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

Minutes of the 62<sup>nd</sup> Meeting Held on January 17, 2007

Pursuant to a Notice and Agenda dated January 5, 2007, a copy of which is attached as Exhibit A, the 62<sup>nd</sup> meeting of the Program Planning Committee of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (NYSERDA) was convened at the Authority's Albany Office located at 17 Columbia Circle, Albany, New York and by video conference in the Authority's New York City Office located at 485 Seventh Avenue, 10<sup>th</sup> floor, New York, New York, and by video conference in the Authority's Buffalo Office located at 617 Main Street, Suite 105, Buffalo, New York, on Wednesday, January 17, 2007, commencing at 10:30 a.m.

The following members of the Committee were present:

Vincent A. DeIorio, Esq., *ex officio* Parker D. Mathusa, Committee Chair Robert B. Catell (via video conference) Elizabeth W. Thorndike, Ph. D.

Also in attendance were Peter R. Smith, President and CEO; Robert G. Callender, Vice President for Programs; Jeffrey J. Pitkin, Treasurer; Roger D. Avent, General Counsel and Acting Secretary to the Board; Paul A. DeCotis, Director; Richard E. Gerardi, Director; Brian M. Henderson, Director; Joseph R. Visalli, Director; Gunnar E. Walmet, Director; Mitchell Khosrova, Esq., Associate Counsel and Secretary to the Program Planning Committee; and various members of Authority staff.

Committee Chair Mathusa first acknowledged the presence of the Authority's newest Board Member, Frank Bifera, Esq., and called the meeting to order and noted the presence of a quorum. The meeting commenced with the approval of the minutes of the 61<sup>st</sup> meeting of the Committee held on September 11, 2006. Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the minutes were approved.

Mr. Mathusa then called on Authority Chair Vincent A. Delorio to discuss approval of the Program Planning Committee Charter. Judge Delorio explained that the Public Authorities Accountability Act of 2005 established an Authority Budget Office (ABO), whose purpose is to study, review, and report on the operations, practices, and finances of State and local public authorities; to promote the adoption of effective principles of model governance; and to provide the Governor and the Legislature with conclusions and opinions regarding the performance of those public authorities.

The ABO developed model charters for the Governance and Audit Committees as examples to reflect current best practices incorporating the statutory requirements of the Act. NYSERDA's officers are recommending similar Charters for all of the Authority's Committees.

The Charter for the Program Planning Committee lists the powers of the Committee, describes the composition of the Committee, and the selection of members. It also denotes the Committee's general and specific responsibilities. Those specific responsibilities are detailed in the memo that was included in the mailing.

The major responsibilities include: reviewing the Authority's annual updating of the multi-year integrated program plan and the portions of the Authority's annual budget related to the Energy Research, Development, and Demonstration (RD&D) Program, the Energy Efficiency Services (EES) Program, the Energy Analysis Program, the Residential Energy Affordability Program (REAP), and the Economic Development Program.

As a way to stay informed and prepare for these major responsibilities, the Committee will receive reports from Staff on the status of the various programs and activities. The Charter is intended to document these responsibilities.

Mr. Mathusa asked if there were any further discussion or questions regarding a recommendation by the Committee that the Board approve the Resolution adopting the Program Planning Committee Charter. There being none, upon motion duly made and seconded, and by unanimous voice vote of the Members, the Committee recommended adoption of the Resolution attached hereto as Exhibit B.

Next, President and CEO Peter R. Smith gave a report regarding various Authority programs and initiatives, including the Renewable Portfolio Standard (RPS), System Benefits Charge (SBC) Program, Consolidated Edison System Wide -Program (SWP), and the Advanced Clean Coal Power Initiative.

Mr. Smith stated that the SBC, which was renewed at increased funding, has been going very well. NYSERDA has executed 1,250 contracts totaling \$112 million from March 2006 through mid-January 2007.

