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July 18, 2014

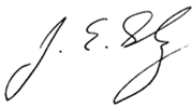
Hon. Kathleen H. Burgess, Secretary
Public Service Commission
Three Empire Plaza
Albany, New York 12223-1350

CASE 14-M-0101
Subject: Comments on Selected Policy Issues on Reforming the Energy Vision

Secretary Burgess:

I am pleased to enclose my comments in response to the Selected Policy Issues on Reforming the Energy Vision (REV). I am a Senior Fellow at the Guarini Center on Environmental, Energy and Land Use Law at New York University School of Law. The views I express here are my own and do not represent the views, if any, of the Guarini Center or of New York University.

Sincerely,



Jonathan E. Schrag

BEFORE THE
STATE OF NEW YORK PUBLIC SERVICE
COMMISSION

CASE 14-M-0101

"Selected Policy Issues on Reforming the Energy Vision"

Submitted by Jonathan E. Schrag, Senior Fellow at the Guarini Center on Environmental, Energy and Land Use Law at New York University School of Law

Introduction

The New York Public Service Commission and the Staff of the Department of Public Service have initiated a comprehensive and far-sighted process to reform the underlying structure and financial incentives affecting provision of electric service in New York State. The Staff Report describes one potential vision for a reformed energy vision. I commend the Commission and Staff for their openness in identifying the broad policy issues under consideration and in accepting public comment on them. The comments below are intended to identify potential issues for further investigation by Department Staff.

Question 1: Potential REV Outcomes

The Commission should more clearly distinguish between outputs and outcomes surrounding the goal of greenhouse gas emissions reductions, and should conduct an economic analysis of the REV value proposition.

The designation of a matrix of potential outcomes and goals suggests that New York State regulators contemplate a shift toward ratemaking based on performance evaluated against specific metrics. This shift presents a significant opportunity to align the financial incentives provided to utilities with state policy objectives. The potential outcomes and goals described in the current Outcomes Matrix merit two observations.

First, the category "Advance Clean Energy" includes a number of goals that appear straightforward but are complexly interrelated and may lead to poorly constructed incentives. The goal to "install new renewable power sources" is an *output*, not an *outcome*. That is, installation of renewable generation sources is not an end in itself but rather a means to achieve the reduction of

greenhouse gas emissions, which is appropriately listed as the first goal of the REV matrix. Similarly, to "increase uptake of energy efficiency measures" is a means to achieve the end of a reduction of greenhouse gas emissions (as well as other goals specified in the matrix). With reduction of greenhouse gas emissions as a goal, the means to achieve it -- whether through installation of renewable generation, energy efficiency, energy storage or energy conservation -- should be left to the marketplace.

Clarity between outputs and outcomes has potential significance for future ratemaking. The creation of parallel or subsidiary goals, each with their own metrics , could lead to financial incentives detached from the actual outcomes that state policy makers seek to achieve in a future performance based regulatory framework. For example, utilities should receive financial incentives for increasing the installation of clean energy only to the extent that installation reduces greenhouse gas emissions.

Second, the goal to "ensure that bill impacts are reasonable" will require a comparison of expected REV investments with a projection of a reasonable, alternative business-as-usual scenario. The assumptions shaping that business-as-usual scenario should incorporate each of the externalities which the REV anticipates will be valued by new products and services. The potential savings over a business-as-usual scenario would represent the aggregate "value proposition" of REV. By conducting this type of economic analysis of the value proposition of REV, the Commission would appropriately reset the standard for comparison from today's bills to what future bills would be if no action were taken. In addition, this economic analysis would indicate how the value proposition may develop over time, indicating for ratepayers how long it will take for the investment in REV to be returned as savings over business-as-usual. This temporal analysis will also allow a comparison of when ratepayer investments will need to be made and when savings will accrue, showing the ratepayer "cash-flow" of REV. Such an analysis would significantly contribute to public confidence in the REV initiatives and would advance the goal of customer engagement.

Question 2: Optimal Ownership Structures for Distributed Energy Resources (DER)

Utility ownership of DER would remove many barriers that currently inhibit its installation and would also raise significant issues of potential anti-competitive conduct should the utility become the Distributed System Platform Provider (DSPP).

Allowing utility ownership of distributed generation at customer locations or at strategic locations on the distribution grid would remove a barrier to utilities supplying electricity to its customers with the least costly distribution system investment. This approach would incentivize utilities to become supporters of a clean, distributed, and more reliable method of delivering electricity and would also provide utilities with financial returns that could be reinvested into the electric distribution grid to service to those customers who are not served by distributed generation.

