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

Minutes of the 58th Meeting
Held on January 9, 2006

Pursuant to a Notice and Agenda dated January 4, 2006, a copy of which is attached as Exhibit A, the fifty-eighth (58th) meeting of the Program Planning Committee of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY was convened at the Authority's New York City Office, located at 485 Seventh Avenue, 10th floor, New York, New York, by telephone conference in the Authority's Buffalo Office, 617 Main Street, Suite 105, Buffalo, New York, and by telephone conference in the Authority's Albany Office, 17 Columbia Circle, Albany, New York, on Monday, January 9, 2006, 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
Elizabeth W. Thorndike, Ph. D.

Also in attendance were Peter R. Smith, President; Robert G. Callender, Vice President for Programs; Wendy M. Shave, Vice President for Administration and Secretary to the Board; Roger D. Avent, General Counsel; Jeffrey J. Pitkin, Treasurer; 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 called the meeting to order and noted the presence of a quorum. Board Chair Vincent A. DeIorio thanked the Committee members and Authority staff for all the hard work of the past year.

The meeting commenced with the first agenda item which concerned the approval of the minutes of the fifty- seventh (57th) meeting of the Committee, held on September 12, 2005. Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the minutes were approved.

Mr. Mathusa then called on President Peter R. Smith to give an overview regarding various Authority programs and initiatives including the Renewable Portfolio Standard ("RPS"), the Consolidated Edison Electric Rate Case, and the Regional Greenhouse Gas Initiative ("RGGI") .

Mr. Smith stated that he would combine those issues with the next agenda item relating to the report of System Benefits Charge program ("SBC") in one report. Mr. Smith underscored the fact that in the midst of very busy and very exciting times, the Authority's efforts to make a difference for New York energy consumers have received renewed validation.

In a December 2005 Public Service Commission ("PSC") Order, SBC was extended for another five-year period to run through June 30, 2011 ("SBC III"). The SBC III program will be funded at $175 million annually, a $25 million increase.. The Authority's staff is in the process of preparing the SBC III Operating Plan ("Plan") to be filed with the PSC on February 15, 2006. The Plan is being filed as a compliance document with the PSC and requires that the Department of Public Service approve of the Plan's conformance with the Order before the Authority is able to commence implementation of the Plan.

Staff is working diligently with all program areas within the Authority to put together a comprehensive Plan that addresses the Administration's and the PSC's public policy goals for the program and that reflects progress made by the Authority during the past eight years of implementation. The Plan will combine some programs, create new initiatives, streamline customer access to programs, and offer some programs as subscription services that were previously offered through competitive solicitation. Staff will brief the Committee on the major components of the Plan at the Board's January 23 meeting.

Program accomplishments to date have fortified the Authority's belief in the broad-reaching benefits of the SBC program. As of September 30, 2005, annual electricity savings from installed measures were approximately 1,700 gigawatt hours. The peak demand reduction from installed measures totaled approximately 1,000 megawatts ("MW"), with 377 MW counted as permanent reductions available through energy efficiency improvements and renewable and on-site generation, and 623 MW available to be called upon when needed through load management programs (curtailable load). Energy bill savings from electricity, natural gas, and oil are estimated to be $230 million per year for every year that the measures are in place. Approximately 4,450 jobs were created through September 30, 2005 as a result of the Program.

The Program is helping to reduce the energy burden on residents and businesses, and on New York State's low-income households in particular. By providing financial support and market development services, New York has become home to a growing energy services industry. New York is becoming a national leader in technology and developing a growing knowledge base in the areas of energy efficiency, demand management, renewable energy development, environmental protection, and energy policy. As a direct result of the efforts under SBC, New York is a leader in installing clean and efficient combined heat and power, engines, fuel cells, and turbines in all sectors, and these efforts include using waste fuels such as biogas.

Mr. Smith then updated the Committee on the Consolidated Edison Rate Case Plan. In March 2005, the PSC issued an Order adopting a rate plan for Consolidated Edison's ("Con Edison's")

electric business. The Rate Plan establishes two Demand Side Management programs. One program, the System Wide Program ("SWP"), is to be administered by the Authority.