Regarding the RPS, NYSERDA is in the midst of conducting its second Main Tier procurement. Bidders representing more than 34 facilities have submitted proposals for approximately \$27 million in annual NYSERDA funding. A meeting of the Technical Evaluation Panel to review and discuss the proposals is scheduled for January 24 and contracts are expected to be executed in mid-February. Proposal evaluation will be based on price (70%) and on the ability of the bidder to demonstrate the expected economic benefits to New York created by the bid facility (30%). Through this procurement, NYSERDA has the potential to support the development of approximately 500-700 Megawatts (MW) of New York- based renewable capacity which, if all gets built, should result in more than \$1 billion of in-state project investment.

In addition, a draft Operating Plan for the Customer Sited Tier is currently under discussion between NYSERDA and Public Service Commission (PSC) staff. Much like the current SBC renewable programs, NYSERDA expects to fund projects by offering incentives. A final Operating Plan should be completed in the near future and the program is planned to begin in mid 2007.

Mr. Smith also reported on the SWP in the Con Edison territory reminding the Members that, in March 2005, the PSC adopted a three-year electric rate Order for Con Edison that includes tasking NYSERDA with administering a demand management program designed to achieve 150 MW of load reductions in the Con Edison service territory. The SWP is funded at \$112 million (excluding administration and evaluation expenses) and is designed to yield demand reduction impacts in addition to those of the current SBC program. As of October 31, 2006, NYSERDA achieved over 126 MW of load reduction in encumbered projects, or over 84% of the goal, in only a 6-month period.

On December 22, 2006, the PSC issued an Order for the SWP modifying certain requirements in its March 2005 Order. The Order permits NYSERDA to continue to implement the SWP with a new, more easily administered, requirement to ensure that the SWP funds will not supplant SBC funds. NYSERDA will be spending over \$71 million of the remaining SWP funds and will match this with approximately \$88 million SBC3 funds in Con Edison territory over a 15-month period until the end of the Con Ed rate settlement agreement on March 31, 2008. The SWP programs, in conjunction with the SBC programs, will work to achieve additional load reduction to improve electric system reliability in the Con Edison territory.

The Advanced Clean Coal Power Plant Initiative was issued in September 2006 by New York Power Authority (NYPA), which is offering the selected plants a long-term power purchase agreement. As NYPA's partner in this initiative, the Authority's primary role is to coordinate the carbon capture and carbon sequestration research at the selected facility. Additionally, as part of the overall initiative, the Authority is providing direct funding to the New York State Museum to complete a geological characterization for carbon sequestration and is also negotiating the State's role in the Department of Energy (DOE)-funded Midwestern Regional Carbon Sequestration Partnership. Clean coal development will be included as part of next year's program plan.

On December 19, 2006, NYPA announced that NRG Energy (NRG) was the winning bidder from the solicitation. NRG will build an integrated gasification - combined cycle (IGCC) coal plant at its Huntley power station in Tonawanda, NY. The award is conditional on NRG's obtaining resources and support to reduce the cost of electricity as stated in NRG's proposal.

In response to Members' comments, Mr. Smith further stated that Clean Coal issues would be discussed in next year's Program Plan.

Mr. Mathusa then called upon Jeffrey J. Pitkin, the Authority's Treasurer, who reported that the Budget includes revenues totaling about \$401 million and expenditures totaling about \$408

million; the \$7 million difference relates to expenditures to be made in this year from program funds received in previous years.

The Budget has been formatted in accordance with regulations issued by the State Comptroller in March 2006. Consistent with the regulations, the Authority is also posting the budgetary information in various public places, including its website, and is providing a copy to the State Comptroller.

With respect to the **New York Energy Smart Program**<sup>SM</sup>, beginning July 1, 2006, approximately \$13.7 million per year has been allocated for administrative purposes. Included in this allocation is approximately \$5.6 million in unexpended administrative funds from previous years. For FY 2007-08, however, the Budget includes administrative costs totaling approximately \$14.0 million. Included in this increased cost is \$1,403,000 for retiree health insurance allocated to this Program due to the adoption of a new accounting standard known as GASB 45. Since this cost was not quantified at the time the administrative budget for this year's **New York Energy Smart Program**<sup>SM</sup> was developed, staff will be seeking approval from the PSC for increased administrative funds to cover this unanticipated expense. There are sufficient administrative funds at this time to cover current expenses, however. Staff will report on the results of such a request at a future meeting.

