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July 29, 2019

**SENT VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Room 1-A209  
Washington, D.C. 20426

Re: Docket No. EL19-\_\_\_\_-000 – New York State Public Service  
Commission et al. v. New York Independent System Operator, Inc.

Dear Secretary Bose:

Attached for filing in the above-referenced proceeding, please find the Complaint of the New York State Public Service Commission and New York State Energy Research and Development Authority and Request for Fast Track Processing. Should you have any questions regarding the attached, please feel free to contact me at (518) 402-1537.

Very truly yours,

/s/ S. Jay Goodman  
S. Jay Goodman, Esq.  
Assistant Counsel

Attachment

cc: Robert Fernandez, Esq.



New York State Energy Research and Development Authority (“NYSERDA”) (collectively, the “Complainants”) submit this complaint (“Complaint”) seeking relief limited to addressing the New York Independent System Operator, Inc.’s (“NYISO”) application of buyer-side mitigation (“BSM”) measures to new electric storage resources (“Energy Storage Resources”).<sup>4</sup> As explained herein, New York State is pursuing statutory mandates for both a 50 x 30 Renewable Energy goal and to significantly increase the deployment of Energy Storage Resources by 2030. Although these goals are statewide, it is anticipated that deployment of Energy Storage Resources will have the greatest benefits in the New York City Metropolitan Area, which has unique regional characteristics, including transmission and gas constraints and a reliance on fuel oil for reliability during winter periods. Accordingly, the development of Energy Storage Resources in this area of the State is necessary to achieve various legitimate State policies, such as enhancing reliability, resilience, and fuel diversity, as well as reducing environmental and public health impacts associated with fossil fuel emissions. Moreover, it is critical that the NYISO and the New York Transmission Owners develop experience at this nascent stage of deploying Energy Storage Resources to ensure they are operated in the most efficient and cost-effective manner under a variety of market and system conditions. This experience will be critical to meet the State’s energy storage and renewable energy goals.

The Commission’s policies and mandates, as set forth in Order No. 841, are designed to support the market participation of Energy Storage Resources to the fullest extent of

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<sup>4</sup> The BSM measures are contained in Section 23.4 of Attachment H of the NYISO’s Market Administration and Control Area Services Tariff (“Market Services Tariff”).

their technical capabilities.<sup>5</sup> These directives are closely aligned and complementary with New York’s policy objectives to support the increased deployment of Energy Storage Resources. Achieving these common policy objectives requires market rules that enable Energy Storage Resources to maximize their versatile operating capabilities as well as their potential economic value.

The NYISO’s current tariff provisions, however, interfere with the State’s legitimate policy objectives by subjecting Energy Storage Resources that participate in the wholesale Installed Capacity (“ICAP”) market to buyer-side mitigation measures. While even the threat of mitigation has a deleterious impact discouraging market entry, actual mitigation would severely limit, or even eliminate, the ability of Energy Storage Resources to be paid for the value they provide. This outcome is contrary to the Commission’s mandate to ensure Energy Storage Resources can enter the market and participate to the fullest extent of their technical capability. Moreover, applying buyer-side mitigation measures to Energy Storage Resources in the NYISO’s Mitigated Capacity Zones (Zones G-J), which includes the New York City Metropolitan Area, will shift project development away from the region where energy storage can provide the greatest reliability, resilience, fuel diversity, environmental, and public health benefits.

The NYISO’s current BSM rules are used as both a shield to preserve the market position of incumbent generators and as a sword against new market entrants. These rules, and

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<sup>5</sup> The Commission recently issued Order No. 841 directed Regional Transmission Operators (RTOs) and Independent System Operators (ISOs) to develop market participation models that ensure Energy Storage Resources may participate in the wholesale markets to the fullest extent of their technical capability. (162 FERC ¶61,127, P2 (issued February 15, 2018) and Errata Notice (issued February 28, 2018) (collectively, “Order No. 841”).) All citations herein to Order No. 841 refer to the revised Order issued on February 28, 2018.

their impact on Energy Storage Resource development, present a market barrier that is unjust and unreasonable, unduly discriminatory, and contrary to Commission and State policy objectives that seek to ensure the full market participation of Energy Storage Resources. Furthermore, there is no evidence to suggest that the State is seeking to “suppress” ICAP prices as part of its Energy Storage Goal and Deployment Policy. Therefore, there is no rational basis to apply BSM measures to Energy Storage Resources in a manner that improperly interferes with legitimate state actions that fall within the regulatory authority reserved to states under the FPA.

The Complainants respectfully request that the Commission preserve the cooperative federalism approach established under the FPA and act expeditiously to remedy the improper application of the NYISO’s tariff by granting a blanket exemption from the BSM measures for all Energy Storage Resources that seek to participate in the NYISO’s ICAP auctions. The Complainants urge the Commission to support the full participation of Energy Storage Resources by preventing the BSM measures from acting as an artificial and unnecessary barrier to such participation. The relief sought herein is consistent with Commission policy regarding the treatment of Energy Storage Resources in wholesale energy markets as well as its precedent approving limited BSM exemptions for resources that are needed to further legitimate State policy objectives. In the alternative, the Commission declines to grant a blanket exemption for Energy Storage Resources, then it should approve a megawatt cap exemption that would enable up to 300 MW of Energy Storage Resources to enter the market each calendar year without the threat of mitigation.<sup>6</sup>

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<sup>6</sup> As discussed below, the 300 MW annual amount, with unused amounts rolled forward, is roughly equivalent to the NYSPSC’s 3,000 MW Energy Storage Resource deployment goal for 2030.

Finally, Complainants request that the Commission establish the filing date of this Complaint as the refund effective date, which is the earliest date allowed under the FPA.<sup>7</sup> The refund effective date would allow the NYISO to undo mitigation measures that are imposed on Energy Storage Resources on or after such date and are inconsistent with the Commission's resolution of this Complaint, including those made as part of the CY19 interconnection process that will begin on or about August 7, 2019.

**B. Request For Fast Track Processing**

Complainants further request that the Commission utilize fast-track processing procedures in order to implement the BSM exemptions requested in this Complaint. Swift action is needed so that revised BSM policies and procedures are implemented before mitigation determinations are made for projects that are anticipated to enter the NYISO's Class Year 2019 ("CY19") interconnection process, which will commence on or about August 2019. BSM determinations will be made shortly thereafter, which will be extremely influential in developer decisions to proceed. Fast track processing is needed to provide clarity for prospective developers of Energy Storage Resources. Furthermore, expeditiously granting an exemption for these resources would avoid the potential issuance of mitigation determinations made during the CY19 interconnection process that likely would cripple resource development and result in the sub-optimal utilization of Energy Storage Resources that are able to commence operations.

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<sup>7</sup> The FPA provides that, "[i]n the case of a proceeding instituted on a complaint, the refund effective date shall not be earlier than the date of the filing of such complaint nor later than 5 months after the filing of such complaint." (16 U.S.C. § 824e(b) (2019).) The Commission previously has set the refund effective date to be the same as the Complaint filing date. (See, e.g., E.ON Climate & Renewables North America, LLC v. Midwest Independent Transmission System Operator, Inc., 137 FERC ¶61,076 (2011)).

## II. COMMUNICATIONS

Complainants request that all correspondence and communications concerning this filing be sent to each of the following persons and that each are included on the Commission's official service list for this filing:<sup>8</sup>

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## III. DESCRIPTION OF COMPLAINANTS AND RESPONDENT

### A. NYSPSC

The NYSPSC is a regulatory body established under the laws of the State of New York with jurisdiction to regulate rates and charges for the sale of electric energy to consumers within the State. The NYSPSC is therefore a "State Commission" as defined in section 3(15) of the FPA.<sup>9</sup> The FPA reserves authority to the states to regulate "facilities used for the generation

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<sup>8</sup> 18 C.F.R. § 385.203.

<sup>9</sup> 16 U.S.C. § 796(15).

of electric energy” and “facilities used in local distribution . . .,” as well as retail utility rates, and provisions necessary to ensure the “safety, adequacy, and reliability of electric service.”<sup>10</sup>

## **B. NYSERDA**

NYSERDA is a public benefit corporation created under the New York Public Authorities Law. NYSERDA is tasked with supporting the development of new energy technologies.<sup>11</sup> Its powers include supporting renewable energy, energy efficiency, and other grid market-related technologies, resources, and programs, and participating in the development of electric generating facilities.<sup>12</sup>

## **C. NYISO**

In accordance with its Market Services and Open Access Transmission Tariffs, the NYISO is responsible for providing non-discriminatory open access transmission service, maintaining the reliable operation of the transmission system, and administering competitive wholesale markets for electricity, capacity, and ancillary services in New York State. The NYISO also is responsible for implementing the BSM measures at issue in this Complaint, pursuant to the provisions of its Market Services Tariff.

## **IV. BACKGROUND**

This section provides an overview of the relevant background, including: (a) a general description of the BSM measures and the current exemptions that the Commission has granted to accommodate legitimate State policy objectives; (b) a summary of the Commission’s

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<sup>10</sup> 16 U.S.C. §§ 824 and 824o(i)(3). The FPA specifically authorizes New York State to “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.” 16 U.S.C. § 824o(i)(3).

<sup>11</sup> New York Public Authorities Law § 1850-a.

<sup>12</sup> Id. §§ 1854(1)(b) and (3)(d).

directives under Order No. 841 that require the NYISO to enable full market participation by Energy Storage Resources, as well as the NYISO’s pending “compliance filing” that proposes that Energy Storage Resources be subject to potential mitigation in the capacity market; and, (c) the New York State laws and policies that require and depend upon the deployment of Energy Storage Resources to achieve legitimate State policies. These regulatory and factual bases support the relief requested in this Complaint.

