NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY Minutes of the 221st Meeting Held on March 7, 2014

Pursuant to a revised notice and agenda dated March 7, 2014, the 221st meeting of the New York State Energy Research and Development Authority ("Authority" or "NYSERDA") was convened on March 7, 2014 at 2:30 p.m., in the Authority's Albany Office at 17 Columbia Circle, Albany, New York; and by video conference in the Authority's New York City Office at 485 Seventh Avenue, 10th floor, New York, New York; and by video conference in the Authority's West Valley Office at 9030-B Route 219, West Valley, New York.

The following Members of the Authority were present in Albany, unless otherwise indicated:

Richard L. Kauffman, Chair (NYC) George F. Akel, Jr. Robert Catell (NYC) David Elliman (NYC) Mark Willis (NYC) Elizabeth W. Thorndike, Ph. D. Joseph Martens (NYC)

Members John Koelmel, Joan McDonald and Audrey Zibelman were unable to attend.

Also present were John B. Rhodes, President and CEO; Janet Joseph, Vice President for Technology and Strategic Planning; Thomas R. Barone, Acting Vice President for Energy Services; David L. Margalit, Chief Operating Officer; Jeffrey J. Pitkin, Treasurer; Hal Brodie, Esq., General Counsel and Secretary; Sara L. LeCain, Esq., Senior Counsel; Gil Quiniones, President and CEO of the New York Power Authority; Radmila Miletich, Independent Power Producers of New York; James Austin, New York State Department of Public Service; and various other staff of the Authority. Mr. Kauffman then called the meeting to order and noted the presence of a quorum. He stated that the meeting notice and agenda were mailed to the Members and press on January 14, 2014. Mr. Kauffman indicated that a revised notice of meeting and agenda was provided to the Members and press on February 24, 2014, and a second revised notice of meeting and agenda was placed before the Members. Mr. Kauffman directed that a copy of the second revised notice of meeting and agenda be annexed to the minutes of the meeting.

Mr. Kauffman indicated that the first item on the agenda was proposed amendments to the Authority's By-laws. John Rhodes, the Authority's President and CEO, stated that the Members are asked to adopt a resolution amending Article IV of the Authority's By-laws to add a new position of Chief Operating Officer and redesignate the Vice President for Operations and Energy Services as the Vice President for Energy Services.

Over the last ten years, the Authority's operations have increased substantially and it has significantly increased the number, variety and complexity of transactions with the private sector and the public. During that time, the Authority has operated with the same configuration of officers. Under that configuration, one Vice President, the Vice President for Operations and Energy Services, was charged with overseeing both the Authority's Energy Services programs and the operations of the Authority. Given the growth experienced by the Authority, this dual portfolio has become increasingly difficult to handle. After much discussion the officers recommend that the Authority should add a new officer with the title of Chief Operating Officer.

The Chief Operating Officer would be responsible to the President and CEO for working with the other officers to develop and implement a strategic approach to operations of the Authority to achieve intended outcomes, to optimize market responsiveness and generally to perform with efficiency and effectiveness; would be responsible for performance management and evaluation systems; would have the power to execute contracts, agreements, or other instruments not encumbering Authority funds in excess of \$1,000,000; and would perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

The Vice President for Energy Services would be responsible to the President and CEO for the discharge of the Authority's energy services programs; would have the power to execute contracts, agreements, or other instruments not encumbering Authority funds in excess of \$1,000,000; and would perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

In addition, the By-laws would be amended to consistently state the title of President and CEO.

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

Resolution No. 1382

RESOLVED, that the amendment to the Authority's By-laws, as presented at this March 7, 2014 meeting, is approved and adopted.

The Chair indicated that the next item on the agenda was the appointment of David L. Margalit as Chief Operating Officer of the Authority. Mr. Kauffman stated that Mr. Margalit is a graduate of University of Delaware and Harvard Business School with a Masters in Business Administration. He mostly recently worked for the City of New York where he served in several capacities, including senior advisor to the Office of the Mayor and Deputy Commissioner for Business Development and Deputy Commissioner for the Workforce Development Division in the Department of Small Business Services. He has also served in the private sector as Vice President for Services at Accela, Inc. and Adjunct Professor at the New York University Wagner School of Public Policy.

