

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
Minutes of the 231st Meeting
Held on June 21, 2016

Pursuant to notice and an agenda dated June 7, 2016 and a revised notice dated June 13, 2016, the 231st meeting of the New York State Energy Research and Development Authority (“Authority”) was convened on June 21, 2016 at 2:30 p.m., in the Authority’s Albany Office at 17 Columbia Circle, Albany, New York, and in the Authority’s New York City Office at 1359 Broadway, New York by videoconference.

The following Members of the Authority were present:

Richard Kauffman, Chair
Sherburne Abbott
Charles Bell
Jay Koh (by videoconference in New York City)
Gil Quiniones
John McAvoy
Basil Seggos
Jigar Shah (by videoconference in New York City)
Elizabeth W. Thorndike, Ph. D.
Mark Willis (by videoconference in New York City)
Audrey Zibelman

Members Daly and Driscoll were unable to attend.

Also present were John B. Rhodes, President and CEO; David L. Margalit, Chief Operating Officer; Janet Joseph, Vice President for Technology and Strategic Planning; Jeffrey J. Pitkin, Treasurer; Sara LeCain, Senior Counsel and Acting Secretary; Conor Bambrick, Environmental Advocates of New York; and various other staff of the Authority.

The Chair welcomed the Authority's newest Member, Basil Seggos, who was confirmed as the Commissioner of the New York State Department of Environmental Conservation the prior week. Previously, Mr. Seggos served as both Deputy Secretary for the Environment and Assistant Secretary for the Environment to Governor Cuomo, advising the Governor on environmental policy and overseeing the operations of the State's environmental agencies. Prior to working the Governor's Office, Mr. Seggos served as the Vice President of Business Development at the clean-tech private equity company Hugo Neu Corporation, Chief Investigator and Attorney at Riverkeeper, Associate at the Natural Resources Defense Council, and as a legal clerk at the White House.

Next, the Chair noted that Sara LeCain would be serving as the Acting Secretary as the Authority's General Counsel and Secretary, Noah Shaw, was unable to attend the meeting.

Before turning to the formal agenda, John Rhodes, the Authority's President and CEO, provided the Members with an update on Authority operations.

Mr. Kauffman stated that the first item on the agenda was a report from the Program Planning Committee (the "PPC"). Mark Willis, Chair of the PPC, stated that the PPC met earlier that day. The PPC received two informational reports, one on the Authority's Clean Energy Pipeline and Metrics and the other on the Authority's Off-Shore Wind program efforts.

Mr. Willis reported that Jennifer Meissner, Program Manager for Performance Management briefed the PPC on the Clean Energy pipeline and metrics. As a follow-up to previous discussions at the PPC about how the Authority selects and build projects, Ms. Meissner provided additional detail on the considerations made in planning and the tools and metrics staff use to weigh options and to understand where the Authority stands in relation to its high-level goals as the Clean Energy Fund ("CEF") portfolio takes shape.

Ms. Meissner explained that there are five key metrics applied across the portfolio for 2016 through 2025. The five key metrics include anticipated energy efficiency savings, renewal energy development, emissions reductions, customer bill savings, and private investment. The application

of these metrics has been expanded and redefined to fit the new approaches under the CEF. Staff have developed an *Initiative Pipeline Overview* report that is updated at least weekly, and emphasizes the impact of the CEF's investments and enhances the Authority's ability to benchmark as it plans. This report is particularly important given the nature of the CEF, which evolves over time, initiative by initiative, using the test-measure-adjustment approach. Staff also compare innovative options to weigh which efforts achieve the greatest results, ultimately determining how the Authority will and will not invest. The report is shared with the public.

Mr. Willis stated that Ms. Meissner walked the PPC through the specifics of the report providing an overall picture of budgets for the various portfolios and visual examples of how each of the key metrics attracts and portrayed in the pipeline report.

Next, Mr. Willis explained that the PPC was briefed on the status of the Authority's off-shore wind program efforts by Doreen Harris, Program Manager for Large Scale Renewables. Ms. Harris described the goals of the off-shore wind master plan announced by Governor Cuomo in his 2016 State of the State address. The goals are to provide a comprehensive state roadmap for advancing the development of off-shore wind in a cost effective and responsible manner. It is expected that off-shore wind can make a significant contribution to the State's Clean Energy goals and the Clean Energy Standard Mandate, along with providing related economic development opportunities for the State.

Ms. Harris described the specific elements of the Off-Shore Wind Master Plan, as well as the various studies being conducted. There are also various pre-development activities being conducted that will serve to reduce overall project and ratepayer costs for New York State off-shore wind sites. These activities will also reduce development risks, reduce project timelines, and will ultimately increase competition between developers for the sites.

Ms. Harris concluded her presentation by providing the PPC with a description of the Authority's role in the Bureau of the Ocean Energy Management's auction for a commercial off-shore wind energy lease off of the coast of Long Island and the schedule set by the Bureau of the Ocean Energy Management's auction.

Lastly, Mr. Willis stated that the PPC received follow-up information regarding certain programmatic information from the April PPC meeting.

Mr. Kauffman stated that the next item on the agenda was the Operations and Accomplishment and Mission Statement and Performance Measurement Annual Report. Ms. Meissner stated that in accordance with the Section 2800 of the Public Authorities Law, the Members are requested to approve the 2015 Operations and Accomplishment and Mission Statement and Performance Measurement Annual Report. The report contains the Authority's accomplishments with a listing of material changes in operations and programs. Of significance in the report are the steps used to approve and implement the CEF. The Authority continues to streamline operations and implement staff training focused on a strategic, marketing-based approach. Also noted is the startup of the 76West Clean Energy Competition, the REV Campus Challenge, and the Affordable Solar program.

