

MINUTES OF THE ONE HUNDRED SIXTH MEETING OF THE
PROGRAM PLANNING COMMITTEE
HELD ON APRIL 30, 2019

Pursuant to a Notice and Agenda dated April 16, 2019, a copy of which is annexed hereto, the one hundred sixth (106th) meeting of the Program Planning Committee (“Committee”) of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (“Authority”) was convened at 12:00 p.m. on Tuesday, April 30, 2019, at the office of the New York State Dormitory Authority (“DASNY”), One Penn Plaza, 52nd Floor, New York, New York, and in the Authority’s Albany Office at 17 Columbia Circle, Albany, New York. The two locations were connected by videoconference.

The following Members of the Committee were present:

Mark Willis, Committee Chair
Richard Kauffman, Chair of the Authority
Sherburne Abbott
Charles Bell
Kate Fish
Jay Koh
Gil Quiniones

Member Kenneth Daly was unable to attend.

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, noted the presence of a quorum, and stated that a Notice of Meeting and Agenda was mailed to the Committee on April 16, 2019 and the press on April 17, 2019.

Mr. Willis indicated that the first agenda item concerned the approval of the minutes of the 105th meeting of the Committee held on January 29, 2019. Upon motion duly made and seconded, and by unanimous voice vote, the minutes of the 105th meeting of the Committee were approved.

Mr. Willis indicated that the next item on the agenda is the annual review and approval of the Program Planning Committee Charter. This item was presented by Noah Shaw, General Counsel for the Authority.

Mr. Shaw stated that pursuant to the Public Authorities Accountability Act of 2005, each of the Authority's Committees adopted Charters setting forth each Committee's responsibilities. One of those responsibilities is to periodically review its Charter and determine what, if any, amendments need to be made. These recommendations would then be presented to the full Board for approval at its meeting later today. A copy of the current Program Planning Committee Charter was included in the meeting packet. Management, at the suggestion of the Chair of the Committee, recommended a change to reflect the Board's desired composition of the Committee, specifically the Charter notes that membership should not be fewer than three nor more than six members though membership composition is always at the discretion of the board. Therefore, it is recommended that the Charter be amended to note that the Committee "shall have no fewer than three, and as many members as the board deems appropriate who shall be elected among the members of the Authority other than the Chair." This change will reflect the desire to have as many members participate in the Committee.

Mr. Willis then called for a motion recommending approval of the Program Planning Committee Charter, incorporating the changes discussed.

Whereafter, upon motion duly made and seconded, and by voice vote of the members present, the following resolution was adopted.

Resolution No. _____

RESOLVED, that the Charter of the Authority's Program Planning Committee as presented to the Members for consideration at this meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, are recommended for adoption and approval by the Board.

Mr. Willis indicated that the next item on the agenda was a presentation on the Authority's Healthy Homes from Low-to-Moderate Income Program Manager, Chris Coll.

Mr. Coll stated that the concept of healthy homes refers to a residential or in-home treatment that addresses building performance and energy efficiency along with considerations for improving occupants' health outcomes. Beyond healthy homes interventions we know that there are a number of positive benefits for resident and community health when it comes to clean energy, improving indoor air quality, reducing exposure to thermal extremes through proper insulation, reducing emissions from indoor combustion of fossil fuels and transportation. This also will help to lower energy costs through energy efficiency for lower income households. Pilots are happening in the Bronx, Syracuse, Rochester, and Buffalo. Working along with Medicaid, the Authority will have access to the managed care organizations ("MCOs"), who are then reimbursed based on the actual cost of the service they are providing. The state is pushing towards reducing Medicaid costs, so that by 2020 the state has reduced Medicaid costs by 25%. They are transitioning the MCO contracts to a pay-for-success model. The state is requiring MCOs to start including an intervention that is targeting social determinants of health into their treatment menu by 2020. The Department of Health has identified five areas where social determinants of health shall be prioritized economic stability, education, social and community, access to healthcare, neighborhood and environment.

Mr. Coll continued, explaining that asthma and household injury represent the two largest causes of avoidable hospitalization for Medicaid customers. The goals of this pilot are to not only develop a framework that validates the healthcare cost savings for MCOs to convince them to invest in these treatments in order to achieve the outcomes of healthcare cost reductions that they are being required to look at, but also establish a model for replication so developing market

supporting activities, such as standardized contracts that would allow MCOs to contract from these services directly as well as specifying these healthy homes interventions that we would like to see included in an MCO-adopted model. The Authority has invested approximately \$200,000 in an initial feasibility study. The feasibility study was complete last year, working with the Department of Health and the Medicaid redesign team about how to operationalize this, and it is at the point where the Authority will be funding a \$10 million pilot, fully subsidizing the in-home interventions as well as funding a substantial evaluation of the outcomes in order to provide evidence that MCOs could use for future investments.

