



July 17, 2014

Hon. Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Agency Building 3
Albany, NY 12223-1350

Re: Case 14-M-0101, Reforming the Energy Vision

Dear Secretary Burgess,

I am writing to provide comments from the American Council for an Energy Efficient Economy (ACEEE) in the Reforming the Energy Vision (REV) docket. ACEEE is a non-profit research organization that works on programs and policies to promote energy efficiency. We have been active on utility issues for more than two decades and have worked extensively in New York State including conducting studies on the state, working as a consultant to PSC Staff and NYSERDA, co-chairing the original System Benefit Charge Advisory Board, and providing comments to the PSC in several dockets.

We have reviewed the Staff Report and Proposal on “Reforming the Energy Vision” and have a number of comments to make. Our comments draw heavily from our recent report on *The Future of the Utility Industry and the Role of Energy Efficiency*, which is available for free download at <http://aceee.org/research-report/u1404> . In this report we found that electricity sales are unlikely to enter a “death spiral” but are also unlikely to increase as much as they have in the past, meaning that investor-owned utilities seeking revenue growth will need to offer new services. The utility industry is changing in fundamental ways and both utilities and regulators need to make adjustments so they are well positioned for the future.

The NYPSC is leading the nation is addressing these issues and in particular we appreciate how the many issues involved are being addressed in an integrated manner. While ultimately the REV objectives will need to be implemented in stages, by first looking at the various issues in an integrated fashion, the PSC can best shape a workable and robust system.

In the remainder of these comments we will first address REV objectives and Category I issues, then proceed to some other issues. We emphasize how energy efficiency fits into the overall

framework, since that is our primary area of expertise, but also comment on a variety of related issues based on our experience.

Objectives

On p. 1 of the staff report, five objectives are listed. We agree with these objectives. However the third objective, “system wide efficiency” is fairly vague and should be clarified. We think this objective involves minimizing customer bills, subject to adequately addressing other objectives. “Least cost” needs to be implicitly or explicitly included in the objectives. We also agree with staff that carbon reduction should be included in the list of objectives. Super Storm Sandy illustrates how global warming can affect NYS and to reduce the chances of future such storms, carbon reduction should be among the REV objectives.

Category I: Advancement of Clean Energy

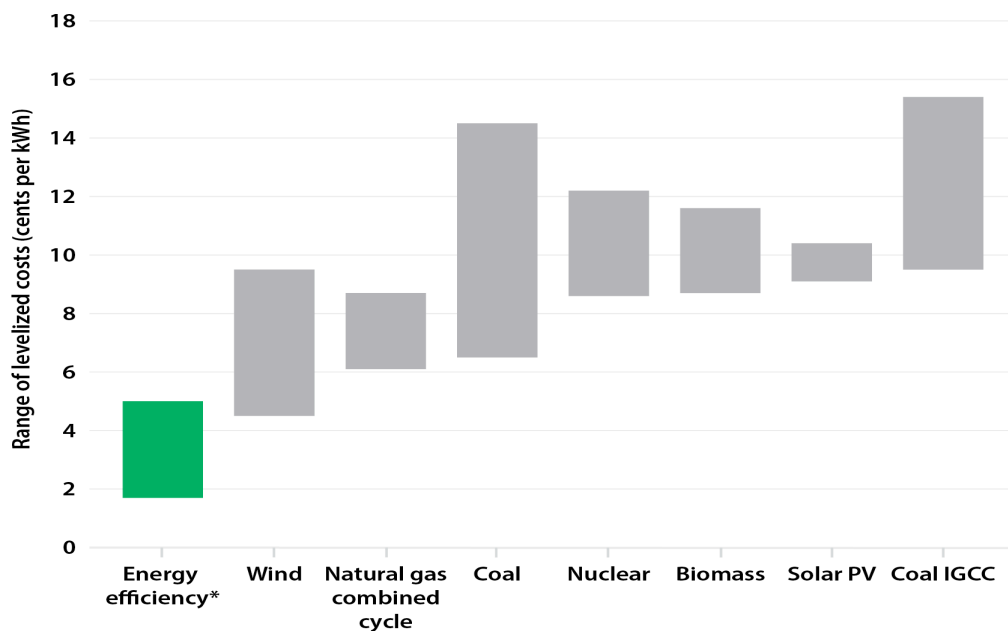
Four subjects are listed in category I – greenhouse gas emissions, regulated air contaminants, energy efficiency and clean generation. We note that these issues are particularly timely and important given the recent draft rules issued by USEPA under section 111(d) of the Clean Air Act. These new regulations will limit the amount of carbon that can be emitted from existing power plants. Two of the leading resources that EPA used to set state-specific standards for emissions are energy efficiency and clean energy. Thus NYS will need robust efforts in these, two areas, both to meet state objectives and also to meet the new EPA regulations. We now turn to specific issues on energy efficiency, including the role of energy service companies (ESCO’s).