The Authority achieved progress across all of its major areas, and Ms. Meissner highlighted a few noteworthy points on program accomplishments. The targets for electricity gigawatt hours saved, and for the number of commercial and industrial customers served mainly from the commercial, industrial program exceeded their individual expectations. Most notably, the Existing Facilities Program and the New Construction Program. Bill savings and emission reduction also exceeded their anticipated targets.

In 2015, progress fell short in the number of households served. This shortfall is mainly due to the Multifamily Program closing for most of 2015 when it ran out of funding under the Energy Efficiency Portfolio Standard ("EEPS"). There was also lower than expected progress in renewable energy resources electric generation gigawatt hours produced. This limited progress was mainly due to the Renewable Portfolio Standard Main Tier project attrition and the Authority's contracts for generation reaching their terminus year. As the CEF evolves, the Authority will modify its approach to account for this metric.

The 2016 targets take into account for the Authority's transition from EEPS to CEF, but are mostly reflective of the continued impact of the Authority's legacy programs, since the report reflects the installed impact. Changes to the metrics, targets and format will be made for the next annual report to better align with the Authority's CEF goals, across all program areas.

In response to an inquiry from Dr. Thorndike, Ms. Joseph explained that the Authority is required to submit this report under the New York State Public Authorities Law and the strategic outlook will posted on the Authority's website. Mr. Pitkin explained that the Authority no longer produces a glossy form of the report as it was expensive and the Authority is better able to convey the initiatives, goals, and achievements in this manner. Mr. Margalit added that the Authority's Strategic Plan that will be considered in September will be written in terms understandable by the general public.

In response to an inquiry from Mr. Willis, Ms. Meissner explained that the plan is to look forward in terms of incorporating more broadly the key metrics that were discussed earlier at the PPC meeting as some of the metrics up to this point in time have been limited to a slice of the portfolio and not reflective of the entire portfolio. Ms. Joseph added that there are areas where the Authority's achievements were lower than the target, and the goal of the new metrics will be to better align achievements and targets.

Mr. Koh commended the Authority's performance on the metrics where it outperformed the targets. He suggested that looking at the metrics in terms of aggregating the impact of the portfolio might be the place to start from on how the Authority can measure progress to provide information to the Members to allow them to make the right set of governing suggestions and decisions.

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

Resolution No. 1455

RESOLVED, that the Authority's Operations and Accomplishments and Mission Statement and Measurements Annual Report as presented at this June 21, 2016 meeting is adopted and approved for submission under Section 2800 of the Public Authorities Law.

Mr. Kauffman indicated that the next item on the agenda was a report on items considered by the Audit and Finance Committee (the "A&FC"). The Chair asked Jay Koh, Chair of the A&FC to address the Members.

Mr. Koh stated that the A&FC had met just before the Board Meeting and that a quorum was present throughout the meeting. The A&FC reviewed the Annual Investment Report for the fiscal year ending March 31, 2016, and the proposed 2016 investment guidelines. The report was reviewed in open session and in executive session with only the independent auditors present.

Mr. Koh stated that the Authority's overall investments have increased from \$1.6 billion to \$1.7 billion dollars, principally from collections for RPS, EEPS, and Technology and Market Development that have not yet been expended or offset by decreases in other funds for wind-down expenditures or where expenditures exceeded revenues.

Mr. Koh stated investment earnings for the fiscal year ending March 31, 2016, were \$15.1 million compared to \$9.7 million from the prior year. The rate of return on this basis was 0.9%, as compared to 0.7% in the prior year.

The Authority's independent auditors reviewed the Investment Report and stated that nothing came to their attention indicating that the Authority was not in compliance with the investment guidelines.

No changes to the Investment Guidelines for the upcoming fiscal year are recommended.

The A&FC unanimously recommends the approval of the Annual Investment Report and Investment Policy Statement.

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

Resolution No. 1456

RESOLVED, that the “Investment Guidelines, Operative Policy and Instruction June 2016”, as presented at this June 21, 2016, meeting are hereby recommended for approval by the Board; and

BE IT FURTHER RESOLVED, that the Authority’s “2015-2016” Annual Investment Report, “for the year ending March 31, 2016, as presented at this June 21, 2016 meeting, is hereby recommended for approval by the Board to be adopted as the Annual Investment report of the Authority required by Section 2800 and Section 2925 (6) of the Public Authorities Law.

The Chair then asked Mr. Koh to report on the Annual Investment Report for the NYSERDA Other Post-Employment Benefits (“OPEB”) Trust for the year ended March 31, 2016 and the “Investment Policy Statement for the NYSERDA OPEB Trust (June 2016).” Mr. Koh stated that the A&FC reviewed the Annual Investment Report for the year ending March 31, 2016, and the proposed 2016 Investment Policy Statement for the NYSERDA OPEB Trust. The Investment Report was reviewed in both open session and in executive session with only the independent auditors present. The Authority has contributed \$31.5 million to the Trust, has earned about \$6.9 million in investment income, has expended approximately \$4.2 million in benefit payments, and has incurred approximately \$144,000 in administrative expenses; leaving a balance of \$34 million in the Trust as of March 31, 2016. The market value of the Trust’s assets as of March 31, 2016, was \$36.7 million dollars reflecting an appreciation of \$2.6 million dollars, resulting in a 35% total return on the Authority’s contributions for the six-year period.

The Members are requested to adopt a resolution approving the Investment Policy Statement for the Authority’s OPEB Trust. There are no substantive changes to the policy, however, editorial changes were made to remove future expected benefit payments since these are in the biannual actuarial valuation reports.

The A&FC unanimously recommends approval of the Annual OPEB Trust Investment and the Investment Policy Statements.