In response to an inquiry made by Mr. Willis, regarding the pilot and how it will be able to show whether this will make an impact, Mr. Coll explained that the projected healthcare cost savings is shown by looking at the asthma universe and the Medicaid codes for claims. It is estimated that on an annual basis the average cost to the Medicaid system for an asthma patient is between \$1500 and \$2300 per year. While household injuries cost between \$5500-\$10,400 per hospitalization. Working with the Department of Health to track the Medicaid member that is participating in the pilot so that there will be baseline data when it comes to their health issues prior to the pilot, as well as health care costs. After the intervention is delivered there will be tracking for two years of healthcare cost savings as well as what the health impacts are for the client.

The components of the Healthy Homes intervention begin with an in-home energy assessment and an in-home environmental assessment. Possible causes for asthma triggers, infiltration of moisture and mold, along with traditional energy efficiency work that will be done, such as air ventilation and insulation will be assessed. There will also be a skilled nurse that will be visiting the household to engage with the client and ensure that they are checking humidity levels in the home as well as taking their medications, etc. The skilled nurse component is already a part of what the Department of Health does in their asthma programs. With regard to household injury, mainly “trip and fall” scenarios, the Authority’s home performance contractors will be installing the necessary items that would improve the overall safety of the home.

Mr. Coll defined the roles and responsibilities of the participating entities, noting that within the Department of Health there are a number of divisions that play a role in this, the office of health insurance programs, and the office of environmental health will be working with the Authority to scope out what the actual treatments look like in terms of the pilot, working with the delivery contractors to do work in the homes, funding the evaluation study and relying on the Department of Health to do the evaluation of the healthcare outcomes. MCOs will be required to sign a participation agreement with the Authority, in addition to developing a sustainability plan for future healthy homes work. The office of health insurance programs in the Department of Health will be requiring that the pilots that participate make at a minimum the same level of investments in healthy homes work as they are receiving as part of the pilot.

There have been conversations with MCOs, that have shown their interest in these pilots, because they see the potential of reducing their healthcare costs. The biggest question that they have had is how something like this is operationalized, can the savings be quantified or verified. This pilot will help to provide these answers to the MCOs and lead to future investment on their part. The market supports, developing a model that can be replicated, developing the training credentials as well as the specifications for the network of home performance contractors that do this work in the field beyond the pilot. The Authority will be working with the MCOs and the contracting network to develop a tool kit for how best to engage from the MCO perspective with a number of contractors in their area.

Mr. Coll explained the timeline for each phase of this program, beginning with the pilot implementation plan phase taking place currently through August 2019. It is expected to have all of the details worked out with respect to how the MCOs are going to engage in this pilot when the program launches at the end of September 2019. Included in the early stages of a launch, the MCO agreements will be in place, and contractors in the regions where the MCOs are participating will begin training, preparing for participation in the pilot. It is expected that the healthy homes work will happen starting late 2019 through early 2022, targeting 500 units. The full measurement and verification evaluation is expected to be completed in 2023. Early returns are expected, in increments, before December 2023. This concluded Mr. Coll's presentation.

In response to an inquiry by Mr. Kauffman regarding the cost share of this program going forward, beyond the pilot, Mr. Coll stated that once the pilot is finished it is expected that Medicaid will be paying for these improvements as part of its efforts to lower healthcare costs.

In response to Ms. Barton's inquiry about the pilots targeting other households other than Medicaid customers, Mr. Coll explained that all of the pilots are for lower income residents, although this is the only pilot that is targeting the Medicaid funding stream long term.

In response to an inquiry made by Mr. Willis, Mr. Coll explained that the homes are selected by the MCOs based on their patients' needs within the asthma population.

Mr. Kauffman then directed a question at Greg Hale, concerning how the Healthy Homes initiative relates to RetroFit NY, a presentation that the board received in September 2018. Mr. Hale stated that he believes it to be highly relevant in potentially bringing in an additional revenue source to support deep energy retrofits.

Mr. Willis noted that there was no formal action required on the Healthy Homes presentation, he then indicated that the next item on the agenda was a presentation on the recently announced Westchester Action Plan. Janet Joseph, Senior Vice President for Strategy and Market Development, led the discussion.

Ms. Joseph began her presentation with some background information on the Westchester gas moratorium, that was established in response to Consolidated Edison's inability to meet natural gas demand on the coldest days of the winter in portions of Westchester county. This moratorium was put in place on March 15, 2019, meaning that Consolidated Edison will no longer be connecting customers to their natural gas system in Southern Westchester. In order to address this situation, the New York State team developed a Clean Energy Action Plan primarily focused on Westchester, but then expanded to really provide clean energy and low carbon options for businesses and residences who are affected by a utility company natural gas moratorium.

Ms. Joseph continued, noting the total investment that was used to address this need is on the order of \$250 million. She continued, outlining that there are three elements to the action plan. Consolidated Edison is delivering an enhanced portfolio of energy efficiency services and heat pump solutions, as part of their Smart Solutions Portfolio, which was just approved in February 2019. The New York Power Authority will be providing additional financing services. The Authority has developed a very targeted portfolio to address the needs of consumers in the Westchester area, as well as in Lansing. Looking at alternatives to natural gas, from a clean energy perspective heat pumps are what will be the alternative solution to heating. While looking to heat pumps, it is important to make sure these buildings are reducing energy consumption to the maximum extent possible. The Authority's focus was on electric heating options, heat pumps and energy efficiency, with a strong focus on new construction. There is extensive stakeholder engagement as well as a planned consumer awareness campaign. In Westchester, the Authority had launched an initiative called Sustainable Clean Heating and Cooling, a solarized version for heat pumps, prior to the announcement of the moratorium. The Authority's teams have been working to bring contractors and solution providers to the developers in the Westchester area, which is what needs to happen for these projects to move forward.

