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

Minutes of the 65th Meeting Held on January 16, 2008

Pursuant to a Notice and Agenda dated January 9, 2008, a copy of which is annexed hereto, the 65th meeting of the Program Planning Committee of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY was convened at 10:30 a.m. on Wednesday, January 16, 2008, at the Authority's Board Room at 17 Columbia Circle, Albany, New York, and by video conference in the Authority's New York City office at 485 7th Avenue, 10th Floor, New York, New York, New York.

The following members of the Committee were present:

Vincent A. DeIorio, Esq., ex officio Parker D. Mathusa, Committee Chair Robert Catell Elizabeth W. Thorndike, Ph. D.

Also in attendance were Robert G. Callender, Vice President for Programs; Jeffrey J. Pitkin, Treasurer; Hal Brodie, General Counsel and Secretary to the Board; Mitchell Khosrova, Associate Counsel and Secretary to the Program Planning Committee; and various members of the Authority staff.

Committee Chair Mathusa called the meeting to order, noted the presence of a quorum, and stated that a Notice of the meeting was mailed to the Members and the press on January 9, 2008. He noted that this Program Planning Committee ("PPC") meeting was being webcast to give the public access to watch the meeting through the internet from any location. All of the Committee members and Authority Officers introduced themselves.

Chair Mathusa then introduced Vice-President for Programs Robert Callender to deliver the President's remarks because President Paul D. Tonko was asked to join the Governor in Buffalo, for the Governor's State of the Upstate address.

Mr. Callender stated that last year was very productive and busy, and 2008 is shaping up in much the same way. NYSERDA staff continues to be a source of objective information and advice for many of our external stakeholders and because of NYSERDA's experience, expertise and ability, the Authority is involved in a number of new initiatives. These new initiatives have the potential to result in expanded efforts, as well as entirely new program opportunities for NYSERDA, with which to address New York's energy, environmental, and economic development issues for years to come.

Last April Governor Spitzer launched his 15 by 15 Initiative. The goal of the program is to reduce statewide electricity use by 15 percent from forecasted levels as of the year 2015, primarily through the implementation of energy efficiency improvements. As a result of these efforts, the plan strives to reduce energy consumption, curb pollution and address global climate change. The plan outlines a platform for a broad spectrum of activities, including new appliance efficiency standards and more aggressive energy efficiency building codes. This plan represents a dramatic acceleration of New York's energy efficiency commitment. The 15 by 15 Initiative has the potential to be the cornerstone of New York's energy and environmental policies.

Mr. Callender noted that the 15 by 15 plan has, to date, been driven by two primary activities: the State Agency Clean Energy Collaborative and the Public Service Commission's (PSC) Efficiency Portfolio Standard (EPS) proceeding. NYSERDA has taken an active role in both activities. The Clean Energy Collaborative has created a "lead by example" approach to the 15 by 15 plan wherein Governor Spitzer has called upon state agencies to develop existing and new energy efficiency activities so that New York State agencies can serve as a role model for other organizations and institutions in finding effective efficiency opportunities, and put them into place to contribute to the 15 by 15 goal. NYSERDA has not only been asked to provide its technical expertise to assist in developing activities, but has also taken a coordinating role in this collaborative.

In addition, the EPS proceeding is well underway, and NYSERDA is fully engaged in this process as well. This proceeding is designed to reach those goals, strategies and programs essential to achieve 15 by 15 that can be determined through the utility regulatory process. The Authority is prepared to assist the PSC in its efforts to establish realistic goals, implement and coordinate programs, measure progress, and evaluate results in an effort to ensure that the most cost-effective programs and strategies are adopted in order to meet the 15 by 15 goal.

NYSERDA is sitting on each of the four working groups that are supporting the proceeding, and is helping to guide policy. In December 2007, the working groups reported to the Administrative Law Judge who will issue a determination in the near future that will define the next stage of this process. This determination will provide a better understanding of NYSERDA's role in the next stage. Ultimately, the Authority hopes to see growth in current and new efficiency programs for NYSERDA. The final results of the proceeding will determine the level and scope of that growth.

Mr. Callender then stated that staff also continues to work on the Regional Greenhouse Gas Initiative (RGGI) and is helping to guide New York State and its regional partners from concept to implementation to operation. The comment period has concluded for the proposed regulations in New York and staff is currently reviewing the substance of the comments and working with the New York State Department of Environmental Conservation (DEC) to decide whether or not to amend the proposed regulations. If the proposed regulations are to be amended, an additional comment period may be required.

To support the RGGI Program, RGGI, Inc. has been formed and serving as the interstate entity to conduct auctions. DEC Commissioner Pete Grannis is the Chair of the board. The PSC approved a total of \$3 million of System Benefits Charge (SBC) funds to be applied to the start up RGGI so far. The Authority has received \$300,000 of the start up funding to support RGGI. NYSERDA is also facilitating the process to competitively select a contractor to conduct a regional auction and if necessary a state auction

In respect to personnel changes, Mr. Callender reported that Karen Villeneuve has been selected to fill the position of Program Director in the Residential Efficiency and Affordability Program and Janet Joseph has been selected to fill the position of Program Director in the Energy Resources, Transportation and Power Systems and Environmental R&D, and the Renewable Portfolio Standard (RPS) Program. Additionally, due to the retirement of Brian Henderson, staff is currently interviewing candidates for the position of Program Director in the Energy Efficiency Services Program and it is expected that this position will be filled soon.

