STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a Session of the Public Service Commission held in the Town of North East on February 23, 2021

COMMISSIONER PRESENT:

John B. Rhodes, Chair

CASE 07-E-0088 - In the Matter of the Adoption of an Installed Reserve Margin for the New York Control Area.

CASE 05-E-1180 - In the Matter of the Reliability Rules of the New York State Reliability Council and the Criteria of the Northeast Power Coordinating Council.

ORDER ADOPTING INSTALLED RESERVE MARGIN FOR THE NEW YORK CONTROL AREA FOR THE 2021-2022 CAPABILITY YEAR

(Issued and Effective February 23, 2021)

INTRODUCTION

On December 4, 2020, the Executive Committee of the New York State Reliability Council, LLC (NYSRC) adopted an Installed Reserve Margin (IRM) for the New York Control Area (NYCA) of 20.7% for the upcoming Capability Year from May 1, 2021, through April 30, 2022. The 20.7% IRM requirement equates to an Installed Capacity (ICAP) requirement of 120.7% of the forecasted 2021 NYCA peak load. In this Order, an IRM of 20.7% is adopted for the NYCA for the upcoming 2021-2022 Capability Year.

BACKGROUND

The NYSRC was formed in 1998 as part of the restructuring of New York's wholesale electricity market in

order to promote and preserve the reliability of New York's power system.[1] Among other matters, the NYSRC is responsible for developing reliability rules in accordance with the standards, criteria and regulations set forth by the Public Service Commission (Commission), the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council (NPCC), the Federal Energy Regulatory Commission (FERC), and the Nuclear Regulatory Commission. In addition, the NYSRC reliability rules include more specific or more stringent criteria that account for special circumstances within the NYCA, such as the configuration of New York's bulk power system and the severe consequences that may result from power interruptions in New York City and Long Island.

One of the NYSRC's key responsibilities is the establishment of an annual statewide IRM. The IRM is intended to ensure that adequate levels of capacity are available to serve load during normal and system emergency conditions. In accordance with the NYSRC's Reliability Rules, the NYSRC must establish the IRM for the NYCA based on the probability (or risk) of disconnecting any firm load due to resource deficiencies, expressed as a percentage above forecasted peak loads such that the loss of load expectation (LOLE) of disconnecting firm load due to resource deficiencies shall be, on average, no more than 0.1 day per year. In evaluating the LOLE and establishing the IRM, the NYSRC takes into

[1] The NYSRC was formed by agreement among 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., Rochester Gas and Electric Corporation, the Long Island Power Authority, and the Power Authority of the State of New York.

consideration various factors, including demand uncertainty, scheduled outages and deratings, forced outages and deratings, assistance over interconnections with neighboring control areas, New York State Transmission System emergency transfer capability, and capacity and/or load relief from available operating procedures.[2]

Load-Serving Entities (LSEs) are required to procure sufficient capacity resources to meet forecasted peak load and the statewide IRM reserve margin, as well as any Locational Capacity Requirements (LCR).[3] The New York Independent System Operator, Inc. (NYISO) determines each locality's LCR based on the IRM. LSEs comply with the LCR and IRM by buying ICAP, which is a commitment, if called upon, to either make electric supply available or to curtail electric usage in response to demand. LSEs may meet their ICAP requirements by either self-supplying (e.g., by allowing LSEs to bid resources they own or have purchased though bilateral contracts into the ICAP auction), or by purchasing ICAP through NYISO-administered ICAP auctions.

Participation in the NYISO-administered forward ICAP auctions (i.e., 6-month strip and monthly) is voluntary. However, participation in the NYISO's monthly spot auctions is mandatory, because LSEs are obligated to purchase through such

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[2] Case 05-E-1180, Order Adopting Modifications to New York State Reliability Rules (issued February 13, 2019), Appendix – NYSRC Reliability Rules & Compliance Manual, Resource Adequacy Reliability Rule A. Resource Adequacy, Introduction and Resource Adequacy Reliability Rule A.1, Requirement 1.1.

