

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on August 8, 2019

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Diane X. Burman, dissenting
James S. Alesi
Tracey A. Edwards
John B. Howard

CASE 19-E-0530 - Proceeding on Motion of the Commission to
Consider Resource Adequacy Matters.

ORDER INSTITUTING PROCEEDING AND
SOLICITING COMMENTS

(Issued and Effective August 8, 2019)

INTRODUCTION

This Order commences a proceeding to examine how to reconcile resource adequacy programs and the State's renewable energy and environmental emission reduction goals. The New York Independent System Operator, Inc. (NYISO) is currently responsible for certain aspects of resource adequacy, which it defines as the ability of the electric systems to supply and deliver the total quantity of electricity demanded at any given time, taking into account scheduled and unscheduled outages of system elements. In doing so, the NYISO considers the transmission system, generation resources, and other resources, such as demand response. The NYISO effectuates this responsibility by requiring all Load Serving Entities (LSEs) to purchase adequate amounts of generation and demand response "capacity" to satisfy their capacity obligations, which are based on the Installed Reserve Margin (IRM) and locational

capacity requirements, where applicable. The IRM is adopted annually by the Public Service Commission (Commission) as a resource adequacy and reliability measure, and is overseen by the Federal Energy Regulatory Commission (FERC) as an input in the NYISO's Installed Capacity (ICAP) market.¹ LSEs are required to procure, through NYISO auctions, bilateral contracts, or by self-supplying, the requisite capacity needed to ensure their retail customer load can be served in a reliable manner.²

The Commission has addressed other aspects of resource adequacy as part of the Renewable Portfolio Standard (RPS), which was adopted in 2004 to achieve a goal whereby at least 25 percent of the electricity used in New York State would be provided from renewable generation resources by 2013.³ In December 2009, the Commission expanded the RPS goal to 30 percent by 2015.⁴ The Commission subsequently transitioned from the RPS to the Clean Energy Standard (CES) in 2016, and implemented a Renewable Energy Standard to ensure that 50 percent of New York's electricity is generated by renewable

¹ ICAP refers to the maximum amount of electricity that a resource is designed to produce. ICAP providers are compensated to make their capacity available by bidding into the NYISO's day-ahead energy market.

² NYISO capacity auctions are measured in terms of Unforced Capacity (UCAP), which adjusts for the probability that a resource will be available to serve load, taking various factors into account (e.g., forced outages).

³ Case 03-E-0188, Retail Renewable Portfolio Standard, Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004).

⁴ Case 03-E-0188, Retail Renewable Portfolio Standard, Order Establishing New RPS Goal and Resolving Main Tier Issues (issued January 8, 2010).

sources by 2030 (commonly referred to as the 50 by 30 goal).⁵ This objective was designed as part of a strategy to reduce statewide greenhouse gas emissions by 40 percent, as compared to 1990 levels, by 2030.⁶ A significant part of this goal involves the procurement of new large-scale renewable resources by the New York State Energy Research and Development Authority (NYSERDA), which is accompanied by an obligation on jurisdictional LSEs to ensure adequate amounts of renewable generation resources are available to serve their retail customers.⁷ This obligation is implemented through a requirement for LSEs to purchase sufficient qualifying Renewable Energy Credits (RECs) from such resources. Moreover, in December 2018, the Commission adopted a statewide energy storage goal of installing up to 3,000 MW of qualified storage energy systems by 2030, with an interim objective of deploying 1,500 MW of energy storage systems by 2025.⁸

ICAP, as currently designed, is an incomplete resource adequacy instrument because it fails to recognize and provide compensation for many important factors, such as environmental and local reliability benefits.⁹ Because of this, there is no

⁵ Case 15-E-0302, et al., Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016) (CES Order).

⁶ CES Order, p. 2.

⁷ CES Order, pp. 14-17. The LSEs under the Commission's jurisdiction include the State's investor-owned distribution utilities, energy service companies (ESCOs), Community Choice Aggregation programs (CCAs) not served by ESCOs, and certain municipal utilities.

⁸ Case 18-E-0130, Energy Storage Deployment Program, Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018).

⁹ For example, there are various load sub-pockets with New York City and other regions of the State that have particular local reliability needs.

guarantee that the resources that clear the ICAP auctions are the same ones needed to meet the State's clean energy and other mandates. Further, the NYISO may impose "mitigation" on resources that are the subject of state policy support by intervening to raise their minimum bid levels into the NYISO-administered auctions and thereby potentially causing them to not "clear" the auction, and therefore to not be counted as eligible capacity resources. As a result, consumers may pay higher costs than necessary, and that increase could grow substantially over time as the State's clean energy goals expand.

