

October 19, 2009

State Energy Plan (SEP) Comments NYSERDA 17 Columbia Circle Albany, NY 12203-6399

Dear Members of the State Energy Planning Board and the Energy Coordinating Working Group:

NYSEG and RG&E are pleased to submit the attached comments on the draft 2009 State Energy Plan released in August. These comments supplement the statement presented at the public hearing in Albany on September 15, 2009. We appreciate the opportunity to provide our perspective as you finalize the State Energy Plan.

By way of background, NYSEG and RG&E serve more that 1.2 million electricity customers and nearly 560,000 natural gas customers across more than 20,000 square miles of upstate New York. Delivering energy in a safe, reliable and environmentally-responsible manner to our communities and customers is of paramount importance.

We commend the State Energy Planning Board for its leadership and initiative in developing the draft energy plan. Only through careful planning and coordinated efforts will the state continue to responsibly and cost effectively meet its energy needs. Meaningful objectives - coupled with implementing thoughtful strategies to achieve those objectives - will help secure New York's energy future which, in turn, will assist in strengthening the state's economy.

Should you wish to discuss any of our comments in more detail, or need further information at any point, please contact James Rettberg, Project Manager (607-762-8813), Robert Bergin, Director-Public Affairs (585-771-2294) or me.

Sincerely.

Michael H Consoy

An equal opportunity employer

Comments on the 2009 Draft State Energy Plan October 19, 2009





NYSEG and RG&E Comments on the 2009 Draft State Energy Plan October 19, 2009

A. General Comments

NYSEG and RG&E strongly support the 2009 Draft State Energy Plan's overall policy objectives to promote economical initiatives that ensure reliability, reduce greenhouse gases, address affordability and improve the state's competitiveness, reduce health and environmental risks, and improve fuel diversity. Within this context we also support the draft energy plan's objectives to increase energy efficiency, develop renewable resources, invest in energy infrastructure, stimulate innovation, and engage local governments and others in achieving the state's energy objectives. Our role as energy delivery companies – and a number of our current initiatives – are or will be instrumental in helping to meet the draft energy plan's objectives.

Our detailed comments that follow focus on four elements of the draft energy plan and 18 related recommendations that are of critical interest and importance to us. The four elements are infrastructure investment, energy efficiency, renewable resources and economic development, and they are vital to achieving the objectives of the draft energy plan.

B. Infrastructure Investment

The draft energy plan includes numerous references to the critical need to invest in energy infrastructure (Page 1, section 1.1; Page 2, Section 1.1.1; Page 8, Section 1.2.3; Page 31, Section 2.2.2; Page 58, Section 4.2.2 in the draft energy plan and Page 32, Section 4 and 4.1; Page 33, Section 4.2; Page 34, Section 4.3; and Page 35, Section 4.4 in the supporting document "Electricity Assessment: Resources and Markets").

As energy delivery companies, transmission and distribution infrastructure is the keystone to meeting our regulatory obligations to provide safe and reliable electricity and natural gas service. Collectively, we own, operate and maintain nearly 61,000 miles of power lines; more than 1 million poles to carry those lines; 370,000 transformers; and 600 substations across more than 40% of upstate New York. Our natural gas infrastructure includes more than 16,500 miles of transmission and distribution pipeline and more than 860 regulator stations.

Given the breadth of our service area, the complexity of our energy delivery systems and our focus on providing safe, reliable service to our customers, we cannot overemphasize the importance of infrastructure investment and cannot overstate our support of the draft energy plan's recommendation regarding infrastructure investment.

As noted in the draft energy plan, "actions to implement the State's Clean Energy Economy goals, such as the need for new infrastructure development may be driven by longer term objectives that are not normally considered in energy system planning." The draft plan further states that "New York's businesses and residents depend on

reliable energy and transportation systems. For all energy systems reliability is contingent on adequate supplies of fuel, as well as a robust delivery system. Investments made in these systems help ensure that the systems remain resilient, flexible, and adaptable to accommodate new technologies. The ability to construct new, and maintain existing delivery infrastructure is key to maintaining reliability."

Further, the draft plan is absolutely on target in stating that "Because New York's electric infrastructure is old, significant capital investments will need to be made in the utilities' electric transmission and distribution systems to meet future electric demand and allow them to continue to provide reliable service. Replacement and improvement of existing aging infrastructure are critical, as system failures not only raise safety and reliability concerns but can also lead to increased system congestion and therefore higher emissions and costs."

