UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

	)	
New York Independent System Operator, Inc.	)	Docket No. ER16-1404-002
	)	

MOTION TO INTERVENE AND COMMENTS
OF THE
NEW YORK ISO'S MARKET MONITORING UNIT

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission, 18 C.F.R. §§ 385.212 and 214 (2019), Potomac Economics respectfully moves to intervene in the above-captioned proceedings.

The New York Independent System Operator (NYISO) filed proposed compliance tariff revisions regarding a renewable exemption from NYISO's buyer-side mitigation ("BSM") provisions. Potomac Economics is the Market Monitoring Unit ("MMU") for NYISO and is responsible for monitoring the electricity markets and evaluating potential rule changes that impact these markets.

I.   NOTICE AND COMMUNICATIONS

All correspondence and communications in this matter should be addressed to:

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II.   BACKGROUND AND PURPOSE

In response to the Commission's Order on February 20, 2020, the NYISO filed this compliance filing proposing changes that relate to the renewable exemption under the BSM provisions in Attachment H to the NYISO's Market Administration and Control Area Services Tariff ("NYISO Tariff").[1] Specifically, the NYISO is proposing a new methodology for calculating the amount of Unforced Capacity from new renewable resources that may be exempt in each Class Year by Mitigated Capacity Zone. The NYISO also proposes revised procedures for revoking previous renewable energy exemptions ("REE") that it granted.

As the MMU for the NYISO, we consulted with the NYISO as it developed these provisions and support them as filed. We find that they satisfy the objective of the Commission's February 20 Order by establishing a reasonable REE, while limiting "the risk that the renewable resources exemption will significantly impact market prices."[2] We also raise concerns regarding the uncertainty participants currently face regarding both the substance and timing of the REE, and support the NYISO's request that the Commission rule on this compliance proposal and allow it to become effective by early June.

The purpose of this filing is to discuss our assessment of the proposed REE provisions and encourage the Commission to approve them.

III.   ACCOMMODATING SUBSIDIZED RESOURCES IN THE ICAP MARKET

To provide context for our assessment of the proposed REE rules, we first discuss the importance of BSM measures, the role of capacity markets, and their interaction with state policies in this section. This discussion provides the principles and background necessary to assess the provisions proposed by the NYISO.

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[1]   *New York Independent System Operator, Inc.*, 170 FERC ¶61,121 (2020) (the "February 20 Order").
[2]   February 20 Order at P. 48.

A. Importance of BSM Measures

The BSM measures are designed to prevent entities from suppressing capacity prices below competitive levels by subsidizing uneconomic new entry of a conventional generator. The BSM measures deter uneconomic new entry by imposing an Offer Floor that prevents the new generator from selling capacity at prices below its costs. Hence, the BSM measures largely prevent the new generator from suppressing capacity prices, so a large entity will be deterred from subsidizing new entry when its primary purpose would be to suppress prices.

The BSM measures are not intended to deter states from promoting clean energy and other legitimate public policy objectives. However, the BSM measures are an important tool for ensuring a workable balance between state policy objectives and ensuring that prices are just and reasonable for both merchant and subsidized resources. This balance is critical because if market participants lose confidence in the market and the competitiveness of future prices, the market will fail to fulfill one of its primary purposes – to efficiently facilitate private investment and retirement decisions. Although the primary objective of subsidies for clean energy is to promote environmental policy, ambitious policies to add large amounts of supply without removing less-clean existing generation will tend to suppress prices in the short-term.

Just and reasonable capacity prices are particularly important in the NYISO because it operates a spot market where the capacity price is set based on the level of supply and a "demand curve" based on the annualized cost of new entry of a conventional generator assuming a 20-year investment horizon. When supply increases significantly above the resource adequacy requirement, prices fall below the annualized Net CONE. Conversely, when the surplus falls near the requirement, prices rise above Net CONE. Hence, investors build generation based on the assumption that the NYISO will remain committed to competitive markets over the 20+ year investment horizon. Merchant generators risk capital without a guarantee to future revenue. To

ensure just and reasonable capacity prices, the BSM measures should prevent out-of-market subsidies from upsetting the balance between supply and demand over an extended period.

