NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Minutes of the 209th Meeting

Held on April 18, 2011

Pursuant to a notice and agenda dated April 8, 2011, a Regular Meeting (the 209th meeting) of the New York State Energy Research and Development Authority ("Authority") was convened on April 18, 2011, at 11:30 a.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.

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

Vincent DeIorio, Esq., Chair
George Akel
Garry Brown
Kevin Burke (by videoconference in New York City)
Robert Catell (by videoconference in New York City)
David Elliman (by videoconference in New York City)
Joan McDonald
Elizabeth Thorndike
Mark Willis

Members Martens and Townsend did not attend.

Also present were Francis J. Murray, Jr., President and CEO; Robert G. Callender, Vice President for Operations and Energy Services; Janet Joseph, Vice President for Technology and Strategic Planning; Jeffrey J. Pitkin, Treasurer; Hal Brodie, Esq., General Counsel and Secretary; and various staff of the Authority.

The Chair 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 April 8, 2011, and directed that a copy be annexed to the minutes.

Before turning to the formal agenda, the Chair welcomed the Authority's newest Member, Joan McDonald, who was recently confirmed by the Senate as the Commissioner of the New York State Department of Transportation. Ms. McDonald served most recently as the Commissioner of Connecticut's Department of Economic and Community Development and has also held positions with New York City government, Jacobs Engineering, and the State Assembly. The Chair welcomed Ms. McDonald on behalf of all the Members.

The Chair then gave a brief report on behalf of the Governance Committee, which met earlier that day. The Governance Committee discussed the results of the Members' evaluation of the Board's performance. Based upon the Members' responses, the Governance Committee has made some recommendations with regard to the manner in which Board business is handled. The results and the Governance Committee's recommendations will be presented to the Board at its June 2011 meeting.

The Chair then called upon President and CEO Francis J. Murray, Jr. to address the Members. Mr. Murray informed the Members that the State's Budget passed on time and included the Authority's Fiscal Year 2011-12 Budget as proposed. Mr. Murray explained that the approved Budget included a provision which authorizes public authorities to make voluntary contributions to the State's General Fund. Any voluntary contribution by the Authority would have to be reviewed and approved by the Members.

Next, Mr. Murray indicated that staff is working with the Governor on two initiatives. The first is the development of Regional Economic Development Councils across the State. The Regional Councils would be comprised of state and local leaders and would be tasked with developing plans to capitalize on the strengths of the particular region.

The second initiative would foster sustainable communities across New York. Mr. Murray explained that the sustainable communities program would likely be funded using a portion of the proceeds of the Regional Greenhouse Gas Initiative ("RGGI") auctions. In order to use the funds for this purpose, the Authority will need to revise the RGGI Operating Plan. Staff will be convening the RGGI Advisory Group to review the RGGI Operating Plan and will bring the proposed amendments to the Members for approval at the June 2011 meeting.

Next, Mr. Murray reported that interest in the Saratoga Technology + Energy Park ("STEP") increases week by week. As a result, the Members will be asked to approve three resolutions regarding the development of STEP later in the meeting.

Mr. Murray continued his remarks by providing the Members with a brief update on the Authority's program implementation. First, Mr. Murray indicated that the implementation of the Green Jobs – Green New York legislation ("GJGNY") is well under way and the Members would be receiving a report on the status of the financing portion of GJGNY later in the meeting. In addition, staff is currently developing a Technology and Market Development Operating Plan for the System Benefits Charge ("SBC"). This Operating Plan will be filed with the Public Service Commission for review in May 2011.

Mr. Murray concluded his remarks by encouraging all the Members to attend the June 9, 2011 Program Planning Committee ("PPC") meeting, which will be held at the State University of New York Albany College of Nanoscale Science & Engineering ("Nano Tech"). Nano Tech recently received one of the largest awards from the U.S. Department of Energy ("DOE") for photovoltaic development. The Authority is a partner in this effort and has invested $5 million in this project. The Members will be given a tour of the Nano Tech facility as part of the meeting.