Mr. Martens added that Mr. Margalit's background and experience will be a great fit for the Authority. Mr. Martens endorsed the appointment.

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

Resolution No. 1383

RESOLVED, that pursuant to Section 1852(9) of the Public Authorities Law and Section 2 of Article III of the By-laws of the Authority, the Authority hereby appoints David L. Margalit as Chief Operating Officer of the Authority, effective March 7, 2014, to serve at the pleasure of the Authority and to perform the duties of the Chief Operating Officer as set forth in Section 4 of Article IV of the By-laws and other duties as assigned by the Authority or the President and CEO; and

BE IT FURTHER RESOLVED, that the Members of the Authority do hereby approve the salary of the Chief Operating Officer, effective March 7, 2014, in the amount of \$160,981; and

BE IT FURTHER RESOLVED, that, with respect to such position, the Members do hereby approve the application of such rules for time, attendance, and compensation as are set forth in the Authority's Personnel Handbook and the Accounting Policies and Procedures Manual.

Mr. Kauffman indicated that the next item on the agenda was a report on the Authority's proposed Fiscal Year 2014-15 Budget ("Budget"). Mr. Kauffman asked Mr. Willis, Chair of the Program Planning Committee ("PPC"), to summarize discussions on the portion of the proposed Budget relating to programs that the PPC oversees. Mr. Willis stated the PPC heard a presentation from Treasurer Jeff Pitkin regarding the Authority's Budget and that the details of the Budget are summarized in the memo in the Board package.

Mr. Willis stated that the PPC unanimously recommended that the Members approve the Budget with respect to those portions that fall under the purview of the PPC.

Mr. Kauffman then asked Dr. Thorndike, Chair of the Waste and Facilities Management Committee ("W&FMC"), to report on the portion of the Budget considered by her Committee. Dr. Thorndike stated that the W&FMC received a report from Mr. Pitkin describing the more significant Budget items that relate to the West Valley Site Management Program and to Radioactive Waste Policy and Nuclear Coordination activities. Dr. Thorndike reported that based on Mr. Pitkin's report, the Committee unanimously recommended that the Members approve the Budget for the West Valley Site Management Program and Radioactive Waste Policy and Nuclear Coordination activities.

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

Resolution No. 1384

RESOLVED, that the proposed fiscal year 2014-15 Budget submitted to the Members for consideration at this meeting, with such non-material, editorial changes and supplementary schedules as the President and Chief Executive Officer, in his discretion, may deem necessary or appropriate, be and it hereby is approved for submission to the persons designated in Sections 1867(4) and 2801 of the Public Authorities Law.

Next, Mr. Kauffman asked John Rhodes, President and CEO, to make a few remarks. Mr. Rhodes reported that it has been nearly six months since his appointment and he has spent his time getting to know the Authority and its staff.

Mr. Rhodes indicated that a strategic review and corporate assessment has been commenced that will review the Authority's work and the market to make sure the Authority is designing programs to meet the needs of its customers and partners. He stated that this will take a "clean sheet" approach and he expects to build on existing work as well as taking a fresh look at the Authority's mission and goals. Staff is currently looking to select a consultant to assist in this review.

Mr. Rhodes indicated that the review will start with energy efficiency, but that he hopes to do this across the Authority. The decision was made to start with energy efficiency because it will coincide with the New York State Public Service Commission ("PSC") review of the Energy Efficiency Portfolio Standard Programs. Mr. Rhodes expects the review to be complete by Summer 2014. Staff will be working closely with the PSC, the New York Power Authority ("NYPA"), and the Governor's office.

As part of the overall review, Mr. Rhodes stated that management will be looking into how to better harness the Authority's resources. In the past, the Authority has been program focused. However, it is valuable to review how the Authority as a whole is using its resources and whether the use is prudent.

Next, Mr. Rhodes reported that the Green Bank was launched and its first solicitation was issued. Staff hopes to have its first deal closed by the end of the first half of the year. The Green Bank Team is led by Alfred Griffin and they are working to develop relationships with market partners while working with the Authority to share opportunities.