[3] Id. at NYSRC Reliability Rules & Compliance Manual, Resource Adequacy Reliability Rule A.2. There are three separate location-specific ICAP requirements for LSEs in New York City, Long Island, and NYCA Load Zones G through J (commonly referred to as the Lower Hudson Valley).

auctions any remaining ICAP requirements pursuant to the ICAP "Demand Curve."[4] The Demand Curve, which is administratively set, establishes the quantity and price of ICAP commitments that LSEs are required to procure in relation to the IRM.[5]

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on December 23, 2020 [SAPA No. 07-E-0088SP15]. The time for submission of comments pursuant to the SAPA Notice expired on February 22, 2021. Comments were received from the NYSRC and NYISO supporting the adoption of the 20.7% IRM.

COMMENTS

NYSRC

The NYSRC recommends that the Commission adopt an IRM of 20.7% for the NYCA for the upcoming Capability Year. The NYSRC advises that, on December 4, 2020, its Executive Committee

[4] If sufficient amounts of ICAP cannot be procured in the spot market to meet the LCR, the NYISO attempts to procure additional resources to make up any deficiency at a price that is capped at the spot auction clearing price.

[5] Under the Demand Curve, the price for ICAP gradually decreases as the amount of available ICAP goes above the IRM, while it increases as available ICAP decreases, in order to send an appropriate price signal when additional resources are needed.

voted to adopt an IRM of 20.7%.[6] The Executive Committee's decision was based on a technical study that was performed by the NYISO at the request and under the supervision of the NYSRC.[7]

The 2021-2022 IRM Study employed the General Electric Multi-Area Reliability Simulation computer modeling software program to calculate the probabilities of outages of generating units, in conjunction with load and transmission models, to determine the number of days per year of expected capacity shortages. The NYSRC indicates that this technique is commonly used in the electric power industry for determining IRM requirements.

The 2021-2022 IRM Study was conducted to determine the IRM for the NYCA that is necessary to meet NYSRC, NPCC, and NERC criteria. The 2021-2022 IRM Study calculated an IRM of 20.7% for the NYCA under base case conditions, and preliminary LCRs of 82.6% and 95.1% for New York City and Long Island, respectively. The 2021-2022 IRM Study base case result represents a 1.8% increase from the 18.9% base case IRM determined in the 2020-2021 IRM Study. The NYSRC notes that the primary drivers of this increase include: 1) updated load forecast uncertainty, 2) representation of the limited output of

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[6] The NYSRC is governed by an Executive Committee, which is comprised of thirteen members, including six Transmission Owners, one representative of the Wholesale Sellers sector, one representative of the Large Consumers sector, one representative of the Municipals and Electric Cooperatives sector, and four members not affiliated with any Market Participants. See, http://www.nysrc.org.

[7] New York State Reliability Council, L.L.C., Installed Capacity Subcommittee, New York Control Area Installed Capacity Requirement for the Period May 2021 to April 2022, Technical Study Report (December 4, 2020) (2021-2022 IRM Study).

certain Energy Limited Resources, and 3) the retirement of generation coupled with topology changes. These factors and several other parameters identified by the NYSRC indicated a cumulative 3.1% increase in the estimated IRM, while decreased enrollment of Special Case Resources coupled with improved performance, a new load forecast, and other parameters decreased the IRM by 1.3%.

In order to illustrate how the IRM would be affected by different assumptions, the 2021-2022 IRM Study reflected various sensitivity studies. These sensitivities used different assumptions from those adopted in the base case, such as differences in generation unit availability, generator retirements, transmission constraints, and limited assistance from neighboring control regions. After considering the sensitivity results, and the modeling and assumption changes made to simulate actual operating conditions and system performances, the NYSRC Executive Committee established a final IRM of 20.7%.[8]

NYISO

The NYISO indicates that its base case evaluation, in order to meet all applicable reliability criteria for the upcoming Capability Year, yielded a NYCA IRM of 20.7%, which was reviewed by the NYSRC, with verification of the data inputs and modeling by General Electric, Consolidated Edison Company of New York, Inc., and PSEG Long Island. The NYISO supports the proposed IRM of 20.7%, which it maintains is within a range of reasonable IRM levels that will maintain reliability in New York

[8] On December 15, 2020, the NYSRC filed the 2021-2022 IRM Study with FERC. FERC accepted the NYSRC's filing on February 3, 2021. See, FERC Docket No. ER21-671-000.

for the upcoming 2021-2022 Capability Year. According to the NYISO, the NYSRC appropriately considered the 2021-2022 IRM Study base case result, modeling inputs, and sensitivity analyses, and correctly applied the LOLE criterion to arrive at an IRM of 20.7%.