Chair DeIorio then turned to the first agenda item which concerned a report from the PPC. George Akel, Chair of the PPC, stated that at its April 4, 2011 meeting, the PPC reviewed the Authority's performance metrics in the context of the Authority's overall strategic planning. Presentations were given by John Williams, Energy Analysis Program Director and Jennifer

Meissner, Evaluation Program Manager. The presentation discussed evaluation results and performance metrics addressing two fundamental questions: (1) is the Authority making significant progress in advancing its primary goals; and (2) is the Authority achieving results in an economically efficient manner while also having a positive impact on New York's economy.

Mr. Akel reported that staff's presentations covered performance metrics for the Authority's four primary mission goals: increasing energy efficiency; diversifying the State's portfolio of energy resources; catalyzing a clean energy economy; and reducing the environmental impact of energy production and use.

In addition, the performance metrics addressed a newly developed customer service goal, which is extremely important to the Authority's success. These new customer service metrics will be tracked on a quarterly basis and will be reported to the Members.

Mr. Akel observed that the presentations demonstrated the Authority's commitment to rigorously evaluating program performance using industry best practices. He noted that the Members have requested more information on performance metrics for some time, and he stated that staff is making much progress on this front. The PPC members were fully engaged in this discussion and provided input to staff in advance of the meeting. The PPC offered several suggestions for how staff could improve upon the presentation of metrics by clarifying any methodological changes and by providing more context. The PPC also identified which metrics are more significant and should be focused on. The PPC discussed how these evaluation results are considered and used in program development.

Mr. Akel stated that the PPC was generally pleased with the performance demonstrated through these evaluation results. The metrics clearly show that the Authority continues to cost-effectively deliver its major programs and is indeed making major progress on its primary goals. Equally important, the results of the evaluation efforts and metrics inform staff as to where the Authority has opportunities to improve.

Mr. Akel noted that the Members were provided with a copy of Mr. Williams and Ms. Meissner's presentation, as well as the draft minutes of the PPC meeting, which described the reports from Energy Analysis staff in much more detail. He then asked Janet Joseph, Vice President for Technology and Strategic Planning, to present a few of the portfolio-level highlights.

Ms. Joseph reported that the Authority achieved more than $3.7 billion in cumulative energy bill savings for program participants through SBC and Energy Efficiency Portfolio Standard ("EEPS") funded programs in 2010. For every $1 in SBC and EEPS funds spent, almost $2.5 in energy bill savings has been realized by participating customers. Ms. Joseph indicated that there was approximately a zero-net cost to non-participants due to the price lowering effect of the reduced energy use on wholesale electric prices. The total resource cost ratio of the SBC portfolio ranges from 1.5 to 3.7, depending upon which benefits are included in the analysis. Over 3,600 net cumulative jobs have been added due to SBC spending through 2010 and over 800 net cumulative jobs were added as a result of research and development product development efforts through 2008.

With respect to program specific metrics, Ms. Joseph reported SBC funded programs have contributed 1,628 GWh in electricity savings through 2010, which is 74% of the SBC goal. This has been achieved using only 62% of the SBC budget. EEPS electric programs have achieved 23% of their goals with only 18% of the budget expended, while EEPS natural gas programs have achieved 13% using only 11% of the budget.

The Authority's renewable and diverse energy supplies programs generated over 1,998 GWh of energy as a result of the Authority's investments. As reported in the 2010 Renewable Portfolio Standard ("RPS") annual report, 29% of the RPS budget is committed and is projected to deliver 39% of the 2015 goal.

Ms. Joseph indicated that as of December 2010, the Authority had invested $139 million in 479 different clean energy businesses. As a result of the Authority's technology development

investments, 175 products yielding $1.3 billion in sales have entered the market. In addition, over 23,000 workers have been trained in clean energy technologies.

These programs collectively translate into numerous environmental benefits equivalent to removing over 630,000 cars from the road.

Ms. Joseph concluded her report by providing the Members with the new customer service metrics that Mr. Akel alluded to earlier in the meeting. In general, the Authority's solicitation and contracting processes are working efficiently. However, Ms. Joseph indicated that senior management will be investigating different ways to expedite the contracting process. In addition, Ms. Joseph reported that the Authority is meeting its invoice processing requirements and has paid 99.98% of its invoices on time in accordance with the Authority's Prompt Payment Policy.