Taking the draft energy plan's recognition of the importance of infrastructure investment a step further, the state must recognize that for utilities to invest the capital needed to enhance system reliability, accommodate new technologies and address new longer term objectives, appropriate regulatory consideration of those investments is critical. With the largest share of customers' bills comprised of supply charges, taxes and fees – components over which utilities have no control – it is essential that allowed energy delivery revenue be adequate to operate and maintain safe, reliable energy delivery systems. In our case, energy delivery rates have been reduced or remained essentially flat every year since 1996. Meanwhile, our operating and maintenance costs have climbed dramatically. This long-term circumstance of delivery rates that are declining and flat while costs are rising is not conducive to providing safe, reliable service nor does it enable us to support future needs as identified in the draft energy plan.

Comments on Specific Energy Infrastructure Investment Recommendations

 "Examine the transmission system needs to identify and evaluate appropriate investment strategies for needed bulk transmission system upgrades or expansions needed to allow for delivery of the energy output from renewable energy systems." (page 93)

We support this recommendation. As is referenced in the draft energy plan, we are working with the other New York transmission owners to evaluate future transmission needs. The New York Independent System Operator (NYISO) is also conducting a number of transmission studies.

 "PSC, along with NYPA and LIPA, should continue a systematic examination and evaluation of the State's transmission and distribution infrastructure and maintain its emphasis on appropriate replacement and upgrade of aging infrastructure to maintain safe and adequate service and also increase efficient utilization of the electric system, while minimizing, where possible, upward pressure on rates." (page 94) The state's investor-owned utilities have an obligation to provide reliable service and thus should be included in this systematic examination and evaluation.

• "The State should encourage cooperation in the development of electricity transmission infrastructure, including Smart Grid technologies, using State-owned lands and rights-of-way unless such development would require a Constitutional amendment or be inconsistent with the public trust or parkland doctrines." (page 95).

We certainly support this recommendation, but stress the need to be aware of North American Electric Reliability Council security issues.

 "The State should initiate a study to inventory existing utility corridors used for electric, natural gas, petroleum products, water and telecommunications facilities that are underused or can be expanded to accommodate new facilities, along with highways, railroads, and waterways. Improve and coordinate efforts to identify and promote the use of linear property interests for use of existing and siting new electric and gas transmission facilities. (page 95)

We endorse this effort although security issues regarding critical energy infrastructure are of paramount importance and must be considered during all phases of any study.

• "The State supports the use of re-powering and replacement of existing units with new facilities when such actions can be justified by their reliability, economic and environmental benefits." (page 94)

We support repowering and the replacement of existing facilities where infrastructure is already in place.

• "Encourage and facilitate the re-powering and replacement of existing energy systems to reduce overall actual emissions and environmental impacts, particularly in potential environmental justice communities." (page 94)

We support repowering and the replacement of existing facilities where infrastructure is already in place.

C. Energy Efficiency

We have long worked to make our energy delivery systems efficient and we have advocated the importance and benefits of using energy wisely to our customers.

Smart Grid Demonstration Projects

In support of the draft energy plan's objective to increase the efficiency of the state's electricity system, we are actively pursuing the deployment of smart grid technologies. We have submitted two proposals to the U.S. Department of Energy (DOE) after having worked closely with the Department of Public Service; we propose installing customer-focused, comprehensive smart grid demonstration projects in the Canandaigua, Bloomfield, Horseheads and Cooperstown areas to reduce load on heavily-loaded

circuits during times of peak demand. The proposed projects would include the installation of smart devices that interface with all aspects of the delivery system. This will improve distribution performance and provide customers with real-time pricing information so that informed energy use decisions can be made.

These projects would assist the state in meeting its objectives of delivering and using energy more efficiently and investing in energy infrastructure. An additional benefit of the proposed projects is that they would complement the draft energy plan's fifth strategy of engaging others – in this instance, local governments – in achieving the state's policy objectives.

In a related matter, Energy East, NYSEG's and RG&E's parent company, has proposed another smart grid demonstration project to DOE. This project would support the draft energy plan's objectives of investing in infrastructure and producing, delivering and using energy more efficiently. A proposed Compressed Air Energy Storage (CAES) plant would use abundant and inexpensive off-peak electricity to inject compressed air into an underground cavern. Then, when electricity is needed, the compressed air would be withdrawn from storage, heated via combustion with natural gas or preheated from the exhaust of a natural gas turbine and then directed through a turbine to generate electricity. Because this proven technology uses less fuel and produces fewer pollutants than traditional generation sources, it will further the draft energy plan's objective of reducing greenhouse gas emissions and costs. The proposed CAES plant would also assist in better utilizing intermittent renewable resources as it can be used to accommodate the impact of fluctuations and uncertain load changes.