**A. The Commission Has Designed BSM Measures To Discourage Uneconomic Entry, While Recognizing That Mitigation Exemptions Are Necessary To Accommodate Legitimate State Policy Objectives**

The NYISO-administered ICAP auctions are intended to ensure compliance with New York’s Installed Reserve Margin, which is used as a measure of resource adequacy to meet New York’s peak demand and maintain its planning reserve margin.<sup>13</sup> The ICAP auctions are designed to encourage new investment, retain existing capacity that is needed, and to inform retirement and entry decisions by providing a price signal that indicates when sufficient capacity is available or when additional ICAP resources are needed. Resources must “clear” the ICAP auction, or contract bilaterally for their capacity to be counted towards meeting New York’s Installed Reserve Margin. In exchange for clearing the capacity market and receiving ICAP payments, a supplier must commit to make the energy associated with its capacity available in the day-ahead energy market. Suppliers that are selected in the energy market are compensated separately for their wholesale sales of energy, and any ancillary services they may also provide.

Under the NYISO’s ICAP market rules, mitigation measures are applied in only two “constrained” Mitigated Capacity Zones (MCZs): New York City (i.e., Zone J) and the “G-J

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<sup>13</sup> The NYSPSC reviews and adopts, as appropriate, an annual Installed Reserve Margin that is proposed by the New York State Reliability Council (NYSRC). The Commission also accepts, for filing, the Installed Reserve Margin filed by the NYSRC.

Locality” (also referred to as the “New Capacity Zone”), which covers the Lower Hudson Valley as well as New York City.<sup>14</sup> Capacity market mitigation is not imposed in other NYISO zones.

The capacity mitigation measures in effect in the Mitigated Capacity Zones include (i) Offer Cap mitigation, which is intended to counteract incentives for pivotal suppliers to exert monopoly market power by raising prices above competitive levels, and (ii) Offer Floor mitigation (i.e., BSM measures), which is intended to address the theoretical concern with monopsony market power by counteracting the purported incentives for buyers to suppress prices below competitive levels. While the Commission initially determined in 2008 that BSM rules should only apply to “net buyers” with an intent and incentive to depress capacity prices, on rehearing the Commission eliminated that restriction and made BSM rules applicable to any new entrant that does not qualify for an exemption.<sup>15</sup>

The current BSM rules require the NYISO to scrutinize every new resource in a Mitigated Capacity Zone to determine whether it is “economic” or qualifies for an exemption. Energy Storage Resources are currently subject to the same BSM evaluation as traditional generators and are deemed to be economic if either (i) 75% of Mitigated Net Cost of New Entry (“Net CONE”), or (ii) their actual Unit Net CONE, is lower than the forecasted capacity prices

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<sup>14</sup> Mitigated Capacity Zones include “New York City and any Locality added to the definition of ‘Locality’ accepted by the Commission on or after March 31, 2013.” NYISO Market Services Tariff § 2.13 (2015), available at [http://www.nyiso.com/public/markets\\_operations/documents/tariff\\_viewer/index.jsp](http://www.nyiso.com/public/markets_operations/documents/tariff_viewer/index.jsp). On August 13, 2013, the Commission accepted the NYISO’s proposal to define a new capacity zone consisting of Load Zones G through J. N.Y. Indep. Sys. Operator, Inc., 144 FERC ¶61,126 (2013).

<sup>15</sup> N.Y. Indep. Sys. Operator, Inc., 122 FERC¶ 61,211 at ¶101, order on reh’g & compliance, 124 FERC ¶61,301 (2008) (“A large net buyer could acquire new capacity that is not needed in the market and whose costs exceed the market price. Such an investment would be inefficient, the net buyer would lose money on the capacity, and no rational seller would knowingly make such an investment. The mitigation of net buyers’ sales of capacity proposed by NYISO should help avoid this.”)

for the relevant mitigation study period.<sup>16</sup> If a resource is either deemed economic or meets the criteria for an exemption, it is eligible to bid into the capacity auction without an Offer Floor. Otherwise, it will be subjected to mitigation through bid restrictions imposed by the Offer Floor and may be precluded from clearing the capacity market and receiving ICAP capacity market revenues if the auction clearing price is below the resource's Offer Floor.<sup>17</sup>

The Commission has considered and granted several exemptions from the BSM rules.<sup>18</sup> In 2015, the Commission granted resource-specific exemptions from the BSM rules for certain renewable and self-supply resources, but found that an adequate justification was needed with regard to Special Case Resources ("SCRs") that address capacity needs by providing demand response services.<sup>19</sup> The NYSPSC, NYSEDA, and a coalition of other entities subsequently filed a complaint in 2016 that requested a blanket exemption from mitigation for

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<sup>16</sup> This is explained further in the attached Affidavit of Adam B. Evans, a Utility Analyst in the New York Department of Public Service's ("NYSDPS") Office of Markets and Innovation. Mr. Evans' Affidavit will be referenced herein as "Evans Aff." Complainants note that the NYISO has not presented any data or other evidence to demonstrate that Energy Storage Resources may be used to exercise buyer-side market power.

<sup>17</sup> As discussed below, the expectation for most projects subject to BSM measures is that the Offer Floor will exceed the auction clearing price and, therefore, the resource will not "clear" the market and be paid for capacity provided to support system reliability, which creates a powerful barrier to market entry and participation.

<sup>18</sup> The Commission granted an exemption from BSM, in 2015, for new entrants that satisfy a Competitive Entry Exemption. (Consol. Edison Co. of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc., 150 FERC ¶61,39, P45, order on reh'g, clarification, & compliance, 152 FERC ¶61,110 (2015).) This ruling is not discussed further herein given that it addresses matters other than consistency with State policy objectives.

<sup>19</sup> Docket No. EL15-64-000, 153 FERC ¶61,022, (issued October 9, 2015) ("BSM Exemption Order"), P105 (citing RE Exemption Order, P30). The NYISO's compliance filing that would implement the exemption for certain renewable resources remains pending before the Commission.

SCRs (the “SCR Complaint”).<sup>20</sup> In a 2017 order, the Commission found that the SCR Complaint adequately justified an exemption for SCRs to further legitimate State policy objectives and granted the relief sought in the SCR Complaint.<sup>21</sup> In so ruling, the Commission agreed that subjecting SCRs to the BSM rules is unjust, unreasonable, and unduly discriminatory and directed the NYISO to exempt SCRs from potential mitigation. The Commission explained that this determination “is consistent with the Commission’s minimum offer price rule policy; specifically, that buyer-side market power mitigation rules are intended to address “market power exhibited by certain entities seeking to lower capacity market prices.”<sup>22</sup> The Commission also found that payments received from dual participation in retail-level demand response programs do not give these resources the incentive or ability to exercise buyer-side market power, and SCRs are not effective tools of price suppression.<sup>23</sup> Wholesale- and retail-level demand response programs, the Commission explained, “complement each other, ...serve different purposes, provide different benefits, and compensate distinctly different services.”<sup>24</sup>

Significantly, the Commission reconciled its approval of a blanket exemption from mitigation with the basis for applying the BSM rules to other resources:

We believe that a blanket exemption from NYISO’s buyer-side market power mitigation rules for SCRs ... allows appropriate flexibility for, and avoids the creation of unnecessary barriers to, the participation of demand response in the wholesale markets. Specifically, the Commission’s concern regarding buyer-side market power stems from scenarios in which ‘buyers or their

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<sup>20</sup> Docket No. EL16-92-000, New York State Public Service Commission et al. v. New York Independent System Operator, Inc., Complaint (filed June 24, 2016).

<sup>21</sup> New York State Public Service Commission et al. v. New York Independent System Operator, Inc., 158 FERC ¶61,137 (issued February 3, 2017) (SCR Order).

<sup>22</sup> Id., P30.

<sup>23</sup> Id., P31.

<sup>24</sup> Id., P33.

agents can exercise market power to reduce capacity market prices below competitive levels by paying out-of-market subsidies to support new capacity, and then offer that capacity into the organized capacity market at prices below costs to drive down the market price.’ With that concern in mind, the Commission seeks to ensure that buyer-side market power mitigation rules strike a careful balance between over-mitigating and under-mitigating new capacity resources. As outlined above, we find that NYISO’s existing buyer-side market power mitigation rules over-mitigate SCRs that have limited or no incentive and ability to artificially suppress ICAP market prices. Therefore, NYISO’s existing buyer-side mitigation rules impose an unnecessary barrier to the participation of demand response in NYISO’s wholesale markets, contrary to Commission policy.<sup>25</sup>

**B. The Commission’s Policy Directives Support Market Rules That Enable Energy Storage Resources To Participate In Wholesale Markets To The Fullest Extent Of Their Technical Ability**

In November 2016, FERC issued a Notice of Proposed Rulemaking designed to promote the full participation of Electric Storage Resources in RTO and ISO markets.<sup>26</sup> The ESR NOPR detailed the benefits of full, unimpeded participation of Electric Storage Resources in the markets, noting that: “[e]lectric storage resources’ ability to charge and discharge electricity provides these resources with significant operational flexibility, and they can be designed to provide a variety of grid services, including bulk energy services (e.g., capacity and energy) and ancillary services (e.g., regulation and reserves).”<sup>27</sup> Moreover, FERC noted that such resources “tend to be capable of faster start-up times and higher ramp rates than traditional synchronous generators and are therefore able to provide ramping, spinning, and regulating

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<sup>25</sup> SCR Order, P34 (citations omitted).