The goal of the SWP is to achieve 150 MW of demand reduction in Con Edison's service territory by March of 2008 through energy efficiency, distributed generation, and load management. The 150 MW goal is intended to be in addition to the Authority's other efforts under the SBC Program.

An Action Plan was developed by a collaborative representing a broad range of interested parties and submitted to the PSC for approval. Staff expects the PSC to act on the Action Plan no later than February of this year, allowing the Authority to go forward with implementation of the Program. Con Edison will fund this program at an amount up to $112 million, plus 9% for administration and evaluation activities.

Staff is negotiating with Con Edison and the New York State Department of Public Service ("DPS") Staff to structure the funding agreement in a way that will allow the Program to continue through the end of Con Edison's Rate Plan without interruption.

Mr. Smith then updated the Committee on the Renewable Portfolio Standard program ("RPS"). The Authority continues in its role as Central Administrator of New York's RPS. A one-page description of the nature and status of the RPS program was included with the mailing.

Essentially, the RPS program works by providing financial incentives, on a competitive basis, to encourage the development of renewable energy sources, including wind, solar, hydro, and biomass. The goal is to have 25% of retail sales in New York be from renewable resources by 2013. Currently, about 19% of New York's electric energy is supplied by renewable resources, requiring an additional 6% be added through the RPS program.

The Authority's contracts provide for payments for the rights to the "environmental attributes" that attach to the individual megawatt hours ("MWh") when they are generated; the Authority will not be purchasing electricity.

These incentives will be available through both a "Main Tier," of larger facilities, which will feed electricity directly into the grid, and a "Customer-Sited Tier," which will consist of smaller, behind-the-meter resources.

Under the competitive Main Tier solicitation issued in December of 2004, seven contracts have been executed. In the aggregate, the contracts call for the addition of approximately 314 MW of new installed renewable capacity, and will result in aggregate annual production of approximately 821,600 MWh of renewable energy.

The Customer-Sited Tier is expected to commence operations in the early part of this year. A RPS Order is expected later this month that is expected to provide the ground rules for the next Main Tier procurement, which staff is hoping to release within the first quarter of this year.

Next, Mr. Smith briefly updated the Committee on the progress made with the Regional Greenhouse Gas Initiative ("RGGI"). RGGI is an agreement among seven Northeast states to implement a cap-and-trade program to lower carbon dioxide ("CO_2") emissions from power plants, which are a major contributor to global warming. This is the first mandatory cap-and-trade program for CO_2 emissions in U.S. history.[1]

Under RGGI, emissions of CO_2 from power plants in the region would be capped at current levels, beginning in 2009 – approximately 121 million tons annually – with this cap remaining in place until 2015. The states would then begin reducing emissions incrementally over a four-year period to achieve a 10 percent reduction by 2019.

The RGGI agreement calls for at least 25 percent of a state's allowances to be auctioned to power plants. The funds generated from these sales must be used for beneficial energy programs dedicated to strategic energy or consumer benefit purposes, such as energy efficiency, new clean energy technologies and ratepayer rebates.

This agreement allows power plants to use "offsets"- greenhouse gas emission reduction projects from outside the electricity sector - to account for up to 3.3 percent of their overall emissions. Examples of offset projects include: natural gas end-use efficiency, landfill gas recovery, reforestation, and methane capture from farming or natural gas transmission facilities.

Mr. Smith reported that during the recent State of the State address, Governor George Pataki announced that furthering efforts toward energy independence is a hallmark of his gubernatorial legacy.

Finally, Mr. Smith informed the Committee that a solar awning has been installed at the Authority building located at 17 Columbia Circle in Albany. The awning, consisting of 3.6 KW of photovoltaic cells will be used to provide electric energy to the building. This project demonstrates the Authority's commitment to renewable technologies, not only in words, but in actions.

Mr. Mathusa then called upon Robert Callender, Vice President for Programs, to report to the Committee on the Saratoga Technology + Energy Park ("STEP"). Mr. Callender provided the Committee with a brief update on some of the Authority's current activities at STEP, as well as the Authority's two most significant initiatives required for this year to support the development of STEP.

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[1] In addition to New York, other states signing the regional Memorandum of Understanding for RGGI are: Connecticut, Delaware, Maine, New Hampshire, New Jersey, and Vermont.