Energy Efficiency Programs

Under the auspices of the Public Service Commission's (PSC) Energy Efficiency Portfolio Standard, we have launched a residential natural gas rebate program that includes specific goals to reduce natural gas consumption. (NYSEG is on target to surpass its 2009 goal; RG&E has already exceeded its 2009 goal.)

Two additional, electric energy efficiency programs have been approved and we are in the competitive procurement stages to acquire the services of implementation contractors. One program will involve installation of energy efficient lighting and refrigerators in multifamily buildings with five to 50 dwelling units. Direct installations – as opposed to a rebate program – will be used to effectively reach this market. The other program will make rebates available to commercial, industrial and municipal customers for more than 100 different electricity and natural gas energy efficiency measures.

Additional plans include a nonresidential customer rebate program; a small business direct install program (to assist another market that is difficult to reach); a residential electric HVAC program; a program to encourage recommissioning of residential air conditioning; a limited income lighting/refrigerator program for one- to four-family homes; and a program to make compact fluorescent light bulbs available to community groups for fundraising.

These programs were selected because they are proven, reliable and easy for customers. They also ensure that every customer has an opportunity to take advantage of at least one program. By competitively procuring services to implement these programs and creating business opportunities for local trade allies, we are helping to produce jobs in New York very cost-effectively.

Beyond rebate and direct-install programs, we are examining independent energy efficiency proposals from third parties as requested by the PSC. The companies have proposed a unique "block bidding" program that would allow third parties to offer proprietary energy efficiency solutions or tailored approaches to particular groups of customers. These programs would work in concert with the companies' current and planned programs. To help coordinate our activities and bring the benefits of all of our programs to our customers, we have joined with NYSERDA and the other New York utilities to create the Energy Efficiency Program Administrators Collaborative (EEPAC). This effort and the breadth of our program offerings and proposals certainly demonstrate our support of and commitment to the energy efficiency goals of the draft energy plan.

The companies also continue our active participation in the NYISO's two demand response programs: the Emergency Demand Response Program and ICAP Special Case Resources Program through our CA\$HBACK and CA\$HBACK Plus programs. These programs can be deployed in energy shortage situations to maintain the reliability of the bulk power grid.

Comments on Specific Energy Efficiency Recommendations

 "Consistent with addressing cyber-security and physical security risks, the State supports the ongoing efforts of the Smart Grid Consortium to identify opportunities for accelerating advancements and investments in Smart Grid technologies; greater use of distributed resources; advanced meters and pricing mechanisms; and leveraging of federal ARRA Smart Grid funding to support greater system reliability and efficiency, and to reduce electricity costs to customers." (page 92)

Critical to the success of a "smart" grid is real-time communications and data management. The need for cyber-security is paramount for both functions, as recognized by all participants in the Smart Grid Consortium. "Interoperability" of systems should be a given – while there should be indifference regarding suppliers it is an absolute requirement that all suppliers meet established performance standards. One of the major roles of the consortium should be to coordinate the gathering of results from pilot projects and compiling that information into a cohesive report. This process will provide the state with the information needed to make informed decisions regarding further smart grid implementation. In a related matter, the state should take a deliberative approach regarding time-of-use (TOU) and other rate structures associated with smart grid applications.

"PSC should be authorized to require that electricity be priced on a time of use basis
for all customers, upon a finding that it is in the public interest to do so. Issues that
should be considered in making that determination include: practical hardships and
difficulties relating to the implementing of time of use rates for residential customers,
and possible means to mitigate any such hardships; and alternative rate regimes,
based on voluntary participation of residential customers." (page 92)

The companies are supportive of pricing that improves economic efficiency and continually look to set delivery rates on the basis of cost. We encourage that any major change in rate structures be completed in a gradual way to avoid undue customer impacts and hardships. Because of the potential adverse impact on customers from the volatility of wholesale market prices – and the limited ability of residential customers to manage their real-time consumption in the face of this volatility – gradual implementation and pilot programs using different rate-setting approaches would be prudent.

"The State should broaden the installation of advanced meters and implementation
of mandatory hourly pricing for industrial and commercial customers by continuing to
reduce the demand thresholds. PSC and State energy authorities should evaluate
and aggressively support implementation of demand response measures where cost
effective and environmentally beneficial." (page 92)

We support mandatory TOU pricing for large commercial and industrial customers. By January 1, 2010, NYSEG's mandatory TOU pricing for commercial and industrial customers will be at a threshold of 3 megawatts (mw) or greater. NYSEG and RG&E filed an advanced metering initiative with the PSC on February 1, 2007. Although dated, this proposal outlines our support of advanced metering. As noted above, we have applied for federal funding for smart grid demonstration projects. We urge that recovery of investment costs net of operating and maintenance savings occur on a timely basis.