<sup>26</sup> Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators, 157 FERC ¶61,121 (issued November 17, 2016) (“ESR NOPR”).

<sup>27</sup> 157 FERC ¶61,121, P10.

reserve services without already being online and running.”<sup>28</sup> Thus, the Commission reasoned that the unimpeded participation of Electric Storage Resources in the markets:

could improve market efficiency by allowing the RTO/ISO to dispatch these resources in accordance with their most economically efficient use (i.e., as supply when the market clearing price for energy is higher than their offer and as demand when the market clearing price is lower than their bid). Moreover, allowing electric storage resources to participate in the organized wholesale electric markets as dispatchable load would allow these resources, under certain circumstances, to set the price in these markets, better reflecting the value of the marginal resource and ensuring that electric storage resources are dispatched in accordance with the highest value service that they are capable of providing during a set market interval.<sup>29</sup>

After considering the comments filed in response to the ESR NOPR, FERC issued a final rule (i.e., Order No. 841) on February 15, 2018.<sup>30</sup> Order No. 841 ordered all RTOs and ISOs to file tariff amendments creating a market participation model that accommodates the full participation of Electric Storage Resources in their markets within 270 days, with such amendments to take effect within 365 days of submission.<sup>31</sup>

On December 3, 2018, the NYISO filed proposed amendments to its Services Tariff and OATT (the “Tariff Filing”) that purported to comply with the Commission directives set forth in Order No. 841. In its Tariff Filing, the NYISO proposed market rules for Energy Storage Resources to participate in the NYISO-administered energy, ancillary services, and ICAP markets. The Tariff Filing included a proposal to subject all Energy Storage Resources to review and potential mitigation under the BSM measures. The NYISO also proposed to

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<sup>28</sup> Id., P50.

<sup>29</sup> ESR NOPR, P72.

<sup>30</sup> 162 FERC ¶61,127.

<sup>31</sup> Order No. 841, P348.

eliminate an existing BSM exemption for resources that are under 2 MW, regardless of technology.

On February 7, 2019, the NYSPSC and NYSERDA (the “NY State Entities”) filed a Protest opposing the NYISO’s proposals because they contravened the express directives of Order No. 841 by creating multiple barriers to Energy Storage Resource market entry and participation.<sup>32</sup> In relevant part, the NY State Entities opposed the Tariff Filing because it included proposals to subject all Energy Storage Resources to potential mitigation under the BSM measures.

On April 1, 2019, the Commission sent the NYISO a list of information requests to clarify the NYISO’s Tariff Filing and assist the Commission in evaluating whether it complies with the requirements of Order No. 841. The NYISO submitted responsive information on May 1, 2019.<sup>33</sup>

**C. New York State Law Mandates A Statewide Energy Storage Resource Deployment Policy To Achieve Multiple State Policy Objectives**

The State of New York has acted pursuant to its sovereign legislative authority and the authority reserved to it and other states under the FPA by enacting laws that mandate the creation of an energy storage deployment target for 2030, and a deployment policy to support that goal. In 2017, the New York State Public Service Law (“NYSPSL”) was amended to recognize the State’s interest in ensuring adequate amounts of Energy Storage Resources on a

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<sup>32</sup> Docket No. ER19-467-000, New York Independent System Operator, Inc., Protest and Interventions of the NYSPSC and NYSERDA (filed February 7, 2019). On February 22, 2019, the NY State Entities filed a Motion for Leave to Answer and Answer to address arguments that Independent Power Producers of New York (“IPPNY”) submitted which supported the proposal that all Energy Storage Resources be subject to potential mitigation.

<sup>33</sup> The Complainants do not take a position at this time on the adequacy of the NYISO’s response to the Commission’s information requests.

statewide basis.<sup>34</sup> In particular, NYSPSL §74 directed the NYSPSC to establish a statewide energy storage goal for 2030 and a deployment policy to support that goal, taking into consideration the following objectives:

- (a) avoided or deferred costs associated with transmission, distribution, and/or generation capacity;
- (b) minimization of peak load in constrained areas;
- (c) systems that are connected to customer facilities and systems that are directly connected to transmission and distribution facilities;
- (d) cost-effectiveness;
- (e) the integration of variable-output energy resources;
- (f) reducing emissions of greenhouse gases;
- (g) reducing demand for peak electrical generation;
- (h) improving the reliable operation of the electrical transmission or distribution systems; and
- (i) such other issues deemed appropriate by the [NYSPSC].<sup>35</sup>

In December 2018, the NYSPSC adopted a statewide energy storage goal and deployment policy, in accordance with NYSPSL §74, including installation of “up to 3,000 MW of qualified energy storage systems by 2030, with an interim objective of deploying 1,500 MW of energy storage systems by 2025.”<sup>36</sup> The Storage Order also adopted “deployment policies and actions to help eliminate barriers inhibiting deployment and support the State’s achievement of

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<sup>34</sup> NYSPSL §74 was enacted by Chapter 415 of the Laws of 2017 on November 29, 2017, and later amended by Chapters 324 and 417 of the Laws of 2018, both effective as of November 5, 2018.

<sup>35</sup> NYSPSL §74 directed the NYSPSC to consult with NYSERDA, NYISO, and the Long Island Power Authority in establishing an energy storage goal for 2030, and the deployment policy necessary to support this goal.

<sup>36</sup> NYSPSC Case 18-E-0130, Energy Storage Deployment Program, Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018) (Storage Order), p. 4.

that goal.”<sup>37</sup> In so ruling, the NYSPSC concluded that the policies and actions it adopted “will help accelerate cost reductions, reduce barriers to the monetization of energy storage services that would otherwise go uncompensated, and improve project economics by sending appropriate price signals to the marketplace.”<sup>38</sup> Energy Storage Resources were thus recognized for their ability to reduce reliance on the “oldest and dirtiest peak generating plants, many of which lay mostly idle and are approaching the end of their useful lives,” for meeting peak power needs.<sup>39</sup> They also were recognized for their ability to smooth and time-shift renewable generation and reduce potential curtailments of those resources, and they are expected to yield over \$3 billion in gross lifetime benefits to New York’s utility customers, create approximately 30,000 jobs in New York, reduce greenhouse gas (“GHG”) emissions, and improve public health by reducing the emissions of criteria air pollutants such as nitrogen oxides (“NO<sub>x</sub>”), sulfur oxides, and particulate matter.<sup>40</sup> The NYSPSC also noted that energy storage technologies will play an increasingly important role in its Reforming the Energy Vision (“REV”) initiatives, which focus on transforming the State’s electricity system into one that is “cleaner and smarter, as well as more resilient and affordable.”<sup>41</sup>

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<sup>37</sup> Storage Order, pp. 4-5. The Storage Order relied on an Energy Storage Roadmap (“Roadmap”) developed by the NYSDPS, NYSERDA, NYISO, and numerous stakeholders to comply with NYSPSL §74. The Roadmap focused on near-term actions that would allow New York to deploy storage in ways that are viable, replicable, and scalable by focusing on those deployments that provide the most value to the system while minimizing overall costs to customers.

<sup>38</sup> Id., p. 12.

<sup>39</sup> Id., pp. 1-2.

<sup>40</sup> Id., p. 3.

<sup>41</sup> Id., p. 2.

The Storage Order announced initiatives that will achieve two key policy objectives regarding the composition of the State’s generation supply portfolio: (i) providing incentives that accelerate the cost declines necessary to catalyze Energy Storage Resource deployment; and (ii) providing an opportunity to gain operational experience with these resources. Specifically, the State’s investor-owned utilities were directed to competitively procure dispatch rights for bulk-level Energy Storage Resources in their service territories (i.e., a Utility Dispatch Rights initiative), and to maximize the benefits these resources provide for reliability, load relief, and reduced environmental emissions by reducing the use of fossil-fueled peaking units. This initiative will enable the utilities to gain valuable experience in the dispatch and operation of Energy Storage Resources and to maximize the value, efficiency, and reliability benefits these resources can provide as they gain a foothold in the market and their deployment increases.

Cost impacts and price signals also are foundational concerns addressed in the Storage Order. Increasing the penetration of distributed energy resources (“DERs”) on the distribution system requires improving the accuracy of how distribution delivery rates reflect utility costs to serve load.<sup>42</sup> Price signals will better reflect the system-wide and locational value that an Energy Storage Resource may provide and improved delivery rates will promote development where needed.<sup>43</sup> To this end, the NYSPSC is overseeing utility delivery rate modifications that are needed to reflect policy-driven changes in the sources and methods used to produce and deliver energy to customers.<sup>44</sup> Utilities will be assigned Energy Storage Resource-

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<sup>42</sup> Storage Order, p. 14.

<sup>43</sup> Id., pp. 14-18.

<sup>44</sup> Id., p. 14.

related targets and financial incentives to achieve them, but potential earnings will be tied to and depend on the utility's ability to realize savings for its customers.<sup>45</sup>

The NYSPSC concluded that Energy Storage Resources offer “numerous benefits and may serve many critical roles in achieving the State’s clean energy goals,” as well as other State policy objectives.<sup>46</sup> As intermittent renewable power resources provide a larger share of New York’s electricity needs, Energy Storage Resources will play an integral part in reaching New York State’s clean energy requirements by serving in many roles that include: (i) addressing the variability and intermittency of renewable resources;<sup>47</sup> (ii) providing relief to constrained areas on the transmission system, including the ability to decrease renewable curtailments; and (iii) shaving system peak load. Energy Storage Resources also will contribute to policy goals that include targets arising from the REV proceeding,<sup>48</sup> as well as the following goals specified in the current State Energy Plan: (a) increasing to 50 percent, by 2030, the amount of electricity consumed in New York that is generated from renewable energy sources (the “50 x 30 Goal”);<sup>49</sup> (b) reducing GHG emissions 40 percent from 1990 levels; and (c) increasing energy efficiency by 600 trillion BTU.<sup>50</sup>

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<sup>45</sup> Storage Order, p. 40.