Installation of distributed energy resources offers a number of significant benefits to the electric distribution system and utility customers. First, utilities and ratepayers can avoid investment in transmission and distribution infrastructure that would otherwise be needed to move power from distant generating facilities to customers. Second, distributed energy resources minimize the "line losses" that occur as electricity flows through the transmission system, leading to higher system efficiency and decreased greenhouse gas emissions. Third, distributed energy resources alleviate the need for high-emission backup power systems like diesel generators. Finally, most distributed energy resources can be configured in a "grid islanding" format so that critical facilities will not lose power in the event of a widespread grid outage, providing broad social benefits.

However, the Staff Report does not propose that utilities act as the exclusive owners of distributed energy resources, but that they compete for opportunities with other distributed energy resource developers. It is critical that the competitive landscape envisioned in the Staff Report is based on a level playing field. However, in the event that the utility becomes the DSPP there are significant questions of how the role of market administrator and market participant could be wielded without providing significant advantage to the utility/DSPP. For example, the DSPP might have access to more granular information about potential customers. Similarly, the utility might leverage the revenue it receives as owner of the natural monopoly of the distribution network to obtain lower cost financing for distributed energy resource project development. The Commission should examine what mechanisms may be available for it to mitigate the vertical market power that would arise from this conflict of roles. Such mechanisms, such as an independent market monitor, would need to be conspicuous and robust to ensure market confidence.

In the event that the Commission determines that utility ownership of distributed energy

resources is in inherent conflict with the utility as DSPP, the potential advantages of allowing utility ownership are sufficiently powerful, particularly in a first stage of regulatory deployment, to prompt the Commission to reconsider whether the utility should, in fact, become the DSPP.

Question 3: Distributed System Platform Provider Identity

The Commission should undertake an analysis of the industrial organization and market power issues raised in each of the seven utility service territories and should allocate the identity of the Distributed System Platform Provider through a competitive process, potentially with an auction of the DSPP franchise.

As discussed above, the role of market administrator may conflict with the role of market participant for distributed energy resources and conventional distribution system services. There are regulatory mechanisms that the Commission could use to mitigate potential market power issues. However, the Commission would first need to conduct a rigorous analysis of the industrial organization for expected distributed energy resources within each of the seven potential DSPPs. For example, what is the market potential and concentration of potential for distributed energy resources within each service territory? What is the current presence of distributed energy resource providers within each service territory? How do transmission congestion, the load curve and the cost of distributed energy resource installation affect distributed energy resource opportunities and values within each service territory? The answers to these kinds of questions could inform a more technical analysis of market power considerations and mitigation measures. It is likely that differences among service territories would suggest that different kinds of mitigation measures would be appropriate for different DSPPs.

In the event that a robust and independent market monitor is included as one of the mechanisms to mitigate market power, that monitor should be hired as soon as practicable, and ideally before the completion of the market design. Allowing a vertical market power expert to participate in market design as an advisor to the Commission will be far more effective than limiting their role to monitoring a potentially flawed market design.

Although the Staff Report discusses a number of considerations underlying the proposal to have the utility become the DSPP, the appropriate forum for a full and fair evaluation of the considerations outlined in the Staff Report is a competitive bidding process with clearly defined criteria. Such a process, while not in itself mitigating any market power issues, would provide

significant benefits to ratepayers, regulators and the distributed energy resource marketplace. First, the process of developing and issuing an RFP for the DSPP would force Department staff to rigorously identify and value the attributes, services and metrics of success for the DSPP. Many of the considerations articulated in the Staff Report, such as accumulated ratepayer value or proximity to distribution data and systems, could be included as criteria within an RFP. Second, the process of submitting a proposal in response to the RFP would solicit innovative ideas from incumbent utilities and also from potential new entrants, such as leading technology firms, providing valuable information to regulators and increasing the overall value delivered by the DSPP. Finally, using a competitive bidding process to assign DSPP identity would highlight that this decision represents an allocation of a new franchise. Such an allocation could be for a fixed period of time, such as twenty years, with the prospect of periodic review. This kind of periodic review of the franchise, discussed at one point in the Superstorm Sandy Moreland Commission, would increase performance, allow for innovation and retain Commission authority to periodically alter how the DSPP should perform.

An innovative variation of this approach would be to auction the DSPP franchise and return the proceedings to ratepayers through some combination of direct savings, investment in the distribution system or takeover of some assets from the incumbent distribution utility. The franchise payment, which could have a minimum reserve price, would serve as a down-payment to ratepayers on the future value to be achieved over business-as-usual from the REV. The winning bidder might receive some form of shared savings plan through which they were able to recoup the value of their franchise payment based upon realizing savings over business as usual. Such a proposal highlights the need for careful analysis of the expected value proposition from REV as well as continued monitoring of economic performance.

Question 4: Benefits and Costs

The Commission should develop an explicit value of carbon emissions for distributed energy resources to avoid the leakage of emissions from conventional generation sources regulated by New York State's Regional Greenhouse Gas Carbon Trading Program and the U.S. Environmental Protection Agency's Clean Power Program to smaller sources that fall beneath those regulatory thresholds.

