

PROGRAM PLANNING COMMITTEE  
OF THE  
NEW YORK STATE  
ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Minutes of the 94<sup>th</sup> Meeting  
Held on April 11, 2016

Pursuant to a Notice and Agenda dated March 29, 2016, the 94<sup>th</sup> meeting of the Program Planning Committee (“Committee”) of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY was convened at 12:30 p.m. on Monday, April 11, 2016, at the office of the New York State Dormitory Authority, One Penn Plaza, New York, New York, and in the Authority’s Board Room at 17 Columbia Circle, Albany, New York.

The following Members of the Committee were present:

Richard Kauffman  
Sherburne Abbott  
Charles “Chuck” Bell  
Ken Daly  
Jay Koh  
John McAvoy  
Gil Quiniones  
Jigar Shah  
Elizabeth W. Thorndike, Ph. D

Also present in either New York City or Albany were: John B. Rhodes, President and CEO of NYSERDA; Janet Joseph, Vice President for Innovation and Strategy; Jeffrey J. Pitkin, Treasurer; Noah Shaw, General Counsel; David Margalit, Chief Operating Officer; Valerie S. Milonovich, Senior Counsel and Secretary to the Committee; and various other members of the Authority staff.

Mr. Kauffman called the meeting to order, noted the presence of a quorum, and stated that a Notice of the meeting (attached hereto as Exhibit A) was mailed to Committee Members and the press on March 29, 2016. Each of the Committee Members introduced themselves.

**Approval of January 26, 2016 Minutes**

The first agenda item concerned the approval of the minutes of the 93<sup>rd</sup> meeting of the Committee held on January 26, 2016. Upon motion duly made and seconded, and by unanimous voice vote, the minutes of the 93<sup>rd</sup> meeting of the Committee were approved.

**Report on the Status of the Authority’s Market Development Efforts**

The Members received a report from David Margalit, Chief Operating Officer, John Saintcross, Assistant Director of NY Prize, and Patrick O’Shei, Director of Performance and Market Standards

on the Authority's market development efforts and two specific examples were presented to illustrate these recent efforts.

Mr. Margalit began the presentation by describing the Authority-wide approach to developing initiatives from the market back. He explained that this new approach instills discipline, design, and sets forth expectations for Authority achievements. The approach also compares size, cost, and possible returns across all program opportunities and necessitates addressing critical questions; the answers to which should reflect the needs and economics of the customer, establish a business case, and result in proof of concepts. Mr. Margalit discussed a range of questions that guide staff in implementing this this new approach.

Mr. Kauffman added that the two examples to be presented, on electric grid activities and real time energy management, represent just two of many examples in the Authority's portfolio.

In response to an inquiry by Mr. McAvoy regarding the incorporation of lessons learned, Mr. Margalit assured the Committee that such information is routinely considered in implementing this new approach.

In response to an inquiry by Mr. Koh as to any recent or forthcoming changes in process or culture at the Authority, Mr. Margalit described that this approach has opened new channels of thinking. For example, the premise that good, new ideas can originate from anywhere within the organization. He added that there are checkpoints along the process continuum, as well as training initiatives, that ultimately result in cultural shifts. Mr. Rhodes provided specific examples of training initiatives that have garnered positive results.

In response to a statement by Mr. Shah with regard to ensuring prudent, successful investments in energy efficiency, Mr. Rhodes assured the Committee that the Authority is taking a critical approach in its portfolio development. He added that the commercial and industrial programs have shown great value, while programs designed to help smaller customers often require a greater amount of resources and result in more modest returns. Mr. Daly suggested that a status report on the Authority's legacy programs may be useful.

John Saintcross presented an overview of program efforts to support the development of a high-performing electric grid. He began by describing some of the current limitations of the existing system, such as the inability to take full advantage of real-time energy data, the lack of dynamic and two-way communications, and the lack of resiliency and carbon reduction efforts in design criteria. Mr. Saintcross proceeded by describing the future state of an integrated electric grid that would deliver reliable, affordable, and clean technology to consumers where, when, and how they want it. Market opportunities include reduced energy losses, customer outages, capital and operating expenses, energy use, and greenhouse gas emissions. He added that achieving the vision will require careful policy formulation, accelerated infrastructure investments, and greater commitment to public/private research, development, and demonstration efforts.