Finally, Paul DeCotis accepted a position in the Governor's Office as the Deputy Secretary for Energy. Therefore, staff will begin to interview candidates for the position of Director of Energy Analysis in a few weeks.

Next, Treasurer Jeffrey Pitkin reported that the Fiscal Year (FY) 2008-09 Budget includes revenues totaling \$406,468,000 and expenditures totaling \$456,742,000, including some expenditures made from program funds received in the prior fiscal year.

The Budget has been formatted consistent with regulations adopted by the State Comptroller in March 2006. The Authority is also complying with requirements under these regulations to make budgetary information available to the public and will provide a copy of the Budget adopted by the Members to the State Comptroller. Because the details of the budget are outlined in explained in the memorandum in the board package, Mr. Pitkin limited the discussion to some of the more significant items.

The **New York Energy \$martSM** Program is funded through the SBC electric ratepayer assessment and a total of \$172,052,000 will be transferred to NYSERDA by the investor-owned utilities during FY 2008-09 pursuant to the PSC's Order. This funding is supplemented with interest earnings on unexpended funds, which are estimated at \$11,875,000.

The SBCIII funding available for NYSERDA's program administrative costs is \$68.3 million for the five year period, which equates to about \$13.7 million per year. However, for FY 2008-09, the Budget includes program administrative costs totaling approximately \$15.6 million (or 8.5% of funding). Approximately \$1.3 million of this increase is due to the adoption of accounting standard Governmental Accounting Standards Board 45. Since the increased cost from adopting this new accounting standard was not quantified at the time the administrative budget for SBCIII

was established, staff will be seeking approval for a modification to provide funding to cover this additional expense. However, as a result of staffing vacancies and unspent administrative funds prior to SBCIII, available funding is sufficient to cover projected cumulative expenses through FY2008-09. Staff will report back on this at a future meeting.

Next, Mr. Pitkin discussed the funding for RPS which was created by a September 2004 PSC Order and is designed to provide incentives to increase the percentage of electric generation from renewable sources to at least 25% by 2013. The program is funded through an RPS electric surcharge in increasing amounts over 8 years. The Budget for FY 2008-09 includes approximately \$67.3 million to be received pursuant to the PSC Order. The Budget reflects expenditures equaling available funding, yet the timing of program payments is expected to be less than this amount, and any funds not expended will be restricted and available to support future year program expenditures.

He further reported that base funding for the Research and Development (R&D) program is expected to be continued to be provided by a State appropriation, financed by an assessment on the intrastate gas and electricity sales of the State's investor-owned utilities totaling \$13,411,000. Additional funding is provided through annual contributions from the New York Power Authority and the Long Island Power Authority (\$1.6 million each), reflecting funding proportionate to the investor-owned utility assessments, and also from project recoupment royalties and interest income.

Program base funding is used to fund R&D projects which will total \$12.6 million, consistent with the programs approved by the Members in the Multiyear Program Plan. In addition, \$750,000 is expected to be transferred to the University of Rochester Laboratory for Laser Energetics pursuant to budget appropriation language, consistent with prior years. It was discussed at an earlier meeting that Division of Budget staff were assessing whether this program initiative should continue to be funded in this manner. Staff assisted Division of Budget staff in obtaining information from the University on the status of work conducted at the Laboratory and the significant benefits accruing from this funding. As a result of this information, it appears that the Governor's Executive Budget will continue to provide the funding transfer as in years past. University officials also invited NYSERDA management to visit the Laboratory and it is expected that this will occur in the next several months.

Mr. Pitkin then noted that the FY 2008-09 Budget also includes \$23.443 million in anticipated State reappropriations for unexpended funding provided in the FY 2006-07 State Budget for a plug-in hybrid vehicle implementation program, an advanced vehicle research and development program, a hydrogen transportation research and development program, and an initiative for the development of pilot cellulosic ethanol production facilities.

The FY 2008-09 Budget includes funds which may be received to fund new energy efficiency and clean energy programs. NYSERDA is expected to administer the proceeds resulting from the auction of the State's carbon dioxide allowances under RGGI. The Budget estimates that auction

proceeds would total about \$60 million annually and includes \$30 million in the Budget for a portion of the first year's proceeds. NYSERDA has also been requested by the DEC to administer the proceeds from the sale of emission allowances under the Federal Clean Air Interstate Rules program (CAIR). The Budget estimates proceeds of \$5 million from the sale of the first year's allowances.

In regard to the Energy Efficiency Deployment Program, Mr. Pitkin pointed the FY 2008-09 Budget includes: \$21.9 million in anticipated State reappropriations for unexpended funding provided in the FY 2006-07 Budget for the E85 fueling station conversion program and for the Investment in Energy Conservation and Efficiency Pilot Program; \$13.3 million for program funding expected to be received or reimbursed, including gas efficiency programs funded through Con Edison and National Grid of \$9 million and \$2.7 million, respectively; up to \$51.6 million anticipated to be received from Con Edison for the System-Wide Demand Management Program (in addition to \$58.4 million and \$12 million to be received in FY 2006-07 and FY 2008-09, respectively) funded through Con Edison's March 2005 3-yr electric rate settlement; and program expenditures of about \$50.9 million funded through certain energy efficiency program revenues collected prior to FY 2008-09, primarily for the Con Edison System Wide Demand Reduction Program.