In response to an inquiry from Mr. Willis, Mr. Koh explained that the allocations in the Investment Policy Statement itself outline the types of investments that can be made. The fees are very low based on the size of the trust; the administrative expenses were \$144,000 against \$36 million. The Investment Policy Statement and allocations are approved by the Board after recommendation by the A&FC. They are based upon the recommendations of the Authorized Representatives and the Authority's Investment Advisor. The fees are relatively low and have resulted in meeting target returns. Based upon, this Mr. Koh would affirm the recommendation of management and the Investment Advisor. This is a fairly low cost, passive strategy and the asset allocations outlined in the Investment Policy Statement are targeted.

In response to an inquiry from Mr. Kauffman, Mr. Pitkin stated that the Investment Policy Statement delegates to the officers the administrative power to make investments in consultation with an outside advisor. The Board's other role as it relates to the Investment Policy Statement is to approve the bench mark targets recommended by the Investment Advisor. The overall strategy yields low cost diversified approaches which allows a broad exposure to the market in order to earn a long-range rate of return, which staff think will be sufficient to satisfy the benefit payments under the Trust.

In response to an inquiry from Mr. Quiniones, Mr. Pitkin stated that the Trust has funded 74% of the liabilities as of March of 2015. Government Accounting Standards Board ("GASB") Statement No. 74 requires government entities to report in the financial statements any unfunded actuarially determined liabilities with respect to post-employment benefits by 2018. Staff is working with an actuary now to update the actuarial evaluation and evaluate the implication of these new accounting standards.

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

Resolution No. 1457

RESOLVED, that the “NYSERDA OPEB Trust Investment Report” for the fiscal year ending March 31, 2016, as presented at this June 21, 2016, meeting is hereby recommended for approval by the Board as the annual investment report of the NYSERDA OPEB Trust required by Section 2800 and Section 2925 (6) of the Public Authorities law; and

BE IT FURTHER RESOLVED; that the “Policy Statement for NYSERDA OPEB Trust (Retiree Health Insurance Benefits Trust)” as presented at this June 21, 2016, meeting is hereby recommended for approval by the Board.

Mr. Kauffman indicated that the next item on the agenda was a review of the Financial Statements of the Authority and NY Green Bank for fiscal year 2015-2016 and asked Mr. Koh to present this item. Mr. Koh stated that the A&FC reviewed the Authority’s and NY Green Bank’s Financial Statements for the recently completed fiscal year. Peter Mahar, Controller and Assistant Treasurer, summarized significant changes compared to last year’s financial statements. After Mr. Mahar’s presentation, the A&FC met in executive session with the independent auditors, where there was ample and detailed review of the Authority’s investments and financial condition. No substantive problems were identified.

Mr. Koh noted that consistent engagement, constant cooperation, and prior interactions between the independent auditors and management in the preparation and review of the financial processes of the Authority has resulted in historically clean audits.

Mr. Koh stated that the independent auditors continue to issue an unqualified opinion on the Authority’s financial statements and the financial statements of NY Green Bank.

The A&FC unanimously recommends approval of the Authority’s financial statements and the financing statements of NY Green Bank.

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

Resolution No. 1458

RESOLVED, that the Audit and Finance Committee recommends that Members of the Authority adopt a resolution in substantially the same form as the resolution submitted to the committee, approving the Authority's Financial Statements and the Financing Statements of NY Green Bank as of March 31, 2016.

In response to an inquiry from Mr. Willis, Mr. Pitkin indicated that he will contact Mr. Willis to provide him with further detail on how NY Green Bank's risks and losses are being evaluated.

Mr. Koh added that the Authority asked the independent auditors to review the financials of NY Green Bank as if it were a standalone entity comparable to commercial financial institutions engaged in similar business. The independent auditors found no material deficiencies and believe NY Green Bank is establishing an accounting system that will be able to handle more complex transactions.

The Chair stated that next item on the agenda is the appointment of the independent auditors for the fiscal year 2016-2017, and he asked Mr. Koh to address this item. Mr. Koh stated that the Members are asked to approve a resolution appointing KPMG LLP, as the independent auditors for the Authority and NY Green Bank for the fiscal year ending March 31, 2017, and the independent auditors for the NYSERDA OPEB Trust. KPMG, LLP was competitively selected under the RFP issued in 2016. The Authority may renew the agreement annually for four, one-year extensions, with annual adjustments to the fees. Mr. Koh stated that the engagement letter from the independent auditor's indicating the services they will provide in conjunction with the audit. The independent auditors' costs and services are consistent with prior independent audit services. The proposed fee for the fiscal year 2016-2017 will not exceed \$95,000.

The A&FC unanimously recommends approval of KMPG, LLP as the Authority's Independent Auditor.

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

Resolution No. 1459

RESOLVED, the A&FC authorizes the President and CEO to retain the firm of KPMG, LLP as independent auditors for the Authority and for NY Green Bank for the fiscal year ending March 31, 2017.

Mr. Kauffman stated that the Board would next consider approval of the Annual Bond Sales report, and he asked Mr. Koh to address this item. Mr. Koh stated that the report describes two bond issuances and one refunding completed during the fiscal year 2015-2016. Also, the report includes a schedule of Authority bonds that are outstanding as of March 31, 2016, which total about \$3.1 billion.

The A&FC unanimously recommends approval of the Annual Bond Sales Report.

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

Resolution 1460

RESOLVED, that the Authority's Annual Bond Sales Report for the fiscal year April 1, 2015 through March 31, 2016, and the information contained therein, as presented at this June 21, 2016 meeting, is adopted and approved for submission pursuant to Section 2800 of the Public Authorities Law.