To accomplish these purposes, the BSM measures provide several types of exemptions to allow generators to sell capacity:

- *Competitive Entry Exemption* – Generators receive a CEE if they are willing to enter the market without subsidies or other support. Competitive new entry benefits consumers by reducing prices and encourages older high-cost existing generation to retire.

- *Part B Test Exemption* – Generators receive this exemption if they can demonstrate their annualized net cost of new entry is lower than expected capacity prices over the first three years of operation. Like the CEE, this allows consumers to benefit from low-cost new entry.

- *Part A Test Exemption* – Generators receive this exemption if their entry does not lead to an abnormally large capacity surplus. In the New York City, this is Part A exemption surplus level is approximately 600 MW above the capacity requirement. In the lower Hudson Valley, this is level is approximately 710 MW above the requirement. This exemption could allow subsidized resources to sell capacity provided that the volume of new entry from subsidized resources is reasonably balanced by policies that lead to retirements of older generation.

- *Renewable Entry Exemption and Self Supply Exemption* – The subject of this compliance filing.

B. Role of Capacity Markets and Interaction with State Policies

Capacity markets supplement energy and ancillary services markets by providing the "missing money" to resources that are required for satisfying the planning reliability

requirements.[3] Economic signals from the capacity market play a key role in motivating efficient entry and exit decisions. These signals complement New York state policy initiatives by: (a) ensuring that while some entry and exit from the market is policy-driven, market signals will still encourage investment needed to maintain reliability; and (b) rewarding those subsidized resources that provide greater value to the wholesale market, thereby reducing the cost of developing them.

New York state has used its regulatory authority to bring about the retirement of 3 GW of coal and nuclear capacity in 2020 and 2021. Another wave of retirements (up to 3 GW) is expected from 2023 to 2025 when the NYDEC tightens air emissions requirements for older peaking units in ozone non-attainment areas. Approximately 1.8 GW of new merchant generation has been built or is expected to become operational between 2018 and 2020, and this private investment has been partly motivated by these expected policy retirements. On the other hand, state subsidies for new entry of policy resources will tend to reduce the amount of merchant generation that enters the market. Hence, the capacity market complements public policies by ensuring that these policy retirements will not lead to high prices or violations of planning reliability criteria.

The NYISO markets also complement state policies by providing market incentives for resources that provide greater value. Generators that locate in areas that cause less congestion or help relieve congestion receive significantly more revenue. Resources that provide greater resource adequacy benefits also receive more compensation in the capacity market. The NYISO markets provide key incentives that influence the selection of specific projects to build renewable generation and energy storage resources. For example, many of the peaking units that

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[3]   The "missing money" refers to the revenues over and above those earned from selling energy and ancillary services that are needed to provide market incentives for maintaining sufficient capacity margins to satisfy planning reliability criteria such as the "one-day-in-ten-year" reliability standard.

will retire between 2023 and 2025 because of tightening air emission requirements are located in import-constrained load pockets, so the NYISO markets will provide incentives that attract some subsidized resources to these load pockets where they can be rewarded for providing significant reliability benefits. These market incentives ultimately lead to selection of more efficient public policy projects, which reduces the cost of these policies for consumers.

Subsidized new entry can disrupt these long-term economic price signals that facilitate merchant entry and exit. However, capacity markets in New York (through market response and/or application of BSM rules) have performed reasonably well in regulating entry and exit decisions even as the state has sought to effect a number of resource mix changes.[4] The capacity market would not be able to attract investment without the NYISO's strong commitment to competitive market principles and BSM measures that ensure subsidized entry does not drive prices below competitive levels.

The Commission has recognized there are legitimate public policy objectives that affect the wholesale markets, and it has allowed for narrowly tailored exemptions for renewable energy resources. However, large quantities of subsidized resources could overwhelm the supply-demand balance in the capacity market and could result in substantial artificial capacity surpluses that may not be absorbed for several years.