Energy Efficiency

Energy efficiency programs are significantly less expensive than new power plants as shown in the graph below which compares the cost per kWh saved to utilities from energy efficiency programs (based on results in 20 states as summarized in a recent ACEEE report¹) to the cost per kWh from a new power plant (based on the latest estimates from Lazard Associates²).

¹ Molina, Maggie. 2014. *The Best Value for America’s Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs*. Washington, DC: American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u1402> .

Levelized Cost per kWh of Electric Resources:



Because energy efficiency is generally less expensive than other electric resources, investments in energy efficiency can help to lower costs relative to a supply-oriented strategy. Energy efficiency also lowers emissions since there are no emissions from power that is no longer needed. Energy efficiency can also frequently help to meet T&D needs by postponing, and in some cases deferring the need for local T&D investments. This is illustrated by multiple projects undertaken by Con Ed, including their latest proposal to use efficiency and distributed generation to delay the need for a \$1 billion substation upgrade. Thus, in order to meet the REV objectives, robust support for energy efficiency needs to be a part of the REV plan. If support for energy efficiency is not robust, the REV objectives are likely to be compromised. The staff report acknowledges the value of geographically-target energy efficiency investments. In addition, on p. 21, it states that “[e]fficiency programs may also be implemented on a territory-wide basis where this will enhance customers’ ability to manage bills and other objectives of the commission.” We urge the Commission to replace “may” in the sentence above with “should” because energy efficiency programs help to lower system costs, reduce bills and meet

² Lazard. 2013. “Levelized Cost of Energy Analysis: Version 7.0.” New York, NY: Lazard. http://gallery.mailchimp.com/ce17780900c3d223633ecfa59/files/Lazard_Levelized_Cost_of_Energy_v7.0.1.pdf .

environmental objectives. If system-wide programs are not offered, some of these system-wide and societal benefits will be lost.

The staff paper implies that utilities will be the main implementer of energy efficiency programs, with NYSERDA concentrating on market transformation initiatives and serving low-income customers. We are fine with this allocation of responsibilities, but suggest a few issues that need attention.

First, if the utilities are to be lead, then the Commission should set specific energy efficiency goals for the utilities to meet, and should provide financial incentives for meeting these goals. In an April 2014 report, ACEEE reviewed implementation of energy efficiency goals in 26 states and found that such goals motivated performance and that most states were meeting or close to their goals.³ The specific goals for NYS can be based on a statewide Integrated Resource Plan and on the savings utilities are showing are achievable in neighboring states, including, in the case of National Grid Massachusetts and Rhode Island, by a company that also serves NYS.⁴ If specific goals are not set and utilities not held accountable for meeting these goals, then energy savings will likely be lower, raising costs for all customers. As the old axiom says, "you can't manage what you can't measure."

Second, there are some items on the cusp between the resource acquisition programs that utilities will run and the market transformation programs that NYSERDA will run. These include new construction programs, whole building programs, and the promotion of advanced technologies and practices that are commercialized but not widely available. The utilities and NYSERDA, perhaps with PSC guidance, should work together to make conscious decisions about which opportunities utilities will pursue, which NYSERDA will pursue, and where and how they will work together. As part of these discussions, efforts should be made to minimize energy efficiency measures that "fall between the cracks". We recommend that savings from

³ Downs, Annie and Celia Cui. 2014. *Energy Efficiency Resource Standards: A New Progress Report on State Experience*. <http://aceee.org/research-report/u1403>. Washington, DC: American Council for an Energy-Efficient Economy. NYS was one of the few states to fall significantly short of its goal, with much of the shortfall at NYSERDA.