Ms. Joseph explained that the consumer awareness and education campaign associated with the action plan was put into place at the direction of the New York State legislature, instructing the Public Service Commission and the Authority to put together a program to encourage energy efficiency and renewable energy in Westchester. Ms. Barton elaborated, stating that the action plan is to put the alternative solutions into the hands of consumers at a time when they need to make decisions.

Donovan Gordon, Clean Heating and Cooling Program Director, presented the solutions that are being presented to consumers and developers in Westchester. Mr. Gordon noted that the two technologies of focus are ground source heat pumps and air source heat pumps. Ground source heat pumps are using the constant temperature of the ground as a heat source and a heat sink to transfer heat to heat and cool buildings. He explained that the current programs have been enhanced, and for commercial and multi-family buildings the current incentive has been increased by 25% for the gas moratorium areas. Along with the increase in incentive, the cap that was

originally placed on the incentives has been increased to \$5 million per project, encompassing some of the larger projects that are taking place in Westchester. Additionally, the Authority has contracted with a contractor and NYPA to offer free geothermal screenings for buildings 25,000 square feet and larger to gauge the feasibility of geothermal heating at the project locations. Residential homes have the added bonus of loan options to finance the rest of the system beyond the incentive received.

Mr. Gordon continued, explaining that air source heat pumps use the outside air to heat and cool buildings, this program also includes free screening for large buildings over 25,000 square feet. The residential program now includes incentives to completely replace the homeowners previous heating and cooling system with the air source heat pump system, whereas in the past there were only incentives being offered for the split system, supplementing the homeowner's current oil or gas system. Recently, there has been the addition of a loan program for air source heat pumps as well.

Following Mr. Gordon's presentation, Patrick O'Shei, Director of New Construction Commercial and Multi-Family, presented on how the Authority will be using this opportunity in Westchester to build the market for the electrification of buildings. Mr. O'Shei explained that not only was the cap on new construction raised, but there will be funding provided for designing a non-fossil fuel HVAC system. In addition to the electrification of a building, the other things that will be funded are, better envelopes in daylighting systems, smart building technology, and on-site renewables. The new construction program was built so that any incentives for heat pumps or PV would be available in addition to the new construction funding. The incentives are design focused and the amount is based on what is built.

Mr. O'Shei continued, noting that in addition there are competitive awards for new construction. There will be funding for net zero economic development, made up of ten one million dollar prizes for each of the ten regions of the state, up to \$5 million in funding for community based development, which is being promoted in Westchester county. The Buildings of Excellence competition, that launched in March 2019, will focus on changing the design of multi family buildings as a long term objective. The Buildings of Excellence program offers up

to \$1 million in additional funding for multifamily buildings along with the other incentives that are offered by the Authority.

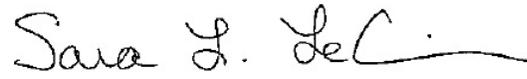
Mr. O'Shei's presentation continued with plans for existing buildings, beginning with Flextech, a program where energy planning and energy efficiency project costs are bought down. In addition to offering Flextech in the market, there is current procurement of Flextech contracts to do business development and grow the pipeline of projects in Westchester county, launching in May 2019. Real time energy management("RTEM") is another program where there has already been great success in the multi-family sector where the projects do include fossil fuel use reduction. There will be an effort launched in early summer to focus RTEM in the Westchester area. In Fall 2019, Building Energy Pro, which is the joint venture with Consolidated Edison for pay-for-performance in the small and medium commercial sector, is expected to launch and will focus on gas reduction.

Mr. O'Shei noted that there are also competitive awards for large and existing buildings, with increased scoring points in the moratorium zones so that the projects will score higher and be more likely to receive funding. The Westchester Carbon Challenge is one of these and will launch in Fall 2019, giving developers time to develop their projects for the Westchester area.

In response to inquiries made by Mr. Kauffman, Ms. Joseph noted that these initiatives are consumer focused, and with that capital cost barriers needed to be addressed on the front end. She explained that this particular initiative for electrification of buildings needed to be on the ground, though the other facets of energy efficiency such as workforce development and other initiatives are still going in addition to these consumer driven programs. To get electrification and heat pumps on the table there is a capital cost hurdle that needs to be addressed, otherwise there will not be continued progress. Ms. Barton added that there is an ongoing discussion about the rate design aspects for customers that go the route of beneficial electrification. This item was for information only. No formal action is required.

Mr. Willis indicated that the next item on the agenda was other business, there being no other business, the meeting was adjourned.

Respectfully submitted,

A handwritten signature in black ink, reading "Sara L. LeCain". The signature is written in a cursive style with a long horizontal flourish at the end.

Sara L. LeCain

Secretary to the Committee