The Chair then moved on to the next item on the agenda, a resolution authorizing the Authority to enter into a modification of the ground lease for United STEP I, LLC ("United STEP I") at STEP. Mr. Akel explained that in 2006, the Members approved a ground lease with The United Group of Companies, Inc. In 2006, the property was assigned to United STEP I. The current ground lease is for a term of 49 years, terminating on June 30, 2055. With its building 100% occupied, United STEP I is seeking to refinance the mortgage to obtain a more favorable interest rate. To make the property more attractive to potential lenders, United STEP I has requested a renewal option, which is common practice in the industry. If the property is refinanced, the Authority will receive 10% of any equity or positive net cash flow received from rents realized by United STEP I.

Mr. Akel continued, stating that the lease modification provides for a 20-year renewal option following the termination date, with United STEP I or its successor providing a written notification one year prior to its intent to exercise the option. At the time of exercising the renewal option, United STEP I or its successor will provide a schedule of rents through the option period. A process has been established and incorporated into the lease modification such

that in the event the schedule of rents is not agreed upon by both parties, the option will not be exercised and the lease will terminate at 49 years.

The PPC unanimously recommended the approval of the ground lease modification.

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

Resolution No. 1291

RESOLVED, that the modification to the ground lease between the Authority and the UNITED STEP I, LLC for land located at 107 Hermes Road at the Saratoga Technology + Energy Park is approved as presented to the Members at the meeting of April 18, 2011. The President and Chief Executive Officer or his designee is hereby authorized to make such changes to the modification as may be necessary and appropriate, provided such changes do not substantially increase the Authority's financial obligations under the modification.

Mr. Akel stated that the next agenda item was a resolution authorizing the Authority to enter into a transfer of title of sewer-related ancillary equipment and for a permanent right-of-way and easement between the Authority and the Saratoga County Sewer District No. 1 at STEP. The resolution would approve a Deed of Dedication, a Permanent Right of Way and Easement, and a Guaranty with Saratoga County Sewer District No. 1 that would allow the Authority to transfer the title for sewer lines and ancillary equipment located at STEP to the Saratoga County Sewer District No. 1.

Mr. Akel explained that this type of transfer of a sewer system to a county sewer district is common and standard practice between developers of commercial and residential developments projects and municipalities, and the Saratoga County Sewer District No. 1 will be responsible for maintaining and repairing the sewer system in perpetuity. As part of the Authority's public/private partnerships with developers to construct, finance, and manage new buildings at STEP, the Authority has installed the infrastructure including the roads, gas, electric, sewer, water, and telecommunications needed to support the Phase II development of STEP.

In 2008, the Authority effectuated a Deed of Dedication, Permanent Right of Way and Easement, and Guaranty to the Saratoga County Sewer District No. 1 for the pump station, sewer lines and ancillary equipment installed to support the Phase I development of STEP. This proposed resolution is a continuation of that process for Phase II. The infrastructure work is now complete for the Phase II development of STEP, and the Authority proposes to transfer the ownership of the ancillary equipment and sewer lines at STEP to the Saratoga County Sewer District No. 1 in accordance with the requirements delineated in the three documents presented to the Members for approval.

The first document for consideration is the Deed of Dedication. Under this agreement, the Authority agrees to dedicate "all rights, title and interest in and to those pipes, conduits, manholes, pumps, sanitary sewer pump station and other related equipment and fixtures, exclusive of grinder pumps, constituting the sanitary sewer system installed within the easement areas..." to the Saratoga County Sewer District No. 1.

The second document is the Permanent Right of Way and Easement. This agreement grants the Saratoga County Sewer District No. 1 a "permanent, non-exclusive right of way and easement for the installation, maintenance, inspection, repair, relining, removal, replacement, improvement, use and operation of a sanitary sewer line."

The third document is a Guaranty which obligates the Authority to reimburse the Saratoga County Sewer District No. 1 for any repair expenses incurred in the first year of transfer in excess of $3,000. After this one year period, the Saratoga County Sewer District No. 1 will bear sole responsibility for all costs to maintain and repair the sewer system.