The Chair indicated that the last item considered by the Audit Finance Committee is the proposed Issuance of Bonds to finance the Green-Jobs Green NY program (“GJGNY”). Mr. Kauffman asked Mr. Koh to present this time. Mr. Koh stated that the Members are requested to adopt a resolution authorizing the issuance of recipient bonds to the New York State Energy Facilities Corporation (“EFC”) in an aggregate principal amount not to exceed \$32,588,500, in connection with the State Revolving Fund (“SRF”) Revenue Bonds expected to be issued by EFC through the State Clean Water Revolving Fund.

The bonds will be issued to finance residential energy efficiency loans under the Green-Jobs Green NY program. The Authority anticipates pledging loan repayments which will produce

projected net revenue of at least 125% of debt service over the term of the bonds and will covenant to EFC to maintain at least 120% coverage.

The bonds will be issued as fixed-rate, taxable bonds with scheduled maturities (serial bonds or term rate bonds with mandatory sinking funds redemptions) structured to correspond to scheduled cash flow payments due from pledged loans. The final maturity will be no greater than approximately fifteen years. The bonds will bear interest at a fixed-rate determined at the time of pricing of the SRF bonds, not to exceed 5%.

The draft Project Finance Agreement sets forth the proposed terms and condition of the bonds. The Resolution presented to the Members requests the Authorized Representatives be authorized to execute the Project Finance Agreement and related documents, with such amendments as necessary.

The A&FC unanimously recommends approval of the Residential Energy Efficiency Financing Revenue Bonds

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

Resolution No. 1461

WHEREAS, pursuant to special act of the Legislature of the State of New York (Title 9 of Article 8 of the Public Authorities Law of New York, as from time to time amended and supplemented, herein called the "Act"), the New York State Energy Research and Development Authority (the "Authority") has been established as a body corporate and politic, constituting a public benefit corporation; and

WHEREAS, pursuant to the Act, the Authority is authorized to issue bonds and notes to provide sufficient moneys for achieving the Authority's corporate purposes, including the establishment of reserves to secure such bonds and notes and the payment of interest on bonds and notes and, in connection therewith, to pledge all or part of the fees, charges, gifts, rents, revenues or other moneys received or to be received and leases or agreements to secure the payment of such bonds and notes; and

WHEREAS, pursuant to the Act, the Authority is also empowered to extend credit and make loans from bond proceeds to any person for the construction, acquisition, installation of, or for the reimbursement to any person for costs in connection with, any special energy project, including, but not limited to, any land, works, system, building, or other improvement, and all real and personal properties of any nature or any interest in any of them which are suitable for or related to the furnishing, generation, production, transmission, or distribution of energy or energy resources; and

WHEREAS, pursuant to the Green Jobs-Green New York Act of 2009 (Chapter 487 of the Laws of 2009) as from time to time amended and supplemented (the "GJGNY Act"), the Authority has been authorized to use innovative financing mechanisms to finance energy efficiency improvements through energy cost savings (herein called the "Green Jobs — Green New York Program"); and

WHEREAS, the Authority issued its "Residential Energy Efficiency Financing Revenue Bonds, Series 2013A (Federally Taxable)" in the aggregate principal amount of \$24,300,000 (the "Series 2013 Bonds") on August 13, 2013 for the purpose of reimbursing the Green Jobs - Green New York Revolving Fund established by the GJGNY Act (the "GJGNY Revolving Fund") for certain residential energy efficiency loans originated and outstanding through June 30, 2013; and to provide funding for new loans originated and to be originated under the Green Jobs -Green New York Program thereafter through December 31, 2013; and

WHEREAS, the Series 2013 Bonds were issued pursuant to an Indenture of Trust, as heretofore supplemented and amended, (collectively, the "2013 Indenture"), between the Authority and The Bank of New York Mellon, as trustee; and

WHEREAS, the 2013 Indenture contemplates the possible issuance of additional parity bonds thereunder to finance residential energy efficiency loans, provided, among other things, the Coverage Test (as defined and described in the 2013 Indenture) is satisfied and evidence is given confirming that the ratings applicable to any outstanding bonds will not be lowered, suspended or withdrawn by reason of the issuance of such additional bonds; and

WHEREAS, on September 30, 2014, the Authority participated in the Short-Term Financing Program of the New York State Environmental Facilities Corporation ("EFC") under EFC's Clean Water State Revolving Fund Program and issued the Residential Energy Efficiency Financing Revenue Notes (Series 2014) (the "2014 Notes") to EFC in the aggregate principal amount of \$30,000,000; and

WHEREAS, on August 20, 2015, the Authority participated in the Long-Term Financing Program of the New York State Environmental Facilities Corporation ("EFC") under EFC's Clean Water State Revolving Fund Program and

issued the Residential Energy Efficiency Financing Revenue Bonds (Series 2015A) (the “Series 2015 Bonds”) to EFC in the aggregate principal amount of \$46,357,500, a portion of the proceeds of which were used to redeem the 2014 Notes; and

WHEREAS, in anticipation of further financing up to \$32,588,500 of residential energy efficiency loans through the issuance of bonds under the 2013 Indenture or other bonds under a separate indenture, the Authority will participate in the Long-Term Financing Program under EFC’s Clean Water State Revolving Fund Program; and

WHEREAS, it is expected that participation by the Authority in EFC’s Long-Term Financing Program will require the Authority to (i) enter into a State Clean Water Revolving Fund Project Finance Agreement (Leveraged Financing Program) with EFC (the “Project Finance Agreement”), a copy of a draft form of which has been presented to this meeting, (ii) issue its bonds to EFC in an aggregate principal amount not to exceed \$32,588,500 (the “Series 2016 Bonds”) (iii), as security for the Series 2016 Bonds, pledge loan repayments from residential energy efficiency loans issued to date and not previously pledged for the Series 2013 Bonds and Series 2015 Bonds plus additional loans expected to be issued through March 31, 2017 or until bond proceeds have been expended pursuant to a pledge agreement (the “Pledge Agreement”); (iv) covenant to apply all or any portion of the moneys, if any, which are on deposit in the GJGNY Revolving Fund (excluding amounts held in the Collateral Reserve Account established under and defined in the Reimbursement Agreement, dated as of August 1, 2013, entered into between the Authority and EFC as amended by the Amended and Restated Reimbursement and Security Agreement between the Authority and EFC, dated as of August 1, 2015 (together the “Reimbursement Agreement”) as Guarantor in connection with the Series 2013 Bonds) which are legally available for the purpose of making any payment due under the Series 2016 Bonds or the Project Finance Agreement for which other moneys pledged to secure the Series 2016 Bonds are insufficient; and (v) enter into an amendment to the Reimbursement Agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY AS FOLLOWS:

Section 1. The offering, issuance, sale, and delivery of the Series 2016 Bonds, and receipt of the financing proceeds, upon the terms and conditions and for the purposes described in this resolution are hereby authorized. The Series 2016 Bonds shall be issued in one or more series in an aggregate principal amount not to exceed \$32,588,500 and shall bear interest at rates determined by EFC and approved by the Chair, the Vice Chair, the President and CEO, the Chief Operating Officer, the Vice Presidents, the Treasurer, or the Secretary of the Authority (individually, an “Authorized Representative” and collectively, the "Authorized Representatives"). The Series 2016 Bonds shall bear interest at a fixed rate of

interest not to exceed five per cent (5%) per annum. The Series 2016 Bonds shall mature no more than fifteen years after the date of issuance thereof. The Series 2016 Bonds shall be dated, have the final maturity, have the designation or designations, be subject to redemption, be payable as to principal, premium, if any, and interest, and have such other provisions all as set forth in the 2013 Indenture as the same shall be supplemented by a Third Supplemental Series Indenture (together, the “2016 Indenture”). The form of the Series 2016 Bonds and all other provisions with respect thereto shall be as set forth in the 2013 Indenture or determined in the manner set forth therein. No Series 2016 Bonds shall be issued pursuant to this resolution after June 21, 2017, provided that amounts may be advanced subsequent to such date under any 2016 Bond once issued in accordance with the terms of the Project Finance Agreement and this resolution.

Section 2. Subject to the limitations set forth in Section 1 hereof, the Authorized Representatives are each also hereby authorized to: (i) determine on behalf of the Authority with respect to the Series 2016 Bonds the particular loans and principal amounts thereof to be pledged as security for the payment of the Series 2016 Bonds; and (ii) pledge any payments on any residential energy efficiency loans not pledged to or financed by the Series 2013 Bonds or the Series 2015 Bonds as security for the Series 2016 Bonds.

Section 3. The Authorized Representatives are each hereby authorized to execute, acknowledge, and deliver any amendment or supplement to the 2013 Indenture (including a Supplemental Series Indenture relating to the Series 2016 Bonds), any amendment or supplement to the Reimbursement Agreement, the Project Finance Agreement and a Pledge Agreement, each with such terms, conditions, amendments, supplements, changes, insertions, and omissions as such Authorized Representative shall approve. Execution of such documents by an Authorized Representative shall be conclusive evidence of any approval required by this Section. Any Authorized Representative, the Assistant Treasurer, and the Acting Secretary of the Authority are each hereby authorized to affix the seal of the Authority on such documents and attest the same.

Section 4. The Authority hereby authorizes the execution and delivery to EFC of supporting documentation for financial assistance from the State Clean Water Revolving Fund, including the Project Finance Agreement.

Section 5. The Authorized Representatives are each hereby authorized and directed to execute and deliver any such other agreements, documents or certificates, to do and cause to be done any such other acts and things and to make such other changes, omissions, insertions, revisions, or amendments to the documents referred to in Sections 1 through 4 of this resolution as they may determine necessary or proper for carrying out, giving effect to, and consummating the transactions contemplated by this resolution, the Project Finance Agreement, the 2013 Indenture, the Reimbursement Agreement or the Pledge

Mr. Kauffman indicated the next agenda item concerns the Authority's Annual Report on the Disposition of Real and Personal Property, as well as the Authority's Guidelines for Disposal of Real and Personal Property. The Chair asked Mr. Pitkin to present the item. Mr. Pitkin explained that the Members are requested to adopt a resolution approving the Annual Report on Disposition of Real and Personal Property for the Fiscal Year ended March 31, 2016 for submission pursuant to section 2800 of the Public Authorities Law. The report summarizes one disposition of real property which was in connection with a property lease at the Saratoga Technology + Energy Park ("STEP").

The Members are also requested to adopt a resolution approving the Guidelines, Operative Policy and Instructions for Disposal of Real and Personal Property. No changes to the guidelines are recommended.

In response to an inquiry from Mr. Kauffman, Mr. Pitkin stated that the one disposition was a ground lease that was considered by the Members at the January 2016 meeting.

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

Resolution No. 1462

BE IT FURTHER RESOLVED, that the Annual Report and Disposition of Real and Person Property June 6, 2016 as presented at this meeting, is adopted and approved as the annual report on disposition of real and personal property required by section 2800 of the Public Authorities Law.

Mr. Kauffman indicated that the next item on the agenda concerned the Authority's Annual Procurement Contracts Report and the Guidelines on Procurement Contracts. Mr. Kauffman called on Cheryl Glanton, Director of Contract Management, to provide a summary of this item. Ms. Glanton stated that New York Public Authorities Law Section 2879 requires the Authority to annually review and approve its Procurement Contract Guidelines, Operating Policy and Instructions and its Annual Report on Procurement Contracts. In January 2016, the Board made updates to the guidelines including a provision to satisfy the Service-Disabled Veteran-Owned

Business (“SDVOB”) Act of 2014. Which similar to the Minority and Women-Owned Business (“MWBE”) initiatives, sets goals and provides agencies and gives authority to contract with SDVOB’s. The SDVOB Act allows discretionary contracting with New York Small Business Enterprises up to \$200,000 as provided for in the States Finance Law as is the practice of state agencies and other authorities. Finally, the Members are asked to approve the Authority’s use of contracts already executed by other state entities, often referred to “piggybacking,” which is also a process provided for under State Finance Law. No other changes to the procurement contracts as of January 2016.