⁴ Regarding savings in neighboring states, in 2012 (the last year available data), Vermont achieved energy efficiency savings of 2.2% of total sales, Massachusetts achieved 1.8%, Rhode Island 1.6% and Connecticut 1.1%. We don't have 2012 data for Ohio and Pennsylvania yet, but in 2011 they achieved 1.2% and 1% savings respectively. In 2014, Massachusetts and Rhode Island are both targeting more than 2% savings and Connecticut is targeting 1.4% savings. These figures all come from the 2013 ACEEE State Energy Efficiency Scorecard, <http://www.aceee.org/research-report/e13k>.

NYSERDA programs, as determined in program evaluations, be counted towards utility goals so that utilities have maximum incentive to work with and assist NYSERDA.

Third, the Staff Report and Proposal seems to envision an increased role for the private market in offering efficiency services. We note that current utility and NYSERDA programs rely overwhelmingly on private market players for providing energy efficiency services and agree with Staff that more can be done so that utility and NYSERDA programs leverage the market. We also note New York's Green Bank which will provide capital to help spur the market and we support this effort. But we caution the PSC not to rely strictly on the market and the Green Bank – in our view technical assistance and incentive programs will always be needed. There are many reasons customers do not invest in energy efficiency, with the result that customers have high implicit discount rates when considering energy efficiency investments. While such high discount rates may be rational for individual customers, at a societal level such discount rates mean that reliance only on the market will result in underinvestment in energy efficiency from a societal perspective. Also, while some customers will take out loans, others will not for a variety of reasons ranging from poor credit rating, aversion to debt, or financial procedures which make “on the books” loans difficult for some companies. For example, Wisconsin Electric and Puget Power in the 1980's found that when commercial customers were offered a choice of a zero interest loan or a rebate of the same value, over 90% chose the rebate.⁵ There are similar studies on residential customers, with 15-49% of customers preferring loans, and the rest preferring grants equal to the loan subsidy.⁶

The fact that we cannot rely strictly on the market is illustrated by an ACEEE study from 2001 which looked at previous attempts to rely just on the market⁷ as well as by a recent study by the Connecticut Office of the Consumer Council which found that competitive electricity suppliers

⁵ Nadel, Steven. 1990. *Lessons Learned: A Review of Utility Experience with Conservation and Load Management Programs for Commercial and Industrial Customers*. Washington, DC: American Council for an Energy-Efficient Economy. <http://www.aceee.org/research-report/u901> .

⁶ Stern, Berry and Hirst. 1985. "Residential Conservation Incentives." *Energy Policy*, April, pp. 133-142.

⁷ Kushler, Marty and Patti Witte. 2001. *Can We Just "Rely on the Market" to Provide Energy Efficiency? An Examination of the Role of Private Market Actors in an Era of Electric Utility Restructuring*. Washington, DC: American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u011> .

were raising rather than lowering bills.⁸ The limitations of loans are illustrated by a 2011 ACEEE report that looked at many of the leading energy efficiency loan programs around the country and found only two that had served more than 5% of eligible participants. The highest participation rate – 16% of eligible customers – was achieved over a period of more than three decades.⁹ If NYS were to rely only on loans, how will the other 84% of customers be served? By contrast, a variety of incentive programs have achieved participation rates of 30% or even 50% or more.¹⁰ Efforts to improve availability of capital are important, but they are just part of the suite of services that are needed to maximize adoption of cost-effective energy-efficiency investments.

In our opinion, if NYS were to rely just on the market for efficiency services (including loans), it would mean that additional supply side resources and carbon reduction measures will be needed, resources and measures that are more expensive than energy efficiency and that all customers pay for through their energy bills. Thus, in order to minimize customer bills, long-term energy efficiency programs should be incorporated into REV. With good programs and policies, it should be possible to reduce the subsidies needed, but NYS cannot eliminate such subsidies unless it is willing to accept the higher bills that result from societally suboptimal levels of efficiency investment.