In response to an inquiry from Mr. Kauffman, Mr. Rhodes indicated that management has discussed the review with staff and has acknowledged that this will be a lot of work for them. Management has asked staff to continue to add value by doing whatever they can to be responsive to the Authority's customers and each other. The goal is to get the most impact out of the Authority's mission.

The Chair stated that the next item on the agenda was a report on the remaining items discussed by the PPC. Mr. Willis stated that the PPC met on January 13, 2014, and considered and discussed several items in addition to the Authority's Budget.

At the PPC meeting, the Authority's President and CEO John Rhodes began by describing the new directions and areas of emphasis for the Authority. First, John reported on the recent State Energy Planning Board meeting, at which the Energy Planning Board issued the Draft State Energy Plan for public comment. Mr. Rhodes stated that public hearings are also being scheduled.

Next, Mr. Rhodes reported on three PSC Orders that were issued at the end of 2013 that are of significance to the Authority. The Orders address the Green Bank, the NY-Sun Initiative, and the restructuring of the Energy Efficiency Portfolio Standard.

Vice President Janet Joseph provided the Committee with a further briefing on the Corporate Strategy Assessment, which was discussed earlier in this meeting by Mr. Rhodes.

Next, the PPC heard a status report on Green Bank activities from Alfred Griffin, the newly named President of the Green Bank. Mr. Griffin reported on the status of funding, organizational issues, processes and procedures and the recently issued solicitation.

With regard to funding, Mr. Griffin reported on the PSC Order issued on December 19, 2013, which, in combination with other funds, takes total initial Green Bank capitalization to approximately \$230 million. Mr. Griffin stated that, as issued, the Order provides the flexibility the Green Bank needs to be responsive to the market while providing milestones of importance to the Commission. The Green Bank Team has already met with the New York State Department of Public Service ("DPS") staff to clarify the terms of the Order.

The PPC then heard from Karen Hamilton, Program Director for Residential Energy Services, who provided the PPC with a thorough update on the NY-Sun Initiative.

Following up on an item discussed at the June PPC meeting, Ms. Joseph reported on the results of an analysis of the impacts of the Research and Development Program ("R&D"), to identify unmet needs, and to further explore opportunities for funding.

As to the suggestion to consider opportunities to invest in potentially transformational high-potential energy technology rather than incremental improvements, Ms. Joseph reported that the Authority recently submitted letters of support with contingent co-funding for several academic institutions in New York State to seek federal funding for creation or renewal of Energy Frontier Research centers. These efforts could leverage up to \$100 million of federal funding to support high potential research in critical areas such as energy storage and advanced materials. Ms. Joseph reported that the chance of success in securing the federal funds is strong and that this would build clean energy innovation assets in New York.

As for the need for more work in the development and advancement of clean and efficient bio-heating options, Ms. Joseph reported that the Governor in his 2014 State of the State Address announced a commitment to launch a significant bio-heat initiative. The effort will include upstream work focused on development of manufacturing capacity and technology as well as workforce development and market adoption.

Ms. Joseph also reported that the Authority is advancing a new model to bring in targeted talent in R&D through a Clean Energy Research Fellow initiative that would allow the Authority to develop a specific clean energy research area. Fellows with exceptional technical capabilities and industry experience are sought and they will conduct research activities, manage project portfolio, develop conclusions, develop bridges to market strategies, and generally supplement Authority staff capabilities.

Ms. Joseph indicated that exploring opportunities for increased R&D funding will be examined as part of the overall statewide clean energy agenda and priorities which are expected to take place over the course of the next year and will also be a part of the Corporate Strategy Assessment discussed earlier.

At this time, Mr. Martens had to leave due to a scheduling conflict.

Mr. Kauffman indicated that the next item on the agenda was a report on the remaining items considered at the W&FMC meeting. Dr. Thorndike explained that the W&FMC received a status report from Director Paul Bembia on West Valley activities, including items relating to the State-Licensed Disposal Area and the West Valley Demonstration Project (the "Project").