With respect to the Authority's infrastructure projects, Mr. Callender was pleased to report to the Committee that the infrastructure is in place, including water, sewer, electric, gas, and high-speed telecommunications to support the initial build up of STEP, as well as, the existing building.

Mr. Callender also reported that the Authority successfully obtained a Small Cities Grant in the amount of $735,000 to support the cost of future infrastructure needs, as well as future roadway improvements and construction at STEP. The entire STEP team continues to work hard at looking for other sources of grant funds and incentives to support the development of STEP.

Next, Mr. Callender reported that through the Authority's Marketing Plan and activities, the Authority is continuing to work to attract clean-energy technology companies at STEP that are in the pre-commercialization and commercialization stages of product development and manufacturing. Staff is also working to attract other related types of businesses that will support the mission and development of the Park.

Staff believes that with the renewal of the SBC, the implementation of the RPS and EO 111, and the Governor's commitment in his 2006 State of the State address that New York is committed to energy independence and will be a worldwide center for clean, renewable energy research, product development and job creation, and that the Authority will be in a good position to attract companies to STEP. To that end, the STEP team continues to work with the Authority's partners and Authority staff to market the many benefits of locating at STEP to potential tenants across New York, as well as, outside New York State.

Staff is working with a number of potential new tenants for STEP and has a number of proposals for these new tenants that currently are being negotiated. Mr. Callender reported that staff is close to finalizing an agreement with a high-tech, transportation-sector related battery manufacturer that wants to locate from Canada to STEP. It is expected that this company will bring 50 new jobs to STEP.

Staff is also working to finalize an agreement with Hudson Valley Community College ("HVCC") to teach energy-related training courses at STEP. President Peter Smith, Rick Gerardi, Director of Residential Energy Affordability Programs, and Adele Ferranti, a Senior Project Manager for Energy Resources, Transportation, Power Systems, and Environmental Research programs, have been instrumental in helping the Authority work with HVCC's President and his staff to attract HVCC to STEP.

Mr. Callender indicated that the Authority has signed a memorandum of understanding ("MOU") with the New York State Department of Environmental Conservation ("DEC") to have a 50,000 square foot state-of-the-art DEC test lab built at STEP. DEC has hired a design firm to support this project.

Staff is also working with a number of energy-related companies that need small amounts of office space at STEP.

With respect to new initiatives, Mr. Callender reported that staff is continuing to work with the Authority's developer for Site One, Idea Partnerships, LLC and the bank, HSBC, on the financing and future construction of Site One – the building for Starfire. Idea and HSBC are currently in negotiations regarding the financing of Site One, and it has been requested that the Authority provide some type of financial assistance. This is a complex negotiation and all of the parties are working to reach mutuality on the terms. If the parties reach a final agreement that supports the financing and construction of the building for Starfire and protects the Authority, staff will submit a resolution outlining the final agreement to the Committee and the full Authority Board for review and approval.

Next, Mr. Callender reported on the continued development of STEP. He indicated that staff was requesting that the Committee act upon the resolution contained in the Committee Meeting package recommending approval of the Authority's Ground Lease with The United Group of Companies, Inc. for the development and management of Site Two at STEP.

Mr. Callender reviewed that at the January, 2004 Board Meeting, the Members adopted a resolution approving the Master Plan for STEP. The resolution provided that staff would seek the approval of the Members for any sale or long-term lease of property at STEP, with the understanding that the development of STEP would be market-driven and a public-private partnership with future developers.

Staff subsequently issued a request for proposals ("RFP") for the development of Site One at STEP and selected Idea Partnerships to develop and manage Site One at STEP. In September 2004, the Members approved a Ground Lease with Idea Partnerships for Site One, an approximately 54,000 sq. ft. building whose principal tenant will be Starfire Systems, Inc.

Since the Authority's goal is to attract clean-energy renewable technology companies to STEP, the Authority, along with its partners, attracted photovoltaic manufacturing company, DayStar Technology, Inc. to STEP from California. To support DayStar's needs in September 2005, the Authority issued a RFP seeking proposals for the development of Site Two at STEP, a building anticipated to be approximately 86,000 square feet to 100,000 square feet for DayStar, a photovoltaic cell manufacturer. The Site Two design is currently envisioned as a Green Buildings Leadership in Energy and Environmental Design ("LEED") rated, two-story building with office, laboratory and production space constructed to DayStar's specifications.