The total RPS Program is budgeted approximately \$47.9 million for incentive payments, Authority program administration expenses, and program evaluation costs.

For the energy RD&D Program, an assessment on the intrastate sales of gas and electricity by the State's investor-owned utilities in the amount of \$13,411,000 is requested. Additional funding of approximately \$3.2 million is expected to be provided through annual contributions from NYPA and the Long Island Power Authority.

The Budget also includes \$19.4 million in anticipated State reappropriations for the plug-in hybrid electric vehicle, advanced vehicle research and development, and hydrogen transportation research and development program initiatives.

With respect to the EES Program, the Budget includes: \$28.9 million in State reappropriations for the E85 fueling station conversion program and for the Investment in Energy Conservation and Efficiency Pilot Program; \$51.6 million from Consolidated Edison for the SWP Program in their territory pursuant to a PSC Order; and approximately \$8.7 million from certain energy efficiency program funds previously collected.

The Budget also includes revenue of \$138,000 from leases of the existing building and from annual ground lease payments for the new buildings to be constructed at the Saratoga Technology + Energy Park (STEP); \$420,000 from a hookup fee from the New York State Department of Environmental Conservation (DEC) with respect to the planned alternate fuel vehicle research

laboratory; and \$7.75 million from an appropriation for the international nanotechnology photovoltaic center to be located at STEP.

The Energy Analysis budget contains a \$1.4 million increase for general program activities.

There is an additional Budget item of \$1,788,000 for principal and interest payments on bonds issued by the Authority to fund the State's costs at the Western New York Nuclear Service Center.

Additionally, the Budget includes a 5.3% increase for staff salaries due to both a slight increase in the number of employees and general salary increases; a fringe benefit cost increase of \$3.3 million from the additional expenses to be recorded annually commencing in FY 2007-08 for retiree health insurance under accounting standard GASB 45; a non-personal service cost increase of 6.5% for increased computer system support costs; and a direct program charges increase of 3.7% for program-consulting support and program-monitoring travel costs.

Moreover, the Authority pays to the State an annual Cost Recovery Fee assessed for general governmental services and the Budget includes \$4,645,000 for this payment. In fiscal years 2004-05 through 2006-07, the Authority was also required to pay the State General Fund, annually, an additional payment of \$913,000 pursuant to Article VII budget bills.

Lastly, the Budget includes \$250,000 for routine computer and equipment purchases and replacements; \$815,000 for infrastructure costs anticipated at STEP; and \$800,000 for costs to assess, upgrade, and consolidate the Authority's financial management and program management and reporting systems.

The Budget anticipates a balance of unrestricted net assets of \$2,358,000 as of March 31, 2008, representing less than 0.6% of total funding, but consistent with historical and fiscally prudent balances.

The PPC unanimously recommends that the Authority adopt the proposed Budget Resolution attached hereto as Exhibit C with respect to the programs under the PPC's review.

Mr. Mathusa then called upon Robert Callender, Vice President for Programs, to report to the Committee on STEP. Mr. Callender provided a brief update on some of the current activities at STEP as well as a few changes in emphasis and lessons learned as NYSERDA continues to develop STEP.

He reported that the selected developer for the first new building, The United Group, has secured its financing, closed on its loan with Citizens Bank, entered into a Payment In Lieu of Taxes (PILOT) agreement with the Saratoga Industrial Development Authority, and started construction of the site, which will be a 100,000 sq. ft., LEED-rated manufacturing, lab, and office multitenant building. The developer has cleared the site, started the foundation work, and expects to begin erecting steel by February. The eight tenants for this building are Starfire, Electrovaya,

Building Performance Institute (BPI), North American Board of Certified Energy Practitioners, Center for Economic and Environmental Partnership, GroSolar, Lockheed Martin, and Hudson Valley Community College (HVCC). HVCC will train students for potential employment at STEP as well as Advanced Micro Devices (AMD).

In accordance with the terms of our ground lease, the developer has paid us a utility hook-up fee of \$632,000 and an initial ground lease payment of \$30,000. NYSERDA has also received approximately \$176,000 for the tree harvesting. All of these funds will be used to support the continued phased build-out of our infrastructure.