IV. COMMENTS ON THE PROPOSED REE PROVISIONS

In its February 20 Order, the Commission ordered the NYISO to develop a revised REE limit that would be: "(1) narrowly tailored to the mitigated capacity zones, and not based on the entire NYCA; and (2) based on UCAP rather than ICAP", while being "mindful of the relationship between: (1) the size of the MW cap; and (2) the limit the MW cap imposes on the

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[4] For instance, in the last year over 1 GW of fuel-efficient merchant entry has occurred in the Mitigated Capacity Zones in NYISO.

renewable resource exemption's impact to market prices."[5] Ultimately, the Commission was directing the NYISO to achieve a reasonable balance between allowing the State to facilitate investment in renewable energy resources, while protecting the integrity of the wholesale market prices.

To achieve this balance, the NYISO proposed an REE limit equal to the greater of:

(i)   A UCAP quantity that would result in a capacity price change equal to the Market Price Impact Floor, proposed to be $0.50/kw-month; **or**

(ii)   The sum of:

    a. the UCAP quantity associated with the change in forecasted peak load;

    b. the UCAP quantity associated with the Incremental Regulatory Retirements;

    c. the Unforced Capacity Reserve Margin ("URM") Impact of the exempted renewable resources; and

    d. the UCAP MW in the "Renewable Exemption Bank" for each Mitigated Capacity Zone.

We find that this proposed formula for calculating the REE limit achieves a reasonable balance of the factors cited by the Commission because it is designed to prevent the exemptions from significantly reducing capacity market prices. If the Minimum Price Impact Floor is binding, the proposal will result in a price impact averaging less than $0.50 per kw-month. This constitutes 4.1 percent of the net cost of new entry ("CONE") outside of New York City and 3.4 percent of the net CONE in New York City. These price effects are modest and well within the general range in which capacity prices typically fluctuate.

The four factors that could produce an REE limit higher than the Minimum Price Impact Floor are each factors that would tend to offset the price reductions caused by the renewable

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[5] February 20 Order at P 48.

resources. Each of the factors would raise capacity prices, all else constant, which allows additional renewable resources to enter without reducing capacity prices. We believe each of these factors are reasonable, which we discuss in the following sections.

A.   Forecast Peak Load Changes

This factor accounts for changes in load that could increase or decrease prices. When load is growing rapidly, the resource adequacy needs increase and prices rise. Including this factor in the REE limit would simply recognize that a State can satisfy increasing demand with renewable resources, rather than facilitating investment in conventional resources. In any case, market prices would not decrease as a result of this component of the REE limit formula.

Importantly, this factor also includes load reductions, which would offset other factors and limit the NYISO's authority to grant REEs that would reduce prices. For example, assume a 200 MW regulatory retirement occurs in a Mitigated Capacity Zone, which would otherwise allow for a 200 MW REE. If forecasted load falls by 200 MW in that zone, it would offset the retirement and no REEs would be granted in excess of the REE associated with the Minimum Price Impact Floor.

B.   Incremental Regulatory Retirements

The reason that State-sponsored resources raise market concerns is that the market is intended to facilitate efficient long-term investment and retirements decisions by all participants. When out-of-market investment occurs, it can substantially change the supply-demand balance to the detriment of the participants that have relied on the market signals. Prospectively, out-of-market entry is perhaps even more harmful because it undermines the integrity of the market signals and interferes with participants ability and incentives to make efficient long-term decisions based on their forecasts of market prices. Therefore, it is the artificial supply surplus that is the primary market concern.

To the extent that the State is taking offsetting out-of-market actions that reduce supply and the associated surplus, these actions mitigate the market concerns. For example, if the State facilitates the entry of 100 MW of renewable resources (in UCAP terms) in a Mitigated Capacity Zone, but takes actions outside of the market to prompt a 100 MW existing resource to retire, these two actions would offset from a supply perspective and not materially affect prices.