Mr. Saintcross described the program strategy as helping to develop a high-performing electric grid that is digitally enhanced and dynamically managed by supporting technology innovation; building capacity to integrate and expand the use of clean distributed energy resources; increasing

customer and third party engagement; and developing advanced materials and systems that enhance grid performance. He also described efforts to create a single enterprise collaborative as a means of pursuing research, development, demonstration planning and execution, as well as to conduct a comprehensive assessment identifying gaps in technological readiness and identifying high-value research priorities.

Mr. Quiniones stated that the New York Power Authority is harmonizing its efforts in this area with those of the other partners to further leverage experiences and enhance coordination. Mr. Saintcross added that connecting the available expertise with the subject matter will help to develop a successful investment strategy, ensuring that resources are wisely spent.

Mr. Koh complimented the inclusion of carbon reduction and resiliency considerations, stating that this is an area ripe for evaluation.

In response to an inquiry from Mr. Kauffman regarding the attraction of private investment, Mr. Saintcross stated that the key will be to correctly align incentives and accurately identify barriers, whether they be regulatory, technological, the value of carbon, or others.

Ms. Joseph added that the overall goals of this effort are to reduce risk and accelerate progress, and in addressing an inquiry from Mr. Koh regarding metrics, stated that advancements in this area will be measured at different levels of achievement. She added that disproving a hypothesis can also have time and resource-saving value.

Mr. Daly suggested that many parties and particularly several utilities working together will be valuable. In response, Ms. Joseph sought input as to the most useful form of utility engagement, recognizing the time pressures of staff and the need for both joint and individual working groups in addressing certain issues.

In response to an inquiry from Mr. Koh, Mr. McAvoy explained that many utilities use an algorithmic tool for assessing potential infrastructure investment strategies which provides a good baseline from which to work.

Mr. Rhodes stated that the Authority recognizes the different utility risk profiles and suggested that the Authority's appetite for risk should be used to mitigate the utility risk. Mr. Koh added that it is the role of the Authority to have a different risk and return profile.

Patrick O'Shei presented an overview of Real Time Energy Management (RTEM) activities by explaining the scope of the RTEM effort and the value proposition that it presents as part of the Authority's portfolio and to end-use customers. Mr. O'Shei described the market opportunity as including the potential to realize 10-15% annual energy savings across 10,000 larger buildings by 2030; to enhance electric grid operations through more intelligent buildings; and to better understand building designs and systems. He also addressed the current economic considerations and stated that returns on investment could range from one to six years (or less), as new vendors enter the market and as technology costs decrease.

Mr. O'Shei described the program strategies as including technical advice and training; addressing market confidence and providing clarification; providing incentives to reduce risk; sharing learnings and technical guidance, and the results of pilot projects and case studies. Projected energy benefits include direct and indirect greenhouse gas reductions, energy savings benefits, and energy bill savings. Projected private investments were described as having a 3 to 1 ratio between direct private investment and Authority-provided incentives. Indirect private investment in a post-incentive market and subsequent energy efficiency investment in buildings with RTEM systems could spur an investment ratio as high as 10 to 1.

Mr. Quiniones described related efforts between the New York Power Authority and the Authority to connect State-controlled buildings through an open data initiative called NY Energy Manager.

Mr. Daly suggested that, in calculating the potential energy savings, such projections be subjected to vigorous stress tests under different commodity price scenarios. Mr. Daly also stated that there may be further opportunities for partnering between the Authority and the utilities with regard to large buildings that are account-managed.

In response to an inquiry by Mr. Shah regarding lighter applications of RTEM, for example focusing on a single aspect such as heating, ventilation and air conditioning (HVAC), Mr. O'Shei responded that such approaches will be included as part of the overall effort, perhaps through the design of a tiered incentive program. However, Mr. O'Shei stressed that the primary focus of the RTEM effort will be on proving out the fuller solution.