Regarding the State-Licensed Disposal Area, Mr. Bembia provided an update on the increase in the leachate level in disposal Trench 14, of which he first informed the W&FMC in April 2013. This increase does not present a threat to public health and safety or the environment. The leachate level is 14 feet below the ground surface and the increase is very slow, less than one inch total in 2013 and only 4.7 inches total since 2011. A hydrogeologist has been engaged to identify the cause and possible mitigation measures for the increase. The final

report from the hydrogeologist will be submitted to the Authority later this month, and Mr. Bembia will brief the PPC further on this issue once the West Valley team has had a chance to consider the findings and recommendations in that report.

Regarding the Project, Mr. Bembia briefed the W&FMC on two items. First, the U.S. Department of Energy ("DOE") has completed construction on the new interim high-level waste storage facility, a dry-cask storage pad on which the High-Level Waste canisters will be stored inside large shielded storage casks. During the excavation for the concrete pad, some contaminated soil was discovered. The contaminated soil was removed from the pad excavation and placed in containers. The remainder of the soil from the excavation was placed in a nearby stockpile area, and DOE will be conducting additional characterization of the soil in the stockpile area in the spring.

Next, Mr. Bembia provided an update on the federal Project budget. As of the January 13, 2014 PPC meeting, the appropriation bill containing specific funding levels for the DOE environmental cleanup Program had not yet been prepared. However, the Authority has been informed subsequently that the FFY 2014 appropriation for the Project has been set at \$64 million, which is the amount that had been requested by DOE in the President's 2014 Budget request.

The W&FMC next received a report from Alyse Peterson on the Authority's nuclear coordination and radioactive waste policy activities. Ms. Peterson reported that the Authority, on behalf of the State of New York, filed comments with the Nuclear Regulatory Committee regarding its September 2013 draft Waste Confidence Generic Environmental Impact Statement. Ms. Peterson also reported that a recent United States Court of Appeals decision directed DOE to suspend collection of fees from commercial nuclear utilities for high-level nuclear waste disposal until there is a plan to deal with the waste.

Mr. Kauffman indicated that the next item on the agenda was a report on items considered by the Audit and Finance Committee ("A&FC"). Robert Catell, the A&FC's Chair,

reported that the A&FC met just before the Board meeting and a quorum was present throughout the meeting.

The A&FC heard a detailed presentation from KPMG, LLP on their proposed process for conducting the fiscal year 2013-14 independent audit. The A&FC was able to ask questions and was satisfied with the proposed procedures for conducting the audit. The A&FC thought the approach was reasonable and that the end product would meet the requirements of the Public Authority Accountability Act and the State Comptroller's regulations, including the delivery of all required opinions.

Mark Mitchell, the Director of Internal Audit, provided the A&FC with a report on his recent activities. Mr. Mitchell discussed the results of recently completed audits, as well as provided a status of his ongoing activities. The A&FC was able to ask questions and was satisfied with the discussion.

Next, the A&FC received a report from Thomas Barone, Acting Vice President for Energy Services, on the status of the Authority's implementation of recommendations from the internal Data Quality Audit. Mr. Barone indicated that the Authority is in the process of implementing several of the recommendations and will continue to provide the A&FC with the status of this implementation. The A&FC was able to ask questions and was satisfied with management's response.

Mr. Kauffman indicated that the next agenda item is a report on the Authority's Cleaner Greener Communities Program from Jennifer Manierre, Associate Project Manager in Energy Efficiency Services. Ms. Manierre provided the Members with an overview of the Cleaner Greener Communities Program and its most recent solicitation.

The Cleaner Greener Communities Program was first announced in Governor Cuomo's 2011 State of the State. The overall goal, as quoted from Governor Cuomo's New NY Agenda, is: "... urban revitalization, Climate Smart Communities, "green" infrastructure, environmental justice, and public transportation."

Ms. Manierre explained that the Cleaner Greener Communities Program has two phases. Phase I offered \$1 million per Regional Economic Development Council to develop regional sustainability plans outlining goals and strategies for overall sustainability, energy efficiency, and resiliency. Phase I was very well-received, with thousands of stakeholders and community leaders getting involved. All of the sustainability plans included a baseline greenhouse gas inventory against which progress will be measured in the coming years.

