

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Cricket Valley Energy Center, LLC)	
Empire Generating Company, LLC)	
)	
v.)	Docket No. EL21-7-000
)	
New York Independent System Operator, Inc.)	

**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 (“Commission”), 18 C.F.R. §§ 385.212 and 214 (2020), Potomac Economics respectfully moves to intervene and comment in the above-captioned proceeding. Cricket Valley Energy Center, LLC (“CVEC”) and Empire Generating Company, LLC (“Empire”) (together the “Complainants”) have asked the Commission to discard the NYISO’s established buyer-side capacity market power mitigation measures (the “BSM Framework”)¹ and replace them with a “clean MOPR” similar to what is now in the process of being implemented in the PJM Interconnection LLC (“PJM”) market region.² Potomac Economics is the Market Monitoring Unit (MMU) for NYISO and is responsible for monitoring the electricity markets and evaluating potential changes that impact these markets.

¹ The BSM Rules are set forth in Attachment H to the NYISO’s Market Administration and Control Area Services Tariff. The Complaint refers to them as the “Offer Floor Rules.”

² See *Calpine Corp. v. PJM Interconnection, L.L.C.*, 173 FERC ¶ 61,061 (2020) (conditionally accepting PJM compliance filings to establish a clean MOPR.)

I. NOTICE AND COMMUNICATIONS

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II. MOTION TO INTERVENE

Potomac Economics is the independent Market Monitoring Unit (“MMU”) for NYISO and is responsible for monitoring the electricity, ancillary services, and capacity markets and evaluating potential changes that impact them. Potomac Economics has a unique perspective and responsibility on those markets that cannot be represented by any other party. It should therefore be permitted to intervene herein.

III. BACKGROUND AND PURPOSE

The Complainants argue that the current BSM Framework applied in the NYISO capacity market is not just and reasonable. In particular, they assert that payments to several large nuclear units totaling 3.3 GW and large quantities of renewable generation in the coming years will lead to unjust and unreasonable price suppression in the NYISO-administered capacity market because the existing BSM rules (a.k.a., minimum offer price rules or “MOPR”) are not applied outside of the G-J Locality and because they are not applied to existing resources at all.

The Complainants’ expert, Dr. Roy Shanker, estimates that these state subsidies have led to the retention of existing capacity, which has resulted in significant price suppression. As a remedy, the Complainants propose to modify the NYISO Tariff by eliminating the existing BSM

rules and replacing them with a “clean” MOPR that removes “loopholes and extensive exceptions in the existing [Offer Floor Rules]”.³

These comments address both the assertion that the current BSM rules are unjust and unreasonable, as well as the specific changes proposed by the Complainants. We explain in Section IV that the current BSM framework has worked well in the areas where it has been implemented. Section V explains that the Complainants do not provide evidence that the current BSM framework is unjust and unreasonable and needs to be replaced. Section VI discusses the “clean MOPR” proposed by the Complainants and why it would be substantially inferior to the NYISO’s current BSM framework. Finally, Section VII provides our conclusions.

IV. THE CURRENT BSM FRAMEWORK IS JUST AND REASONABLE FOR THE PROMPT CAPACITY MARKET OPERATED BY NYISO

The current BSM framework, which consists of Part A, Part B, Competitive Entry, and Renewable Entry Exemptions, has worked well in the areas where it has been implemented. Each of these exemption tests has been found to be just and reasonable by the Commission. In the context of the prompt capacity market operating in New York, exemption tests are performed as part of the interconnection process so that developers know whether they will be mitigated before they are built.

A. The Optimal Application of BSM in Forward Capacity Markets versus Prompt Capacity Markets

The Complainants filing and Dr. Shanker’s supporting affidavit provide only a cursory and incorrect assessment of how differences between PJM’s forward capacity market and the NYISO’s prompt capacity market necessitate differences in how buyer-side mitigation is administered. The NYISO BSM framework has been developed to be reasonable for application

³ See affidavit of Roy Shanker, Attachment A of the Complaint, ¶ 35.

in its prompt capacity market. Simply lifting a BSM framework developed for a forward capacity market and applying it to the NYISO's prompt capacity market would be unreasonable.

The economic principle that should be applied under both types of capacity markets is that the implications of mitigation should be known at the time a developer is making its decision to invest its capital in a new or existing resource. This is accomplished in PJM by applying its MOPR in its Base Residual Auction (BRA) that runs three years in advance of the planning year. Hence, resources that are subject to the MOPR and do not clear may be deterred from entering, which is one of principal purposes of the MOPR.

In the NYISO's prompt capacity market that runs immediately prior to each planning month, this economic principle is accommodated through a series of exemption tests that are administered roughly three years in advance of the planning year. Like in PJM, this will allow developers to have sufficient knowledge regarding potential mitigation of their resources in order to make efficient investment decisions regarding whether to invest capital in the resource.