• "The State should continue to implement rate structures and metering requirements for non-residential customers that encourage the use of electricity at off-peak hours and/or encourage control of daily electric load." (page 92)

As noted above, we support pricing structures that improve efficiency when they make economic sense. Since most commercial and industrial customers are on or will be on TOU rates, efficiency gains are able to be realized. Tying TOU rates in with an advanced metering system would certainly allow energy services companies and utilities to do more TOU pricing based on real time hourly market prices.

D. Renewable Energy

We support the draft energy plan's objectives to develop in-state energy supply resources to improve the state's energy independence and fuel diversity.

NYSEG and RG&E have owned and operated in-state renewable hydroelectric generation for decades and are experienced in maximizing this resource for the benefit of our customers and the state. Governor Paterson's goal for the state to meet 45% of its electricity needs through improved energy efficiency and clean renewable energy by 2015 is supported by recent efforts of RG&E to increase output at existing hydroelectric generating facilities and add a new 6-mw hydroelectric generating unit. The new generating unit will add to New York's renewable resources; it is equally important for New York to retain the existing facilities in the baseline level of renewables included in the Governor's overall target.

As is written in the draft energy plan, "production and use of in-state energy resources – renewable resources and natural gas – can increase the reliability and security of our energy systems, reduce energy costs and contribute to meeting climate change, public health and environmental objectives." We agree that introduction of these resources in an environmentally and economically sensitive manner will have a positive and important impact on New York's future.

Supplementing our hydroelectric generation efforts is the interconnection of renewable resources to our energy delivery systems. Since 2006, we have connected more than 600 photovoltaic systems, nearly 40 wind projects and three hybrid projects, with the number of installations increasing each year. Commercial wind generation connections alone represent 415 mw of installed capacity, with a total additional installed capacity of 350 mw in the queue for next year.

In addition, we continue to offer wind power to our customers through our successful Catch the Wind program. As of September 30, 2009, approximately 20,900 NYSEG and RG&E customers have purchased more than 92 million kilowatt-hours of wind energy attributes annually. This effort supports the voluntary segment of the state's Renewable Portfolio Standard (RPS). The companies have also been active in the proceedings on the Customer-Sited and Main Tier portions of the RPS.

A final note on renewables relates to our interest in methane digesters. NYSEG's Auburn Division contains an untapped renewable resource – methane derived from the anaerobic digestion of manure and other waste products. The 35,000 head of livestock on 15 farms in the area have a potential of producing approximately 17 mw of energy. NYSERDA is funding the construction of waste digesters and generators for this application. We are examining the concept of a distributed generation collection system for waste digesters – dedicated circuits to collect the generation – that would avoid rebuilding the electricity distribution system. Additionally, the proposed collection system would be safer for customers, utility workers and equipment; increase power quality; accommodate all customer generation at less cost; provide the capability for

additional renewable resources; and provide a platform for smart grid technology testing and design.

Comments on Specific Renewables Recommendations

 "The State should include energy storage technologies in the definition of "alternative energy production facility" under PSL, Section 2(2-b), in order to exempt energy storage facilities up to 80 MW from the jurisdiction of the PSC. This would reduce time and cost of permitting and encourage the development of these technologies." (page 92)

Storage comes in a variety of sizes and capabilities and can impact either the distribution or transmission system. Smaller units would only impact the distribution system and should be a direct concern of the local utility and be considered under existing interconnection requirements. For distribution level storage, PSC involvement on a regular basis is unnecessary. If the goal is to reach a point where a micro grid approach is being considered, then PSC involvement would be appropriate as the concept of microgrids has a multitude of implications. If the intent is to provide bulk storage as a near term benefit to the transmission system such as the proposed Energy East CAES facility, the approval processes with the PSC and the NYISO should be reviewed to identify ways to shorten the time periods for approvals.

• "Enhance certainty in the renewable energy market by scheduling regular solicitations for Main Tier procurements. Consider more flexible solicitation schedules, other than the standard 10 year contracts, to accommodate changing market conditions." (page 92)

We support the central procurement process for Main Tier resources, and plan to actively participate in the 2009 RPS review that will begin with a special PSC session and technical conference on October 28, 2009.

• "Create a tracking and trading system for REC's to foster development of a robust voluntary market for REC purchases and to help ensure integrity in measuring compliance with the RPS." (page 93)

In general, we support this recommendation and are in favor of systems that increase transparency and ensure compliance. The state should examine integrating the New York and New England markets to decrease price disparity across a trading region.