<sup>46</sup> Id., p. 1.

<sup>47</sup> Energy Storage Resources may be co-located with renewable energy resources or sited remotely from those facilities.

<sup>48</sup> Storage Order, p. 2 (stating that Energy Storage Resources “will play an increasingly important role in this REV transformation”).

<sup>49</sup> Id., p. 1 (citing Case 15-E-0302, Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016) (“CES Framework Order”).)

<sup>50</sup> Id., p. 4 (citing State Energy Plan, p. 3). The State has committed to a more ambitious, economy-wide GHG emissions reduction target of 80 percent by 2050. (Id. (citing Executive Order No. 24 (2009).)

With respect to the 50 x 30 Goal, the NYSPSC explained in the Storage Order that “[a]s intermittent renewable power sources like wind and solar provide a larger share of New York’s electricity needs, energy storage will be used to smooth and time-shift renewable generation output and reduce the need to curtail these resources at certain off-peak times.”<sup>51</sup> More specifically, Energy Storage Resources “will be a critical component in enabling renewables to provide the needed amount of penetration to reduce GHG emissions sufficiently to satisfy the [Clean Energy Standard] and State Energy Plan targets.”<sup>52</sup>

Importantly, the Storage Order found that an additional utility scale storage procurement is necessary to provide the flexibility for bulk-level storage applications to provide maximum benefits to ratepayers. Accordingly, the electric Investor-Owned Utilities were directed to implement the Utility Dispatch Rights initiative by competitively procuring dispatch rights for bulk-level energy storage systems sited within their service territory to provide benefits based on local needs that include: (1) local reliability services; (2) local load relief; (3) local environmental benefits derived by reducing the use of peaking units for contingency purposes; and, (4) wholesale services (e.g., capacity, spinning reserves, frequency regulation). As the NYSPSC indicated, “[t]his requirement will give utility grid operators and system planners real world experience using storage to meet system needs at scale.”<sup>53</sup> Furthermore, NYSERDA was instructed to design the bulk system component of its market acceleration incentive to work in coordination with these utility competitive procurements. This market acceleration bridge

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<sup>51</sup> Storage Order, pp. 2-3.

<sup>52</sup> Id., p. 4.

<sup>53</sup> Id., p. 53.

incentive may compensate for such things as the benefit of accelerating the decline in storage costs, CO<sub>2</sub> savings (peak/off-peak arbitrage), and local emissions benefits.

In addition, Energy Storage Resources and other clean energy technologies are identified in the current State Energy Plan as resources that are important to achieving the goals and targets of REV and the Clean Energy Standard while creating jobs.<sup>54</sup> New York State Energy Law § 6-104(5)(b) states that every energy-related decision or action made by any State entity, including Complainants, “shall be reasonably consistent” with the most recent State Energy Plan or its most recent update.<sup>55</sup> The current State Energy Plan identifies an initiative to reduce barriers to the deployment of Energy Storage Resources and other DERs, and notes that the developing Roadmap will identify “the electric system needs that energy storage is uniquely suited to address under various scenarios approaching 50 percent renewable generation and 40 percent GHG reduction by 2030, ranges of storage that can address these needs with net benefits to ratepayers, and potential programmatic and policy interventions that could help to build this future state.”<sup>56</sup>

Moreover, on July 18, 2019, Governor Cuomo signed into law the New York State Climate Leadership and Community Protection Act (CLCPA), L. 2019, Ch. 106.<sup>57</sup> This law establishes a Climate Action Council to develop a plan to achieve net zero GHG emissions through statewide actions that target all sectors of the State economy. With respect to the

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<sup>54</sup> The current State Energy Plan is a biennial update to the 2015 State Energy Plan, which is available at <https://energyplan.ny.gov/Plans/2015-Update> (the “State Energy Plan Update”).

<sup>55</sup> State Energy Plan Update, p. 87.

<sup>56</sup> *Id.*, p. 85.

<sup>57</sup> Climate Leadership and Community Protection Act, A.8429 (Englebright)/S.6599 (Kaminsky) (Governor’s Program Bill No. 7), available at <https://legislation.nysenate.gov/pdf/bills/2019/S6599>.

electricity sector, the CLCPA also requires a program to, among other things, enable achievement of the following targets: (a) 3,000 MW of Energy Storage Resources installed statewide by 2030; (b) renewable energy systems must account for at least 70% of statewide electric generation by 2030; and (c) the statewide electric system will result in zero emissions by 2040.

Furthermore, achieving the State's Energy Storage Resource deployment target is also needed to support broader environmental policy objectives. In accordance with its authority under the State Environmental Conservation Law, the New York State Department of Environmental Conservation ("NYSDEC") is proposing to implement stricter NO<sub>x</sub> emissions limits that would be applicable to simple cycle and regenerative combustion turbines ("SCCTs").<sup>58</sup> The purpose of the proposal "is to lower allowable NO<sub>x</sub> emissions ... during the ozone season ... to [help] address Clean Air Act (CAA) requirements, ozone nonattainment and protect the health of New York State residents."<sup>59</sup> The United States Environmental Protection Agency designated the New York Metropolitan Area as a "marginal" nonattainment area for currently-applicable ozone concentration standards, and has proposed to reclassify this region as a "serious" nonattainment area.<sup>60</sup> Ozone exposure can cause adverse public health impacts and is linked to asthma, acute bronchitis, nonfatal heart attacks, missed work and school, hospital admissions and emergency room visits and, potentially, death from the effects of ozone.<sup>61</sup>

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<sup>58</sup> See Proposed Part 227-3 Regulatory Impact Statement Summary, [available at https://www.dec.ny.gov/regulations/116180.html](https://www.dec.ny.gov/regulations/116180.html) ("NO<sub>x</sub> Emissions Proposal").

<sup>59</sup> Id., p. 1.

<sup>60</sup> Id., pp. 1, 3.

<sup>61</sup> Id., p. 4.

Restricting the emission of ozone precursors such as NO<sub>x</sub> helps to lower ozone concentration standards.

The NO<sub>x</sub> Emissions Proposal explains that SSCTs typically run “less than 5 percent of the time” and only during periods of peak electricity demand during the summer at times that also present “a strong likelihood of high ozone readings.”<sup>62</sup> The peaking units tend to be comparatively older with high NO<sub>x</sub> emissions rates, and the facilities are difficult to retrofit with after-market emissions controls.<sup>63</sup> NYSDEC reports that, across the 99 high-ozone days that occurred between 2011 and 2017, SSCTs installed before 1986 accounted for approximately 36 percent of electricity generated by all SSCTs but approximately 96 percent of all NO<sub>x</sub> emissions from these sources.<sup>64</sup> Retrofits needed to comply with the proposed emissions standard are likely to be uneconomic for older SSCTs.<sup>65</sup> NYSDEC anticipates that these facilities will be replaced or retired.<sup>66</sup> State policy initiatives including the Energy Storage Resource deployment target, 50 x 30 Goal, REV, and energy efficiency are expected to limit demand for the older SSCTs, thus reducing the need to replace retired units.<sup>67</sup> Achieving the Energy Storage Resource deployment target, therefore, will provide critical support for State efforts to comply with certain Clean Air Act emissions standards and secure important public health benefits while maintaining reliability.

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<sup>62</sup> NO<sub>x</sub> Emissions Proposal, p. 1.

<sup>63</sup> Id.

<sup>64</sup> Id., p. 2.

<sup>65</sup> Id., p. 3.

<sup>66</sup> Id.

<sup>67</sup> Id., p. 3 and n.12.

## **V. COMMUNICATIONS WITH THE NYISO**

In advance of filing the instant Complaint, the Complainants contacted the NYISO to explain the BSM exemptions proposed herein, and to obtain the NYISO's comments. Complainants discussed the Complaint with the NYISO and considered its feedback in the preparation of this filing.

## **VI. DISCUSSION**

This Complaint is submitted while the NYISO's Order No. 841 Tariff Filing remains pending before the Commission to ensure that sufficient justification is presented for the Commission to grant an exemption from BSM measures before mitigation determinations are issued in the NYISO's next Class Year interconnection process, which will commence on or about August 1, 2019.

### **A. Summary of Supporting Affidavit**

Attached hereto as Exhibit A is the supporting affidavit of Adam B. Evans. Mr. Evans is an analyst employed by the NYSDPS with duties that include monitoring and evaluating the NYISO ICAP market design and operations, acting as NYSDPS Staff lead on NYISO Energy Storage Resource issues, and advising the NYSPSC. In his Affidavit, Mr. Evans: (a) summarizes State policies regarding Energy Storage Resources; (b) briefly describes the New York ICAP markets and the NYISO's BSM rules; (c) describes how the BSM rules are implemented, focusing on their application to Energy Storage Resources participating in the NYISO-administered ICAP market; and (d) explains why the BSM rules are not just and reasonable as applied to Energy Storage Resources, and how this improper application of the BSM rules treats Energy Storage Resources in an unfair manner that impedes their participation in the NYISO ICAP market, thereby obstructing legitimate policy objectives of New York State.