Indeed, the Commission has in numerous orders pertaining to the NYISO's *ex ante* exemption tests acknowledged the differences between BSM rules in prompt versus forward capacity markets:

It is reasonable for NYISO to provide an exemption test before a supplier begins construction of a new resource, as NYISO's tariff current provides, and to apply such a test to all new entrants. An entity whose resource is forecast to be economic at the time its construction begins is not attempting to artificially depress market prices through uneconomic entry. Thus, it would not be reasonable to impose an offer floor on such a resource that prevented it from clearing in the capacity auction if market conditions unexpectedly worsened by the time that construction is completed.⁴

This determination demonstrates the Commission's understanding of the sound economic principles underlying the BSM mitigation framework and the importance of making a mitigation

⁴ *New York Independent System Operator, Inc.*, 133 FERC ¶ 61,178 at P 71 (2010).

determination at the time that the developer is making the investment decisions. Importantly, the Commission also affirmatively states in this Order that it would be *unreasonable* to apply the offer floor after construction is completed on a resource that would otherwise have passed *the ex ante* exemption tests.

Importantly, this is precisely the unreasonable outcome that would be facilitated by the “clean MOPR” that the Complainants are requesting the Commission adopt in this proceeding. In arguing for the replacement of the BSM framework with a clean MOPR, the Complainants and Dr. Shanker never address how developers could determine before construction whether they would be mitigated in NYISO’s prompt capacity market. By ignoring the substantial risk this would create for developers in New York, they fail to recognize the inefficient associated costs that would undermine economic investment in the NYISO markets. Fortunately, the Commission understands this concern and it has been the basis for the Commission’s numerous rulings in support of the current BSM framework.

B. Key Elements of the Current BSM Framework

Given that conducting exemption tests at the time of the investment decisions is essential in prompt capacity market, NYISO has worked with its stakeholders and the Commission to develop exemptions that are economically sound and will facilitate efficient market performance. Importantly, these exemptions are specifically designed to ensure that the BSM framework does not hinder efficient economic investment, which would fundamentally undermine the performance of the NYISO markets. In this subsection, we describe the economic basis for each element of the current BSM framework, which underlies FERC’s findings that each are just and reasonable.

Part A Test

A new entrant is determined to be exempt under the Part A test if the price forecast for the first year of its operation is higher than the “default net CONE”. The economic purpose of this test is to allow unmitigated entry as the market moves toward the minimum capacity requirement level. BSM is intended to protect the market from uneconomic entry that would create an artificial supply surplus and inefficiently suppress capacity prices. This is not a concern when capacity levels are falling and the market is moving toward the minimum capacity requirement levels. Hence, mitigation under these conditions is not reasonable and is at odds with the objectives of the BSM rules.

FERC has long recognized the value of the Part A test and these considerations have been part of the justifications for the Part A Exemption since it was first adopted in 2008. In commenting on the importance of *ex ante* testing in avoiding deterring new entry that is needed, the Commission state that it “...agrees that units should be exempted when their decision to enter was based on price signals the market sent indicating that entry was needed.”⁵

The Commission also explicitly endorsed the thresholds used to ensure that the Part A test does not result in unreasonable suppression of capacity prices. In this regard, the Commission stated that the Part A test threshold of 75 percent of Net CONE is reasonable because it prevents “[uneconomic] entry from depressing the market price significantly below the net CONE...”⁶

Hence, the Part A Exemption Test allows exemptions for resources needed to address the system’s capacity needs, allowing new resources to sell capacity as long as there is a reasonable balance between supply and demand.

⁵ *New York Independent System Operator, Inc.*, 122 FERC ¶ 61,211 at P 117 (2008).

⁶ *New York Independent System Operator, Inc.*, 122 FERC ¶ 61,211 at P 107 (2008).

Part B Test

Since the primary purpose of the capacity market is to facilitate investment and other long-term decisions that will sustain a sufficient base of capacity to maintain reliability, it is critical that BSM not be an inefficient barrier to economic investment needed to achieve this objective. A new unit is granted a Part B exemption if the average capacity price forecast over the three-year MSP is higher than the new unit's Net CONE. Therefore, the economic purpose of the Part B test is to ensure that a project is not mitigated when it is economic under expected market conditions. Eliminating the Part B test would create substantial inefficient risk that would undermine the performance of the NYISO markets.