As to the Saratoga Technology + Energy Park (STEP), the FY 2008-09 Budget includes \$209,000 in lease rentals from the existing 22,000 square foot building and from annual ground lease payments, and includes \$420,000 anticipated to be received as an infrastructure hookup fee for the DEC alternate fuel vehicle research laboratory facility.

The FY 2008-09 Budget includes \$5,045,000 in State appropriation funding for the Energy Analysis department, reflecting an increase of \$2,400,000 from the prior year to fund additional costs to update the State Energy Plan, as discussed with the Members at the September meeting. Based upon discussions with Division of the Budget staff, the Governor's Executive Budget is expected to include a recommendation for this increase in funding.

Mr. Pitkin then discussed several general NYSERDA expenses. The FY 2008-09 Budget includes an increase for salaries from the FY 2007-08 Budget of \$3.9 million, due to an increase of 31 staff members, primarily for 20 additional staff budgeted for the new RGGI and CAIR programs and 5 additional staff budgeted for Energy Analysis. The Budget includes an increase of about \$2 million for Other Operating Costs, of which \$1.4 million is for additional costs in support of updating the State Energy Plan. The remainder of the increase is primarily for increases in computer system consultant support costs. The Authority has begun preparation to revise the State energy Plan and awaiting direction to proceed.

NYSERDA pays to the State an annual fee assessed under Public Authorities Law Section 2975, known as the New York State Cost Recovery Fee, for general governmental services, which is allocated among program activities in proportion to each program's revenues. The FY 2008-09 Budget includes \$4,645,000 for this payment based on the latest year's actual assessment.

In fiscal years 2004-05 through 2006-07, NYSERDA was required to make an additional payment of \$913,000 annually to the State general fund pursuant to Article VII budget bills. While the enacted FY 2007-08 Budget included a similar provision, the Division of the Budget waived NYSERDA's payment obligation for this year to provide necessary funding to cover upfront data analysis costs in support of RGGI. NYSERDA is expected to be required in the FY 2008-09 Budget to resume this payment.

The FY 2008-09 Budget includes \$220,000 for routine equipment purchases and replacements, \$640,000 for infrastructure costs anticipated at STEP (anticipated to be reimbursed through hookup fees collected from developers as future development occurs), and \$1.5 million to upgrade and consolidate NYSERDA's financial management and program management and reporting systems.

In conclusion, Mr. Pitkin also noted that the Budget anticipates a balance of unrestricted net assets of \$3,588,000 as of March 31, 2009, representing about .9% of total funding and consistent with historical and fiscally prudent balances.

During discussion it was noted that the total of all projects when combining the NYSERDA funds and the co-funding amounts is approximately \$2 billion.

Mr. Mathusa asked if there were any further discussion or questions regarding a recommendation by the Committee that the Board approve the Resolution regarding the FY 2008-09 Budget. Being none, based on all the reports and discussions as presented, upon motion duly made and seconded, and by unanimous voice vote, the Committee recommended that the full Board adopt the Resolution approving the FY 2008-09 Budget. A copy of said resolution is attached hereto as Exhibit A.

Next, Mr. Callender provided an update on some of the current activities at STEP, as well as a few of our changes in emphasis as STEP continues to be developed. He reported that the developer, The United Group, has completed the construction of the first new building at STEP. The facility is 105,000 square foot, Leadership in Energy and Environmental Design (LEED)-rated light manufacturing, lab, and office, multi-tenant building and will be the home to seven companies that are developing, demonstrating, and manufacturing clean energy and environmental technologies. These companies include Starfire Systems, Inc., Electrovaya Company, Inc., Lockheed Martin Corporation, C9 Corporation, Building Performance Institute Inc, The Lighting Cultivator, Inc., Center for Economic and Environmental Partnership, Inc. The United Group is currently completing the fit-up work for each of the individual tenants. It is anticipated that the tenants will begin moving into the facility in February.

Mr. Callender then noted that staff is also working with Hudson Valley Community College (HVCC) on the design of a facility, know as the TEC SMART, that will be located at STEP and it will be a critical component of our knowledge community. This building will be a 40,000

square foot facility where HVCC will teach a variety of degree and non degree clean energy courses to grow the clean energy workforce in the areas of building construction, photovoltaics, geothermal, small wind and the semiconductor industry. A site at STEP has been selected for the building; HVCC is working with Dormitory Authority of the State of New York (DASNY) on the construction of the facility and HVCC anticipates breaking ground on the building in 2008.

He further reported that there is good progress on the development of the DEC 72,000 square foot Alternative Fuel Vehicle Research Lab that will be located at STEP. Specifically, the design of the lab has been completed by Affiliated Engineers, Inc. and a site for the lab at STEP has been selected. The Authority has signed a cooperative agreement ground lease with the DEC and the DEC is working with Office of General services (OGS) to issue a Request For Proposals (RFP) to select a construction firm to build the lab. Construction is expected to begin construction this Summer.

Additionally, the DEC, HVCC and NYSERDA are also very close to signing a Memorandum of Understanding to have HVCC train automotive program students at the lab. This state-of-the-art lab will also be a perfect fit in STEP's knowledge community, and it will also help attract new transportation companies to STEP, as the State works on a number of challenging transportation issues.