Staff received two proposals in response to the RFP. The proposals were evaluated by a Technical Evaluation Panel ("TEP") consisting of staff and outside members with relevant expertise. The TEP also conducted interviews with both proposers to clarify certain elements of the proposals, and then unanimously recommended that the Authority proceed to negotiate a ground lease with The United Group of Companies, Inc. ("United"). United was selected because it provided the best proposal for the continued public private development of STEP.

United is located in Troy, New York and was formed in 1978. United is experienced in real estate development, financing, acquisitions, and property management. United's proposed

development team includes: Turner Construction (construction); Einhorn, Yaffee, Prescott (architectural and engineering); Saratoga Associates (site planning and engineering); Millennium Credit Markets (financing); and United Realty Management Corp. (property management).

The Ground Lease that was included in the Committee Meeting package is similar in structure and terms to the Ground Lease approved by the Members for Site One, except for the financial payments to the Authority, which are based on United's proposal. Under this Ground Lease, the Authority will lease approximately 6 acres at STEP to United for a 49-year term. United will obtain financing for, and will construct and manage a building of approximately 100,000 sq. ft. with DayStar as its sole tenant.

United will pay the Authority base rent of $30,000 annually, with escalations every five years ending with $107,000 for years 45 to 49. United will also pay to the Authority 10% of the Net Proceeds from any refinance and of annual Net Cash Flows (rental income less operating expenses and debt service payments) achieved from leasing the building or only 5% if the tenant or tenants have a credit rating less than Triple B ("BBB"). United will also pay the Authority 5% of Net Proceeds from Sale of the Building or only 2.5% if the tenant or tenants have a credit rating less than BBB. The Ground Lease will also require United to pay a percentage of any common area expenses incurred by the Authority and will require payment of $6 per square foot as a "hook-up" fee for water and sewer, upon completion of construction.

If the developer is unable to execute a lease agreement with DayStar or if financing is not secured. the Ground Lease may be terminated by the Authority at specified milestone dates, the latest date being March 31, 2006. Under the proposed Ground Lease, the Authority will not be providing any guaranty or collateral to support this development. If the developer is unable to obtain financing, the Authority may be asked to consider providing some financial assistance or guaranty. Any such arrangement would be submitted to the Members for review and approval.

Mr. Mathusa asked if there was any further discussion or questions regarding the Committee approving a recommendation by the Committee that the Board approve the Resolution approving the Ground Lease with United for Site two at Step. There being none, upon motion duly made and seconded, and by unanimous voice vote of the members, approved the recommended Resolution attached hereto as Exhibit B.

Mr. Mathusa then called upon Paul DeCotis, Director for Energy Analysis Programs, to provide an update on evaluation activities and an assessment of alternative fuel vehicle technologies.

Mr. DeCotis provided the Committee with an update on the Natural Gas Efficiency Potential Study. Preliminary results for the Con Edison study suggest residential savings of about 760,000 dekatherms (Dth), or 1.5% of projected residential sales in 2016, with commercial and industrial savings at about 600,000 Dth or 1.4% of the sector's sales forecast in 2016. The majority of the savings opportunities are in commercial and residential space and water heating; space and water heating savings account for approximately 80% of the commercial sector savings and 90% of the residential sector savings.

Assuming the gas efficiency programs start in 2007, lost revenues for the first year would be very small, *i.e.*, less than $100,000. From 2008 onward, there likely would be no need for a lost revenue recovery mechanism, as long as the programs are administered by a third party, since the reduction in demand growth due to efficiency measures could be accounted for in future rate making.