Additionally, the design for DEC's Alternative Fuel Vehicle Research Lab (AFVRL) has been completed and final design and construction documents will be completed this Spring.

With respect to STEP's marketing plan and activities, Staff has developed a new STEP marketing solicitation in response to the needs of the marketplace. Specifically, the new open solicitation invites businesses and developers to apply to construct owner-occupied buildings or multi-tenant buildings for businesses that meet the Authority's tenant-criteria. This approach is consistent with how the real estate market operates and it gives the Authority the flexibility to attract the clean-energy companies NYSERDA wants at STEP.

Next, Mr. Callender discussed the Resolution contained in the meeting package that approves the transfer of 8.64 acres of land that is located at STEP to the Luther Forest Technology Campus Economic Development Corporation (LFTCEDC) in exchange for 8.64 acres of like-kind land located at the Luther Forest Technology Campus (LFTC).

He explained that the LFTCEDC is developing the Campus which will be the new home to chip fab manufacturer, AMD, and is located next to STEP. Under the proposed agreement, the LFTC will provide 8.64 acres of land at the northern-most area bordering STEP, allowing NYSERDA to construct the curve in the loop road on the STEP property as is delineated in the STEP Master Plan and Land Plan that the Members approved in January 2004. In exchange for this land, NYSERDA will provide the LFTCEDC with 8.64 acres of land that is located along the south base of STEP. This land will be used by the Town and LFTCEDC to construct a road and bring power utilities into the LFTC. Overall, this exchange of like-kind land will facilitate the construction of a new road and new utility services that will be used by both parks, and it will continue the coordination of infrastructure build-out in both parks.

Mr. Mathusa asked if there was any further discussion or questions regarding the Committee approving a recommendation that the Board approve the Resolution authorizing the transfer of 8.64 acres of land that is located at STEP to the LFTCEDC in exchange for 8.64 acres of like-kind land located at the LFTC. There being none, upon motion duly made and seconded, and by unanimous voice vote of the members, the Committee approved the recommended Resolution attached hereto as Exhibit D.

Next, Mr. Mathusa stated that each of the Program Directors would present a brief report regarding their current activities including, changes in emphasis and lessons learned. Paul DeCotis, Director for Energy Analysis Programs, reported that Staff is independently updating its energy resource assessments, that were last updated in 2002 as part of the State Energy Pansince the energy planning legislation lapsed in 2003, Energy Analysis is continuing this effort on its own, given the important nature of this work. Staff is also updating the energy demand and price forecasts to assist in policy-making and for continuing analysis of the Regional Greenhouse Gas Initiative (RGGI) work. Mr. DeCotis further stated that staff is expected to meet all reporting deadlines for the Low-level Radioactive Waste Status Report, Patterns and Trends Report, the annual and quarterly SBC reports, and NYSERDA's contractor evaluation and special studies reports.

Staff is also continuing to conduct modeling analysis for RGGI that will provide support for DEC's filings with the Governor's Office of Regulatory Reform (GORR) for implementing a final rulemaking. Mr. DeCotis also noted that the natural gas efficiency potential studies for both Con Ed territory and the Statewide programs have been completed, as has the petroleum infrastructure study. And, the Broadwater liquefied natural gas (LNG) facility review supporting the Department of State is near completion.

Mr. DeCotis noted that Staff is finishing the reports for several public benefits programs including the annual report for the **New York Energy \$mart<sup>sm</sup>** Program, quarterly reports for the Con Edison Natural Gas Efficiency Pilot Program, and the report for the Con Edison Electric System-Wide Program.

He concluded by summarizing that the new SBC Evaluation Framework will be implemented as Staff has consolidated the work of five current evaluation assistance contractors down to three. Lastly, a Strategic Program Plan meeting is being scheduled and a guidance document is anticipated to be issued in February 2007.

Program Director Brian Henderson reported on the Energy Efficiency Services (EES) Program. He began by explaining the program's current activities and mentioned that the Commercial and Industrial Performance Programs is one of the largest deployment programs at NYSERDA. The program is helping to build a robust service provider industry and has leveraged over \$650 million in energy capital improvements in over 1,000 businesses and institutional customers across the state.