Staff has also been working on extending STEP's water, sewer, gas, electric, telecommunications, and roads infrastructure. It is all in place to support the new Site One building, the proposed the DEC Lab, and the proposed HVCC TEC SMART facility. Mr. Callender further noted that the development of STEP is consistent with the STEP Master Plan that was approved by the Members in January 2004.

He further explained that NYSERDA has entered the next phase of marketing STEP. Staff has greatly enhanced the partnerships with the Center for Economic Growth, Saratoga Economic Development Corporation and the Empire State Development Corporation in that each party now has a specific role in all of the presentations and proposals that is made to clean energy companies to attract them to STEP. There is now a much stronger team approach to marketing STEP and attracting companies to New York State.

Staff has partnered with Luther Forest and the Center for Economic Growth to develop a joint marketing strategy for both Luther Forest Technology Campus and STEP and sharing the costs of this effort. In fact, Center for Economic Growth will be taking office space at STEP in the very near future.

It is expected that chip fab manufacturer Advanced Micro Devices (AMD) will be locating next to STEP at the Luther Forest Technology Campus and NYSERDA is growing a partnership with AMD. Staff is working with AMD on the types of companies NYSERDA should be attracting to STEP to support AMD's business needs, and grow both parks in accordance with our joint

business needs. Staff is also working with AMD on how AMD can make its chip fabs more energy efficient as its AMD's corporate policy to be energy efficient and green.

Mr. Callender then turned to the next agenda item regarding the resolution approving a Communications Site Lease Agreement between the Cellco Partnership d/b/a Verizon Wireless and NYSERDA for the purpose of constructing, operating and maintaining a cellular tower at STEP. The STEP Master Plan and Land Plan called for NYSERDA to develop STEP as a knowledge community that would focus on attracting clean energy technology companies that are developing, demonstrating and manufacturing clean energy and environmental technologies. And, to support the build-out of STEP, the Master Plan stated that NYSERDA would establish public/private partnerships to construct, finance, and manage new buildings at STEP, and that the Authority would be responsible for building the infrastructure at STEP. To that end, staff is continuing to install the infrastructure including the roads, gas, electric, sewer, water and telecommunications that is required to support the build-out of the Park.

In respect to the telecommunications infrastructure, one major technological amenity lacking at STEP is the infrastructure for cellular service. Therefore in an effort to address this deficiency in March of 2007, NYSERDA issued a competitive solicitation entitled Cellular Coverage at STEP. This solicitation was mailed to 53 telecommunications companies and cell tower builders. The solicitation sought proposals to improve the cellular service at STEP under a non-exclusive arrangement. Cellco Partnership d/b/a Verizon Wireless (Verizon) was the only proposer, and as a result of a Technical Evaluation Panel that was held in May 2007, Verizon was selected as the contractor and NYSERDA entered into negotiations with Verizon.

As a result of those negotiations, Verizon has signed the Communications Site Lease Agreement that is contained in your meeting package. Under the agreement, Verizon proposes to locate and construct a cell tower in the southeast corner of STEP on a 100 foot by 100 foot parcel of land outside of the STEP loop road, with proximity to the Luther Forest Technology Campus and the proposed site of AMD's chip fab. The 100-120 foot tall cell tower will be located within a fenced-in compound and Verizon will also construct a small building to house the required equipment. The Lease Agreement also grants a 12 foot wide easement for ingress and egress from Stonebreak Road to the cell tower site.

The terms of the Agreement with Verizon call for a 5-year ground lease with four 5-year renewals, at NYSERDA's option. Total payments to NYSERDA by Verizon are approximately \$776,209. And given the fact that other carriers may use the cell tower under this non-exclusive agreement, Verizon also proposed co-location revenue arrangements with other cellular providers which will result in an additional \$400 a month to be paid to NYSERDA for each additional provider.

Verizon is responsible for presenting the plan for the cell tower to the Town of Malta Planning Board and is also responsible for all costs associated with the project, including permitting, site work, construction, and maintenance. Verizon has already completed the Phase I and Phase II environmental site assessments in order to determine the viability of the project, and NYSERDA and Verizon agree that the visual impacts of the cell tower will be minimal.

Moreover, NYSERDA has discussed the advantages of the improved cell service with the STEP tenants, Luther Forest Technology Campus, AMD and the Town of Malta and all of the parties agree that the cell tower is needed, and the improved cell service will benefit the businesses and residents of Malta.

Mr. Mathusa asked if there were any further discussion or questions regarding a recommendation by the Committee that the Board approve the Resolution regarding the Communications Site Lease Agreement. Being none, based on all the reports and discussions as presented, upon motion duly made and seconded, and by unanimous voice vote, the Committee recommended that the full Board adopt the Resolution approving the Communications Site Lease Agreement. A copy of said resolution is attached hereto as Exhibit B.

The next agenda item concerned the approval of two deeds that convey land at STEP to the Town of Malta and Saratoga County for the purpose of constructing and maintaining a roundabout at the entrance of STEP.