Phase II is a \$90 million effort to fund implementation of large-scale, high profile projects that support the goals of each plan, and approximately \$30 million was available in the first solicitation which included three categories of projects: open enrollment incentives for municipalities to adopt streamlined permitting processes for photovoltaic systems and charging stations; competitive grants for comprehensive planning and zoning on the municipal level; and help communities develop a clear and permanent framework for long term sustainable growth competitive grants for large-scale, replicable sustainability projects.

All projects are intended reduce greenhouse gas emissions and stimulate environmentally sustainable economic growth. The focus is on holistic projects that address sustainability from a variety of angles, such as energy efficiency, resiliency, and smart growth. These are exemplary projects that not only reduce greenhouse gas emissions, but also make New York State a better place to live, work, and do business.

The response to the solicitation was good. The Authority received 193 applications through the Consolidated Funding Application last summer. Out of all of those applications, 28 comprehensive planning and zoning projects as well as 18 large-scale sustainability projects were selected.

Ms. Manierre then provided the Members with an example of a large-scale sustainability project in the Finger Lakes Region. I-Square is in Irondequoit, a suburb of Rochester, and the project was funded at \$1.9 million. This is a mixed use development intended to redevelop and revitalize a distressed retail and residential area in the center of the Town. The area has been neglected for years, with empty storefronts, vacant office space, and rundown housing. The

Authority will be helping to create a town square with shopping, dining, living, and entertainment, while making the entire area more pedestrian and bicycle-friendly. This type of development epitomizes the goals of the Cleaner Greener Communities Program. It reduces greenhouse gas emissions by bringing services closer to where people already live so they can spend less time driving. It spurs economic development in an existing community, and avoids the unintended consequences associated with typical development patterns such as loss of farmland and natural habitat. This type of development also eliminates the need to build and maintain miles of new infrastructure such as roads and sewers.

Ms. Manierre indicated that going forward, staff anticipate two more rounds of funding based on lessons learned from the first round and input from stakeholders. Staff are working on the next round that will be released in 2014. While the Authority will continue to focus on supporting community-based sustainability efforts that reduce greenhouse gas emissions, staff envision a greater emphasis on innovative, capacity-building and market-changing approaches that create outcomes in alignment with the Authority's broader clean energy activities and goals.

Mr. Kauffman then indicated that the last item on the agenda was other business.

In response to an inquiry from Dr. Thorndike, Mr. Rhodes indicated that an updated Organizational chart would be forwarded to the Members.

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

Hal Brodie Secretary



REVISED NOTICE OF MEETING AND AGENDA

March 7, 2014

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

PLEASE TAKE NOTICE that a regular (the 221st) meeting 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 by video conference in the Authority's New York City Office at 485 Seventh Avenue, 10th floor, New York, New York, and by video conference in the Authority's West Valley Office at 9030-B Route 219, West Valley, New York, on Friday, March 7, 2014, commencing at 2:30 p.m., for the following purposes:

- 1. To consider and act upon a resolution approving amendments to the Authority's Bylaws.
- 2. To receive reports on the proposed FY 2014-15 Budget of the Authority from the Program Planning Committee and from the Waste and Facilities Management Committee and to consider and act upon a resolution approving the Authority's FY 2014-15 Budget.
- 3. To receive a report from the Program Planning Committee.
- 4. To receive a report from the Waste and Facilities Management Committee.
- 5. To consider and act upon a resolution to convene in executive session to receive a status report from the General Counsel on ongoing litigation matters and to discuss matters leading to the appointment of a particular person.
- 6. To consider and act upon a resolution appointing David L. Margalit as the Chief Operating Officer of the Authority.
- 7. To receive a report from the Audit and Finance Committee.
- 8. To receive a report on one of the Authority's ongoing programs.
- 9. To transact such other business as may properly come before the meeting.

New York State Energy Research and Development Authority

Albany

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Richard L. Kauffman, Chairman John B. Rhodes, President and CEO Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156 New York City 485 Seventh Avenue Suite 1006 New York, NY 10018-6815 (P) 212-971-5342 (F) 518-882-1091 West Valley Site Management Program 9030-B Route 219 West Valley, NY 14171-9500 (P) 716-942-9960 (F) 716-942-9961 Members of the public may attend the meeting at any of the above locations. 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.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.aspx.

Hal Brodie Secretary