Staff is continuing to assist customers in identifying energy savings opportunities at their facilities. Over 3500 customers have participated in the FlexTech and the Technical Assistance Services programs. Work also continues with over 80 participating lenders and have leveraged over \$195 million in low-cost financing under the Loan Fund. NYSERDA is well on its way to achieving the goals of the System Wide Demand Management program in the Con Edison Service territory. Approximately 126 MW of load reduction have been contracted with approx \$40 million in funding. The Authority will be extending the program with the remaining \$71

million over the next 15 months for an additional increment of load reduction impacts and helping with electric system reliability during the Summers of 2007 and 2008.

Additionally, while implementing the SBC3 programs, Staff will also need to re-bid a number of support contracts that provide site visits and technical assistance to customers. Many of the contractors are new to these services. For example, NYSERDA just competitively selected eight new FlexTech contractors for New York City; as well as six of 14 (43%) being new contractors for the New Construction/Green Buildings program; and eight of 12 (67%) being new Technical Support contractors.

In regard to changes in emphasis, Mr. Henderson stated that NYSERDA has a large portfolio of completed New Construction Program projects and Staff is now following-up with the customers to perform "post-occupancy performance assessments" of the new green buildings to see how they are performing and to assess occupant satisfaction.

Over the past several years, Staff has focused on architects and engineers training and is now providing training to the broader commercial construction industry including vendors, installers, technicians, and other business partners on energy efficiency measures, proper installation and best practices.

Moreover, the Authority is trying to make a greater impact across whole sectors with its programs, rather than individual projects and to better address certain sector-based issues/barriers. Building on the success in the schools sector, NYSERDA will increase its emphasis on commercial real estate, hospitality, industry and water treatment facilities. Later in 2007, Staff will also expand to healthcare and colleges.

Mr. Henderson noted that customers are asking for more assistance beyond just energy-efficiency to include strategic energy planning in multi-building facilities; commodity procurement; load profile assessments; and demand reduction.

Staff also sees an opportunity to further strengthen the codes and standards. Working with the Department of State, Staff is completing energy-efficiency standards for equipment and appliances (incandescent reflector lamps, metal halide lamps, external power supplies and consumer audio/video products like DVD players/recorders, digital-to-analog converter boxes, TVs, etc.). Staff further expects to be working with the Department of State during 2007 to enhance the State's Energy Code.

He then summarized a lesson learned. NYSERDA just needs to "tweek" some of its programs to maximize impacts by enhancing, streamlining and consolidating programs; but the basic strategy of technical and financial assistance is not changing. For example, Staff is merging the Smart Equipment Choices program into the broader Commercial Industrial Performance Program. Also, with the new System-Wide Demand Management Program in Con Edison territory, NYSERDA is adding the Combined Heat and Power deployment component.

Staff is also pushing for greater adoption of certain technologies and best practices such as geothermal Heat Pumps, high performance T-8 lighting, and more electric-to-steam chiller replacements in New York City. Energy usage has been benchmarked in over 500 K-12 schools and Staff sees greater opportunity in this area, along with building commissioning, facility training and addressing the increasing energy demand of plug loads in commercial buildings.

Mr. Henderson concluded by explaining that NYSERDA is working with the PSC and the utilities with on-site technical assistance and load profile assessments to help the larger customers across the State with the new hourly pricing tariff.

Next, Program Director Rick Gerardi reported to the Committee on the Residential Energy Affordability Program (REAP) and highlighted that Staff has issued solicitations for all its major implementation contractors and marketing contracts. The transition to a target-performance incentive basis for the Multifamily Building Performance Program will be completed in March 2007 and third-party Quality Assurance Programs are already in place.

As to changes in emphasis, Mr. Gerardi stressed the consolidation of the Multifamily Program initiatives. There will now be a single portal that is market driven for all of NYSERDA's Qualified partners. Additionally, pursuant to discussions with the Department of Energy, some of REAP's programs are being considered as the national pilot which may include energy-efficient mortgages for ENERGY STAR Labeled Homes, as well as, collection of real usage data to be used in evaluation, quality assurance, and advertisement marketing.