Mr. DeCotis then updated the Committee on the Petroleum Infrastructure Study. The study indicates that regional petroleum fuels storage capacity has been in decline since 1997, falling by close to 15 percent. Current storage capacity for distillate is 800 million gallons and for residual, 760 million gallons. During normal demand periods, storage capacity is adequate to meet supply needs. Demand is roughly 90.2 million barrels annually for distillate and 47.4 million barrels for residual fuel in New York. At the multi-state level between New York and New Jersey, there is sufficient supply availability to withstand all but a once-in-a-century winter. However, at the local level, the distribution system may rapidly develop bottlenecks and constraints, well before the once-in-a-century scenario. Severe snow and ice conditions reduce supply deliverability by as much as 30%.

The number of natural gas customers served by interruptible contracts has grown since 2000. This has the potential to sharply increase petroleum fuel demand at the exact point in time when the petroleum distribution system is most vulnerable. PSC requirements mandating specific preseason backup fuel inventory levels for interruptible gas users has benefitted the early winter season supply situation.

Next, Mr. DeCotis updated the Committee on the State Energy Plan annual report, which provides an update of the implementation status of Energy Plan recommendations. The annual report shows significant accomplishments to date in many areas, including energy efficiency, renewable and indigenous energy resource development, environmental regulation, and policy coordination among State agencies.

Next, Mr. DeCotis provided an update on the management and programmatic activities for Energy Analysis. Staff has begun the Authority's 2006-2009 strategic planning process, as well as drafting the annual Patterns and Trends report. The evaluation of the New York Energy $mart℠ program is continuing with the preparation of the annual report, as well as the evaluation planning for SBC III. Staff will be rebidding the evaluation assistance contracts. Additionally, staff is monitoring the winter fuels situation, including supplies and prices. Finally, under the energy markets intelligence activities, staff are updating the energy resource assessments from the 2002 State Energy Plan, including price and demand forecasts for all major fuels.

At its June 2005 meeting, the Committee requested an update on the status of alternative fuel vehicle technology development, noting that a number of evolving technologies seemed to show great promise. Energy Analysis led a team effort within the Authority with assistance from Research and Development and Energy Efficiency Services staff to respond to this request. The team determined that several recently completed studies could be used to address the issues raised by the Committee.

An LNG/CNG Fueling System study for New York was completed in June 2005 by Ruby Mountain, Inc. The study was jointly funded by the Authority, KeySpan, BNL, and the United States Department of Energy.[2] Additionally, an alternative fuel vehicle ("AFV") study was completed for Suffolk County in October 2005 by Taitem Engineering, PC sponsored by NYSERDA and KeySpan. Several other activities were cited and used to complete the analysis, including internal briefings prepared earlier for the Authority's management.

The studies included a technology comparison, which studied 13 vehicle types, each with certain advantages and disadvantages compared to conventionally-fueled vehicles. Conventionally-fueled vehicles have an edge due to lower vehicle and fuel costs, and extensive fueling and repair infrastructure. Generally, the advantages of AFVs include operating on domestically-produced fuels (i.e., reduced dependence on foreign oil) and potential reductions in harmful environmental emissions. Generally, the disadvantages of AFVs include lower miles per gallon and vehicle range, unequal availability for vehicle uses, higher capital and operating costs, and an immature fueling and repair infrastructure.

Overall, the New York State vehicle fleet includes more than 4,600 AFVs. The Authority has invested over $25 million in transportation research and development, including $16 million for compressed natural gas projects, $6.8 million for hybrid electric vehicle projects, and $3.6 million for fuel cell development. In addition, through its deployment programs, the Authority has invested $27 million in 66 AFV projects, representing over 800 CNG vehicles and 16 CNG refueling stations. In addition, New York State has leased two hydrogen fuel cell cars as part of an Authority-funded project to develop a hydrogen fueling infrastructure with Honda, Plug Power, and Air Products.

Governor Pataki's November 2005 Executive Order calls for biodiesel to meet 10% of the fuel needs of the New York State vehicle fleet by 2012. This is in addition to the goal established in Executive Order 111 that 100% of all new New York State light duty non-emergency vehicle purchases be alternative fuel vehicles by 2010.

The Energy Policy Act of 2005 contains a number of provisions that will directly support the development and deployment of alternative, particularly renewable, fuel technologies. A few examples are incentives for producing ethanol from cellulosic biomass, additional funds for the Clean Cities program to support expanded use of AFVs, new and extended tax credits for small producers of bio-diesel and ethanol fuels, and tax credits for the establishment of clean-fuel refueling property (E85, natural gas, CNG, LNG, propane, hydrogen, B20).