In accepting the NYISO's Part B exemption test, the Commission has recognized the important economic rationale for the test:

...the Commission agrees that units should be exempted when their decision to enter was based on price signals the market sent indicating that entry was needed. If NYISO predicts in some future year that market prices will be greater than the net CONE, then this indicates that building new capacity to begin operation in that year is economically rational. Such new capacity should not be penalized after-the-fact for a decision to build that was economically rational at the time the decision was made. If the actual capacity price in a year is below seventy-five percent of net CONE and differs from the forecast of higher capacity prices for that year made at the time the decision to build the new capacity was made, the owner of the new capacity should not be penalized because it (and NYISO) did not correctly estimate that demand. Thus, in this circumstance, we believe that the owner of the new capacity should be allowed to offer below the price floor in order to be assured of being selected as a capacity resource and receiving whatever capacity price clears the market.⁷

This well-articulated statement by the Commission reflects its full understanding of the economic principles underlying the NYISO's BSM framework. In particular, the statement explains why the Part B test and the other *ex ante* exemption tests are necessary to achieve just and reasonable outcomes in the NYISO's prompt capacity market. To rule with the

⁷ *New York Independent System Operator, Inc.*, 122 FERC ¶ 61,211 at P 117 (2008).

Complainants and order the adoption of a clean MOPR to replace the current BSM framework, the Commission would have to reverse itself on all of these prior findings and the economic principles that support them.

Competitive Entry Exemption

Since the purpose of the BSM rules is to protect the market from uneconomic out-of-market investment, it follows that it should not be applied to entirely private “in-market” investment in resources that are made in response to the market’s economic signals. The competitive entry exemption is designed to achieve this objective by exempting resources that are not supported by subsidies (either direct or indirect) through contracts with government entities or regulated entities that benefit from state regulatory cost recovery. Hence, the economic purpose of the CEE is to ensure that the BSM framework does not inadvertently deter or increase the risks associated with private market-based investment.

In its order directing the NYISO to include a CEE in its Tariff, the Commission noted that unsubsidized merchant resources “do not have the incentive to exercise buyer-side market power.”⁸ The Commission also referred to its finding when approving PJM’s CEE provisions that “...the purpose of the MOPR, however, is not to protect a merchant resource from making a poor investment decision with its own capital.”⁹ The Commission added that:

[b]ecause a purely merchant generator places its own capital at risk when it invests in a new resource, any such resource will have a strong incentive to bid its true costs into the auction, and it will clear the market only when it is cost effective.”¹⁰

⁸ See *Consolidated Edison Co. of New York, Inc. v. New York Independent System Operator, Inc.*, 150 FERC ¶ 61,139 (2015) at P 46.)

⁹ *Id.* at P. 3, citing *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090, at P 57 (2013).

¹¹ *New York Public Service Commission, New York Power Authority, and New York State Energy Research and Development Authority v. New York Independent System Operator, Inc.* (“Order on REE/SEE Complaint”), 153 FERC ¶ 61,022 (2015) at P 2.

Renewable Entry Exemption

The renewable entry exemption (REE) was recently found to be just and reasonable by the Commission because it exempts resources intended to achieve state public policy objectives that would not substantially suppress prices or undermine the performance of the market. To ensure that the entry of renewable generation does not lead prices to be suppressed below competitive levels, the amount of renewable entry exemptions granted in a class year is appropriately limited.

New renewable units that belong to a set of eligible technologies can obtain a REE, subject to a total MW cap for each Class Year. The purpose of these provisions is to exempt from Offer Floor the new entrants that “have limited or no incentive and ability to exercise buyer-side market power to artificially suppress ICAP market prices”.¹¹ In requiring the NYISO to not subject intermittent renewables (up to a MW cap) to BSM rules, the Commission stated that “[eligible] intermittent renewable resources with low capacity factors and high development costs, including many wind and solar resources, narrowly defined, provide their developer with limited or no incentive and ability to exercise buyer-side market power to artificially suppress ICAP market prices.”¹²

The amount of renewable entry exemptions is limited by a MW cap to ensure that the entry of subsidized renewable resources does not depress prices below competitive levels. The cap depends on two fundamental criteria:¹³

¹¹ *New York Public Service Commission, New York Power Authority, and New York State Energy Research and Development Authority v. New York Independent System Operator, Inc.* (“Order on REE/SEE Complaint”), 153 FERC ¶ 61,022 (2015) at P 2.

¹² *Id.* at P 47.

¹³ The cap is also computed using several other criteria. First, the URM is an adjustment to account for the effect of the renewable generator on the ICAP requirement, if applicable. Second, there is a minimum quantity of exemptions in each class year, which may reduce the amount granted in subsequent years.

- Load growth – This recognizes that when load is growing, it provides more room for renewable generation to enter without suppressing prices below competitive levels.
- Regulatory retirements – While New York has increased supply by supporting “clean” resources, it has also reduced supply by using its authority to retire resources that would be economic to remain in-service. The cap recognizes that regulatory retirements can offset the price effects of the entry of renewable generators.