He summarized the lessons learned as follows: REAP must fine-tune its incentive strategies with mid-stream providers so that incentives are market-based rather than transaction-based. In addition, REAP will package renewables and fully integrate programs such as CHP, Ground Source Heat Pumps, Time of Use, and Real Time Pricing. The programs also need to 'coordinate' with federal programs, such as federal tax incentives for energy-efficient homes, and must continue to leverage New York City Housing Preservation and Development, United States Housing Preservation and Development and New York State Division of Housing and Community Renewal funding for comprehensive energy-efficiency work on low-income buildings.

Program Director Joe Visalli followed with a report on the Research and Development program for energy resources, transportation and environmental research and development program. In discussing the RPS, Dr. Visalli reported that NYSERDA issued its second Main Tier Solicitation and recently received proposals competing for \$270 million in long-term (10 year) contracts. These contracts will result in \$1 billion in investment in New York for new renewable energy generation facilities of an estimated 700 MW in nameplate capacity. The proposals are currently being evaluated and a decision will be made in the near future.

Dr. Visalli explained that the program's changes in emphasis include biofuels and bioproducts, such as the current project that NYSERDA and New York State Department of Agriculture and Markets jointly conducting including cellulose to ethanol; improving environmental performance

for power generation; and plug-in hybrid electric vehicles testing and anti-idling demonstration projects. He noted that Staff is moving forward with the Clean Energy Business Development program, and will expand the scope of the next solicitation to include innovative products in the areas of renewable energy, energy efficiency, energy storage and clean generation. The initial solicitation targeted renewable energy products only, and this expanded effort should result in more competition to select the most promising projects leading to new businesses in New York.

The Committee next received a report from Program Director Gunnar Walmet on the Building and Industry Research and Development program. He updated the Committee on the CHP Program where there is 140 MW in the pipeline at a cost of approximately \$57 million. There are already 22 MW on-line from 44 operational projects. All projects will provide extensive data for technology transfer. The most recent projects that have been placed in service have provisions for backup power during utility outages. The largest new projects in the portfolio include projects at New York University, New York Presbyterian Hospital, Cornell University, and SUNY Binghamton.

Mr. Walmet then explained that the Hydrogen Program invested \$9 million over four years on studies, education, development and demonstration currently working with NYPA on the Buffalo and Niagra Falls hydropower to hydrogen demonstration. The SuperPower project is the first in the nation and was operational in June 2006. The emphasis will now be on commercialization. An example of the program enhancing competitiveness is the Phillip's chip fab that doubles the battery life in cell phones and X-Box game systems. This is the only chip fab in the nation producing this new chip. He also highlighted the New York Times Building in New York City that has the most advanced daylighting, CHP, and under floor air distribution.

Mr. Walmet also highlighted the program's change in emphasis stating that the Industrial R&D program, EES, and Environmental R&D programs will have one combined solicitation with three due dates a year and funding of \$4.5 million per year. Regarding the Con Edison System-Wide CHP subscription program, he reported that it is well subscribed and Staff is now working on a joint effort with SBC funds. Additionally, a Lighting Incubator solicitation was issued with a January 15, 2007 due date and the transmission and distribution superconductor program is being solicited in two rounds after lengthy planning and coordination with the Independent System Operator.

He concluded by stating that some of the barriers in Distributed Generation and CHP are uncertain environment regulations; uncertain energy/gas prices; need for coincident heat and electric for good economics; high cost of customized engineering; fairly viable in large size - broader in small; and that fuel cells have not become cheaper. He explained that, in regard to the hydrogen program, there is a strong public interest; some good niches, for example fork-lifts; and good sites near by-product hydrogen plants.

Mr. Mathusa asked if there was any other business before the Committee. There being none, upon motion duly made and seconded, and by unanimous voice vote of the members, the 62<sup>nd</sup> meeting of the Program Planning Committee was adjourned.

Respectfully submitted,

Mitchell Khosrova

Secretary to the Program Planning Committee