Mr. Callender noted that during the planning and development of the STEP Park, NYSERDA completed a generic environmental impact study under its State Environmental Quality Review Act (SEQRA) for STEP. One of the components of the generic environmental impact study was a traffic impact study. The traffic impact study called for specific roadway improvements and enhancements to support the increased levels of morning and afternoon vehicle traffic due to the proposed build-out of STEP.

Specifically, the traffic impact study stated that the Authority would be required to install traditional traffic lights and exclusive turning lanes or a roundabout at the entrance to STEP, known as the intersection of Dunning Street, Plains Road, and Hermes Road, once the build-out of STEP exceeded 150.000 square feet.

With the new building at STEP being roughly 105,000 square feet and with the planned construction of HVCC's TEC SMART facility and DEC's Lab, the total square footage of the three buildings will be approximately 217,000 square feet.

In an effort to support the continued development and build-out of STEP, as well as the development of Luther Forest Technology Campus to support the construction of AMD's 1.25 million square foot chip fab, the Town of Malta secured approximately \$10.8 million in federal funding to construct road improvements in and around the Town of Malta, and this funding included \$1.2 million to construct a roundabout at the entrance to STEP.

In March 2006, NYSERDA entered into an agreement to provide funding in the amount of \$47,000 to support the design of the roundabout. The total cost of the design of the roundabout

was \$106,000. The preferred design of the roundabout requires that the County use .12 acres of land and the Town of Malta use .04 acres of land at STEP at the Hermes Road entrance. The actual roundabout will be constructed on the .12 acres and the storm water maintenance will be constructed on the .04 acres. A permanent easement of .28 acres to the County will be used for on-going maintenance of the roundabout.

This proposed transaction is consistent with the Public Authorities Accountability Act since the recipients of the land are municipalities, Saratoga County and the Town of Malta, and the purpose and use of the property will further the health, safety, or the welfare of the public.

The design of the roundabout has been completed, the construction is set to begin this Spring and the construction of the roundabout will satisfy the roadway improvements requirements under the traffic impact study of the SEQRA for STEP with very minimal costs to NYSERDA.

Mr. Mathusa asked if there were any further discussion or questions regarding a recommendation by the Committee that the Board approve the Resolution approving two STEP related deeds. Being none, based on all the reports and discussions as presented, upon motion duly made and seconded, and by unanimous voice vote, the Committee recommended that the full Board adopt the Resolution. A copy of said resolution is attached hereto as Exhibit C.

Hal Brodie was then called upon to discuss the next resolution regarding the Clean Air Interstate Rule (CAIR) Nox trading program. He indicated that DEC was promulgating a rule governing Nox emissions and that the rule would provide that 10% of the allowances would be set aside to be sold by NYSERDA. The proceeds would be used for energy efficiency and renewable energy.

Among other things, the rule caps Nox emissions and allocates the allowances among generators. It requires generators to have one allowance for every ton of Nox that the generator emits. It allocates 10% of the allowances to an energy efficiency and renewable technology account to be administered by NYSERDA.

Staff has negotiated an agreement with DEC governing the Authority's management of this account. Under the Agreement, NYSERDA will sell the allowances and use the proceeds for energy efficiency and renewable energy technologies as provided by the rule. The Agreement provides that NYSERDA will provide DEC with a program plan describing how the Authority will spend the money derived from the sale of the CAIR allowances. The Authority will also provide annual reports to DEC on the sales of allowances and implementation of the programs.

Staff will likely retain a broker to sell the allowances. Under the rule, the Authority may use funds from the account to offset the costs of administration of the account and the programs implemented with the resulting funds. The Authority has conservatively estimated in the budget that during the coming fiscal year, sale of these allowances will generate \$5 million.

During discussion it was noted that the plan will be prepared over the next several months so sales would not occur any earlier than this Summer. Additionally, NYSERDA will have one year to sell the allowances after the funds are received. Staff is working with the DEC and a final plan will be brought to the Members for approval

Mr. Mathusa asked if there were any further discussion or questions regarding a recommendation by the Committee that the Board approve the Resolution approving the CAIR Cooperative Agreement. Being none, based on all the reports and discussions as presented, upon motion duly made and seconded, and by unanimous voice vote, the Committee recommended that the full Board adopt the Resolution approving the CAIR Cooperative Agreement. A copy of said resolution is attached hereto as Exhibit D.

Next, Mr. Mathusa stated that each of the Program Directors or Managers would present a brief report regarding their current activities and planned changes in emphasis for future activities.

Jack Spath, Acting Director of the Energy Analysis program began the presentations by reporting that the evolution of new programs resulting from a variety of State enhanced program efforts resulted in several new program initiatives, including EPS, Clean Energy Collaborative, Natural Gas Efficiency, CAIR, and RGGI and it is expected that the Authority's Program Evaluation activities will also increase substantially. As to the Evaluation Plan, staff has developed documented evaluation principles and procedures that will serve as guidance for the Energy Analysis evaluation team which includes NYSERDA program staff and contractors.

He noted that the RPS evaluation and report is due March 31, 2009. Staff issued a competitive solicitation which resulted in the selection of two contractors to assist in collecting data and preparing the required report to PSC.

NYSERDA, as an organization has become increasingly involved in Public Service Commission Regulatory Proceedings and that Energy Analysis has been given a leadership and coordination role in these efforts working closely with Program Staff and Counsel's office. Energy Analysis staff has been documenting the procedures and processes to ensure consistency and efficiency.