The PPC unanimously recommended the approval of the three documents.

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

Resolution No. 1292

RESOLVED, that the Deed of Dedication between the Authority and Saratoga County Sewer District No. 1 for the transfer of title of sewer-related ancillary equipment at the Saratoga Technology + Energy Park ("STEP") as presented to the Members at the meeting of April 18, 2011, is hereby approved with such changes as the President and Chief Executive Officer, in his discretion, may deem necessary or appropriate, provided such changes do not substantially increase the Authority's financial obligations under the agreement; and

RESOLVED, that the Permanent Right of Way and Easement between the Authority and Saratoga County Sewer District No. 1 for the installation, maintenance, inspection, repair, relining, removal, replacement, improvement, use and operation of a sanitary sewer line and appurtenances at STEP as presented to the Members at the meeting of April 18, 2011, are hereby approved with such changes as the President and CEO, in his discretion, may deem necessary or appropriate, provided such changes do not substantially increase the Authority's financial obligations under the agreement; and

RESOLVED, that the Guaranty pursuant to which the Authority guaranties payment for certain repair and maintenance expenses of the Saratoga County Sewer District No. 1, as presented to the Members at the meeting of April 18, 2011, is hereby approved with such changes as the President and CEO, in his discretion, may deem necessary or appropriate, provided such changes do not substantially increase the Authority's financial obligations under the agreement.

The Chair indicated that the final STEP agenda item was a resolution authorizing the Authority to enter into a lease with a single purpose entity to be formed by the Jersen Construction Group, LLC ("Jersen") at STEP. Mr. Akel stated that Jersen submitted a proposal to the Authority under the Invitation to Develop at STEP competitive solicitation to design, construct, finance, own and lease a 75,000 square foot, LEED-rated, predominately single tenant building on approximately 2 acres of land. The proposal was evaluated by a Technical Evaluation Panel ("TEP") consisting of Authority staff and outside expert members. The TEP recommended approval of the proposal to the Authority management. Jersen was the general contractor for The United Group of Companies, Inc.'s building at STEP, 107 Hermes Road. Under this proposed development, Jersen will form a limited liability company named STEP Tech, LLC ("STEP Tech"). The proposed ground lease is similar in structure and terms to the ground leases previously approved by the Members for The United Group of Companies, Inc., 107 Hermes Road building and for Hudson Valley Community College's TEC SMART building.

STEP Tech will construct an 89,592 square foot LEED-rated, multi-tenant building on approximately 3.08 acres of land at STEP near TEC SMART. This building, the building footprint, and the location of the building reflect the STEP Master Plan and the clustering of buildings. The ground rent payments will be pre-paid, with the Authority receiving $414,400 either at the closing on the permanent financing or within six months of substantial completion of the building, whichever occurs first. However, the payment must be made prior to the third anniversary of the ground lease's commencement date.

Mr. Akel stated that in conformance with the Public Authorities Law §2897(3), an appraisal was commissioned to establish the fair market value of the land to be leased, which will be included in the record of transaction. The rent structure is in accordance with the fair market value as determined by the appraisal, which appraised the land at $100,000 per acre. The utility connection fee is $6.99 per square foot, or $626,304. Since STEP Tech will be extending the infrastructure for the benefit of its building and others, it will receive a dollar-for-dollar credit for extending such infrastructure.

The ground lease also provides for two 10-year extensions at the end of the 49-year term. Upon notice of STEP Tech's intent to exercise its option, STEP Tech will propose a schedule of rents to be paid. The Authority has established a process such that in the event the two parties cannot agree on a schedule of rents that will be paid under the options, the options will not be exercised and the ground lease will terminate.

The PPC unanimously recommended the approval of the ground lease.

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

Resolution No. 1293

RESOLVED, that the ground lease between the Authority and the single purpose entity to be formed by the Jersen Construction Group, LLC for land at 20 Tech Trail at the Saratoga Technology + Energy Park is approved as presented to the Members at the meeting of April 18, 2011. The President and Chief

Executive Officer or his designee is hereby authorized to make such changes to the ground lease as may be necessary and appropriate, provided such changes do not substantially increase the Authority's financial obligations under the ground lease.