Due to what we believe are the limits of what markets aided by loans can accomplish, we urge the Commission to treat any efforts which dismantle incentive and technical assistance programs with caution. Perhaps a new system can be tried in a single county, and the results compared to the accomplishments of more traditional programs in the rest of NYS and adjoining states. Or perhaps the two types of programs can be run in parallel, with the traditional programs phased out only if the new programs prove they can achieve at least the same amount of cost-effective savings.

⁸ Koenig, Bryan. 2014. "Conn. Residents Pay Much More with 'Nonstandard' Utility Supplier – Report." *Energy Wire*. March 17. <http://www.eenews.net/energywire/stories/1059996224/search?keyword=Koenig+Conn+residents+pay+much+more> .

⁹ Hayes, Nadel, Granda and Hottel. 2011. *What Have We Learned from Energy Efficiency Financing Programs?* Washington, DC: American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u115> .

¹⁰ Nadel, Pye and Jordan. 1994. *Achieving High Participation Rates: Lessons Taught by Successful DSM Programs*. <http://www.aceee.org/research-report/u942> . ACEEE is now revising this work and will publish our results in late-2014.

Role of ESCO's

The Staff Report and Proposal, on p. 19, discusses how ESCO's will be expected to play a substantial role under REV. These issues are also discussed on pages 38-43. We agree that ESCO's have an important role to play. But we note that ESCO's tend to work with larger customers because they need large savings to cover substantial marketing and other relatively fixed costs. Over the years various ESCO's have tried to serve residential and small business customers and ultimately failed to build a sustainable market. We also note that even some large customers do not want to work with ESCO's, preferring to manage the process more themselves. For these reasons we recommend that REV include various mechanisms to build ESCO markets where they are now on the cusp of sustainability, but to recognize that ESCO's will only be part of the long-term solution. We also note that ESCO's can, and routinely do, take advantage of present and future incentive programs – they are not discriminated against. In fact, many ESCO's freely admit that the presence of utility program incentives are an important asset to their business success.¹¹ The question is how much additional support they should be provided. We tend to look at ESCO support as a market transformation initiative – what can be done to remove barriers and build promising markets so they are more sustainable going forward?

Other Categories

The line between category I and the other categories is not entirely clear but there are several issues we wish to comment on that seem to relate primarily to categories II through VI, but do sometimes touch on category I. Specifically, in the paragraphs below we discuss the following issues: utilities and distributed generation, regulatory reform, rate design, and utility services. At the end we add a few additional comments on points made in the Staff Report and Proposal.

Utilities and Distributed Generation

The Staff Report and Proposal supports the development of distributed generation and we agree. On p. 28 the Report and Proposal specifically asks: "What is the range of potential rules for utility engagement (e.g. utility engagement as a backstop only; allowing utility engagement

¹¹ See footnote 5.

up to certain quantified limits...). In our opinion utilities have both power project development expertise and available capital. They also need to offer additional services if they want to grow their revenues. We believe that utilities should be allowed to invest in distributed generation projects, competing with other providers. If there are concerns they will overly dominate the market, then some limits can be placed on the amount of such capacity they own (e.g. up to x% of total generating capacity) and this limit periodically reviewed. Where distributed generation would be useful in a particular location to help meet system needs and no developer is willing to undertake the project under reasonable terms, then the utilities should be directed to undertake the project and allowed to put the project in their ratebase. If utilities are allowed to make distributed generation investments, we would expect them to concentrate on combined heat and power and community-scale solar projects where their current expertise will be of most use. We do not think utility involvement in residential solar is needed and we believe they may have difficulty competing in this market, but we are not opposed to letting them try if they want using shareholder funds and subject to protections against self-dealing. We discuss this latter issue further below.