Additionally, Energy Analysis staff has been charged by the Governor's staff to serve as the coordinator for a recently established Clean Energy Collaborative with the New York Power Authority (NYPA), Long Island Power Authority, Division of Housing and Community Renewal, DASNY, Department of State, DEC, Office of General Services, and NYSERDA. The Collaborative's mission is to articulate State government's contribution to achieving the 15 by 15 goal.

Mr. Spath reported that a decision regarding the update of the State Energy Plan is expected and that, in anticipation of such effort, Energy Analysis staff recently prepared and updated the Petroleum and Coal resource assessment reports which have been posted on the NYSERDA web site.

In regard to Authority-wide policy analysis, Energy Analysis staff to assess the impact of the recently enacted Federal Energy Legislation on New York and, more specifically NYSERDA's programs.

Next Mark Eggers, Program Manager of Energy Efficiency Services (EES), highlighted specific accomplishments in the program. As to the deployment activities, the Consolidated Edison System-wide program reaching 169 MW of electric savings in the Con Ed territory at a cost of \$59 million. Therefore, the electric savings goal of the program was accomplished at approximately one-half of the budgeted costs. Likewise, EES staff has achieved approximately 150 percent of the initial goal in its SBC programs by saving 925MW and 2,300 MWh with spending of \$297 million.

He further reported that the Enhanced Commercial and Industrial Performance program had \$750 million leveraged from a funding amount of \$120 million. The FlexTech program has 4,000 customers served; the High Performance Buildings programs has over 1,000 projects consisting of 165 million square feet (these included Walmart and Price Chopper); and the alternative fuel vehicle programs helped fund 10 biofuel terminals and four ethanol fueling stations.

Some of the program's changes included the following: Sustainable Energy Master Planning, an integrated approach which focuses on energy planning on the entire campus or site; expanding sector focus of Medical, Universities, and Local Government; an industrial process emphasis; strategic planning for energy and demand reduction with real-time information; a diesel emissions reduction program focusing in New York City; and strengthening state energy codes and standards.

Mr. Eggers concluded by emphasizing the importance of an integrated approach to customer solutions by stressing targets, assistance, training, and verifying performance. There will also be an enhancement and consolidation of certain programs into the Existing Buildings program. Staff also continues to collaborate with partners including NYPA and DASNY on green and energy-efficiency activities.

Karen Villeneuve, Director of the Residential Efficiency and Affordability Program, reported that the new Multifamily Performance Program was launched in May 2007 and has been well received. More than 45 mid-stream partners (energy analyst/design) have been accepted and more than 60 new and 140 existing buildings are in the pipeline resulting in more than 48,000 housing units. This includes Peter Cooper Village and Stuyvesant Town in New York City of approximately 11,000 units. Additionally, the Real Estate Board of New York will be promoting this NYSERDA program to its members in New York City.

The EmPower New YorkSM program achieved 133% of the SBC goal, as of September 2007, and has also been implemented with various utility/settlement funds, resulting in more than 28,000 jobs, since July 1, 2006. The one-to-four family New York ENERGY STAR® Labeled Homes, known as the New Construction program, reached 113% of the SBC goal, as of November 2007.

This is nearly 15% of new starts in the State in 2007 (a steady increase) despite downturn in the market.

In the Products program, staff exceeded the goal of 10,000 Change A Light pledges through our web-site and has brought on several new big-box partners in 2007. In response to the Be Cool campaign, 40% of survey participants bought compact fluorescent light bulbs (CFL), 25% bought ENERGY STAR appliances, 22% shifted appliance use to off peak, and 10% turned in room air conditioners.

Ms. Villeneuve further noted that the Home Performance with ENERGY STAR program (existing one-to-four family homes) is starting outreach to remodelers, electricians, realtors, home inspectors, book keepers, and accountants. These are segments of the market that will improve comprehensiveness of the program, expand the infrastructure, and support program sales. To improve cost-effectiveness of the Home Performance with ENERGY STAR program and to encourage more comprehensive work, staff is implementing a tiered incentive approach. Homeowners will receive better financing or cash incentives for more comprehensive work, as will the contractors.

Training is being delivered for single family building science through the HVCC network which will grow from six to at least 10 learning centers this year. Staff is working with HVCC staff to expand training to the multifamily building science, photovoltaic, solar thermal, geothermal and other new technologies. Expansion of the workforce development effort is critical to achieving 15 by 15 goal.

With certain programs maturing in certain markets as opposed to others, it is time to take a more tailored/regional approach to marketing. The program has already started using more unique approaches in downstate markets and expect that trend to continue. This is an area that NYSERDA is already in collaboration with utilities and large cities, such as New York. Staff is working with other states and regions to look at energy efficient mortgages and other financing options for energy efficiency work. Staff is also working with low-income service organizations to leverage existing funding streams, particularly for housing, for energy efficiency work.

She then noted that not all multifamily buildings can or want to reach the program's 20% energy reduction goal and were not coming into the program because of that. Despite this, staff is attempting to enable those buildings to perform cost-effective work using our Loan Fund. It was learned from the end-of-season Be Cool survey, that there has been great progress in sales of CFLs in New York with the Ayuthority's market-transformation approach such as; 80% percent of survey respondents are familiar with CFLs; 72% report their use at an average of 6.1 CFLs per household.