Mr. Shah and Mr. Quiniones provided company-specific examples of successful real time energy management approaches, located within New York and nationally.

### **Report on Status of Regional Greenhouse Gas Initiative Budget**

The Members received a report from Treasurer Jeff Pitkin on the status of the Regional Greenhouse Gas Initiative budget. Mr. Pitkin reported that, as previously reported, the June, September and December RGGI auctions produced proceeds which were \$40.4 million higher than the Authority Staff estimates, including the sale of additional cost containment reserve allowances in the September 2015 auction.

Mr. Pitkin reported that the March 2016 auction produced \$29.9 million in proceeds based on a \$5.25 allowance price, which was \$2.2 million lower than the original estimate. Cumulatively, the auctions for the fiscal year have resulted in revenue of \$165.7 million, which was \$38.3 million higher than the original estimate for the year.

The additional revenue, coupled with adjustments to program funding allocations, resulted in ending the fiscal year with revenues of \$21.9 million greater than program funding allocations, rather than the original projected shortfall.

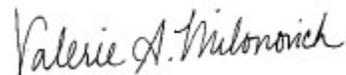
The RGGI Operating Plan for fiscal year 2016-17 is anticipated to be presented to the Board at the June 2016 meeting.

In response to an inquiry by Mr. Koh with regard to the fluctuation in allowance market prices, various Authority Staff provided insight as to the factors that may have influenced the fluctuations, including the U.S. Supreme Court grant of a stay with regard to the federal Clean Power Plan and the inclusion of nuclear energy resources as part of the State's Clean Energy Standard. Mr. Rhodes added that the new price of \$5.25 provides yet another good data point to consider when estimating future budgets.

### **Other Business**

Mr. Kauffman indicated that the last item on the agenda was other business. There being no additional business to consider, upon motion duly made and seconded, and by unanimous voice vote, the meeting was adjourned.

Respectfully submitted,

A handwritten signature in cursive script that reads "Valerie S. Milonovich".

Valerie S. Milonovich  
Secretary to the Program Planning Committee


**NYSERDA**
**ANDREW M. CUOMO**  
Governor

**RICHARD L. KAUFFMAN**  
Chair

**JOHN B. RHODES**  
President and CEO

## NOTICE OF MEETING AND AGENDA

March 29, 2016

TO THE MEMBERS OF THE PROGRAM PLANNING COMMITTEE:

PLEASE TAKE NOTICE that a meeting of the Program Planning Committee (the 94<sup>th</sup> meeting) of the New York State Energy Research and Development Authority (“Authority”) will be held at the office of the New York State Dormitory Authority (“DASNY”), One Penn Plaza, 52<sup>nd</sup> Floor, New York, New York, and in the Authority’s Albany Office located at 17 Columbia Circle, Albany, New York, on Monday, April 11, 2016, commencing at 12:30 p.m., for the following purposes:

1. To consider and act upon the Minutes of the ninety-third (93<sup>rd</sup>) meeting of the Program Planning Committee held on January 26, 2016.
2. To receive an overview of the Authority’s approach to developing initiatives and a report on two key initiatives under development:
  - a. To receive a report on the Authority’s Smart Grid program efforts;
  - b. To receive a report on the Authority’s Commercial Real-Time Energy Management (RTEM) program efforts
3. To receive a report on the status of the Regional Greenhouse Gas Initiative budget.
4. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting at either of the above locations. In order to expedite the entry procedures established by the building management, any members of the public planning to attend the meeting at DASNY’s office should notify DASNY’s receptionist at 212-273-5000, 24 hours in advance of the meeting, and must be prepared to show valid photo identification upon arrival at One Penn Plaza.

Video conferencing will be used at both locations and the Authority will be posting a video of the meeting to the web within two business days of the meeting. The video will be posted at <http://www.nyserdera.ny.gov/About/Board-Governance/Board-and-Committee-Meetings>.

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Valerie S. Milonovich  
Secretary to the Program Planning Committee

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