## **B. Requested Relief**

The Complaint requests that the Commission make the following findings:

1. The existing NYISO Market Services Tariff provisions subjecting Energy Storage Resources to BSM measures are unjust and unreasonable, and unduly discriminatory;
2. The full and unrestricted participation of Energy Storage resources at the bulk system level is necessary to further New York's legitimate Statewide energy storage goal and deployment policy, as implemented under State law and authority reserved under the FPA;
3. The Commission's directives in Order No. 841 support the elimination of barriers to market entry for Energy Storage Resources, including the BSM measures;
4. Energy Storage Resources should be granted a blanket exemption from BSM measures or, in the alternative, an annual exemption of 300 MW with unused exempt capacity carried forward to subsequent annual periods;
5. Fast Track processing of this Complaint is necessary to effectuate the requested changes prior to mitigation determinations for resources participating in the NYISO's CY19 interconnection process, which is anticipated to commence in August 2019; and,
6. The refund effective date, as required under FPA §206(b), should be established as of the filing date of this Complaint.

## **C. Argument**

The Commission has recognized the need for exemptions from BSM measures where needed to further specific State policy objectives. In order to consider whether an exemption is warranted, the Commission has indicated that the NYPSC should file a complaint in accordance with FPA §206 to provide sufficient justification. Specifically, the Commission has indicated that:

[n]evertheless, the Commission recognizes that the NYPSC may conclude that the procurement of new capacity, even at times when the market-clearing price indicates entry of new capacity is not needed, will further specific legitimate policy goals, such as renewable portfolio standards. We agree that it may be appropriate to exempt such new resources from the price floor proposed by NYISO, but the NYPSC has not provided sufficient specificity to

allow us to mandate an appropriately narrow exemption at this time. The NYPSC may make a filing under section 206 of the FPA to justify a mitigation exemption for entry of new capacity that is required by a state-mandated requirement that furthers a specific legitimate state objective. At that time, we will evaluate the merits of the proposed exemption, but at this time, the NYPSC has provided inadequate justification either for a general exemption or for a finding that the appropriate mechanism for supporting its goals is, in fact, an exemption from the price floor for new capacity.<sup>68</sup>

As discussed within the following sections, subjecting Energy Storage Resources to the NYISO's BSM rules is unjust, unreasonable, and unduly discriminatory because such rules interfere and conflict with the State's authority and legitimate policy objectives, which include the integration of intermittent renewable energy resources, reduction of environmental emissions, improving the reliability and resilience of the electric system, and increasing fuel diversity, among other matters. Moreover, mitigation of Energy Storage Resources is inconsistent with Order No. 841, which requires the NYISO to implement market rules that enable Energy Storage Resources to participate in the capacity markets to the fullest extent of their technical capability. The BSM measures represent a significant barrier to market entry and participation. There is also no rational basis to mitigate Energy Storage Resources in the absence of compelling evidence that such resources are being used to suppress capacity prices. Accordingly, the Commission should grant a mitigation exemption for Energy Storage Resources, consistent with the relief sought in this Complaint.

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<sup>68</sup> New York Independent System Operator, Inc., 124 FERC ¶31,301, (issued September 30, 2008), P38.

1. **The Commission Should Determine That The NYISO's Existing Market Services Provisions Applying Tariff BSM Measures To Energy Storage Resources Is Unjust And Unreasonable, And Unduly Discriminatory**

The Commission originally directed the NYISO to utilize BSM measures to address the risk that a large net buyer of capacity might improperly exercise monopsony market power by constructing an uneconomic capacity resource to realize a net savings on capacity purchases necessary to serve its customers. Since then, the Commission has abandoned this focused approach designed to address specific conduct in favor of a blunt instrument that assumes the intent of every State policy providing financial assistance to a resources is to suppress capacity market prices. This disparate treatment of resources based on their connection to State policy objectives is unduly discriminatory.

The Services Tariff currently includes physical withholding rules which provide that sellers' market behavior will not be considered anti-competitive unless it increases capacity prices by at least \$0.50/kilowatt-month.<sup>69</sup> There is no comparable threshold to trigger the BSM rules. Instead, under the existing tariff, the NYISO would deem a downward price impact of only a penny to be anti-competitive and would mitigate the resource by imposing an Offer Floor that the resource would be unlikely to escape. This lopsided response to price changes shields incumbents at the expense of new technologies participating in the ICAP Market, including resources critical to achieving the State's policy goals, such as Energy Storage Resources.

New York is harmed by this overbroad application of BSM measures because the market rules interfere with its pursuit of legitimate State objectives. The State pursues a diversity of energy and environmental policy objectives that – depending on the timing of their

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<sup>69</sup> Services Tariff §23.4.5.6.3.

implementation – can result in short-term capacity price decreases *or* increases.<sup>70</sup> These market impacts are the incidental effects of regulatory actions designed to achieve the State’s legitimate policy objectives. Further, State policy does not operate in a vacuum and it is one of many factors that may increase or decrease capacity prices. It is inappropriate to apply overbroad and long-lasting buyer-side mitigation measures to Energy Storage Resources in the ever-changing multi-variable market dynamic.

Further, imposing mitigation measures on capacity resources simply because they are supported by State policy initiatives when policy actions potentially may elicit an incidental and temporary increase or decrease in capacity prices inappropriately interferes with legitimate State policy objectives. The NYISO has not attempted to block State policies that may reduce supply and thus temporarily raise capacity prices, and the NYISO should not take such action.<sup>71</sup> Instead, the NYISO has rigorously analyzed the reliability implications and potential costs of State policies and has provided that information to the State and to market participants.<sup>72</sup> This approach ensures reliability, helps policymakers make prudent decisions, and accommodates policy objectives that New York State is authorized to select and implement.<sup>73</sup> In these cases, the NYISO has respected the role of the States in setting energy and environmental policies. It is an approach that should be followed regardless of how State policies impact the markets.

In the case of Energy Storage Resources, the NYISO has appropriately analyzed reliability implications and provided information to the State and market participants through its Working Groups. The NYISO, however, has gone beyond that limited role to impose BSM

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<sup>70</sup> Evans Aff., ¶20-21.

<sup>71</sup> Id., ¶22.

<sup>72</sup> Id.

<sup>73</sup> Id.

measures that overrule State policies because they could add to capacity supply and temporarily reduce capacity prices.<sup>74</sup> Thus, in the case of Energy Storage Resources, the overbroad and unduly discriminatory imposition of BSM measures undermines and interferes with the State's authority in setting energy and environmental policies, including resource adequacy matters reserved to the states under the FPA.

It should be noted that the slope of the ICAP Demand Curves in Mitigated Capacity Zones is steep.<sup>75</sup> This increases the likelihood that new market participants trigger only a short-term change in wholesale capacity prices and a quick market response via the retirement of a comparable quantity of capacity resources, which will push prices back up.<sup>76</sup> It is for this reason that State policy programs are anticipated to elicit only short-lived price fluctuations and would not serve the purpose of buyer-side market power.<sup>77</sup> The potential impact of New York's Energy Storage Resource deployment goal will also be tempered by the rate and distribution of Energy Storage Resource deployment throughout the State.

Other policies and market forces occurring in parallel with Energy Storage Resource deployments will cause some capacity resources to exit the market and others to enter it. The NYDEC's NO<sub>x</sub> Emissions Proposal alone is forecast to impact up to 3,500 MW of existing resources that are approaching the end of their useful lives, operate during less than 5 percent of the year, and emit significant quantities of criteria pollutants that impose adverse public health impacts when they do run.<sup>78</sup> Approximately 70 percent of the New York City

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<sup>74</sup> Evans Aff., ¶22.

<sup>75</sup> Id.

<sup>76</sup> Id.

<sup>77</sup> Id., ¶17.

<sup>78</sup> NO<sub>x</sub> Emissions Proposal, p. 3.

generation fleet will be 50 years old or older by 2021,<sup>79</sup> approaching the end of their useful lives, and many are likely to exit the market before 2030. The capacity market does not explicitly incorporate State policy goals and, absent State action, the likely outcome of the capacity markets would simply be the replacement of old fossil-fueled units with new fossil-fueled units, which would be contrary to the State's policy to reduce reliance on fossil fuels and reduce emissions of carbon, NO<sub>x</sub>, and other pollutants.

The Storage Order addresses this market limitation by creating a regulatory framework that relies on market-based competitive procurements and incentives that compensate for benefits not valued in the wholesale market and which decline as Energy Storage Resource market penetration increases. The markets will respond accordingly whether or not the net result of State policy initiatives and market forces increases or decreases capacity prices. This responsiveness is one of the primary benefits that the markets provide. Selectively insulating the wholesale capacity market from the effect of policies that might yield short-term price decreases while ignoring the effect of policies that might yield the opposite result distorts the market by not allowing it to respond as designed.

Moreover, there is no evidence to conclude that State policy seeks to suppress ICAP prices, or that Energy Storage Resources are being used to do so. Accordingly, there is no rational basis to apply BSM measures to Energy Storage Resources. The Commission should therefore find that it is unjust and unreasonable to penalize Energy Storage Resources that are being deployed to further legitimate State policy objectives, which are discussed in the following section.

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<sup>79</sup> 2018 Load & Capacity Data, NYISO, available at <https://www.nyiso.com/documents/20142/2226333/2018-Load-Capacity-Data-Report-Gold-Book.pdf/7014d670-2896-e729-0992-be44eb935cc2>.