Lastly, consumer education is taking hold in other areas. For example, 85% of room air conditioner users turned off air conditioners when not home and over 50% use multiple

temperature settings. Consumer education is working and should continue to be a primary means of achieving energy goals.

Director of Energy Resources, Transportation & Power Systems, Environmental R&D and RPS, Janet Joseph then reported. Regarding the RPS, she stated that the third main-tier solicitation is underway. Under the previous two solicitations, NYSERDA attained over 800 MW of new capacity under contract. This is associated with about \$1 billion in economic development benefits in the State, which is roughly double the program costs to date. Notwithstanding the very positive benefit/cost outcome of the program to date, it is unlikely that NYSERDA will hit the renewable energy program target with the current funding. Staff is currently doing a cost study with DPS staff to determine the full costs needed to hit the 25% renewable energy target. It is expected that these RPS funding issues will be resolved early this year.

All of the customer-sided tier programs are issued including photovoltaic, small wind, fuel cells, and biogas-to-electric. Both the photovoltaic and the biogas-to-electric program are near full subscription. NYSERDA currently has 4MW of photovoltaic installed and applications in-house for 4MW of new anaerobic digesters.

Ms. Joseph also reported that staff has broken ground on the first large-scale pilot facility to produce ethanol from cellulose in the State. In the transportation area, the conversion of the test vehicles in the plug-in hybrid electric vehicle program is nearly completed and a few of the vehicles have already begun testing.

On the environmental front, a program was started to determine the viability of carbon dioxide sequestration in geological formations in the State. This effort is a collaborative effort that includes several academic, industrial, and agency partners. Additionally, several new energy storage projects have been initiated in a range of technologies including energy storage which is key to enabling a number of renewable and energy efficiency technologies and strategies. An interesting study of the life cycle environmental impacts of a range of beefaloes used in different applications has also commenced which is very important to ensure that problems are solved in an environmentally sustainable manner.

She then updated the Members on very promising results from tests that were conducted on the subway system using energy control systems. The technology that could substantially reduce electricity consumption in the downstate load constrained area. Building on this successful collaboration we are working on a joint solicitation with the New York City Mass Transit Authority to evaluate and demonstrate improved electric transportation efficiency technology.

Environmental R&D staff has been tasked with not only co-managing some research to help design the RGGI auction, but is also helping the regional organization, RGGI Inc., to establish auction capability. NYSERDA's energy and environmental market expertise in the RPS program have been extremely useful in this new area. If RGGI Inc. is not able to conduct an auction in a timely manner, NYSERDA will conduct the auction on behalf of New York State. The Authority

has proposed draft regulations to allow NYSERDA to do this.

Revenues from the sale of carbon allowances under RGGI could be a major new funding source for clean energy initiatives in the State and NYSERDA is responsible for administrating this Energy Efficiency and Clean Energy Account. The Environmental R&D group will also be handling the sales of CAIR allowance which will also generate new revenues for clean energy initiatives.

Shifting from emission markets to technology markets, staff continues to ramp up our business development and manufacturing initiatives. Workforce development is a priority for NYSERDA. NYSERDA is leading the country in this area and staff has plans for the year ahead to build on what we have done in the photovoltaic and energy efficiency areas and apply that to other clean energy technologies and markets. She added that staff is exploring opportunities for new collaboration with universities in the State focused on the Clean Energy Technology arena including New York State Foundation for Science Technology and Innovation and the New York Academy of Sciences.

New York State has a unique opportunity to develop a Clean Energy Economy, especially upstate, but this requires a sustained market pull, skilled workforce, economic incentives, and a high-level of focus and coordination among the state agencies.

It has also become very clear that New York needs policies and programs that address all fuels and all sectors. There are tremendous opportunities in the transportation sector that the Authority cannot address with the very limited funds currently available. Ms. Joseph emphasized that the transportation sector uses one-third of the energy consumed in New York State but NYSERDA is investing about 3% of its budget in this sector.

After discussion regarding wind turbines, photovoltaics, and plug-in hybrid vehicles, it was noted that New York State needs a comprehensive energy policy that recognizes the bigger context of all fuels and all sectors.

Gunnar Walmet, Director of the Industry and Buildings R&D Program concluded the presentations. He first highlighted some current activities. Staff launched a Transmission and Distribution (T&D) R&D program that is very successful and anticipates running out of money this year. Many factors including awareness of sustainability, rising energy costs, and food safety concerns will favor "controlled environment agriculture". Staff has developed a roadmap and will soon schedule another meeting regarding this.

Additionally, NYSERDA has \$11 million available for a fuel cell subscription program under the RPS customer-sided tier on a first-come, first-served basis. The lighting business assistance program, known as LINC, has been incorporated and will move into a small office at STEP. Staff has launched a major program to develop and use clean solid biomass burning (logs, chips, and wood and grass pellets). The goal is efficiency over 75% and emissions comparable to oil.

The Environmental program is working on characterizing emissions and buildings R&D on products and demonstrations.

As to highly advanced residential buildings, staff is trying to find cost effective means to go well past ENERGY STAR levels, even to an affordable northern, zero energy design. Staff has also launched a major initiative to reduce energy use in data centers, in coordination with EES staff. This is the fastest growing load, along with displays, currently 1.5% of total United States electric consumption.