These elements work together to allow subsidized renewable resources to enter the market and sell capacity as long as they do not suppress capacity prices and to recognize that when the state uses regulatory authority to reduce supply it creates additional space for entry of renewable resources. The Commission has recognized these principles with respect to renewable resources not only in New York, but in other ISOs/RTOs as well.¹⁴

C. Conclusions Regarding the Existing BSM Framework

This section explains how each exemption test that together make up the existing BSM framework has been found to be just and reasonable based on sound economic principles. Importantly, the exemption testing process is specifically tailored to NYISO’s prompt capacity market such that the process for granting exemptions is integrated with the interconnection process. This allows developers to know whether they will be mitigated before building a generator and funding associated transmission upgrades. This is critical for allowing the BSM framework to facilitate efficient investment decisions and to ultimately lead to just and reasonable market outcomes.

¹⁴ In *ISO New England Inc. et al.*, 158 FERC ¶ 61,138 at P 9 (2017), the Commission, reaffirming its decision to approve a renewable resource exemption in the ISO New England Forward Capacity Market, stated: “One purpose of capacity markets is to send appropriate price signals regarding where and when new resources are needed. If renewable resources are being built, but are not reflected in the FCM, then the FCM may send an incorrect signal to construct new capacity that is not needed. Not only would the capacity market send an incorrect signal, but customers would have to pay for capacity twice -- first, for renewable resources via out-of-market mechanisms and second, for additional capacity that is procured because the capacity market has sent the incorrect signal that additional capacity is needed.”

This differs from the PJM and ISO New England markets, where the MOPR is applied through the forward capacity auction. This is reasonable in these markets because they operate three years in advance at the time when developers are making investment decisions. The BSM framework is designed to achieve the same objective to inform the generator whether it will be mitigated before it is actually built. By doing so, the mitigation framework can achieve its objective of deterring uneconomic entry without inefficiently hindering efficient investment. The Complainants have offered not legitimate evidence to counter these conclusions and prior FERC determinations that the NYISO BSM is not just and reasonable, which we discuss in detail in the following section.

V. THE COMPLAINANTS HAVE NOT SHOWN THAT EXISTING BSM RULES ARE UNJUST AND UNREASONABLE

Under Section 206, the Complainants have the burden of proof to demonstrate why the NYISO's existing tariff is not just and reasonable. They simply have not made this demonstration. The fact that the Commission has approved other rules in other RTO markets does not equate to the NYISO's rules being unjust and unreasonable. In fact, the differences in the design of the NYISO capacity market from those of PJM and ISO New England necessitate different BSM rules in New York as discussed in the prior section.

The primary evidence cited by the Complainants to demonstrate that the NYISO BSM rules are unjust and unreasonable is a faulty analysis of the effects of not mitigating the existing nuclear units in the Rest of State area that are receiving ZEC subsidies. We explain below why this analysis is not correct and does not suggest that the BSM rules in New York are unjust or unreasonable.

A. The Complainants Analysis of the Current BSM Rules is Faulty

The complaint cites Dr. Shanker’s analysis for a “ballpark” estimate of the NYCA capacity price impact of ZEC subsidies. This analysis suggests that excluding two of the three upstate nuclear facilities could lead to an increase in the NYCA capacity price of \$44.27/kW-year.¹⁵ As acknowledged by Dr. Shanker, this does not account for the market response to higher prices in the form of additional imports or the reentry of other units. Dr. Shanker indicates that this price impact is conservative as his analysis considers the retirement of only two of the most uneconomic nuclear units and ignores the subsidies to other nuclear units and to renewable units. Dr. Shanker also argues that the state is procuring or planning to subsidize entry of large quantities of intermittent renewable resources in addition to the nuclear units receiving ZEC payments.

While Dr. Shanker’s analysis considered the price impact of nuclear unit retention, it is one-sided and does not account for the effects of offsetting state policies that have directly resulted in a reduction of capacity supply. For instance, over 2 GW of capacity from the Indian Point nuclear plant will retire by April 2021 due to state intervention. Not recognizing policy-driven retirements significantly overestimates the price impacts of state policies. Indeed, the Commission recently recognized that it is appropriate to consider the state policy-driven retirements when developing the limit for granting Offer Floor exemptions to intermittent renewable entrants.¹⁶ In accepting the NYISO’s proposal to consider policy-driven retirements (“Incremental Regulatory Retirements”) for limiting the price impacts of exemption to renewable resources, the Commission stated that:

¹⁵ Dr. Shanker estimated the increase in price by excluding the capacity from the two single-unit nuclear facilities that receive ZEC payments (Ginna and Fitzpatrick). Furthermore, Dr. Shanker relied on nuclear unit GFCs from PJM to validate his findings that subsidies are retaining these units that would have otherwise retired.

¹⁶ *New York Independent System Operator, Inc.*, 172 FERC ¶ 61,058 at P 50 (July 17, 2020 Order).