**2. The Full and Unrestricted Participation Of Energy Storage Resources At The Bulk System Level Is Necessary To Further Legitimate State Policy Objectives, As Implemented Under State Law And Authority Reserved Under the FPA**

The FPA, “like all collaborative federalism statutes, envisions a federal-state relationship marked by interdependence.”<sup>80</sup> Generation is a discrete local activity,<sup>81</sup> and accordingly reserves authority to the states to regulate “facilities used for the generation of electric energy.”<sup>82</sup> While the Commission regulates interstate transmission and wholesale sales of electricity, states retain authority over energy production,<sup>83</sup> including “questions of need, reliability, cost, and other related state concerns.”<sup>84</sup> For example, states’ regulatory authority over generation facilities extends to the environmental impacts associated with the operation of those facilities.<sup>85</sup>

The Commission does not consider environmental impacts associated with the transmission and wholesale sales of electric energy that it regulates.<sup>86</sup> Wholesale auctions regulated by the Commission are explicitly neutral as to “environmental or technological goals.”<sup>87</sup> States, in contrast, regulate electricity generation with consideration of its environmental consequences. States may mitigate these consequences by directing the

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<sup>80</sup> Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1300 (2016) (Sotomayor, J., concurring) (Hughes).

<sup>81</sup> Utah Power & Light Co. v. Pfof, 286 U.S. 165, 181 (1932) (generation is “purely intrastate”).

<sup>82</sup> 16 U.S.C. § 824(b)(1).

<sup>83</sup> Hughes, 1299-1300 (Sotomayor, J., concurring).

<sup>84</sup> Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm’n, 461 U.S. 190, 2015 (1983).

<sup>85</sup> Californians for Renewable Energy, Inc. v. CAISO, 117 FERC ¶ 61,072, P 10 (2006).

<sup>86</sup> Grand Council of the Crees v. FERC, 198 F.3d 950, 957 (D.C. Cir. 2000).

<sup>87</sup> ISO New England Inc., 138 FERC ¶ 61,027, P 91 (2012).

jurisdictional utilities’ planning and resource decisions.<sup>88</sup> “[R]esource decisions are the prerogative of states commissions,” which “may wish to diversify their generation mix to meet environmental goals in a variety of ways.”<sup>89</sup>

The Commission has acknowledged that wholesale markets have “no feature to explicitly recognize ... environmental or technological goals.”<sup>90</sup> All megawatt hours are the same, regardless of the fuel used to generate them, and are sold in the wholesale markets as undifferentiated commodity products.<sup>91</sup> The Commission has not dictated that auction price signals should be the sole determinants of generator entry and exit, but rather it has acknowledged that states may exercise their regulatory authority over generation facilities and retail sales to achieve environmental objectives.<sup>92</sup> Thus, consistent with the allocation of regulatory authority embedded in the FPA, state policies by design will influence the market’s supply portfolios. Wholesale markets are designed to be workably competitive within these parameters.

Energy Storage Resources are a critical component of the State’s ability to meet various policy objectives including the 50 x 30 Goal, as outlined in the Background section

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<sup>88</sup> New York v. FERC, 535 U.S. 1, 24 (2002) (states traditionally regulate “integrated resource planning” and “utility generation and resource portfolios”).

<sup>89</sup> S. Cal. Edison Co., 70 FERC ¶ 61,215, at 61,676.

<sup>90</sup> ISO New England Inc., 138 FERC ¶61,0927, P91.

<sup>91</sup> Id.

<sup>92</sup> ISO New England Inc., 155 FERC ¶ 61,023, P23 (2016) (granting a mitigation exemption for certain renewable resources favored by state policy because the Commission balances multiple concerns, including “accommodate[ing] the ability of states to pursue their policy goals”); PJM Interconnection, L.L.C., 135 FERC ¶ 61,022, P143 (acknowledging state rights “to pursue legitimate policy interests”), on reh’g, 137 FERC ¶ 61,145, P3 (2011) (“[S]tates and localities have their own policies and objectives,” which may not be reflected in the wholesale market design and with which the Commission intends not to “unreasonably interfere”), aff’d sub nom. N.J. Bd. Of Pub. Utils. v. FERC, 744 F.3d 74 (3d Cir. 2014).

above. New York's policy support for Energy Storage Resource deployment to further State energy and environmental objectives might have an incidental (and unintended) impact on the wholesale market but, if there is such an impact, it would be permissible under the FPA. The Supreme Court recognized in Hughes that the wholesale and retail markets are inextricably linked; consequently, Commission regulation of the wholesale markets can have an incidental impact on the retail market, and state commission regulation of generation and retail markets can have an incidental impact on the wholesale market.<sup>93</sup> This is consistent with the cooperative federalism design of the FPA and judicial precedent recognizing this dual regulatory system.<sup>94</sup> The Supreme Court has concluded that it would be "strange" to find that states only have the authority to regulate electric energy production if such action has no effect on subsequent sales.<sup>95</sup> Accordingly, federal authority should not be exercised in a manner that interferes with the statutory authority reserved to states under the FPA.<sup>96</sup>

Subjecting Energy Storage Resources to BSM measures would counteract State decisions and interfere with State policy objectives regarding the mix of generation resources that should be used to provide a reliable source of energy while satisfying energy and environmental policy objectives that serve the public health, safety, and welfare of state residents. For example, the programs described in the Storage Order include incentive structures that were based on a forecast of all revenues that an Energy Storage Resource may earn, including those from the ICAP market. The Bridge Incentive for Energy Storage Resources may

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<sup>93</sup> Hughes, 136 S. Ct. 1290-91.

<sup>94</sup> Nw. Cent. Pipeline Corp. v. State Corp. Comm'n, 489 U.S. 493, 513 (1989) ("Northwest Central").

<sup>95</sup> Northwest Central, 489 U.S. 512-13; see also id. at 514 (stating that Congress drew "a brighter line ... more favorable to the States' retention of their traditional powers").

<sup>96</sup> Id., 489 U.S. 513.

compensate for a variety of benefits not addressed by the wholesale markets, including the benefit of reduced carbon dioxide emissions, reduced curtailment of renewable resources, and system resilience.<sup>97</sup>

Excluding Energy Storage Resources from the wholesale capacity market adversely affects project economics and will make it exceedingly difficult for the State to achieve a challenging policy goal.<sup>98</sup> Mitigated resources that commence operations notwithstanding this barrier to entry will contribute to system reliability but will not be compensated for this service, therefore resulting in unjust and unreasonable rates for these resources.<sup>99</sup>

Federal and State interests should instead be balanced in a manner that enables the State to regulate generation and environmental objectives and identify resources needed to meet the State's resource adequacy needs, as reserved to the states under the FPA and confirmed by judicial precedent, while the Commission ensures that prices remain just and reasonable for those and any other ICAP resources necessary to meet the State's Installed Reserve Margin.<sup>100</sup> New

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<sup>97</sup> Storage Order, p. 67.

<sup>98</sup> Evans Aff., ¶7, 17-18.

<sup>99</sup> As the Commission notes in the ESR NOPR: "Removing these barriers will enhance the competitiveness, and in turn the efficiency, of organized wholesale electric markets and thereby help to ensure just and reasonable and not unduly discriminatory or preferential rates for wholesale electric services." (ESR NOPR, P14.)

<sup>100</sup> Importantly, the market rules appropriate for implementation in the single-state NYISO control area may differ from those implemented in other control areas. (See, e.g., RE Exemption Order, P78 (noting that the Commission "has recognized that market design and rules need not be identical among the regions and may instead reflect the unique characteristics of the markets as necessary," and what may be appropriate for one control area "is not necessarily appropriate for NYISO") (citation omitted)). Harmonizing Federal and State policy objectives within a single-state control area does not present the same issues as a multi-state control area where the interstate impacts of individual state policies may be taken into account.

York cannot achieve its Energy Storage Resource deployment and policy goals without this balancing of interests. Overbroad application of the BSM measures to counteract State support for Energy Storage Resources “creates a powerful barrier to market entry because project owners know that they will not be compensated for the value their resource provides to the system.”<sup>101</sup> This market barrier “will reduce significantly the magnitude and rate of Energy Storage Resource deployment in the Mitigated Capacity Zones,”<sup>102</sup> where the State has determined that the resources will provide significant reliability, economic, and public health benefits while advancing State energy and environmental policy objectives. Indeed, the Mitigated Capacity Zones are likely where Energy Storage Resources will have the most impact in helping to replace old peaking units and in managing transmission congestion, while also counting towards Locational Capacity Requirements.<sup>103</sup>

**3. The Commission’s Directives In Order No. 841 Support The Elimination Of Barriers To Market Entry For Energy Storage Resources, Including The BSM Measures**

In Order No. 841, the Commission revised its regulations to include the mandate that RTO/ISO markets must be designed to accommodate Energy Storage Resource participation to the full extent of their technical capability.<sup>104</sup> The Commission thus found that existing market rules are unjust and unreasonable because they include barriers to Energy Storage Resource participation in the wholesale markets.<sup>105</sup> In so ruling, the Commission explained that

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<sup>101</sup> Evans Aff., ¶ 17.

<sup>102</sup> Id.

<sup>103</sup> Id. (explaining that subjecting Energy Storage Resources to potential mitigation is likely to limit the deployment of these resources in Mitigated Capacity Zones).

<sup>104</sup> Order No. 841, P317; 18 C.F.R. §35.38(g)(9)(ii).

<sup>105</sup> Order No. 841, PP 1, 19-20.