Provisions that recognize that out-of-market entry offsets out-of-market exit is consistent with the Competitive Auctions with Sponsored Resource ("CASPR") rules implemented by ISO New England. The same economic rationale justifies the Incremental Regulatory Retirements in the REE limit calculation. In the end, the net of the out-of-market entry and exit affects capacity market prices, which is the basis for this element of the REE formula proposed by the NYISO.

Given the rationale described above, it is essential that the retirements be the result of State policies or regulatory actions, i.e., retirements that would not likely have occurred based purely on market prices. Hence, Incremental Regulatory Retirements should not include retirements that are substantially caused by market outcomes. As stated in the NYISO filing:

> Incremental Regulatory Retirements comprise only those retirements where a public policy decision or action external to the market contributes materially to the retirement. Decisions to continue, or cease, operating have typically been driven by the direct impact of market conditions upon the economics of a particular facility. Thus, a Generator that is uneconomic and unable to recover its costs sufficiently via the markets, irrespective of external policy actions, is expected to exit and thus would not be included as an Incremental Regulatory Retirement. The proposed mechanism is intended to only capture market exit that is the result of a new regulatory action, for which the anticipated cost of compliance or other financial impact (e.g., elimination of a local property tax exemption) is a significant factor in the Generator's exit.[6]

The NYISO recognizes that this determination may not always be straight-forward, so it proposes that the MMU perform an independent review of the determination. If the MMU does not validate the determination, the Commission would review and determine whether the

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[6]   [NYISO Filing at p. 8.]

retirement in question qualifies as an Incremental Regulatory Retirement for purposes of the REE limit calculation. We believe this will ensure that no exemptions are granted that are not clearly justified under the provisions proposed by the NYISO. This will also provide additional transparency for market participants.

C.   URM Impact of the Renewable Resources

The URM Impact factor accounts for the fact that, given the performance of renewable energy resources, the demand for local capacity rises as renewable resources enter a Mitigated Capacity Zone. Each MW of increased demand resulting from the renewable resource entry offsets one MW of the renewable resources' UCAP, resulting in no effect on market prices. Therefore, it is reasonable for this factor to be included in the REE limit calculation.

D.   The Renewable Exemption Bank

The Renewable Exemption Banks accounts for the fact that the factors described above may sometimes occur in different Class Years than the renewable resource entry. Hence, if a higher quantity of exemptions are justified than can be granted in a particular class year, the residual exemptions are available to future class years. The fact that both entry and exit can be lumpy from Class Year to Class Year supports the NYISO's proposed banking provision.

Importantly, the NYISO's proposal avoids double-counting in the provision of exemptions by recognizing the exemptions granted through the "Part A" test for granting BSM exemptions. To do this, NYISO will deduct the UCAP equivalent renewable capacity exempted under the Part A test from the renewable exemption bank, which can cause the bank to be negative and reduce the exemptions that would otherwise have been available in future Class Years. The NYISO also proposes that the banked quantities be adjusted for forecast errors that affected the REE limits. Ultimately, this will ensure that the quantity of REEs granted over time will be reasonable and consistent with the Commission's objectives.

V.   CONCLUSIONS

Based on our assessment of the key aspects of the NYISO's proposed formula-based REE limit calculation, we find the proposal to be a well-reasoned and balanced approach for allowing the State to support the entry of renewable energy resources, while minimizing the potential price impacts and associated harm to the market. Therefore, we respectfully recommend that the Commission accept the NYISO's proposed compliance filing.

Additionally, we believe that uncertainty surrounding the implementation of the REE, and the potential delays in the Class Year process creates inefficient risk for the participants. This uncertainty is heightened by the fact that there is no deadline for the Commission to rule on this compliance filing. Therefore, we also support the NYISO's requests that the Commission issue an order accepting the filing within sixty calendar days with an effective date of June 9, 2020. This will allow the Class Year process to proceed on schedule with certain regarding the application of the REE.

Respectfully submitted,

/s/ David B. Patton

David Patton
President
Potomac Economics, Ltd.

April 28, 2020

CERTIFICATE OF SERVICE

I hereby certify that I have this day e-served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 28th day of April 2020 in Fairfax, VA.

/s/ David B. Patton

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