LEGAL AUTHORITY

The New York State Public Service Law (PSL) provides that "every electric corporation...shall furnish and provide such service, instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable."[9] Moreover, the PSL authorizes the Commission to prescribe the "safe, efficient and adequate property, equipment and appliances thereafter to be used," whenever the Commission determines that the utility's existing equipment is "unsafe, inefficient or inadequate."[10] This authority encompasses prescribing reliability rules necessary to ensure safe and adequate service.[11]

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. Accordingly, the Commission has jurisdiction to

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[9] PSL §65(1).

[10] PSL §66(5). The Commission also notes that the Federal Power Act reserves jurisdiction to the States to "set and enforce compliance with standards for [the] adequacy…of electric facilities," such as the IRM. 16 U.S.C. §824o(i)(2).

[11] See, Case 05-E-1180, supra, Order Adopting New York State Reliability Rules (issued February 9, 2006).

review and approve the IRM, first as a matter of adequacy, and alternatively as a matter of reliability, so that electric corporations, such as LSEs, provide safe and adequate service, instrumentalities and facilities.

The Federal Power Act (FPA) reserves jurisdiction over resource adequacy matters, such as the IRM, to the states. In particular, 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."[12] Further, the FPA prohibits 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."[13] In addition, the FPA 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 result in lesser reliability outside the State than that provided by the reliability standards."[14]

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. The Commission periodically approves Reliability

[12] 16 USC §824(b).

[13] 16 USC §824o.

[14] 16 USC §824o(i).

Rules of the NYSRC and the Criteria of the NPCC,[15] and adopts an IRM annually for the NYCA. The Commission exercised this authority in approving the current IRM of 18.9%.[16]

DISCUSSION

Environmental Quality Review

Under the State Environmental Quality Review Act (SEQRA), Article 8 of the Environmental Conservation Law, and its implementing regulations (6 NYCRR Part 617 and 16 NYCRR Part 7), the Commission must determine whether the action that it is authorized to approve may have a significant impact on the environment. The proposed action over which the Commission has jurisdiction is the establishment of an IRM for the NYCA for the Capability Year beginning on May 1, 2021, and ending on April 30, 2022.

The Commission is Lead Agency for the review of this action pursuant to SEQRA. There are no other "involved agencies," and the action contemplated is an "unlisted action," as defined in 6 NYCRR §617.2.

An Environmental Assessment Form (EAF) regarding the action was prepared by Department of Public Service Staff for the Commission's consideration.[17] After considering the EAF, the record in this proceeding, and the criteria for determining

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

[16] See, Case 07-E-0088, et al., supra, Order Adopting Installed Reserve Margin for the New York Control Area for the 2020-2021 Capability Year (issued February 28, 2020), Confirming Order (issued March 19, 2020).

[17] 6 NYCRR §617.6(a)(3).

significance listed in 6 NYCRR §617.7(c), it is concluded that the action will not have a significant adverse impact on the environment. The action will not result in a significant impact on the environment since the action implements existing policy for ensuring the adequacy of resources by maintaining the probability of disconnecting firm load due to a resource deficiency at no more than once in ten years, on average. The recalibration of the IRM for the Capability Year furthers this established policy, and accounts for changes in the modeling data.

Accordingly, it is determined that the proposed action will not have a significant adverse impact on the environment. As such, it is unnecessary to prepare an Environmental Impact Statement. A Notice of Determination of Significance (Negative Declaration) concerning this unlisted action is attached.