The Members have been provided with a copy of the Annual Report on Procurement Contracts. The annual report lists all contract actions exceeding \$5,000 that were executed or modified by the Authority during April 1, 2015, and March 31, 2016, and details all contracts involving contractor performance extending beyond a one-year period that is open. Section 1 of the report indicates that during the period covered by this Annual Report, the Authority initiated or modified a total of 7,187 contract actions. Approximately 97% of these actions were competitively selected, and 97% of the dollar amount committed to this period resulted from competitive procurement. Section 2 lists 14,448 procurement contracts extending beyond a one-year period that is open. Section 3 of the report lists 595 non-contract payments equal to or greater than \$5,000 in the aggregate made to vendors. Ms. Glanton stated that the Authority is in compliance with the guidelines in its selection of contractors.

Ms. Glanton stated that the members have also been provided with an annual report on the Authority's compliance with Article 15-a of the Executive Law. Of the 108 contracts subject to Article 15-a which was initiated or modified during the reporting period, 44% of the number of contracts were awarded to certified minority and women-owned businesses (“M/WBE’S”), representing 31% of the total contract dollar amounts. During this period three 15-a waivers were requested, and all three waivers were granted.

Ms. Glanton concluded her report by reminding the Members that the Annual Procurement Report was compiled using a new technology platform that has the ability to summarize

information better than in the past. Therefore, the Members were provided with a handout aggregating the report's information through various charts and graphs.

In response to an inquiry from Mr. Koh, Ms. Glanton stated that the Authority has increased its M/WBE participation over the last year, and it has increased both in the number of contracts executed and the total dollar amount committed. The Authority's M/WBE participation has consistently been over the 30% target during both this past fiscal year and the prior fiscal year.

In response to an inquiry from Ms. Zibelman, Ms. Joseph stated that the Authority does not generally have targets based upon region, but there may be programs that establish a specific geographical targets. Mr. Rhodes added that the Authority's spending is generally statewide.

In response to an inquiry from Mr. Kauffman, Ms. Glanton stated that the number of contracts have increased, but the dollar amount committed has gone down. Mr. Kauffman commended staff on the improved contract processing time.

In response to an inquiry from Ms. Abbott, Ms. Glanton indicated that with respect to M/WBE participation, both the numerator and denominator are going up. Under the Public Authorities Law, the Authority is only required to have M/WBE participation for goods and services procured for the Authority's own account. However, the Authority has contracted with a substantial number of M/WBEs across the Authority's programs. These contracts are not included in the denominator, but they represent approximately \$54 million in total contracted dollars.

Mr. Kauffman indicated that counsel's office has compared the lists provided by the Members of entities with which each member is associated and which he or she believes may enter into contracts with the Authority to the list of contracts in the Periodic Procurement Report for contracts which have been, or expected to be, executed and which do have, or are expected to have, a period of performance in excess of one year. Counsel's office reports just a few potential conflicts. Specifically, the Authority has entered into or anticipates entering into contracts with Cornell University, Paul Smith's College, and University of Rochester, identified by Dr. Thorndike; Plug Power and Quixotic Systems, identified by Mr. Shah; JP Morgan Chase and New

York University, identified by Mr. Willis; Syracuse University, identified by Ms. Abbott; and GridMarket, and Viridity Energy, identified by Ms. Zibelman.

Thereafter, upon motion duly made and seconded, and by voice vote of the Members present, the following resolution was passed. Dr. Thorndike, Mr. Shah, Mr. Willis, Ms. Abbott, and Ms. Zibelman abstained from the vote solely with regard to contracts involving the respective entities identified by each of them above.

Resolution No. 1463

BE IT FURTHER RESOLVED, that the Authority's 2015-16 Annual Procurement Contracts Report, as presented at this meeting, is adopted and approved as the annual report of the Authority required by Section 2800 (1)(a)(6) and Section 2879 of the Public Authorities Law.

Mr. Kauffman indicated that the next item on the agenda was a report on the Periodic Procurement Contracts Report, and he asked Cheryl Glanton to provide a brief summary of this item. Ms. Glanton stated that pursuant to Public Authorities Law section 2879, the Members are requested to adopt a resolution approving the Periodic Procurement Contracts Report. The Periodic Report covers the period April 1, 2016, through May 15, 2016. The report summarizes 469 procurement contracts exceeding \$5000 that were initiated or modified during the period. Over 94% of the procurement contracts were competitively selected. All of the actions were in compliance with the procurement contract guidelines. The report also summarizes an additional 1,024 procurement contracts that are expected to be executed by the Authority, which have a period of expected performance in excess of one year. These contract actions total approximately \$357 million. Ms. Glanton stated that the Members have also been provided with a Periodic Report on Authority Compliance with Article 15-a of the Executive Law. Of the 17 contracts subject to Article 15-a, which was initiated or modified during the reporting period, 47% were awarded to certified M/WBE's, representing 46% of the total contract amounts. In addition, the contract for MJW Technical Services was granted a waiver of the 15-a requirements and the contract for Peter L. Krug is exempt from 15-a requirements.