Mr. Walmet reported that NYSERDA has increased work on clean fuel efficient biofuels and biomass based heating in response to skyrocketing oil prices and is developing flexible load appliances, mainly lighting and air conditioners, to respond to the smart meters mentioned in the Governor's State of the State.

In the Combined Heat and Power area, the emphasis is now on systems capable of emergency stand-alone operation, even on the New York City grid, preferably flicker-free switch-over. This will also support security issues.

Mr. Walmet concluded by reporting that R&D staff will be even more critical in the future to meet impending energy challenges. Even with high and ricing prices, energy efficiency alone generally does not sell products.

Chair Mathusa then 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 65th meeting of the Program Planning Committee was adjourned.

Respectfully submitted,

mitchell Khasrova

Mitchell Khosrova

Secretary to the Program Planning Committee

New York State Energy Research and Development Authority

Vincent A. Delorio, Esq., Chairman Paul D. Tonko, President and CEO

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NOTICE OF MEETING AND AGENDA

January 9, 2008

TO THE MEMBERS OF THE PROGRAM PLANNING COMMITTEE:

PLEASE TAKE NOTICE that a meeting of the Program Planning Committee (the 65th meeting) of the New York State Energy Research and Development Authority will be held in the Authority's Albany Office, 17 Columbia Circle, Albany, New York, on Wednesday, January 16, 2008, commencing at 10:30 a.m., and by video conference in the Authority's New York City Office, at 485 Seventh Avenue, 10th floor, New York, New York, for the following purposes:

- To consider and act upon the minutes of the 64th meeting of the Program Planning 1. Committee held on September 17, 2007.
- To receive an overview from the President on the status of various programs and 2. activities.
- To receive a report from the Treasurer and to consider and act upon a resolution 3. approving the Authority's fiscal year 2008-2009 Budget.
- To receive a report from the Vice President for Programs on the status of current and 4. future activities to support the development of the Saratoga Technology + Energy Park (STEP).
- To consider and act upon a resolution recommending approval of a ground lease with 5. Verizon Wireless for approximately 10,000 square feet of land located at the Saratoga Technology + Energy Park (STEP) for the development of a cell tower.
- To consider and act upon a resolution recommending approval of a Deed to the Town of 6. Malta and a Deed to the County of Saratoga to transfer approximately .04 and .12 acres of land located, respectively, at the Saratoga Technology + Energy Park (STEP) for the development of a Roundabout at the intersection of Hermes Road and Dunning Street outside of STEP.
- To consider and act upon a resolution recommending approval of a Memorandum of 7. Understanding with the Department of Environmental Conservation for the Authority to administer funds generated by the sale of allowances under the Clean Air Interstate Rule (CAIR) program.

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Buffalo

Larkin at Exchange Building 726 Exchange Street, Suite 821 Buffalo, New York 14210 Phone; (716) 842-1522 Fax: (716) 842-0156

- 8. To receive a report from the Acting Director of the Energy Analysis Program on the status of current activities and planned changes in emphasis for future activities.
- 9. To receive a report from a Program Manager of the Energy Efficiency Services Program on the status of current activities and planned changes in emphasis for future activities.
- 10. To receive a report from the Director of the Residential Efficiency and Affordability Program on the status of current activities and planned changes in emphasis for future activities.
- 11. To receive a report from the Director of the Energy Resources, Transportation and Power Systems, and Environment Research and Development Program on the status of current activities and planned changes in emphasis for future activities.
- 12. To receive a report from the Director of the Industry and Buildings Research and Development Program on the status of current activities and planned changes in emphasis for future activities.
- 13. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting at either of the above locations. The meeting is also available through webcast at http://www.nyserda.org/governancemeetings.asp

Mitchell Khosrova

Secretary to the Program Planning Committee

Exhibit A

RESOLVED, that the proposed fiscal year 2008-09 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.

Exhibit B

Resolution No.

RESOLVED, that the Communications Site Lease Agreement between the Authority and the Cellco Partnership d/b/a Verizon Wireless for development and construction of cell tower at the Saratoga Technology + Energy Park ("STEP") submitted to the Members for consideration at this Meeting 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.

Exhibit C

Resolution No.

RESOLVED, that the Deed and Permanent Easement between the Authority and the County of Saratoga for the transfer of approximately .12 acres and .28 acres, respectively, of land at the Saratoga Technology + Energy Park ("STEP") for the purpose of construction and maintenance of a roundabout located at the intersections of Dunning Street, Plains Road, and Hermes Road submitted to the Members for consideration at this Meeting 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.

AND RESOLVED, that the Deed between the Authority and the Town of Malta for the transfer of approximately .04 acres of land at the Saratoga Technology + Energy Park ("STEP") for the purpose of construction and maintenance of a roundabout located at the intersections of Dunning Street, Plains Road, and Hermes Road submitted to the Members for consideration at this Meeting 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.

Exhibit D

Reso	lution	No	
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RESOLVED, that the Cooperation Agreement between the Authority and the New York State Department of Environmental Conservation regarding the Authority's responsibilities and activities with respect to the administration of the energy efficiency and renewable energy technology account, as established under the Department of Environmental Conservation's Clean Air Interstate Rule Ozone Season and Annual Trading Program submitted to the Members for consideration at this Meeting 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.