



REV'ed and Ready

New York aims to
Reform its Energy Vision.
For technology companies,
it's a dream come true.

BY ANDREW O. KAPLAN



or New York's electric utilities, there's no shortage of challenges:

- The widespread devastation wreaked by Superstorm Sandy and other catastrophic weather events;
- The aging infrastructure of the energy distribution system;
- The significant capital expenditures needed to replace aging power facilities;
- The ever-increasing demand for electricity from commercial and residential users;
- The public outcry for cheaper and cleaner energy.

Against this backdrop, and in tune with the urging of Gov. Andrew Cuomo, the New York Public Service Commission ("PSC") in April 2014 coined a new phrase in the energy industry lexicon. It opened a new proceeding to be known as Reforming the Energy Vision ("REV") – an initiative beginning at square one and aimed at overhauling how electricity is produced, distributed, consumed, regulated, and priced in the Empire State.

The first major milestone of the initiative was attained on February 26, 2015, when the PSC issued its 328-page, Track I Order (NY PSC Case 14-M-0101) adopting a regulatory policy framework and implementation plan. Although in its nascent stages, the REV plan already is receiving plaudits. In March, Harvard University's Ash Center for Democratic Governance and Innovation acknowledged the initiative in its 2015 Bright Ideas program for innovative government action for pioneering a market-oriented approach to draw fresh capital and investors in energy efficiency and renewables.

The Track I Order imposed key deadlines this Spring, including the setting of May 1 as the date by which targeted utility companies must identify at least one potential non-wires-alternative project and provide comments concerning microgrids. A PSC white paper also due in May will offer a cost/benefits analysis of utility expenditures regarding energy distribution and efficiency, while June is expected to see a straw proposal from the PSC about performance-based rate setting as part of a Track II Order, which will likely modify some of the Commission's regulatory and ratemaking process.

It seems an appropriate time, therefore, to examine REV, which has the potential to create a significant market base for companies engaged in developing emerging power storage technologies and for alternative energy providers nationwide. Hurdles remain that could derail this ambitious plan. Yet this effort could just as easily turn New York into a hub for more efficient, cleaner electricity – a template for others to follow.

A Radical Re-orientation

In the introduction to the Track I order issued in February, the PSC summed up its aims for REV:

"to reorient both the electric industry and the ratemaking paradigm toward a consumer-centered approach that harnesses

Andrew Kaplan, an energy lawyer and partner at Pierce Atwood LLP in Boston, represents providers of energy storage, demand response, ancillary services, and electricity and natural gas transmission and supply in wholesale and retail markets. He served previously as general counsel and chief of staff for the Massachusetts Dept. of Telecomm. & Energy (now the Dept. of Pub. Utils.)

New York could become a laboratory of sorts – a template for others to follow.

technology and markets. Distributed energy resources (DER) will be integrated into the planning and operation of electric distribution systems, to achieve optimal system efficiencies, secure universal, affordable service, and enable the development of a resilient, climate-friendly energy system."

Gil Quiniones, president and CEO of the New York Power Authority, quoted in a recent NYPA press release, said REV's initiatives "will fundamentally transform the way energy is generated, distributed and used in New York State." Although New York is no stranger to innovation in the power industry (after all, Manhattan sported the nation's first electric grid in the 1880s courtesy of Thomas Alva Edison, no less) never before has a regulatory body asked utilities to collaborate with energy storage facilities as envisioned by REV.

To keep up with technology development and increase its focus on consumers, PSC outlined the following core policy outcomes for REV:

- Enhanced customer knowledge and tools that will support effective management of their total energy bill
- Market animation and leverage of ratepayer contributions
- System-wide efficiency
- Fuel and resource diversity
- System reliability and resiliency
- Reduction of carbon emissions.

Central to the REV initiative is the transformation of a half-dozen major investor-owned utilities and two large municipal-owned utilities identified in the plan into Distributed System Platform Providers (DSPP). These DSPPs will act as retail

UTILITIES OWNING DISTRIBUTED RESOURCES?

A key bone of contention in the REV proceeding.

In its ground-breaking Track I order in Reforming the Energy Vision, issued Feb. 26, 2015, the New York Public Service commission conceded that utility ownership of distributed energy resources (DER) was “one of the most contentious issues.”

On one hand, the PSC sought an ownership structure that could “best accelerate market creation” for new technologies, such as energy storage, renewable energy, and energy efficiency techniques. Yet the commissioners wanted also to minimize opportunities

for utilities to use their monopoly position in the transmission and distribution realms to exercise market power or sidetrack new products, “whether through action or inaction.”

“First and foremost,” wrote the PSC, “utility ownership of DER will be the exception rather than the rule.”