The Chair indicated that the next item on the agenda was a report from the Audit and Finance Committee ("A&FC"). Mr. Catell, Chair of the A&FC, reported that the A&FC heard a detailed presentation from Lumsden & McCormick on its proposed process for conducting the fiscal year 2010-11 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 Authorities Accountability Act and the New York State Comptroller's regulations, including the delivery of all required opinions.

Next, the Chair asked Mr. Catell to brief the Members on proposed changes to the Authority's Internal Control Manual. Mr. Catell explained that the A&FC received a report from the Authority's Treasurer, Jeffrey J. Pitkin, regarding amendments to the Internal Control Manual. The purpose of the Internal Control Manual is to set forth the Authority's policies and procedures for ensuring an effective system of internal controls that also promotes accountability and transparency. The Members are responsible for approving all modifications to the Internal Control Manual. The Internal Control Manual summarizes the detailed policies and procedures contained in the Operations and Procedures Manual, Personnel Handbook, Accounting Policies and Procedures Manual, and Information Security Policies and Procedures Manual, which are provided to staff.

The proposed amendments include adding: responsibility and accountability for program performance reporting; controls recently enhanced for information technology governance; further specificity to the duties and controls of certain organizational units; and various updating, editorial, and clarifying changes.

The A&FC unanimously recommends approval of the amendments to the Internal Control Manual.

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

Resolution No. 1294

RESOLVED, that the amendments to the Internal Control Manual, as submitted at this April 18, 2011 meeting, are hereby approved and adopted.

Next, the Chair asked Mr. Catell to provide the Members with an update on the recent activities of the Director of Internal Audit. Mr. Mitchell, the Director of Internal Audit, reported to the A&FC on an audit of employee travel and credit card expenditures. With few exceptions, reviews performed by supervisors and Finance staff provided assurance that the Authority's travel and expense policies and directives, as outlined in the Personnel Handbook, were followed. Although a few specific opportunities to improve business controls were identified, no material findings were noted. Generally, the travel and expenditure controls evaluated are adequate, appropriate, and effective to provide reasonable assurance that travel expenditures are being documented and being reviewed and approved by a supervisor and by Finance staff.

Then, Mr. Mitchell provided the A&FC with a summary of several audits that are close to being completed.

The Chair indicated that the next item on the agenda was the Annual Internal Audit Report. Mr. Catell indicated that Mr. Mitchell provided the A&FC with the results of the various audit activities that were conducted last year. The Members were provided with a copy of the report prior to the meeting. While Mr. Mitchell identified opportunities for improvement, no significant deficiencies were identified.

The A&FC was satisfied with the report.

The next item on the A&FC agenda was a report on the GJGNY financing program. Mr. Catell indicated that Mr. Pitkin provided the A&FC with an update on the financing for residential energy efficiency improvements as part of GJGNY, which was summarized in the handout before the Members.

The financing program was launched in mid-November 2010. The initial interest being offered on the unsecured loans is 3.99% or 3.49% if the borrower agrees to automated monthly payment.

As of March 31, 2011, the financing program has received 911 applications for financing, and 515, or 59%, of these have been approved. The Authority has purchased 143 loans for a total of $1,155,231.

There are 142 loans in the portfolio (one loan paid off early) with an outstanding balance of $1,140,841. All of the loans are current.

The Chair then asked Mr. Catell to report on the remaining items considered at the A&FC meeting. Mr. Catell stated that the A&FC received a report from Mr. Pitkin on two outside audits that were performed on the Authority's programs.

The first was an audit by the New York State Comptroller of the energy audit component of the Flexible Technical Assistance Program ("Flex Tech"). The purpose of the audit was to determine if Flex Tech had sufficient resources to meet demand. A draft report was issued, but it was not clear whether a final report will be issued. Therefore, the draft report was provided to the Members prior to the meeting. It indicates that Flex Tech had sufficient resources to meet demand and customer needs and was reaching the public sector to help reduce the burden on local government taxpayers.