We also agree with NYISO that the proposed definition of Incremental Regulatory Retirement appropriately recognizes that out-of-market actions that reduce the supply of renewable resources in the capacity market offset the effects of renewable resource policies that increase supply of renewable resources in the capacity markets. Therefore, we find that the Incremental Regulatory Retirements component of NYISO’s proposed Renewable Exemption Limit is mindful of the relationship between: (1) the size of the MW cap; and (2) the limit the MW cap imposes on the renewable resources exemption’s impact to market prices.¹⁷

Therefore, to accurately evaluate the results of the current NYISO rules on the capacity market outcomes, one must estimate the effects of *all* out-of-market state actions. To do this, we forecasted the NYCA capacity price for the Capability Year 2021/22 under two scenarios: (a) continued application of current BSM rules (“Status Quo”), and (b) a case that removes all state actions that procure new or retain existing capacity *or* lead to the retirement of existing capacity (“No State Actions”). The first column of Table 1 shows the major state actions that have likely resulted in changes to the resource mix in NYCA since 2015.¹⁸ The second column shows the capacity (Summer CRIS MW) of each resource. The following two columns show our assumptions regarding the status of each resource under the above two scenarios.

Table 1 – Retirements and New Entry Affected by State Actions since 2015

Resource	Capacity (Summer CRIS MW)	Status Quo	No State Actions
<i>Nuclear Units</i>			
Indian Point 2	1027	Out	In
Indian Point 3	1040	Out	In
Ginna	582	In	Out
Fitzpatrick	859	In	Out
Nine Mile	1941	In	In
<i>Coal Units</i>			
Huntley 67 and 68	395	Out	Out
Dunkirk 2	75	Out	Out
Somerset	687	Out	In
Cayuga Units 1 & 2	309	Out	Out
<i>Large-scale Renewables</i>	261	In	Out

¹⁷ *Id.* at P 50.

¹⁸ The capacity data shown is based on information published in the NYISO’s Gold Book.

In addition to the impacts listed in the table above, merchant entry since 2015 has likely been influenced by state actions. In particular, capacity prices in the G-J Locality where the Cricket Valley Energy Center (“CVEC”) plant is located would be significantly lower if the 2 GW of capacity of the Indian Point units were to remain in service. Therefore, for the purposes of our analysis, we assumed that the CVEC plant would have not entered the market in the *No State Actions* scenario.¹⁹ On the demand side, we assumed the ICAP demand curve would reflect the parameters based on data published in September 2020.²⁰ All other assumptions are based on the most recent and accurate data available.²¹

¹⁹ To the extent that the CVEC project is modeled as in-service, the price in *No State Actions* case would be even lower than our estimate.

²⁰ The ICAP Demand Curve parameters are based on data from the September 2020 final report of *Independent Consultant Study to Establish New York ICAP Demand Curve Parameters for the 2021/2022 through 2024/2025 Capability Years*.

²¹ Our price estimates are based on the following assumptions:

- Capacity Requirements - The peak load we used for our price forecasts is based on the NYISO’s 2020 Gold Book. The Installed Reserve Margin (“IRM”) is based on a recent estimate used for studying the Locational Capacity Requirements (“LCRs”) in the NYISO.
- Internal Resources – We adjusted the total amount of internal capacity that cleared in the October 2020 and November 2020 ICAP Spot Auctions using the UCAP of resources listed in Table 1 (and CVEC) in accordance with the assumptions underlying each scenario.
 - The forecasted capacity prices coupled with recent energy futures pricing data suggest that the NYISO market revenues are likely to be exceed the average generation cost of multi-unit nuclear plants in all scenarios. See <https://www.nei.org/resources/reports-briefs/nuclear-costs-in-context>. Accordingly, we assumed that Nine Mile units will remain in service even in the *No State Actions* scenario.
- Imports - We estimated the capacity imports into NYISO in the following manner:
 - Imports from ISO-NE were assumed to be price-sensitive, and were determined based on the price differential between the forecasted NYCA price and the clearing price in FCA-10 that was further adjusted for the cost of “pay for performance” obligations in ISO-NE. Imports from ISO-NE were also limited by the import right limits for 2020/21 as determined by the NYISO. See https://www.nyiso.com/documents/20142/10754502/4%20BIC_2020_02_12%20import-rights.pdf/c91ab641-f61d-4aa0-60b7-481543f7aa7d
 - In each scenario, imports from PJM were determined based on the price differential between the regions and the amount of grandfathered import rights limits (1080 MW). In the *Status Quo* and *No State Actions* scenarios, the forecasted NYCA prices (prior to adjusting for imports from PJM) were slightly higher than the BRA prices (\$51/kW-year) and significantly higher than the two Incremental Auctions prices for 2021/22. For the purposes of our analysis, we assumed that half of the grandfathered rights (i.e. 540 MW) will be utilized in the *Status Quo* and *No State Actions* scenarios. Given the high cost of firm transmission rights, we assumed that there would be no other imports from PJM to NYCA.