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[2] This study identified regulatory and legislative barriers to the development and deployment of a joint LNG/CNG fueling system and developed information, including educational materials and an LNG risk assessment that can be used to address these barriers.

Mr. Mathusa then called upon Joseph Visalli, Director of the Energy Resources, Transportation, Power Systems, and Environmental Research programs, to highlight its current activities and initiatives.

First, Dr. Visalli addressed RPS. Many policy issues have been identified that need to be resolved to foster the success of the RPS: ensuring reasonable cost; making sure New York State facilities have an equal opportunity to obtain RPS contracts; harmonizing RPS, with green market programs, and the existing environmental disclosure program. Staff is working on these issues. With respect to the Customer-Sited Tier, staff is still in the process of designing this program and determining how to best separate RPS and SBC funds given the differing incentive requirements for PV, fuel cells, small wind and biomass..

Dr. Visalli reviewed a nine-state collaboration to develop a protocol to evaluate on-farm biogas systems. The initiative includes California, Washington, Iowa, Wisconsin, Illinois, Mississippi, North Carolina, Vermont, and New York, as well as EPA and Unites States Department of Agriculture. The first meeting will be held this month in Illinois. The collaborative hopes to have a test protocol for performance testing and cost evaluation in place this year and will begin to gather data to populate a national database.

Next, Dr. Visalli updated the Committee on the Clean Diesel Initiative. The Authority is managing a clean diesel portfolio worth $50 million. The portfolio includes work in all sectors: on-highway (e.g., bus programs, truck stop electrification), off-road (e.g., construction), marine (e.g., ferry program). It also includes deployment, demonstration and evaluation in the field, and product development.

There are several opportunities for the future development of this initiative. Nationally, there is a growing interest in reducing pollution from "legacy" diesel engine fleets. The East Coast Clean Diesel Collaborative kick off planned in February 2006 in New York City is a multi-state, effort with EPA. Additionally, the Authority is launching a field program to test technologies appropriate for reducing pollution from off-road construction equipment in New York City in Summer 2006. This is part of an Authority and DEC MOU, which received an EPA grant to support the work. Staff will work very closely with the New York City Department of Environmental Protection. Staff will also collaborate with the Texas New Technology Research and Development Program in Clean Diesel area, focusing on construction and ports. Both EPA and DEC are interested in more Authority assistance in managing voluntary diesel retrofit programs and evaluating the effectiveness of retrofit technologies in the field. The Authority's future work will try to advance goals of both reducing petroleum consumption and reducing emissions.

Next, Mr. Visalli reported to the Committee on the New York City Subway Initiative. The New York City subway uses 2 billion KWh per year of power and has an on-peak demand in excess of 500 MW from the Con Edison system. The majority of the power distribution system is in excess of 50 years old. The potential for energy efficiency improvements to the system is one of the lowest hanging fruits in the New York City load pocket.

Recent Authority projects (Alstom, Oak Ridge National Laboratory third-rail study) have demonstrated both the needs and the ability of the New York State transportation sector to supply solutions. The Authority has signed an MOU with NYPA to co-fund several projects. Additionally, the SBC III plan includes a $1 million per year program element to augment the Authority's statutory electric transportation research and development efforts. Mr. Visalli explained that the Metropolitan Transit Authority pays into the SBC.

Staff is looking to incorporate several future projects into the initiative. First, staff will be looking at the aluminum third rail and conducting a complete energy study, electrical coupling wear testing, and a short circuit testing. Next, staff is looking to improve regeneration capacity from existing trains. Additionally, staff will be investigating energy storage and conducting system- wide modeling to assess the benefits of energy storage at stations and power substations. Next, staff will be working to develop hardware to allow cleaning while power is on the third rail through insulator cleaning technology. Finally, staff will be looking at efficient switch and third rail winter heating. These switches and rail are continuously heated from October to March to prevent icing.