The REV should limit carbon emissions from distributed generation

The greenhouse gas emissions from distributed generation generally do not fall under the regulatory umbrella of either New York State's Regional Greenhouse Gas Initiative or the U.S. Environmental Protection Agency's Clean Power Plan. As a result, the impetus from REV could result in the migration of emissions from regulated sources to unregulated sources, resulting in the unintended consequence of a proliferation of relatively inexpensive, fossil fuel-fired reciprocating engines. These sources are both carbon intense and emit greater amounts of NOx, SOx, particulate matter and noise.

The Commission needs to develop a mechanism to value carbon emissions for distributed generation and prevent the migration of emissions. One mechanism would be for developers to assign a price to greenhouse gas emissions as a way to distinguish among various types of distributed energy resources. Each type of distributed energy resources has its own attributes and costs. A price on carbon emissions, even one as small as the current RGGI price, would help to level the differences between high carbon technologies such as reciprocating engines and low carbon DER such as solar panels or energy storage. Other mechanisms could include a quantity based limit (in capacity, megawatt hours or emissions) or simple performance standards for fossil fuel fired distributed generation. Additional analysis of these various mechanisms, in concert with NYS Department of Conservation, could provide significant benefit.

Without a mechanism for DER developers to value greenhouse gas emissions, the REV process runs the risk of inadvertently circumventing the U.S. EPA's efforts to reduce carbon dioxide emissions from existing power plants and New York State's existing carbon trading program. Without such a mechanism, the shift in emissions from conventional generators to distributed generation would yield a perverse outcome: regulated entities under RGGI and US EPA would have met their goals and DER would expand while net emissions would have remained constant.

There is also a need for Commission staff to engage closely with U.S. EPA staff and NYS DEC staff in the review of the Clean Power Program Proposal and the design of New York's State Implementation Plan. In particular, the current EPA proposal includes language that defines regulated entities under the Proposal as generation stations that sell at least one-third of their output to a distribution utility. This kind of definition may be out of step with the new regulatory landscape of the REV.

The same principle applies to other forms of environmental impact associated with distributed generation, including emissions of NOx, SOx, particulate matter noise, and consumption

of water. There is a risk that without these kinds of protections the REV will promote widespread deployment of high-carbon and high-pollutant distributed generation, especially in urban locations that are among the primary areas of intended program impact.

The REV should broadly review cost benefit methodologies

The REV also proposes a broad review of cost benefit methodologies for New York State energy planning processes. This should include an approach that maximizes net social welfare and accounts for externalities. An externality is the uncompensated benefit or cost imposed on third parties by a transaction: in other words, an effect whose cost or benefit is not internalized by the acting parties. Once all significant impacts are cataloged, analysts quantify and monetize each effect to allow comparison between various policies, allowing decision-makers to then select the policy options that generate the greatest net benefits to society.

By contrast, the types of project analyses historically used in New York's energy planning decisions are less comprehensive in their assessment of effects and do not compare alternatives in a way that is useful for prioritizing actions with the greatest net benefits. The Commission should consider whether the Total Resource Cost ("TRC") test, which measures only a subset of costs and benefits that accrue to the utility and its customers (ignoring social externalities) remains the most appropriate cost-benefit methodology or should be replaced with a more comprehensive measure of social, environmental, health and overall system benefits..

Question 5: Transition for Clean Energy Programs

Maintaining a rigorous cap on carbon dioxide emissions which includes emissions from distributed energy resources is the best policy mechanism to ensure New York State continues to achieve its carbon reduction policy objectives.

Question 6: Enhanced Services

The Commission should clearly distinguish between regulated and unregulated activities according to whether the activity is dependent on the exercise of a natural monopoly.

The fundamental rationale for regulation of electric distribution companies by the Public Service Commission is that the companies exercise a natural monopoly over the distribution system: poles, wires and substations. That is, it is in the public's interest to maintain a single system; competition among multiple overlapping distribution systems would be to the detriment of ratepayer interests.

Many of the enhanced services envisioned as a part of the DSPP are not related to the exercise of a natural monopoly. In fact, the Staff Report explicitly envisions competition among DER product and service providers. In a competitive landscape, the rationale for Commission oversight is unclear and should be carefully articulated. The agglomeration of regulated and unregulated activities within a single entity may initially appear as efficient, but could inadvertently expand Commission oversight into a range of activities for which it is not suited.

Question 8: Other

The Commission should explicitly examine the lessons of the telecommunications industry. Many of the policy questions identified in the REV process have been examined in the context of the telecommunications industry, both in the United States and in the European Union. Although some regulators may have has experience with the telecommunications industry, a rigorous and explicit examination of the goals, experience and outcomes of telecommunications industry regulatory changes since 1996 would inform this proceeding.