The IRM for the 2021-2022 Capability Year

The 2021-2022 IRM Study utilized a sophisticated computer model that included a detailed load, generation, and transmission representation of the 11 NYCA zones, as well as the four external control areas interconnected to the NYCA. The model calculated the number of days per year of expected capacity shortages, expressed as an LOLE index, which is a common utility practice for determining installed reserve requirements. The 2021-2022 IRM Study calculated a NYCA IRM base case requirement of 20.7% for the period May 1, 2021 through April 30, 2022. In adopting a 20.7% IRM, the Executive Committee of the NYSRC considered the 2021-2022 IRM Study, the impact on the IRM under various sensitivity cases, and other relevant factors.

Given the NYSRC's experience and expertise in developing the IRM, the Commission has given considerable weight to its findings, conclusions, and recommendations. The NYSRC has adequately demonstrated that the appropriate IRM for the upcoming Capability Year should be 20.7%. Recognizing that the sufficiency of electric generation facilities and other resources, such as demand response, is critical to the health, safety, and welfare of the citizens of New York, it is determined that the 20.7% IRM requirement recommended by the NYSRC is reasonable and properly responds to the State's needs and statutory mandates to ensure reliability and the adequacy of electric resources.

The record supports the NYSRC's decision to adopt an IRM of 20.7% based on the 2021-2022 IRM Study that considered various sensitivity scenarios (including those that would decrease the IRM as well as those that would increase the IRM) and other relevant factors. Therefore, the NYSRC-recommended IRM of 20.7% is adopted for the NYCA during the Capability Year beginning on May 1, 2021, and ending on April 30, 2022. This action is supported by the record and is in the public interest.

Timely Review and Adoption of Future IRMs

The Commission has previously recognized the need to develop a workable process that provides sufficient time for review and adoption of the IRM, taking into account any necessary actions by the NYISO or FERC.[18] To ensure the Commission has adequate time to comply with the notification requirements of the State Administrative Procedure Act, and to

[18] Case 07-E-0088, et al., Order Adopting Installed Reserve Margin for the New York Control Area for the 2008-2009 Capability Year (issued February 29, 2008), pp. 12-13.

thoroughly consider any comments received in response to the notice, the NYSRC is expected to develop a schedule that will allow it to file all future IRMs sufficiently in advance of the date by which the Commission's approval is sought.

CONCLUSION

For the reasons stated above, a 20.7% IRM is adopted for the NYCA for the Capability Year beginning on May 1, 2021, and ending on April 30, 2022.

It is ordered:

1. An Installed Reserve Margin of 20.7% is adopted for the New York Control Area for the Capability Year beginning May 1, 2021, and ending April 30, 2022.

2. These proceedings are continued.

(SIGNED) _____
Commissioner

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CASE 05-E-1180 - In the Matter of the Reliability Rules of the New York State Reliability Council and the Criteria of the Northeast Power Coordinating Council.

NOTICE OF DETERMINATION OF SIGNIFICANCE/NEGATIVE DECLARATION

NOTICE is hereby given that an Environmental Impact Statement will not be prepared in connection with the adoption of an Installed Reserve Margin (IRM) for the New York Control Area for the Capability Year beginning on May 1, 2021, and ending on April 30, 2022. This is based upon the determination, pursuant to regulations implementing Article 8 of the Environmental Conservation Law contained in 6 NYCRR Part 617, that such action will not have a significant effect on the environment. The action contemplated is an Unlisted Action, as defined in 6 NYCRR §617.2.

The action will not result in a significant impact on the environment since it is implementing an existing policy for ensuring the adequacy of resources by maintaining the probability of disconnecting firm load due to a resource deficiency at no more than once in ten years, on average. The recalibration of the IRM for the Capability Year furthers this established policy, and accounts for changes in the modeling data.

The address of the Public Service Commission, the lead agency for the purposes of the Environmental Quality Review for

this action, is 3 Empire State Plaza, Albany, New York 12223-1350. Questions may be directed to Humayun Kabir by email at humayun.kabir@dps.ny.gov, by phone at (518) 474-1373, or by mail to the address above.

MICHELLE L. PHILLIPS
Secretary