Next, Dr. Visalli updated the Committee on the program's efforts to assist communities with wind farm development. The Authority would like to get out of the lead agency role and allow communities to take on the role themselves. The decision on whether or not to have a wind farm sited in a community should reside within the locality. Staff has developed 33 white papers to provide information on all the various aspects of wind energy development. The papers can be downloaded from www.powernaturally.org. The paper topics range from how to prepare a Comprehensive Plan for the town, to examples of New York local government laws and zoning provisions on wind, and a legal guidebook for landowners. Over the past year, staff has made presentations on wind energy development to numerous local government planning organizations across New York State. Additionally, staff coordinates monthly meetings of a multi-agency task force on wind energy. In addition to the Authority, members include: DEC, New York State Department of Agriculture and Markets, DPS, New York State Department of State, New York State Department of Parks, and the Governor's Office.

Finally, Dr. Visalli updated the Committee on the statewide research and development project for wind and wildlife impacts. Staff has convened a new dialogue process about wind power development to address real or perceived impacts on birds and bats resulting from on-shore wind power development in the State; assist DEC with development of voluntary wind facility impact analysis guidelines; and develop a strategy for a comparative analysis of the environmental impacts of wind power as compared to conventional forms of power production. The first meeting of the Steering Committee was held on October 19, 2005. Staff is beginning a cooperative program with other states through the Authority's membership in Clean Energy States Alliance to address the need for some degree of uniformity between states when dealing with these issues because birds migrate and because non-uniformity can lead to less costly development for out-of-state facilities.

Mr. Mathusa indicated that the next item on the agenda was a report on the Industry and Buildings R&D program, by the Director Gunnar Walmet. Mr. Walmet began his report by informing the Committee that the plan for the Hydrogen Program is out and responses to the solicitation are due January 30, 2006. The combined heat and power ("CHP") program is on track and will be continued under SBC III. Mr. Walmet added that the Association of State Energy Research and Technology Transfer Institutions protocol for monitoring field performance is an important mechanism for technological transfer of demonstration project results for CHP. Additionally, the superconducting cable is on schedule for start-up in the first quarter of 2006. The project has received $10 million from the United States Department of Defense for the 2nd generation wire. Finally, the New York Times building is ready to go full-scale with its motorized shades to support the daylighting program.

Next, Mr. Walmet updated the Committee on several new initiatives. Staff is planning to allocate $2 million per year for electric power research and development to be used for the state-wide public benefit program. The industrial process efficiency program will be expanded and solicitations will now be issued multiple times each year. Additionally, the demand has increased for reduction technology demonstrations for room air conditioner controls and daylight dimming procedures.

Next, Mr. Walmet reported on the new CHP initiatives. The SBC II-funded DG-CHP Demonstration subprogram supports and funds nearly 100 CHP demonstration projects and 20 feasibility and technology transfer studies. The Authority contributes nearly $55 million to a cumulative project cost total of some $275 million. As of today, 37demonstration projects are operational, producing 16 MW of electricity. At the conclusion of the current SBC II program, the DG-CHP demonstration subprogram will result in installations producing 100 MW of electricity at an annual fuel use efficiency of 60% and at an emissions rate lower than the grid.

Finally, Mr. Walmet reported that two new CHP subscription options will offered in addition to the current competitively selected projects.

Next, Mr. Mathusa called on Rick Gerardi, Director of the Residential Energy Affordability program ("REAP") to report on current activities and initiatives. Mr. Gerardi reported that REAP intends to enhance its quality assurance and quality control ("QA/QC") systems for large-scale deployment of all programs. REAP has also implemented a low-income winter heating initiative to mitigate the high cost of energy for New York's poorest citizens. REAP has also incorporated gas energy efficiency initiatives into existing program offerings in Con Edison and National Grid service territories.

Mr. Gerardi reported that REAP will be creating innovative structures for implementing SBC III residential and low-income programs. It will expand energy usage data transfer from all utilities into the CRIS database to track pre and post performance on all SBC buildings. Finally, REAP will be conducting national model pilots for low-income financing, energy efficient mortgages, and ENERGY STAR multifamily buildings.

Finally, Mr. Mathusa called on Brian Henderson, Director of Energy Efficiency Services ("EES") programs to update the Committee on the program's current activities. Mr. Henderson explained that EES comprises commercial, industrial, institutional, and transportation efficiency deployment programs and services.