“market rules designed for traditional resources can create barriers to entry for emerging technologies.”<sup>106</sup> Preventing Energy Storage Resources from participating in the market to the full extent of their technical capability, the Commission noted, artificially reduces competition and thus fails to ensure just and reasonable rates.<sup>107</sup>

The Commission also explained that such limitations inhibit developer efforts to design their Energy Storage Resources to maximize the capacity, energy, and ancillary services that they provide.<sup>108</sup> Further, the Commission found that this creates a missed opportunity to improve bulk system resilience by capitalizing on the ability of Energy Storage Resources to both inject energy into the grid and withdraw energy from it.<sup>109</sup>

Subjecting Energy Storage Resources to potential mitigation under the BSM measures is inconsistent with the policy described in Order No. 841. Whereas Order No. 841 requires the elimination of barriers to Energy Storage Resource market entry and participation and wholesale market rules that enable their full participation, mitigation creates a powerful market barrier that is entirely inconsistent with the explicit directives of Order No. 841.

Moreover, Energy Storage Resources differ from traditional generators in that they often may provide distinct products and services to both the wholesale and retail markets. Many Energy Storage Resources might realize their full economic potential only if they are compensated for all products and services provided in both the wholesale and retail markets. Barriers to wholesale market entry thus also may inhibit retail market entry.

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<sup>106</sup> Order No. 841, PP 10, 20.

<sup>107</sup> Id., PP 1-2, 19-20.

<sup>108</sup> Id., PP 2, 12.

<sup>109</sup> Id.

These outcomes are inconsistent with Order No. 841. The Commission should grant the requested blanket exemption for Energy Storage Resources so that the policy objective clearly established in Order No. 841 is not doomed to failure or mediocrity by market rules that do not account fully for the technical capabilities and economic opportunities of Energy Storage Resources.

**4. Energy Storage Resources Should Be Granted A Blanket Exemption From BSM Measures, Or, In The Alternative, An Annual Exemption Of 300 MW, With Unused Exempt Capacity Carried Forward**

Based on the foregoing reasons, the Commission should find that subjecting Energy Storage Resources to the BSM rules is unjust, unreasonable, unduly discriminatory, inconsistent with Order No. 841, and interferes with legitimate State policy objectives. Energy Storage Resources will serve a critical role in pursuit of the State's energy and environmental policy objectives. Subjecting these resources to potential mitigation will create significant and inappropriate barrier to market entry and participation that will interfere with the State's ability to pursue legitimate objectives that are within regulatory authority reserved to it by the FPA. The need for this relief is urgent given the purpose and scale of State policy objectives and in light of current expectations that the next (CY19) interconnection process may include approximately 300 MW of Energy Storage Resources that are needed to further those objectives. However, if, notwithstanding the foregoing discussion, the Commission declines to exempt Energy Storage Resources, it should grant a limited exemption for some resources.

The NYISO Class Year Process continues to be extremely long and fraught with delays, and the number of Class Year entrants continues to grow. The most recent Class year (CY17) has taken over two years to be completed. Therefore, in the event the Commission denies the blanket exemption, it should consider instead an alternative Energy Storage Resource

exemption cap of 300 MW per calendar year. This alternative relief would recognize significant shortcomings in the Class Year Process and the resulting lumpiness of entry that could result.

The limited exemption may be based on the RE Exemption Order, in which the Commission directed the NYISO to exempt certain new renewable resources up to an annual megawatt cap.<sup>110</sup> Allowing 300 MW of Energy Storage Resources to enter the market each year without examination under the BSM rules would ensure that New York can pursue part of its legitimate State policy objectives without undue interference from wholesale market rules. An annual cap of 300 MW, with unused amounts carried over to the following years, would provide New York with a linear path to achieve its 3,000 MW storage deployment goal over the 10-year period from 2020-2030.

**5. Fast Track Processing Is Necessary To Effectuate The Requested Changes Prior To Mitigation Determinations For Resources Participating In The NYISO's CY19 Interconnection Process**

Fast Track processing of this Complaint is necessary to provide certainty for investment decisions that will be made shortly. Specifically, the NYISO is expected to commence the CY19 process in August 2019. Approximately 300 MW of Energy Storage Resources currently are expected to be included in CY19. The NYISO may issue mitigation decisions for CY19 projects as early as Fall 2019. Historically, the decision to mitigate a project has not been reconsidered.

The Commission should move promptly to implement the BSM exemptions requested in this Complaint. As demonstrated herein, subjecting Energy Storage Resources to the NYISO's BSM rules is unjust, unreasonable, and unduly discriminatory because it erects artificial barriers to market entry, thereby impeding Energy Storage Resource deployment and

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<sup>110</sup> RE Exemption Order, P51.

interfering with legitimate State policy objectives. It also selectively regulates State policy decisions that promote market entry but not market exit, and thus contravenes New York State's reserved authority under the FPA to regulate generation and the environmental impacts associated with generation.

Action on this Complaint would resolve these issues. Prompt action is requested to provide market certainty for Energy Storage Resource developers participating in the CY19 process. This would support programs designed to encourage Energy Storage Resource development while avoiding interference with legitimate State energy policy objectives. Although it is unknown today whether those resources would, or would not, be mitigated, an adverse mitigation decision likely would prevent the resource from entering the market and contributing to the State's Energy Storage Resource deployment goal and policy. Additionally, the mere threat of mitigation may be enough to dissuade developers from pursuing Energy Storage Resource projects in New York State. Promptly modifying the BSM rules as proposed in this Complaint also would assist the NYISO in effectively and efficiently revising its BSM rules.

Continuing to engage in the NYISO stakeholder process as a means for resolving these issues, however, will result in significant delay because BSM issues do not lend themselves to efficient resolution in the stakeholder process. The Complainants should not be compelled to engage in what might become an unduly protracted stakeholder process while the unjust, unreasonable, and unduly discriminatory BSM rules that obstruct pressing public policy goals remain intact.

**6. The Refund Effective Date Should Be Established As Of The Filing Date Of This Complaint**

For proceedings instituted upon a complaint, FPA §824e(b) requires the Commission to establish a refund effective date that “shall not be earlier than the date of the filing of such complaint nor later than 5 months after the filing of such complaint.” The Commission previously has set the refund effective date to be the same as the Complaint filing date.<sup>111</sup> Complainants are concerned that the NYISO may issue adverse mitigation decisions for Energy Storage Resources before the Commission acts on this Complaint. The Commission should protect ratepayers by adopting the earliest possible refund effective date allowed by the FPA – i.e., the date of filing of this Complaint – so that any adverse mitigation decisions issued after the date of filing may be overturned if required by the Commission in its order addressing this Complaint. Adopting the refund effective date as recommended would be consistent with the Commission’s “general policy of providing maximum protection to customers...”<sup>112</sup>

**VII. Additional Requirements of Rule 206**

Pursuant to Rule 206 of the Commission’s Rules of Practice and Procedure, Complainants set forth below the following information that is not provided elsewhere in the Complaint:

**A. Rule 206(b)(4)(5): Financial Impact and Nonfinancial Impacts on Complainants**

Complainants are unable to accurately quantify the aggregate dollar impact associated with the mitigation of Energy Storage Resources. However, as discussed herein, such

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<sup>111</sup> See, e.g., E.ON Climate & Renewables North America, LLC v. Midwest Independent Transmission System Operator, Inc., 137 FERC ¶61,076 (2011).

<sup>112</sup> Id., P43.

mitigation impedes participation in available Energy Storage Resource deployment programs, thereby harming consumers by diminishing the penetration of storage resources and their ability to support distribution and bulk system reliability, provide clean peak load support, and reduce the emissions of criteria pollutants and GHGs that adversely impact public health.

**B. Rule 206(b)(6): Related Proceedings**

In addition to the pending complaint proceedings identified above, there is another proceeding that is pending or is within the rehearing period that raise other issues concerning the buyer-side mitigations measures. This proceeding is Docket No. EL19-467, *New York Independent System Operator, Inc.*

**C. Rule 206(b)(7): Specific Relief Requested**

Because (i) critical New York energy policy objectives include robust Energy Storage Resource deployment programs as a constituent element of the strategy to achieve those goals, (ii) inclusion of such program benefits in the calculation of the Offer Floor for Energy Storage Resources erects a barrier to market entry, and (iii) the Commission's recent decision on the applicability of buyer-side mitigation to the SCR program interferes with legitimate State policy objectives, Complainants seek the following relief:

1. All Energy Storage Resources seeking to participate in the ICAP market should be exempted from buyer-side mitigation so that they can contribute to State policy objectives to their fullest extent because subjecting these resources to mitigation limits full Energy Storage Resource participation and interferes with legitimate State policy objectives and State authority to regulate generation, supply portfolios, and the environmental impacts of generation.
2. In the alternative, if the Commission declines to grant a blanket exemption as requested, then it should authorize 300 MW of Energy Storage Resources each year to be exempt from buyer-side mitigation measures, with any exempt capacity not entering the market to be carried forward.

3. This Complaint should be processed on a Fast Track so that the requested relief can be implemented prior to mitigation determinations for resources participating in the NYISO's CY19 interconnection process, which is anticipated to commence in August 2019.
4. The Commission should establish the refund effective date required under FPA §206(b) as the filing date of this Complaint, which is the earliest date allowed under the FPA.

**D. Rule 206(b)(8): Documents that Support the Complaint**

Documents supporting the Complaint include the Affidavit of Adam B. Evans, which is attached as Exhibit A.

**E. Rule 206(b)(9): Informal and Alternative Dispute Resolution Procedures**

Complainants did not call the Enforcement Hotline or Dispute Resolution Service, or utilize other informal dispute resolution procedures. These procedures are not well-suited to correcting the market rules discussed herein.

**F. Rule 206(b)(10): Notice of Complaint**

A form of notice suitable for publication in the *Federal Register* is attached to this Complaint.