Given the resource mix shown in Table 1, we estimate the prices in 2021/22 would be:

- \$48/kW-year in the *Status Quo* scenario; and
- \$44/kW-year in the *No State Actions* scenario.

These results indicate that the current BSM rules will not produce unreasonable prices and allow out-of-market state actions to depress the prevailing capacity prices. Properly considering the effects of all state out-of-market actions, both those that increase supply and those that reduce supply, indicates that (a) the prices are **lower** in the *No State Actions* scenario than in the *Status Quo* scenario. Our analysis suggests that these findings hold under a range of assumptions about market response from imports.²² Therefore, by focusing on a subset of New York State policies that affect the generation mix, Dr. Shanker presents an incomplete and misleading analysis of the effects of state actions. Hence, there is no empirical basis for the Commission to agree with the Complainants that the NYISO's BSM rules are unjust or unreasonable, or to grant the relief the Complainant seek to adopt a "clean MOPR" in New York.

B. The Complainants Assertions Depend on a Flawed Definition of "State Subsidy"

The Complainants analyses and results are also overstated because they adopt an overly-broad definition of a state subsidy. The Complainants interpretation of the definition of State Subsidy adopted by the Commission in the PJM II Order is overly broad because it does not properly distinguish between: a) efficient compensation by a State that reflects the value of a service or outcome, versus b) payments that exceed the value of the service or outcome being

- Imports from Hydro Quebec were assumed to be equal to the average quantities that cleared the ICAP Spot Auctions in the last two Capability Periods.

- Imports from Ontario were assumed to be equal to the import rights limit for 2020/21.

²² Given the lower internal capacity in the *Status Quo* scenario, prices in the *No State Actions* scenario can be expected to be lower, if a similar level of imports are assumed in both scenarios. NYCA prices in the *No State Actions* scenario can be expected to at best equal the prices in the *Status Quo* scenario, if imports respond perfectly to price differentials between NYCA and its neighboring regions and more capacity is imported in the latter scenario.

procured. We do not believe the Commission intended such a broad interpretation of its definition that ignores this distinction. This distinction is key because payments that are efficient and consistent with the underlying value of the service being procured are not distortionary and does not adversely affect the markets.

There are many examples of payments made by states or municipalities that are efficient and do not represent subsidies. These examples include:

- The state paying its electricity bill in a state facility;
- A municipality procuring steam from a cogeneration facility;
- Payment by a municipal utility for use of a right-of-way;
- Support for hydro projects that have a recreational or other functions;
- Purchase of rate-based emission credits (under the clean air act) from a low-emitting generator by a state-owned generation facility.

In each of these cases, a service or product that has value is being procured. Economists would generally agree that to the extent that the payment accurately reflects the value of the service or product, it is not a subsidy. Only when the payment exceeds the value of the product or service could it be considered a subsidy.

Applying this economic principle to the ZEC and REC programs can lead to a very different conclusion than the one advanced by Dr. Shanker. To start, it is important to recognize that elimination or abatement of a negative externality can have substantial value. At issue in New York is the value of reducing carbon emissions, which have motivated both the REC and ZEC payments. The Commission has recognized the legitimacy of state actions to reduce carbon emissions in its recent proposed policy statement that encourages carbon pricing:

We issue this proposed policy statement to . . . encourage RTO/ISO efforts to explore and consider the benefits of potential Federal Power Act (FPA) section 205 filings to establish [carbon pricing] rules.²³

Clearly, such an encouragement is premised on an assumption that reducing carbon emissions in electricity markets is valuable. Hence, under a proper economic definition of subsidy, the REC and ZEC payments are only subsidies to the extent that they exceed the energy value of the resources to the system plus the value of the marginal carbon reductions they provide. This is particularly important for the ZECs, which were the primary basis for the Complainants arguing that the state is currently suppressing capacity prices in New York.

The ZEC payments are calculated on the basis of a social cost of carbon determined by the State. Hence, these payments would constitute an economic subsidy only to the extent that the social cost of carbon assumed by the State exceeds the true value of carbon emissions.

Many would argue that these payments are subsidies because the payments are not available to other resources that contribute to reducing carbon emissions. However, the fact that these payments are only available to the upstate nuclear units only makes them discriminatory, it does not make them an economic subsidy. Further, if they do not constitute an economic subsidy, then they cannot lead to price suppression. One can only legitimately argue that price suppression has occurred when a subsidy causes an uneconomic resource that to remain in operation that is economic to retire. If, however, the ZECs reflect the true value of the carbon reductions and are not subsidies, then the nuclear resources would not be efficient to retire. Consequently, the capacity prices that result from these resources remaining in operation are efficient.