• "Continue to provide incentives for environmentally beneficial, renewable DG resources, including CHP, with specific targets determined by the PSC in the expanded RPS proceeding, funded through the Customer-Sited Tier. Identify opportunities for targeted DG deployment that may serve to reduce the need for peaking power plants in load pockets." (page 92)

Again, we support the expanded use of renewable resources, but caution the state to keep long-term ratepayer impacts in the forefront and develop the least-cost solutions. Meeting specific targets with large subsidies and costly incentives can cause future negative impacts, as witnessed by the legacy of the state's "6 cent" law.

 "Amend the net metering law to provide greater flexibility to commercial customers to size systems to meet a greater percentage of their energy requirements, while ensuring that system reliability is not negatively impacted." (page 92)

We appreciate the recognition that system reliability is of critical importance when considering the expansion of net metering. An additional concern that needs to be considered is the cost associated with expanded net metering. Costs for system upgrades to benefit one customer or a group of customers should not be borne by all other customers, and if those costs are allocated to other customers, there should be identified benefits and recognition of the resulting economic impacts.

 "Examine the protocols used by NYISO and utilities for connecting DG sources to the grid to help ensure such implementation is timely and cost-effective." (page 92)

We support the idea of reviewing these protocols to determine if improvements can be made and to ensure timely and cost-effective implementation.

E. Economic Development

We would be remiss if we didn't highlight a section of the draft energy plan that is of major importance to our residential customers. The plan's fourth strategy suggests that the state "continue to provide support through the state's low cost power programs to retain New York's commercial and industrial base."

We are fully committed to economic development – as witnessed by our significant contributions to projects that have retained businesses and attracted new businesses to the state. Both NYSEG and RG&E have a long history of supporting economic development activities in our service areas by offering a full menu of incentive rates as well as a brownfield redevelopment program and a utility infrastructure investment program. In addition to these company economic development resources, eligible customers are able to take advantage of state power programs including expansion power, economic development power and Power for Jobs.

As these state-funded programs are being reviewed, it is essential that we retain the New York Power Authority (NYPA) hydropower allocations that are currently dedicated to our residential customers. For 40 years, the companies' residential electricity customers have directly benefited from these NYPA allocations through bill credits. Today, this power benefits 1.2 million customers, representing approximately 3 million people.

Based on actual and estimated data, from 2006 through 2010, NYSEG residential customers will have seen a \$307 million direct benefit from the hydropower allocation; RG&E residential customers will have seen a direct benefit of \$164 million. The value of these allocations to our residential customers is considerable; it should not be dismissed as trivial, nor should the direct, positive impact of these savings in the local economy be overlooked. Allowing hydropower allocations to be "repurposed" for economic development programs that are in need of evaluation and revamping would be devastating for upstate residential customers, especially given current economic struggles.

Comments on Specific Economic Development Recommendations

• "NYPA's economic development programs to reduce energy prices and bills for businesses, industry, and not-for-profit organizations should be tapped to attract clean energy industries and facilitate energy efficiency in support of the State's '45 by 15' initiative." (page 96)

We support the evaluation and revamping of existing economic development programs to ensure that programs are based on sound and complete economic analyses. Economic development power programs are a useful tool to trim costs, but systemic energy-related changes would go much further to enhance the state's business climate. Eligibility requirements should be looked at closely to ensure that the intended purpose of the programs is being fulfilled to the maximum extent possible. Clean energy industries should be supported only if they meet strict eligibility requirements.

• "NYPA's Power for Jobs program should be extended for a longer period of time, beyond the one-year cycle of extensions. Opportunities for increasing the size of the program should be explored." (page 96)

Again, we support the evaluation and revamping of existing economic development programs to ensure that programs are based on sound and complete economic analyses. Power for Jobs should be extended only after a careful and complete review of the program's true effectiveness. Program expansion should not be supported through the "repurposing" of the residential hydropower allocation that is currently provided to our residential customers.

F. Conclusion

We are largely supportive of the Draft State Energy Plan's objectives and recommendations to develop all available economic and environmentally beneficial resources. As a regulated utility with the responsibility for providing safe, reliable and adequate service, we are well-suited to assist the state in achieving key policy objectives, strategies and recommendations described in the draft energy plan. Critical to this involvement are the resources necessary to address and implement these initiatives. Appropriate regulatory consideration of the companies' future delivery rates

is encouraged in an effort to provide system improvements and support our innovative initiatives that will enhance the state's energy future.