Accordingly, this Order commences a proceeding for the Commission to consider how to reconcile resource adequacy programs with the State's renewable energy and environmental emission reduction goals. This inquiry is necessitated by the Commission's statutory obligations to ensure the provision of safe and adequate service at just and reasonable rates. Costs to consumers are a primary and ultimate consideration, recognizing that the necessary investments in resources must have sound economics. However, New York is ideally situated, being within a single state Independent System Operator, to speak clearly and coherently to its environmental, economic, and energy service policy interests, and thus to the services and outcomes it looks to electricity markets and providers to deliver. As identified below, the Commission is seeking comments from all interested entities and individuals on a wide range of questions regarding resource adequacy matters. An opportunity will be provided for initial and reply comments to ensure a robust record and to inform the Commission's decision making.

BACKGROUND

Prior to the restructuring of the State's electric industry in the 1990's, the Commission ensured that the vertically integrated Investor Owned Utilities (IOUs), which were members of the New York Power Pool, maintained adequate amounts of generation facilities to reliably serve customers.¹⁰ The New York Power Pool utilized the IRM, whereby IOUs were required to maintain generation levels that were sufficiently above forecasted peak demand, such that the probability of a loss of load was no more than one loss-of-load day per ten years.¹¹

In accordance with electric industry restructuring initiatives, the Commission approved the transfer of operational control over certain transmission assets from the IOUs to the NYISO in 1999.¹² As a condition of transferring control to the NYISO, the IOUs' responsibility for maintaining applicable levels of capacity was delegated to the NYISO. This was intended by the Commission to ensure that, as New York moved to restructured electric markets and the IOUs divested their generation facilities, which were purchased by independent

¹⁰ The New York Power Pool was comprised of the IOUs (i.e., Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation) and the non-jurisdictional entities that included the Long Island Power Authority and the New York Power Authority.

¹¹ See generally, Case 29409, Plans for Meeting Future Electricity Needs in New York State.

¹² Case 99-E-0745, Joint Petition of Central Hudson Gas & Electric Corporation, et al., Untitled Order (issued September 21, 1999).

generation owners, the competitive market would maintain the reserves needed to ensure reliability (i.e., the IRM).¹³

The IRM is computed annually by the New York State Reliability Council (NYSRC), with the technical assistance of the NYISO. Pursuant to the NYISO's FERC-approved tariff, LSEs are required to procure sufficient capacity to meet their capacity obligations. The NYISO determines the amount of capacity that each LSE must procure, and that supplying resources are qualified to provide. LSEs may meet their obligation to procure sufficient capacity by either self-supplying, entering into bilateral contracts with capacity suppliers, or through the NYISO-administered auctions. LSEs are required to purchase sufficient amounts of capacity or pay a deficiency charge.

In 2004, the Commission implemented the RPS to meet a State objective whereby at least 25 percent of electric needs were provided from renewable generation resources by 2013. The Commission subsequently expanded that objective in December 2009 to 30 percent by 2015.¹⁴ In August 2016, the Commission adopted a transition from the RPS to the CES to meet the 50 by 30 goal through several regulatory mechanisms, including: (1) a Tier 1 component whereby NYSERDA procures new large-scale renewable resources and jurisdictional LSEs are obligated to serve their retail customers through the purchase of qualifying RECs from

¹³ Revenues from a few peak periods might not have provided sufficient income to generators for the capacity needed to maintain the reserve margin required for reliability. See also, Public Utilities Commission of the State of California v. FERC, 254 F.3d 250, 252-53 (D.C. Cir. 2001) (noting the inability of California's competitive market to ensure reliability without a mechanism to do so).

¹⁴ Case 03-E-0188, Retail Renewable Portfolio Standard, Order Establishing New RPS Goal and Resolving Main Tier Issues (issued January 8, 2010).

such resources;¹⁵ (2) a Tier 2 maintenance program to provide necessary funding to preserve existing zero-emissions facilities; and, (3) a Tier 3 requirement for LSEs to purchase Zero Emissions Credits (ZECs) to maintain the zero-emissions attributes of qualifying nuclear zero-carbon electric generating facilities through 2029.