Regulatory Reform -- RDM and Incentives

In our opinion, the RDM program has been very successful and should be continued, although we would expect some modifications as the REV process proceeds. As noted on p. 49 of the Staff Report and Proposal, "RDM provides no positive incentive for utility bill management." Energy efficiency programs are an example of utility bill management as such programs help to keep customer bills lower. We recommend that RDM be complemented with specific positive incentives that should be provided to utilities if they meet specific energy efficiency goals. Such goals should include overall savings achieved and may also include metrics related to other public policy goals such as cost-effectiveness and serving populations that are typically underserved. The incentive processes in Connecticut, Massachusetts and Rhode Island have worked particularly well with such multiple goals and we recommend that the PSC study their experience before designing a NYS program. In the longer term, if NYS adopts performance based ratemaking, we think that an explicit energy efficiency metric or metrics should be included.

Rate Design

We presume that rate design will be discussed later in the REV proceeding. These issues are discussed on pages 58-65 of the Staff Report and Proposal. At this point we wish to point out that in structuring rates, care should be taken not to reduce the variable rate to levels that discourage energy efficiency investments, as reduced energy efficiency investments will increase overall system costs. While some people seek to divide the cost of utility services into two buckets – fixed and variable costs -- we believe this is an over-simplification. Instead we recommend consideration of three buckets – truly fixed costs (e.g. the cost of monthly billing), short-term variable costs (e.g. fuel costs), and costs that may be fixed in the short term but are variable in the long-term depending on the need for infrastructure investments (e.g. many T&D costs). For example, if electric vehicles become widespread, absent energy efficiency investments, there may be the need to upgrade many distribution circuits. Rate design needs to recognize this third bucket and price these services in ways that markets can respond to. For example, time-of-use rates hold much promise, with costs higher during peak periods that trigger the need for new investments. We are also open to three-part rate designs, with fixed cost charges to cover truly fixed costs and variable kWh and kW charges used to cover other costs.

Utility Services

According to Staff Report and Proposal, “[p]roducts and services under a DSPP model will not be limited to DER but may also include value-added services that may be offered by the utility and/or by competitive providers” (p. 19). We agree. As noted in our recent report on *The Future of the Utility Industry and the Role of Energy Efficiency*, utilities wishing to grow their revenues will need to consider providing additional value-added services. We believe the issue of utility services needs more attention than it receives in the Staff Report and Proposal and recommend that this issue be explicitly addressed later in the REV docket. We believe that utilities should be able to provide value-added services, but need to do so on a level playing field with competitive suppliers. A level playing field in turn means that utilities are not duly advantaged by their association with the regulated wires company (e.g. protections against self-dealing) but also that they can be nimble enough to quickly make decisions to respond to market changes (e.g. they shouldn’t need PSC approval for most of their unregulated actions as long as they follow pre-established PSC guidelines).

Other issues

The Staff Report and Proposal raises a few other issues we wish to comment on as follows:

On p. 34, the report describes barriers to financing by low-income customers, and implies that the main barrier is that they are often renters. In addition we would note that prior credit history is commonly a problem, as is a general aversion to incurring more debt.

On p. 37, the report asks “What type of compensation is more likely to attract customer participation, bill savings or direct payments?” Several prior studies have found that a substantial majority of customers prefer rebates to subsidized loans of equivalent value, strongly implying that the majority of customers prefer direct payments to bill savings.

On p. 40, in the next to last paragraph, a variety of services are listed, with an emphasis on sensors and controls. We agree that these are important but note that there are many other services, particularly energy efficiency services, that are not listed.

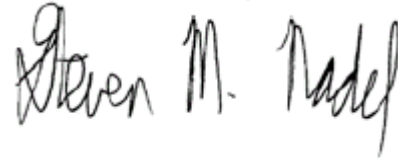
On p. 42, the report notes that little purpose may be served by switching commodity service from utilities to ESCo’s. We agree and in particular note the Connecticut experience as discussed in the research cited in footnote 6.

Conclusion

The REV docket is an important one and we look forward to providing input in subsequent stages. At this point we wish to emphasize the importance of maintaining robust energy efficiency programs in the long-term since energy efficiency is generally both the low-cost resource and the low-cost form of carbon reduction. If energy efficiency efforts are not robust, system costs and customer bills will be higher.

We would be happy to answer any questions you have about these comments or the various reports we cite in these comments.

Sincerely,

A handwritten signature in black ink that reads "Steven M. Nadel". The signature is written in a cursive style with a large initial 'S' and a distinct 'N'.

Steven M. Nadel
Executive Director