Nevertheless, there are exceptions, and those exceptions are worth citing here in detail. Thus, as explained in the order, utility ownership of DER will be allowed only in the following circumstances:

1. Procurement of DER has been solicited to meet a system need, and a utility has demonstrated that competitive alternatives

“First and foremost, utility ownership of DER will be the exception rather than the rule.”

proposed by non-utility parties are clearly inadequate or more costly than a traditional utility infrastructure alternative;

2. A project consists of energy storage integrated into distribution system architecture;

3. A project will enable low- or moderate-income residential customers to benefit from DER where markets are not likely to satisfy the need; or

4. A project is being sponsored for demonstration purposes.

Importantly, the New York commission was sensitive to concerns voiced by consumer advocates that low- and middle-income customers might not find

it easy to participate in REV benefits, for reasons related to location, premises constraints, and/or access to capital. The commission saw the problem as “particularly acute in the case of rental customers,” who could not control improvements to residential premises. Such concerns gave way to exception number 3, above, as the PSC explained in its February order:

“Where system benefits and/or substantial customer benefits can be achieved with DER projects, in areas that are not being served by markets, utilities will be able to propose programs to achieve them.” —BWR

dispatchers of electricity on the grid from fossil fuel mainstream power plants and a bolstered supply of DER. Such DERs will include renewable power sources such as solar arrays, wind farms, and storage technologies.

Unrestricted utility ownership of DERs, the PSC feared, might enable utilities to gain an unfair edge over third-party service providers. Consequently, to promote a competitive marketplace for consumers and to ensure that greener and cleaner alternative energy sources are a prominent part of the State’s initiative, REV allows DSPP/utilities to own demonstration projects for cutting-edge technology, energy storage and large-scale batteries. (See sidebar, *Utilities Owning Distributed Resources?*, above.)

Incentives abound in the REV initiative. As part of the PSC’s effort to gain the upper hand during periods of peak energy demand, customers will be offered financial incentives to reduce demand, and those who install their own alternative power sources, such as solar rooftop panels, will be offered inducements so that they can sell power to the grid during peak usage. Utilities, in turn, benefit under the Track I Order, which characterizes energy storage as a grid reliability device, instead of as a generating asset. A utility thus can own storage technology that has been integrated into the grid and used for reliability.

Additionally, the REV affords utilities the chance to boost revenues through assisting in distribution of energy generated from smaller power providers.

A Laboratory of Sorts

If REV achieves its goals, ratepayers may dodge the significant costs it will take to repair and upgrade existing power plants and

Never before have regulators asked utilities to collaborate with storage providers in this way.

erect new energy generating facilities to meet the demand for electricity. Moreover, the initiative’s incentives could create a magnet that attracts alternate energy providers and emerging and experimental energy storage technology companies, which would enable the Empire State to

become a hub of energy-saving technologies.

At the same time, REV could provide opportunities to makers of batteries, synchronous condensers and other small, cutting edge companies. New technology companies often struggle to obtain financing. They must navigate around the Catch-22 situation of

persuading venture capitalists and financial institutions to open the coffers so that the companies can develop their product and ultimately generate revenue, whereas financiers may insist on seeing revenues already on the books before they are willing to write a check. REV can provide a jump-start for alternative energy technology companies. The plan offers companies a validation of their products under the aegis of a utility. If the product performs as expected, there is an increased likelihood that other utilities will enter into contracts with the tech company, which can then leverage those contracts with investors and obtain financing to grow their businesses.

REV's efforts could make New York a laboratory of sorts. It promises a power system that relies more heavily on renewable-based generation, one in which utilities distribute the flow of electricity from numerous independent energy systems and microgrids. Other states are still confronting inefficiencies, pollution, and antiquated power plants in need of massive infusions of capital to upgrade the facilities. They are watching carefully to see how REV plays out. Already, states eager for new ways to store energy and produce power more cheaply and environmentally friendly are weighing enacting their own version of the initiative.

Not a Panacea

REV promises sweeping changes in how consumers employ electricity and the way utilities maintain and expand their power systems, as well as how utilities rates are set, but it's no sure panacea.

To date, words like “ground-breaking” and “innovative” are being invoked to describe REV. The PSC is promising more details later this year, but so far, the biggest question concerning REV is: How much will it cost? Naysayers complain that electricity generated by “clean” energy facilities reliant on wind and solar power is expensive. There's also concern that the energy levels promised by the REV initiative may be overstated,

Other states are watching carefully to see how REV plays out.

and that the end result of the plan will merely delay, and not obviate the need to build large power-generating plants. Add to that the ever-present “NIMBY” issue of property owners opposed to seeing land dug up to install power transmission lines.

There are hurdles to overcome and the initiative is as likely to generate litigation as electricity. Yet the Cuomo administration, the New York Power Authority, the New York State Energy Research & Development Authority and utility companies appear all-in on making REV a success. Investors are lining up and technology companies are spending money to be a part of REV and its opportunity to promote clean energy innovation, more choice for power customers, and a boost in the state's economy.

Christmas may come early this year in New York for energy storage and alternative energy suppliers, as the REV Track I Order mandates each targeted utility company must file an initial Distributed System Implementation Plan by December 15, 2015. 