Mr. Kauffman indicated that Counsel's office has compared the lists provided by Members of entities with which each member is associated and which he or she believes may enter into contracts with the Authority to the list of contracts in the Periodic Procurement Report for contracts which have been, or expected to be, executed and which do have, or are expected to have, a period of performance in excess of one year. Counsel's office reports just a few potential conflicts. Specifically, the Authority has entered into or anticipates entering into contracts with Cornell University and University of Rochester, identified by Dr. Thorndike; Quixotic Systems, identified by Mr. Shah; JP Morgan Chase and New York University, identified by Mr. Willis; and Syracuse University, identified by Ms. Abbott and Con Edison Solutions.

Thereafter, upon motion duly made and seconded, and by voice vote of the Members present, the following resolution was passed. Dr. Thorndike, Mr. Shah, Mr. Willis, and Ms. Abbott abstained from the vote solely with regard to contracts involving the respective entities identified by each of them above.

Resolution No. 1464

RESOLVED, that the periodic procurement contracts report, covering the period March 15, 2015 through May 15, 2016, as presented at this meeting including but not limited to the contracts identified therein which have, a period of performance in excess of one year, is hereby approved in accordance with Public Authorities Law Section 2879 (3)(b)(ii).

The Annual Prompt Payment Policy Report was next on the agenda, and Mr. Kauffman called on Authority Treasurer Jeffrey Pitkin. Mr. Pitkin explained that the Members are requested to adopt a resolution approving the Authority's Annual Prompt Payment Policy Report for the fiscal year ended March 31, 2016.

The report notes that all but three of the 95,000 invoices processed were paid as required by the Prompt Payment Policy. The three exceptions resulted in no interest payments to vendors, were isolated occurrences of non-compliances and processes have been re-enforced with staff. In addition, the finance department is currently taking on LEAN project to receive contractor invoices electronically through a website portal. Invoices will be automatically routed to the Finance staff person assigned to each vendor for review and processing in the accounting system. This will

replace the current process of manually printing and distributing invoices to Finance staff for processing. The goal is to reduce the risk of invoices being misplaced or overlooked before they can be entered in the accounting system and scheduled for payment.

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

Resolution No. 1465

RESOLVED, that the Annual Prompt Payment Policy report presented to the Members of the Authority at this June 21, 2016 meeting is adopted and approved as the Annual Report required by Section 2880 of the Public Authorities Law.

Mr. Kauffman indicated that the next item on the agenda was a report on the NY Green Bank from Alfred Griffin, President of NY Green Bank. Mr. Griffin provided the members with a status report on the activities of NY Green Bank, including recently closed transactions.

Ms. Zibelman and Mr. Bell commended Mr. Griffin on the success of NY Green Bank activities.

In response to an inquiry from Mr. Quiniones, Mr. Griffin stated that NY Green Bank expects to have nearly \$200 million in commitments a year, averaging approximately \$50 million a quarter.

Mr. Koh stated that as a member of the NY Green Bank Advisory Council, he has seen that there is a tremendous amount of operational team building and systems building that has occurred internally. Mr. Koh added that the maturation of the NY Green Bank team and the quality of the staff is very high, the Members should have a lot of confidence in the team, which is supported by the clean audits by the independent auditors.

Mr. Koh suggested that prior to the next Board meeting, Mr. Griffin provide the Members with a walkthrough of NY Green Bank's business model. Specifically, detail on what the loan volume needs to be like to get to reach a breakeven point and when that is projected to happen

under the current targeted budget plan for the next couple of years, as well as the pipeline of upcoming transactions.

At the future Board meeting, Mr. Koh suggested that Mr. Griffin focus his report on how NY Green Bank accounting treatment and business model compare to other banking institutions.

Mr. Kauffman indicated that the next item on the agenda was a report from the Governance Committee (“GC”). He asked Sherburne Abbott, Chair of the GC to address the Members. Ms. Abbott stated that the GC met earlier in the day and a quorum was present throughout the meeting. The first item considered by the GC was a proposed salary increase for the Authority’s Officers. In accordance Public Authorities Law the Members are required to approve the compensation of officers, including salary increases. Historically the Authority has provided employees with benefits comparable to those provided to management/confidential employees by the State.

Recently the New York State Division of Budget released a budget bulletin providing guidelines for the payment of a 2% general salary increase to Management/Confidential employees and other unrepresented employees in the Executive Branch, retroactive to April 1, 2016.

The Members are asked to approve the same percentage salary increase for the President and CEO, Chief Operating Officer, the Vice President for Technology and Strategic Planning, the Treasurer and Internal Control Officer, and the General Counsel and Secretary. These funds have already been included in the Authority’s 2016-2017 budget.

The GC unanimously recommends approval the salary increase for officers.

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

Resolution No. 1466

RESOLVED, that the Governance Committee recommends that the Members of the Authority adopt a resolution in substantially the same form as the resolution submitted to the committee approving a 2% general salary increase

retroactive to April 1, 2016, payable as appropriate to the President and Chief Operating Officer; Vice President for Technology and Strategic Planning; Treasurer and Internal Control Officer and the General Counsel and Secretary was approved.

The Chair then turned to the next agenda item considered by the GC, the Authority's compensation schedule. Ms. Abbott stated that Mr. Rhodes explained to the GC that, in accordance with the Public Authorities Law 2800, the Authority is required to submit a compensation schedule for all employees in decision-making or managerial positions with salaries in excess of \$100,000 as part of its annual report to the Governor, the New York State Comptroller and the Legislature, among others.

In addition, pursuant to the Public Authorities Reform Act of 2009, Section 2800 was amended and now requires that the Authority submit biographical information on each employee included on the list. The Members are asked to approve the submission of this information as part of the Authority's compensation schedule.

The GC unanimously recommends the approval of the compensation schedule and the submission of the vitae.

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

Resolution No. 1467

RESOLVED, that the Governance Committee recommends that the Members of the Authority adopt a resolution in substantially the same form as the resolution submitted to the committee adopting and approving the Authority's Compensation schedule and vitae to be submitted pursuant to section 2800 of the Public Authority's Law.