The second audit was completed by the U.S. Department of Energy ("DOE") Inspector General's Office on the $123 million State Energy Program American Recovery and Reinvestment Act ("ARRA") grant. The purpose of the audit was to ensure that recipients of ARRA funds are using the funds in accordance with federal and DOE requirements. The Inspector General's Office did not issue a formal report, but DOE staff indicated that they were pleased with the Authority's monitoring systems and controls.

The Chair indicated that the next item on the agenda was the periodic procurement contracts report, presented by Cheryl Earley, Director of Contract Management. Ms. Earley stated that pursuant to Public Authorities Law Section 2879, the Members are requested to adopt a resolution approving the Periodic Procurement Contracts Report. She explained that the Periodic Report covers the period December 16, 2010 through March 15, 2011. The report summarizes 592 procurement contracts exceeding $5000 that were initiated or modified during the period. These contracts total approximately $72.7 million. Over 96% of the procurement contracts were competitively selected and 99% of the dollars committed resulted from competitive procurement. The report also summarizes an additional 270 procurement contracts that are expected to be executed by the Authority, and which have a period of expected performance in excess of one year. These contract actions total approximately $66.7 million. All of the actions were in compliance with the procurement contract guidelines.

Ms. Earley stated that the Members have also been provided with a periodic report on Authority compliance with Article 15-a of the Executive Law. Article 15-a requires public authorities to make a good faith effort to solicit active participation by minority or women-owned business enterprises (MWBEs) in certain contracts. Of the 12 contracts subject to Article 15-a which were initiated or modified during the reporting period, 3 were awarded to certified M/WBEs, representing 25% of the total number of 15-a Qualified Contracts and 17% of the aggregate committed amount.

The Chair reminded the Members that General Counsel Hal Brodie recently requested that each Member provide a list of any entities with which each Member is associated and which he or she believes may enter into contracts with the Authority. Many of the Members provided such a list, and the Chair urged those that had not yet done so to provide this information to Mr. Brodie as soon as possible.

The Chair advised that Counsel's office has compared the list of entities provided by Members thus far to the list of contracts in the Periodic Procurement Report and reports just a few potential conflicts. Specifically, the Authority has entered into or anticipates entering into contracts with Cornell University and the University of Rochester, two entities identified by Liz

Thorndike; Con Edison Solutions, identified by Kevin Burke; and SUNY Research Foundation, identified by Bob Catell. The Chair asked whether each of them wished to abstain from the vote to approve contracts with those specified entities. Ms. Thorndike, Mr. Burke, and Mr. Catell all stated that they would so abstain.

Whereafter, upon motion duly made and seconded, and by voice vote of the Members present, the following resolution was adopted. Mr. Burke, Dr. Thorndike, and Mr. Catell abstained from the vote with regard to contracts involving the respective entities identified above.

Resolution No. 1295

RESOLVED, that the Periodic Procurement Contracts Report, covering the period December 16, 2010 through March 15, 2011, as presented at this meeting, including but not limited to the contracts identified therein which have been, or are expected to be, executed and which do have, or are expected to have, a period of performance in excess of one year, is hereby approved in accordance with Public Authorities Law Section 2879(3)(b)(ii).

At this time, Mr. Burke had to leave, due to a prior commitment.

The Chair indicated that the next agenda item was a report from Peter Douglas, Director of the Energy Efficiency Research Program, on one of the Authority's first research and development ("R&D") programs, the Oil Heat R&D ("Oil Heat") Program. Mr. Douglas stated that over the 35 year history of this program, the Authority has made a cumulative investment of $17 million that has returned $5 billion in energy cost savings and 32 million tons of avoided CO_2 emissions. This small program has had a tremendous impact on the heating oil industry in New York State and on consumer savings.

Mr. Douglas explained that following the first oil-shocks in the 1970s, the United States proceeded to shift away from the usage of distillate fuel oil for heating purposes in residential and commercial buildings to other more secure energy sources. Over the past 35 years, dependence on this fuel type has declined from 58% to 3% nationwide. While New York followed this trend, its ability to substitute has been more constrained, and as a result, fuel oil

still accounts for 13% of primary energy use in buildings in New York. The bulk of this decline is due to the expansion of the natural gas distribution network in urban and suburban areas.