²³ *Carbon Pricing in Organized Wholesale Electricity Markets*, Federal Energy Regulatory Commission, Docket No. AD20-14 (October 15, 2020).

VI. A “CLEAN” MOPR WOULD BE SUBSTANTIALLY INFERIOR TO THE CURRENT BSM RULES IN NYISO

As discussed in Section IV, the BSM rules in NYISO have been specifically developed to be just and reasonable in the context of the NYISO’s specific market design. The Complainants argue that applying a “clean” MOPR that is comparable to the MOPR in PJM’s forward capacity market would be straightforward and beneficial.²⁴ We disagree with this assertion. Applied in the context of the NYISO’s prompt capacity market, a clean MOPR would be an inefficient barrier to efficient investment, result in artificial capacity surpluses, and raise price above competitive levels, and it would conflict with previous Commission and higher court decisions.

A. A Clean MOPR Would Lead to Inefficient Barriers to Investment, Artificial Capacity Surpluses, and Raise Prices above Competitive Levels

Application of a clean MOPR would subject new resources to mitigation long after the investments have been made and the units are in service. This would pose a substantial risk for developers that must commit to the investment three to four years earlier. This risk is artificial and would serve as an inefficient barrier to entry. The current BSM rules do not engender this unnecessary and inefficient risk because it includes the *ex ante* exemption testing described in Section IV that is conducted at roughly the time when developers must decide whether to move forward with their projects.

Additionally, a clean MOPR would lead to prices that substantially exceed efficient levels that are not affected by out-of-market state actions. The following analysis of the clean MOPR case is performed in the same manner as the analysis described in Section V. We forecasted the NYCA capacity price for the Capability Year 2021/22 under a clean MOPR scenario and compared it to the No State Actions case described previously. Table 2 shows the marginal resources that are assumed to clear and not clear in these two scenarios.

²⁴ See Shanker Affidavit at P 33-35.

Table 2 – Retirements and New Entry in the No State Actions and Clean MOPR Cases

Resource	Capacity (Summer CRIS MW)	Clean MOPR	No State Actions
<i>Nuclear Units</i>			
Indian Point 2	1027	Out	In
Indian Point 3	1040	Out	In
Ginna	582	Out	Out
Fitzpatrick	859	Out	Out
Nine Mile	1941	In	In
<i>Coal Units</i>			
Huntley 67 and 68	395	Out	Out
Dunkirk 2	75	Out	Out
Somerset	687	Out	In
Cayuga Units 1 & 2	309	Out	Out
<i>Large-scale Renewables</i>	261	Out	Out

Our analysis based on the resource assumptions shown in Table 2 produces estimated prices in 2021/22 of:²⁵

- \$73/kW-year in the *Clean MOPR* scenario; and
- \$44/kW-year in the *No State Actions* scenario.

These results indicate that the Complainants are not, in fact, seeking the prices that would prevail if the State had not engaged in any out-of-market actions, but rather prices that would be inflated because the clean MOPR only addresses out-of-market actions that *increase* supply. Given these results of applying a one-sided clean MOPR, we conclude that a clean MOPR would not be just and reasonable in New York. The one-sided nature of the clean MOPR could be addressed by recognizing the out-of-market actions that reduce supply in New York, but this would result in prices that are comparable to the *Status Quo* case. Applying the clean MOPR with this modification, in addition to not substantially affecting prices compared to the

²⁵ In the Clean MOPR scenario, the forecasted NYCA prices were significantly higher than the BRA prices for 2021/ 22. Therefore, we assumed that the full 1080 MW of grandfathered import rights will be utilized in the Clean MOPR scenario. See footnote [14] for other assumptions underlying our forecasted prices.

NYISO's current rules, would still engender the inefficient risk described above associated with applying mitigation years after the investment decision is sunk.

The Commission has many times acknowledged the rights of states to affect the generation mix within their state, and New York's CLCPA will require the state to develop significant quantities of renewable resources over the coming decades. Applying a clean MOPR in New York would become increasingly unjust and unreasonable as the growing quantities of resources entering to satisfy the CLCPA mandates would be mitigated. This mitigation would produce a growing disconnect between the prevailing capacity surplus in New York and the capacity market prices. This disconnect would send poor economic signals to investors considering capital investments in New York. Such investors may be motivated to make capital investments in new or existing resources that are not needed or efficient given the growing supply surplus. Ultimately, this inefficient surplus that is partly due to the state initiatives and partially due to the inefficient investment incentives provided by the clean MOPR would result in substantial costs for New York's customers that cannot be deemed just and reasonable.