Mr. Kauffman stated that the next agenda item concerned an evaluation by the Members of the Board's performance over the past year. Section 108 of the Public Officers Law authorizes the Members to convene in private session in order to review a matter made confidential by State law. Since Section 2800 of the Public Authorities Law states that the annual Board Member

Performance Evaluation is confidential, it may be discussed by the Members in private session. In addition, the Members would convene in executive session to discuss the employment history of particular persons.

Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the Members adopted the following resolution.

Resolution No. 1468

RESOLVED, that pursuant to section 105 of the Public Officers Law, the members of the New York State Energy Research and Development Authority shall convene in executive session on June 21, 2016, for the purpose of the employment history of a particular person.

The Board took no action during the private session. At the conclusion of the private session, the Chair reconvened the meeting in open session.

Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the Members adopted the following resolution.

Resolution No. 1469

RESOLVED, that the Authority's Annual Confidential Board Member Performance Evaluation Report as presented at this June 21, 2016 meeting, is adopted and approved to be submitted pursuant to Section 2800 of the Public Authorities Law.

Mr. Kauffman indicated that the last item concerned other business.

Dr. Thorndike asked to make a few remarks.

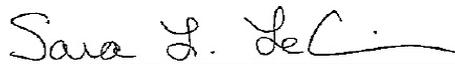
First, Dr. Thorndike commended two of the Authority's officers who have received the Public Service Excellence Award from the State Academy for Public Administration. Janet Joseph was the 2015 recipient and Jeffrey Pitkin was the 2016 recipient.

Next, Dr. Thorndike reported that Noah Shaw, Janice Dean and Paul Bembia put together an excellent response to the U.S. Department of Energy's ("DOE") request for other considerations regarding consent based siting. She explained that there is an ongoing argument between the State and DOE that the majority of the waste at the Western New York Nuclear Service Center ("West Valley") is U.S. Department of Defense waste.

Dr. Thorndike stated that it would be encouraging to see the State's Governor, legislative leaders and congressional delegation join together to get the federal government to acknowledge its primary responsibility for the disposal of this high-level waste. Given the facts and documentation, the State should not be the only state in the nation responsible for the cost of disposing high-level waste. Dr. Thorndike would like to see a strategy devised to place West Valley high-level waste squarely in line with the DOE sponsored defense depository where it belongs.

Lastly, Dr. Thorndike stated that the annual meeting of the environmental groups around the State was held. The fifteen represented groups are very active and helpful in suggesting ways the Authority could better meet its Mission. The Members will be receiving a report on the specific discussions.

Thereafter, there being no other business, upon motion duly made and seconded, and by unanimous voice vote of the members, the meeting was adjourned.



Sara L. LeCain
Acting Secretary



NYSERDA

ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

JOHN B. RHODES
President and CEO

June 13, 2016

REVISED NOTICE OF MEETING AND AGENDA

TO THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY:

PLEASE TAKE NOTICE that the Annual Meeting (the 231st) of the New York State Energy Research and Development Authority will be held in the Authority's Albany Office at 17 Columbia Circle, Albany, New York, and in the Authority's New York City Office at 1359 Broadway, 19th floor, New York, New York, on Tuesday, June 21, 2016, commencing at 2:30 p.m., for the following purposes:

1. To receive information from the Program Planning Committee.
2. To consider and act upon a resolution approving the Operations and Accomplishments, and Mission Statement and Measurements Annual Report.
3. To receive information from the Audit and Finance Committee and:
 - a. to consider and act upon a resolution approving the Annual Investment Report of the Authority and the *Investment Guidelines, Operative Policy and Instructions (June 2016)*;
 - b. to consider and act upon a resolution approving the Annual Investment Report for the NYSERDA OPEB (Other Post-Employment Benefits) Trust for the year ended March 31, 2016 and *the Investment Policy Statement for the NYSERDA OPEB Trust (June 2016)*;
 - c. to consider and act upon a resolution approving the Financial Statements of the Authority and NY Green Bank for fiscal year 2015-16;
 - d. to consider and act upon a resolution approving the appointment of the Authority's independent auditors for fiscal year 2016-17;
 - e. to consider and act upon a resolution approving an annual bond sales report; and
 - f. to consider and act upon a resolution authorizing the issuance of bonds to the New York State Environmental Facilities Corporation to finance residential energy efficiency loans issued through the Green Jobs - Green New York Program.

New York State Energy Research and Development Authority

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4. To consider and act upon a resolution approving the Annual Report on Disposition of Real and Personal Property and the *Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2016)*.
5. To consider and act upon a resolution approving the Annual Report on Procurement Contracts and the *Procurement Contracts Guidelines, Operative Policy and Instructions (June 2016)*.
6. To consider and act upon a resolution approving the periodic procurement contract report.
7. To consider and act upon a resolution approving the annual report on the implementation of the Authority's prompt payment policy.
8. To receive a status report on NY Green Bank.
9. To receive information from the Governance Committee and:
 - a. to consider and act upon a resolution approving a salary increase for Officers;
 - b. to consider and act upon a resolution approving a compensation schedule;
 - c. to consider and act upon a resolution to enter into private session for the purpose of reviewing the Annual Confidential Board Member Performance Evaluation Report and to enter into executive session for the purpose of discussing the employment history of a particular person; and
 - d. to consider and act upon a resolution approving the Annual Confidential Board Member Performance Evaluation Report.
10. To transact such other business as may properly come before the meeting.

Members of the public may attend the meeting at either of the above locations. Video conferencing will be used at both locations and the Authority will be posting a video of the meeting to the web within a reasonable time after the meeting. The video will be posted at <http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings>.



Noah C. Shaw
Secretary