Mr. Henderson reported that EES is currently working on a mainstream energy efficiency design for green buildings. EES recently achieved a major milestone of 500 architects and engineering firms participating in the program. The program includes over 1200 projects, with 200 being green (energy and materials analysis), influencing almost 15% of construction in New York State. Mr. Henderson also reported that the Authority was the recipient of the United States Green Building Council's "Leadership Award" at the GreenBuilt 2005 November national Conference in Atlanta Georgia. Craig Kneeland, Senior Project Manager for EES, accepted the award for the Authority. Additionally, former Authority Member, Timothy S. Carey received the "Advocacy Award" from the United States Green Building Council for Mr. Carey's demonstrated commitment to energy and green principles at Battery Park City Authority and across New York City.

Next, Mr. Henderson reported on the electric system reliability demand response program. The Authority is setting in place an aggressive Peak Load Reduction program for Summer 2006. Staff will build on already achieved successful MW reductions working closely with New York State Independent System Operator, PSC, the New York Power Authority , the Long Island Power Authority, and DEC. The program continues to build a robust demand response market in New York City.

Mr. Henderson reported that EES has expanded its energy service company ("ESCO") and service providers network. Last month, the Authority received an oversubscription of project applications which forced it to temporarily close the Commercial/Industrial Performance Program ("CIPP"). A total of over $575 million in energy efficiency capital improvement projects are currently being managed under the program.

Next, Mr. Henderson reported that New York is leading by example in the public sector. Under Governor Pataki's Executive Order 111, "Green and Clean" State Buildings and Vehicles, despite the cold 2004 winter, above average summer temperatures, and continued budget austerity, New York State agencies and authorities reduced their energy use 10.2% from their baseline usage. This translated to a savings of $54 million during the 2003-2004 fiscal year. Furthermore, 30% of all New York State vehicles are alternative fuel vehicles and the fleet is on track to total 11,000 when fully implemented by 2010.

Next, Mr. Henderson reported on new initiatives undertaken by EES. First, EES will be focusing on energy efficient equipment and appliance standards. In legislation that passed last year, the Authority was charged with setting minimum energy efficiency standards for 14 products and appliances. However, 10 of those are potentially pre-empted by the new Federal Energy Policy Act. Staff is moving forward on 4 products: metal halide lamp fixtures, incandescent reflector lamps, power supplies, and consumer audio and video products, including digital TV adaptors,

set-top boxes, and other similar equipment. By this spring the Authority must establish an advisory committee, develop standard recommendations, develop product testing and certification procedures, and develop proposed regulatory language for the New York State Department of State to issue.

Another initiative undertaken by EES is the Urban Heat Island ("UHI") and Reforestation project. Staff is developing an UHI mitigation strategy and a multi-year reforestation project in the Bronx. The project includes analysis, geographic information system mapping, and planting trees to optimize UHI mitigation. Staff expects to plant approximately 9,000 trees in the Bronx to help mitigate summer urban heat gain and lower building air conditioning demand.

Mr. Henderson provided the Committee with an update on the Demand Management Program in New York City. With the settlement in the Con Edison case, staff expects that approximately 75% of the Authority's commercial and industrial programs of the overall SBC and SWP activities will focus on New York City. Staff plans to implement aggressive MW reduction goals.

Next, Mr. Henderson indicated that EES planned to focus on sector-based initiatives. Staff will be building off the Authority's successful work with schools. The initiative has benchmarked and provided services to 400 schools that comprise 250,000 students, approximately 17% of the entire school population. Staff is looking to expand the intitiative to focus on healthcare facilities and commercial office space.

Finally, Mr. Henderson reported to the Committee that EES has expanded its transportation deployment focus. Currently, staff is managing $27.7 million in alternative fuel vehicle projects ranging from hybrid electric trucks, buses, clean school buses, and CNG refueling stations, displacing 46 million gallons of petroleum over the life of the vehicles. Another seven solicitations will be issued this year for $8.5 million for training, biofuels assessments, and alternative fuel vehicle technology.

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 fifty-fifth meeting of the Program Planning Committee was adjourned.

Respectfully submitted,

Mitchell Khosrova

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