Hence, labeling Complainants' proposed MOPR provisions as "clean" may sound virtuous and straightforward when they are, in fact, economically harmful and overly simplistic. A clean MOPR would produce unintended and inefficient consequences in the NYISO capacity market. The current BSM rules have been developed after much analysis and discussion with the NYISO market participants and numerous contested proceedings before the Commission. The Commission has in many orders recognized the economic justifications for various aspects of the current BSM rules, and on this basis determined them to be just and reasonable. Complainants have not met their burden of proof. They have not presented sufficient evidence that: a) the current BSM rules are not just and reasonable, or b) a clean MOPR would be just and reasonable in the context of the NYISO prompt capacity market.

B. Application of a “Clean” MOPR in NYISO Would Conflict with Previous Commission and Higher Court Precedents

Buyer Side Mitigation rules must appropriately balance between several competing objectives. In particular, application of the “clean” MOPR to NYISO would be inconsistent with precedents from previous Commissions and decisions of the Supreme Court and circuit courts that have acknowledged the Commission’s need to balance between two competing priorities: (a) to ensure just and reasonable wholesale rates and (b) to respect the jurisdiction of states to control their generation mix. Application of the “clean” MOPR in NYISO would address the first priority without giving adequate consideration to the jurisdiction of New York State.

In approving renewable entry exemptions in New York and New England, previous Commissions have acknowledged the need to balance between these priorities. For example, the Commission denied a complaint proposing that it impose a renewable exemption in ISO New England before the sloped demand curve was implemented there, but the Commission clearly affirmed the need to balance appropriately: “...the Commission must balance two considerations. The first is its responsibility to promote economically efficient markets and efficient prices, and the second is its interest in accommodating the ability of states to pursue other legitimate state policy objectives.”²⁶ The Commission continued to apply this balancing principle after ISO New England adopted a sloped demand curve, ordering the ISO to implement a renewable entry exemption.²⁷

In reviewing challenges to Commission orders requiring the application of the renewable entry exemption in ISO New England, a three-judge panel of the Court of Appeals for the Fourth Circuit agreed that it is appropriate for the Commission when setting a just and reasonable rate to

²⁶ See order denying NESCOE complaint, 142 FERC ¶ 61,108 at P 35.

²⁷ See 147 FERC ¶ 61,173 at P 83, which states: .

balance the price suppression concerns against its stated intention to accommodate state policy decisions related their generation mix: ‘...the Commission “reasonably acted to balance competing interests” by “mak[ing] the judgment that encouraging renewable energies was less important than allowing such out-of-market entrants to depress capacity prices.” NEPGA, 757 F.3d at 295. Although we deferred to FERC’s decision “to decline a categorical mitigation exemption,” *id.*, we never held that the Commission must always weigh encouraging renewable energies as less important than preventing price suppression.’²⁸ Thus, the Commission should not dismiss the importance of accommodating state policy without some assessment of the tradeoffs between competing objectives.

VII. CONCLUSIONS

The Complainants argue that the current BSM Framework applied in the NYISO capacity market is not just and reasonable, asserting that payments to nuclear resources and renewable resources will inefficiently suppress prices. To address these concerns, they propose to eliminating the existing BSM rules, including its *ex ante* exemption tests, and replacing them with a “clean” MOPR that would be applied in the prompt capacity market.

In these comments, we explain that the Complainants have not come close to meeting their burden of proof to show that the existing BSM Framework is unjust and unreasonable. In particular, they do not address the economic need to apply *ex ante* exemption tests in the context of a prompt capacity market, which has been recognized by FERC in numerous orders finding the BSM framework in NYISO to be just and reasonable. These rules allow developers to know whether they will be mitigated before building a generator and funding associated transmission upgrades. This is critical for allowing the BSM framework to facilitate efficient investment

²⁸ See *NextEra Energy Resources, LLC, et al. v. FERC*, No. 17-1110 (D.C. Cir. Jul. 31, 2018).

decisions and to ultimately lead to just and reasonable market outcomes. Discarding this framework would require FERC to completely reverse itself and its findings in many prior cases, but provides no basis for the Commission to do so.

Further, we show that the prices in the NYISO markets will not be suppressed, but rather are likely to be slightly higher than in a case where the State takes no actions to increase or decrease the market supply. In contrast, we show that the Complainants' recommended clean MOPR would result in inefficiently higher prices because it would selectively address out-of-market State actions that *increase* supply while conspicuously ignoring those that *decrease* supply. While this is clearly in the economic interests of the Complainants, it does not serve the interests of efficient market performance.

Finally, we explain why the clean MOPR proposed by the Complainants to replace the current BSM framework would be unjust and unreasonable in the context of the NYISO prompt capacity market. In addition to the inefficient increase in prices described above, we explain that a clean MOPR applied after resources are built will create substantial inefficient risk for developers that will hinder economic investment.

Therefore, we respectfully recommend that the Commission dismiss deny the Complaint.

Respectfully submitted,

/s/ David B. Patton

David Patton
President
Potomac Economics, Ltd.

November 18, 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 18th day of November 2020 in Fairfax, VA.

/s/ David B. Patton