In July 2018, the Commission adopted a supplementary goal to contribute toward the overall objective of the CES whereby LSEs were obligated to obtain, on behalf of their retail customers, the Offshore Wind Renewable Energy Credits (ORECs) associated with the output of 2.4 GW of new offshore wind generation facilities.¹⁶ The recent enactment of the New York State Climate Leadership and Community Protection Act (CLCPA) expands upon the CES objectives by requiring the establishment of programs for at least 9 GW of Offshore Wind by 2035, and to ensure that at least 70 percent of New York's retail load, as served by jurisdictional LSEs in 2030, is from renewable resources. The CLCPA also requires the Commission to develop programs to procure 6 GW of photovoltaic solar generation by 2025, and to support 3 GW of energy storage capacity by 2030. Moreover, the Commission is to establish a program to require that "the statewide electrical demand system will be zero emissions" by 2040.¹⁷ The Commission is authorized to modify these obligations based on certain factors, including the provision of safe and adequate service.¹⁸

¹⁵ CES Order, pp. 14-17.

¹⁶ Case 18-E-0071, Offshore Wind Energy, Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement (issued July 12, 2018).

¹⁷ The quoted language may be restated as a requirement whereby there are zero statewide emissions in 2040 associated with electric demand.

¹⁸ Chapter 106 of the Laws of 2019.

LEGAL AUTHORITY

The Commission is initiating this proceeding to investigate resource adequacy matters that fall within its statutory authority under the Public Service Law (PSL). These matters directly relate to the Commission's statutory responsibilities to ensure that "every electric corporation and every municipality shall furnish and provide such service, instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable."¹⁹ To carry out its obligations, the Commission may "examine or investigate the methods employed...in manufacturing, distributing and supplying...electricity...and have power to order such reasonable improvements as well as promote the public interest, preserve the public health and protect those using such...electricity."²⁰ And, whenever the Commission determines, after a hearing, that "the property, equipment or appliances of any such person, corporation or municipality are unsafe, inefficient or inadequate, the [C]ommission shall determine and prescribe the safe, efficient and adequate property, equipment and appliances thereafter to be used, maintained and operated for the security and accommodation of the public and in compliance with the provisions of law and of their franchises and charters."²¹

Further authority is provided under PSL §5(2) to "encourage [jurisdictional entities] to formulate and carry out long-range programs...for the performance of their public

¹⁹ PSL §65(1).

²⁰ PSL §66(2). The Commission also has authority under this section to "order reasonable improvements and extensions of the works, wires, poles, lines, conduits, ducts and other reasonable devices, apparatus and property of...electric corporations and municipalities."

²¹ PSL §66(5).

service responsibilities with economy, efficiency, and care for...preservation of environmental values and the conservation of natural resources.”²² The Commission possesses all powers necessary or proper to enable the Commission to carry out the purposes of the PSL.²³

Jurisdiction over resource adequacy matters are generally reserved to the states under the Federal Power Act (FPA). The FPA expressly reserves the rights of states to exercise jurisdiction “over facilities used for the generation of electric energy or over facilities used in local distribution.”²⁴ The FPA also reflects the nexus between resource adequacy and reliability matters by authorizing FERC to “develop and enforce compliance with reliability standards” covering the bulk-power system, but explicitly preventing FERC from “order[ing] the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services.”²⁵ Moreover, FERC’s jurisdiction over reliability standards preserves the “authority of any State to take action to ensure the safety, adequacy, and reliability of electric service within that State, as long as such action is not inconsistent with any reliability standard, except that the State of New York may establish rules that result in greater reliability within that State, as long as such action does not

²² See, Consolidated Edison Co. v Public Service Commission, 47 NY2d 94 (1979) overturned on other grounds (describing the broad delegation of authority to the Commission and the Legislature’s unqualified recognition of the importance of environmental stewardship and resource conservation in amending the PSL to include §5).

²³ PSL §4(1).

²⁴ 16 USC §824(b).

²⁵ 16 USC §824o.

result in lesser reliability outside the State than that provided by the reliability standards.”²⁶

The Commission exercises its jurisdiction, on an ongoing basis, over reliability standards and resource adequacy matters, as authorized under the PSL and reserved to the State under the FPA. For example, the Commission approves an IRM annually for the New York Control Area,²⁷ while FERC also plays a role in accepting the IRM for use in the NYISO’s capacity market.²⁸ Further, the Commission periodically approves Reliability Rules of the New York State Reliability Council and the Criteria of the Northeast Power Coordinating Council.²⁹ The Commission has also established resource adequacy standards as part of the Clean Energy Standard, which defines generation fuel types and quantities necessary for LSEs to serve their retail customers. These actions fulfill the Commission’s statutory responsibilities, in part, by ensuring that electric corporations, such as LSEs, provide safe and adequate service, instrumentalities, and facilities.³⁰

²⁶ 16 USC §824o(i).