Today, 33% or 2.3 million of NYS's households rely on fuel oil for heating, and 75% of these users are located in the New York City and Long Island metropolitan area. This makes New York home to one of the largest concentrations of fuel oil usage in the country. These factors expose a significant share of New York households and businesses to market volatility, potential supply interruptions or natural events such as ice storms or ice jams on the Hudson River.

Mr. Douglas stated that there is a strong cluster of oil heating equipment manufacturers in New York. Thanks in part to the introduction of new products by these and other manufacturers, New York has seen a steady increase in equipment efficiencies, such that an average homeowner's heating season now requires 500 gallons of oil less than it did 35 years ago- a 40% reduction in fuel use. But from a consumer perspective, these gains have been offset by increases in the price of fuel oil, which has outpaced the broader energy and consumer prices indices. In fact, total statewide expenditures for fuel oil today is about twice as large even though physical usage is less than half of what it was in 1975. The burden is also felt through the costs of providing home heating oil purchase assistance to low-income families, where State and Federal subsidies exceed $130 million annually. Emissions from the use of fuel oil also contribute to sulfur-based acidification of the local atmosphere and cardio-vascular problems from particulate matter, particularly in dense urban areas. Hence, in terms of security, welfare, and environmental issues, a significant share of the state's population is dependent on the wrong energy source at the wrong time.

Mr. Douglas explained that the Authority has two major roles in this arena: (1) helping consumers become more energy efficient, via programs delivered through the Authority's Residential and Energy Efficiency Services departments; and (2) assisting technology vendors in New York develop more efficient products, via programs delivered by the Authority's R&D programs. However, the funding resources available for these important activities are mainly statutory and by definition relatively small.

The Authority's R&D programs have pursued a broad range of activities that address technical, market and policy barriers to achieving efficient, clean, and secure use of fuel oil products for rate-payers, particularly those with few options.

Since 1975, the R&D programs have funded the Oil Heat Program with $250,000 to $500,000 annually, using principally statutory funds. The Oil Heat Program focuses on the breadth of issues impacting the use of fuel oil in New York. The very first competitive solicitation ever issued by the Authority, Program Opportunity Notice No. 1, was for heating oil R&D, and was designed to address fuel oil topics. From its inception, the Oil Heat Program has emphasized close coordination with stakeholder agencies and organizations including: Federal agencies such as DOE, the Environmental Protection Agency, and Brookhaven National Laboratories; State agencies such as the New York State Department of Environmental Conservation, the New York State Division of Housing and Community Renewal, and the New York State Office of Temporary 2nd Disability Assistance; other New England states and non-governmental organizations; Empire State Petroleum Association; National Oil Heat Research Alliance; and New York technical universities and manufacturers of oil heating equipment.

Mr. Douglas continued by stating that funded projects support technology development with New York manufacturers, performance assessment of alternative fuel oil formulations such as bio-fuels and low sulfur, or development of objective technical and economic data. Additionally, project outcomes have direct impact on equipment and fuel supply market actors as they provide products and services to end-users; help support the Authority deployment programs and other state agencies that provide subsidy programs for low-income and other targeted sectors; and are widely disseminated to help improve public and private decision making.

Mr. Douglas concluded his report by crediting Ray Albrecht, a former member of the Authority's research staff, as the originator and driving force behind the Oil Heat Program up until his retirement in 2009.

The Chair indicated that the final agenda item was other business and called on Elizabeth Thorndike to give a brief report on activities at the Western New York Nuclear Service Center ("West Valley"). Dr. Thorndike stated that as there were no agenda items requiring action, the April Waste and Facilities Management Committee meeting was cancelled. However, she asked staff to prepare a brief report on recent developments to keep the Members updated. The written report was distributed to Members at the meeting.

