

March 3, 2005

Jaclyn A. Brillling
Secretary
New York State Public Service Commission
3 Empire State Plaza
Albany, New York 12223-1350

Re: Case 05-M-0090 – In the Matter of the System Benefits Charge III. Notice
Soliciting Comments.

Dear Ms. Brillling,

The Electric Power Research Institute (EPRI) is following with interest the New York System Benefits Charge (SBC) program and commends New York for considering research and development as a part of the solution to vital issues. The funding made available through the SBC program could provide a critical mass of research and development funds to make a difference in areas that require significant resources to address.

EPRI is pleased to submit the following comments with respect to the questions listed in the Notice Soliciting Comments.

Comments on Questions:

Question 12: Should SBC funds be extended to programs that encompass research and development into retail and/or wholesale electric market competitiveness issues, or transmission and/or distribution of the State's energy resources?

Because the SBC program enables a critical mass of funding to be achieved which can address research and development issues that are critical to New York, EPRI could support development of a program on electricity transmission and distribution (T&D). New York's T&D systems impact every New Yorker, and because the transmission system is not an island, others in the region as well. Across the United States, overall investments are lower than needed to meet the needs of consumers and society in transmission and distribution research and development and infrastructure enhancement.

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The program that meets New York's needs should be defined by the stakeholders of the system, including owners, operators, regulators, and science and technology experts from New York and around the world. The New York State Energy Research and Development Authority's (NYSERDA's) March 4, 2005 planning session represents a good example of who should be involved and how this could work. In this session, transmission and distribution issues, research and development needs, and perspectives learned from the industry at large will be discussed by a well-rounded group of stakeholders. Experts not in attendance will have a chance to participate through review and comment. The stakeholders include representatives of the New York Public Service Commission, New York utilities, the New York Independent System Operator, NYSERDA, EPRI, and independent technical and scientific experts. The purpose of the session is to discuss and brainstorm the critical T&D research and development needs in New York, with focus on the wide-area issues related to the interconnected power system. The outcome of this and of follow-up sessions will set the tone to lay the strategic groundwork for the focus of a new research and development program on transmission and distribution that meets the needs of New York's entire constituency.

Many New York state entities already have comprehensive ongoing research and development programs, including both internal and external collaborative engagements. The New York Power Authority's Convertible Static Compensator at the Marcy Substation and Consolidated Edison's EPRI Cable Testing Network are tremendous success stories that reflect the value of these programs and the leadership New York companies have shown in implementing R&D solutions for their most critical business challenges. The transmission and distribution R&D program should build on and complement work under way by entities inside New York and others. It should not duplicate nor reinvent work that has already been accomplished, nor should it supplant work that is in planning or under way. The New York program should contribute to the existing work to gain access if private, and it may augment or accelerate work that brings value to New York if public. Finally, the program should heavily leverage the expertise of those entities in New York whose core business is T&D operations, beyond input to the scope of work, and directly engage them through program oversight, governance, and implementation.

A collaborative program, defined as one where resources are brought together from multiple partners to solve issues that face all partners and produce results that are mutually beneficial, is an effective way to address problems facing New York as well as other states and regions. While this approach does not always address unique problems that may affect certain areas or companies, the collaborative approach enables the partners to focus collective knowledge and expertise on problems too large for individual partners to tackle alone and it multiplies the power of the financial investment in problem solving. By collaborating with others outside the state, New York can address problems larger than New York can solve on its own and multiply its financial investment far beyond what its ratepayers can shoulder. The NYPA and ConEd projects sited

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above are excellent examples of collaborative programs that brought funding from inside as well as outside the state to benefit New York and others. In addition, attention should be paid to specific needs of the constituents of New York, such as the downstate region (New York City and environs).

In conclusion, if designed appropriately, EPRI would support development of a stakeholder-driven, collaborative research and development program under the SBC III program to address transmission and distribution issues for New York.

Question 8: How can future SBC funded programs be more responsive to the needs of New York's energy consumers?

Combined heat and power (CHP), demand response, and other distributed energy resources (DER) have the potential to significantly transform the relationship of utilities and customers, and to introduce a much richer set of tools for providing not only power, but also reliability, security, flexibility and power quality in energy systems.

But the deployment of DER has lagged far behind the expectations of equipment manufacturers, regulators, and electricity consumers. Barriers remain in place that block the way. The number of CHP projects in New York under the NYSEERDA program is a laudable achievement. At the same time, the efforts to include distributed generation in utility distribution planning have fallen short of expectations. To date, no projects have resulted from the New York utility solicitations. EPRI believes this is because there is a lack of real or perceived opportunities for utilities to benefit.

EPRI has developed a framework for bringing stakeholders together to collaboratively develop win-win opportunities for DER, that is, where multiple stakeholders benefit and none are harmed. One example of a win-win DER opportunity is where a customer-sited distributed generation device enables the customer to limit demand during peak periods to enable deferral of a distribution upgrade. This approach is being taken in Southern California, where an EPRI-facilitated stakeholder group provided input to Southern

California Edison's distributed generation solicitation process, so that a solicitation package would yield successful proposals.

EPRI recommends using a stakeholder collaboration approach in New York, bringing New York utility personnel together with consumers, regulators, researchers, and distributed generation, demand response, and energy efficiency developers and suppliers. Working as partners, stakeholders can explore options for win-win DER opportunities in ways that single entities cannot. Developing the win-win business model for DER is the means of opening up

opportunities for DER in New York that will benefit the DER customers, other rate payers, and society.

There are technical barriers as well that may have solutions in research and development, such as grid and environmental impacts. For example, because placement of DER may result in unacceptable fault currents for utility operation, the development, demonstration and deployment of advanced fault current limiting devices is needed. The research and development program to address these issues should follow the same guidelines described above for the transmission and distribution research: stakeholder should be engaged, and the program should complement other research and collaborate to solve common problems.

Question 5: How might the SBC programs be adjusted given the Commission's order, issued September 24, 2004, regarding a Renewable Portfolio Standard (Case No. 03-E-0188)?

How a state meets its renewable portfolio standard (RPS) depends on the cost and availability of renewable power generation technologies as well as availability of renewable resources in the state. Different resources are available in each state. Sometimes the resource is located far from the load, possibly requiring transmission expansion. Renewable resources are often intermittent, impacting power delivery system operations and the need for fossil plant back up. The resulting costs and environmental impacts could be significantly higher than expected if fossil units are operating in spinning reserve to assure system reliability.

To develop an effective renewable strategy in New York, public and private organizations should work together to understand how renewable energy can benefit and cost the ratepayers of the state. Organizations working together should include New York utilities, NYSEERDA, the NY Public Service Commission, renewable technology suppliers, and technical and scientific experts. The collaboration of these stakeholders should be facilitated by an objective technical leader.

For example, the following should be understood:

- Strategic options for supplying renewable energy in New York
- The costs to ratepayers of renewable energy integrated into a power delivery system, including costs of providing back up power, spinning reserve, and storage
- The impacts of intermittent renewable energy on power delivery system reliability
- The environmental impacts of renewable energy, including the impacts of providing back up power and spinning reserve.

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We look forward to the outcome of the SBC III discussions and going forward with new research and development programs.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Evans". The signature is stylized with a large initial "K" and a long horizontal stroke extending to the right.

Kevin Evans
Senior Vice President & Chief Business Officer

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