²⁷ See generally, Case 97-E-0088, Installed Reserve Margin for the New York Control Area.

²⁸ See generally, Conn. Dep't of Pub. Util. Control v. FERC, 569 F.3d 477, 481-83 (D.C. Cir. 2009).

²⁹ See generally, Case 05-E-1180, Reliability Rules - New York State Reliability Council and the Northeast Power Coordinating Council.

³⁰ See, Case 07-E-0088, et al., Installed Reserve Margin for the New York Control Area, Order Adopting Installed Reserve Margin for the New York Control Area for the 2019-2020 Capability Year (issued March 6, 2019). The IRM, as established by the NYSRC, is intended to ensure the adequacy of electric generating facilities in New York. As such, it is a key tool available to the Commission to foster the adequacy of generating resources. While the IRM is a measure of adequacy, it is based, in part, on reliability criteria.

NOTICE SOLICITING PUBLIC COMMENTS

Comments are solicited on the following questions relevant to the Commission's resource adequacy inquiry, as well as other related matters that commenters would like to raise. Answering these questions will assist the Commission in determining what, if any, subsequent actions should be taken, which may include refinements to existing policies or establishing new policies.

Resource Adequacy Matters

- 1) Are the State's energy policies and mandates, such as those related to Offshore Wind, photovoltaics, other renewables, and energy storage compatible with the NYISO's resource adequacy mechanisms? If not, what issues are manifested? Also, if not, how could they be aligned?
- 2) Does the interaction of policies and market structure mechanisms result in safe and adequate service at just and reasonable rates for customers?
- 3) Is an ICAP product an effective long-term solution for resource adequacy given the required future generating resource mix, which may have lower marginal costs or different availability profiles than many current generation resources in operation? What are the salient attributes of such long-term solutions?
- 4) Is there a preferred mechanism(s) for ensuring resource adequacy? What are the cost impacts and benefits to consumers under the various potential resource adequacy mechanisms?
- 5) Should alternative approaches be considered to ensure the procurement of generation resources is aligned with State policy goals. If so, which ones? Are there existing or proposed models which might be instructive, such as the State overseeing LSEs' resource adequacy portfolios (e.g.,

an approach similar to the one used by California) or restructuring NYISO rules to accommodate State public policies (e.g., a Fixed Resource Requirement Alternative, as proposed by FERC Order issued on June 29, 2018 in Docket No. EL16-49, ¶160 et seq.)? ³¹

- 6) What is the State role with respect to resource adequacy matters that best serves New York's electricity customers with safe, adequate, and reliable service at just and reasonable rates in the context of state policies?
- 7) What, if any, next steps should the Commission take with respect to resource adequacy matters?

Interested entities should submit initial comments by November 8, 2019. All filings should refer to "Case 19-E-0530" and be submitted to the Secretary by e-filing, through the Department of Public Service's Document and Matter Management System (DMM), or by e-mail to the Secretary at secretary@dps.ny.gov. If unable to file electronically, commenters may make submissions by U.S. Mail or by hand delivery to the Hon. Kathleen H. Burgess, Secretary, Public Service Commission, Three Empire State Plaza, Albany, New York 12223-1350. All documents submitted to the Secretary will be posted

³¹ The current resource adequacy framework in the California Independent System Operator (ISO) region coordinates requirements established by the ISO tariff's "Reliability Requirements" with those of the California Public Utility Commission's "Resource Adequacy" program. This approach imposes resource requirements on LSEs, which are able to meet these resource requirements through self-supply, or through resources procured through bilateral contracts; LSE's are also required to enter into forward commitment capacity contracts with generators, while must-offer obligations are used to ensure that resources contribute to meeting resource adequacy requirements. See, <https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Reliability%20Requirements>

on the Department's website and become part of the official case record. Based on the level of comments received, the Secretary will establish a reasonable period for reply comments, which will not be less than 15 days. The Secretary may extend these deadlines for good cause shown.

The Commission orders:

1. A proceeding is instituted to consider resource adequacy matters, as discussed in the body of this Order.
2. Interested entities are invited to submit comments consistent with the schedule and requirements set forth in the body of this Order.
3. In the Secretary's sole discretion, the deadlines set forth in this Order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.
4. This proceeding is continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS
Secretary