The President's Federal Fiscal Year ("FFY") 2012 budget includes only $60 million for West Valley. Dr. Thorndike indicated that West Valley has not been funded at a level this low since 1989. In recent years, funding has been around $85 million and was increased last year as a result of American Recovery and Reinvestment Act ("ARRA") funding. Staff believe that an increase in the federal appropriation for the West Valley Demonstration Project ("WVDP") is needed for FFY 2012 to avoid a significant impact on cleanup activities, including layoffs. Funding at the $60 million level will add approximately four years to the Phase I decommissioning work and will increase the total project cost by about $120 million.

DOE and Authority staff have discussed the West Valley funding concern with staffers for Congressmen Brian Higgins and Thomas Reed. In addition, Authority President Murray recently sent letters to Congressmen Higgins and Reed, and Senators Schumer and Gillibrand, supporting an $85 million federal appropriation for West Valley for FFY 2012.

Dr. Thorndike explained that the WVDP's ARRA funding will end on June 30, 2011, and will result in the layoff of sixty-five employees that were hired as a result of ARRA. West Valley Environmental Services, LLC is presently seeking individuals throughout the company who are willing to voluntarily leave employment to create openings for the ARRA employees.

Next, Dr. Thorndike reported that West Valley staff is in the planning and design stage for installing additional erosion controls in the creeks adjacent to the State Licensed Disposal Area ("SDA") in 2011. This work is needed to prevent erosion from destabilizing the SDA. The cost of the erosion control work will be split 50/50 with DOE under the 2010 Consent Decree. Staff will be revisiting the Quantitative Risk Assessment prepared for the SDA in 2009 to

determine whether any updates or revisions are recommended based on the recent events at the Fukushima nuclear power plant in Japan.

Dr. Thorndike concluded her remarks by commending staff on the metrics presentation. She indicated that the Authority should continue to work on its outreach and marketing efforts, but that great strides have been made in that area.

At this time, Mr. Catell had to leave, due to a prior commitment.

The Chair asked if there was any other business.

Ms. McDonald stated that the New York State Department of Transportation ("DOT") is cooperating with four other states to launch an eco-driving campaign which would fit within the Authority's goals. The campaign provides drivers with various tips, focusing on the long distance driver. Ms. McDonald indicated that DOT staff will be contacting the Authority and the New York State Department of Environmental Conservation to gain their support and cooperation for this effort.

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

Hal Brodie
Secretary

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April 8, 2011

NOTICE OF MEETING AND AGENDA

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

PLEASE TAKE NOTICE that a regular (the 209th) meeting of the New York State Energy Research and Development Authority ("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, on Monday, April 18, 2011, commencing at 11:30 a.m. for the following purposes:

1. With respect to matters considered by the Program Planning Committee:

   (a) to receive a report on program evaluation and metrics;

   (b) to consider and act upon a resolution approving a modification to the lease between the Authority and United STEP I, LLC at 107 Hermes Road, Saratoga Technology + Energy Park ("STEP");

   (c) to consider and act upon a resolution approving a transfer of title of sewer-related ancillary equipment and for a Permanent Right-of-Way and Easement between the Authority and the Saratoga County Sewer District No. 1 at STEP;

   (d) to consider and act upon a resolution approving a ground lease between the Authority and the single purpose entity to be formed by the Jersen Construction Group, LLC at 20 Tech Trail at STEP.

2. With respect to matters considered by the Audit and Finance Committee:

   (a) to receive a report on the independent audit of the Financial Statements of the Authority for FY 2010-11;

   (b) to consider and act upon a resolution approving modifications to the Authority's Internal Control Manual;

(c) to receive a report on the recent activities of the Director of Internal Audit;

(d) to receive an Annual Internal Audit Report from the Director of Internal Audit; and

(e) to receive a report on the Green Jobs-Green New York program.

3. To consider and act upon a resolution approving a periodic procurement contracts report.

4. To receive a report on the Authority's Oil Efficiency research and development program.

5. To transact such other business as may properly come before the meeting.

Members of the public may attend the meeting at any of the above locations. In accordance with guidance from the Office of Taxpayer Accountability, 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.org/governancemeetings2.asp.

Hal Brodie
Secretary