**G. Rule 206(c): Service**

A copy of this Complaint has been served on the following party via e-mail:

Robert E. Fernandez, Esq.  
EVP, General Counsel, & Chief Compliance Officer  
New York Independent System Operator, Inc.  
10 Krey Boulevard  
Rensselaer, New York 12144

**CONCLUSION AND RELIEF REQUESTED**

New York is pursuing comprehensive energy and environmental policy objectives that require a shift in the State's generation supply portfolio. Energy Storage Resources will

serve a critical role in achieving these legitimate objectives. Their full, unmitigated participation in wholesale markets will be necessary to secure all system reliability and environmental benefits these resources can provide.

Subjecting Energy Storage Resources to potential mitigation is unjust, unreasonable, and unduly discriminatory because it interferes with legitimate State policy objectives and treats the potential risks of supplier and buyer-side market power disparately under rules that are discriminatory and irrational. For the reasons set forth herein, the Complainants respectfully request that the Commission grant the limited relief proposed in this Complaint and order the NYISO to make a tariff compliance filing, due within 30 days of the Commission's order in this proceeding, to allow Energy Storage Resources to participate as capacity suppliers without review under, or potential mitigation by, the BSM rules.

Respectfully submitted,

*/s/ John Sipos*

John Sipos  
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Public Service Commission  
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Dated: July 29, 2019  
Albany, New York

*/s/ John Williams*

John Williams  
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and Regulatory Affairs  
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# **ATTACHMENT A**

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

**NEW YORK STATE PUBLIC )  
SERVICE COMMISSION, NEW )  
YORK STATE ENERGY RESEARCH )  
AND DEVELOPMENT AUTHORITY )**

**COMPLAINANTS, )**

**v. )**

**DOCKET NO. EL19-\_\_\_-000**

**NEW YORK INDEPENDENT )  
SYSTEM OPERATOR, INC. )**

**RESPONDENT. )**

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**AFFIDAVIT OF ADAM B. EVANS  
IN SUPPORT OF THE COMPLAINT OF THE  
NEW YORK STATE PUBLIC SERVICE COMMISSION AND  
NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY**

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I, Adam B. Evans, being duly sworn, depose and say:

1. My name is Adam B. Evans and I am employed by the New York State Department of Public Service (“NYSDPS”) where I serve as a Utility Analyst in the Office of Markets and Innovation. My business address is Three Empire State Plaza, Albany, New York, 12223-1350. I have been with the DPS since 2010 and serve as the Department’s main representative at many of the New York Independent System Operator (“NYISO”) Working Group meetings, where new proposals for market changes are developed and discussed. In this role, my duties with the NYSDPS include analyzing and reporting on the New York Independent

System Operator, Inc. (“NYISO”) Installed Capacity (“ICAP”) market design and operations, evaluating the potential price impacts of proposed changes in the electric energy market and ICAP markets, developing and evaluating State Policy and the considerations of policy-market dynamics, and advising on numerous proceedings before the New York State Public Service Commission (“NYSPSC”), including the Matter of Energy Storage Deployment Program that is progressing before the NYSPSC in Case 18-E-0130. Because of my understanding and experience with energy issues, particularly wholesale market energy issues, I provided affidavits previously in Commission Docket Nos. EL15-64 and EL16-92 relating specifically to Buyer-side Mitigation (BSM) issues. Both complaints were granted in part, which led to BSM exemptions for Demand Response Resources and certain Renewable and self-supply resources.

2. I earned a Bachelor of Business Administration Degree in Finance from James Madison University. Prior to joining the NYDPS in 2010, I held a professional position in Finance with C + C Trading in New York City for approximately five years before joining the NYDPS in 2010. I traded energy commodities and energy-related financial and futures market products while with C + C Trading.

### **Purpose and Summary of Affidavit**

3. The purpose of my affidavit is to support the NYSPSC and New York State Energy Research and Development Authority (collectively, the “Complainants”) Section 206 Complaint under the Federal Power Act that requests changes to the NYISO Market Administration and Control Area Services Tariff (“MST”) in order to provide just and reasonable treatment of Energy Storage Resources. Specifically, Complainants seek to ensure that buyer-side mitigation (or “BSM”) rules for Energy Storage Resources do not discriminate against, or interfere with, legitimate New York State policy objectives. The Complainants seek a blanket

exemption from the NYISO's BSM rules for Energy Storage Resources to support New York State mandates regarding the deployment of renewable energy facilities and an Energy Storage Resource deployment policy directed under New York State Public Service Law §74. The first State policy is the "50 x 30" goal, which requires that 50 percent of the electricity consumed in New York be derived from renewable sources by 2030, whereas the second State policy is an NYSPSC-administered process to oversee the deployment of 1,500 megawatts of Energy Storage Resources by 2025, and up to 3,000 megawatts by 2030. Alternatively, if the Federal Energy Regulatory Commission ("Commission") declines to grant a blanket exemption for this purpose, the Complainants seek an annual exemption of 300 megawatts because applying mitigation to Energy Storage Resources impedes their development and, therefore, interferes with legitimate State policy objectives.

4. In my affidavit, I: (a) summarize State policies regarding Energy Storage Resources; (b) briefly describe the New York ICAP market and the NYISO's BSM rules and how they are administered, focusing on their application to Energy Storage Resources participating in the NYISO-administered ICAP market; and, (c) explain why the BSM rules are not just and reasonable as applied to Energy Storage Resources, and how this improper application of the BSM rules treats Energy Storage Resources in an unfair manner that impedes their participation in the NYISO ICAP market, thereby obstructing and interfering with legitimate policy objectives of New York State.

#### **State Energy Policy Regarding Energy Storage Resources**

5. The Complaint details why both State and Federal energy policies favor increasing the deployment of Energy Storage resources, which will be a necessary part of the

equation to support system reliability and to meet the State's clean energy mandates. As more renewable, intermittent resources enter the market, the management of the electric grid will become increasingly complex. There will be an increased need for fast-responding, flexible resources to support real-time changes on the system to maintain reliability. Energy Storage Resources are an important tool to satisfy this need and New York has determined that its generation and supply portfolio should be adjusted to include more storage resources. Energy Storage Resources are envisioned to be: (a) paired with renewables to reduce intermittency; (b) connected at locations on the transmission and distribution systems that will alleviate constraints; and, (c) consistently available and able to respond to fluctuations in load or generation. State and Federal policies and program rules should be harmonized to maximize resource deployment and the benefits that Energy Storage Resources provide, thereby furthering State and Federal policy objectives. Failure to balance Federal and State policies in this manner will interfere with the complementary objectives that the Commission and New York are seeking to achieve.

6. Scaling the deployment of Energy Storage Resources is critical to satisfy the clean energy mandates specified in New York's Energy Planning Law, Public Service Law, and State Energy Plan, and implemented through action by State agencies and authorities, including the NYSPSC and NYSERDA. The Complaint explains why State agencies and authorities are obligated to pursue the State's energy and environmental objectives.

7. The Complaint also discusses actions that the NYSPSC and NYSERDA have taken to achieve the State's energy and environmental policy objectives. These include implementing programs designed to accelerate the market penetration of Energy Storage Resources. The two main programs that are aimed at bulk system resources are the utility bulk-system dispatch rights competitive procurements (the "Competitive Dispatch Procurement") and

the NYSERDA market acceleration bridge incentive (the “Bridge Incentive”). The Competitive Dispatch Procurement requires each electric investor-owned utility to procure, through a competitive procurement, multi-year dispatch rights for a minimum megawatt-defined amount of storage within their service territories. The NYSERDA Bridge Incentive is designed to compensate for benefits accruing over the 20-year life of the storage asset. Examples of these benefits include cost savings resulting from reduced soft costs, accelerated decline of energy storage system costs, environmental benefits, hosting capacity improvements, and improving system resiliency. Environmental benefits may include emissions reductions that result from peak/off-peak arbitrage as Energy Storage Resources charge using cleaner off-peak energy to support peak period dispatch, thereby displacing the need for fossil-based generation with a dirtier emissions profile that otherwise could run during peak periods.

#### **The ICAP Market and Current BSM Rules**

8. For any given resource, ICAP refers to the maximum capability to provide electrical power, or the demonstrated amount of demand that can be curtailed, at the direction of the NYISO. To ensure that load can be served reliably, the NYISO requires a minimum level of ICAP to be procured. This minimum level needed to meet the forecast peak load plus a reserve margin is called the Installed Reserve Margin (“IRM”). The IRM is used to plan for and maintain system resource adequacy.

9. ICAP supply resources include electric generators, transmission lines located in other regions that have Unforced Deliverability Rights (“UDRs”), Energy Limited Resources (“ELRs”), and demand response resources that participate in the Special Case Resource (“SCR”) program. Energy Storage Resources currently can participate in the capacity market under the ELR program. An Energy Storage Resource can offer Unforced Capacity (“UCAP”) in a

quantity equal to the maximum sustained amount of megawatts discharged over a four-hour period.

10. Both supply-side and buyer-side mitigation rules were developed to prevent the exertion of market power in parts of the New York ICAP market. Capacity Mitigation rules currently apply to two Mitigated Capacity Zones in New York: Zone J (New York City), and Zones G-J (G-J Locality, covering the Lower Hudson Valley and New York City).

11. Buyer-side mitigation rules are intended to prevent buyers with market power from intentionally suppressing prices below competitive levels. The Commission has concluded that applying the BSM rules to certain resources, including projects developed on a merchant basis, certain self-supply resources, intermittent renewable generation projects, and Demand Response resources is unjust, unreasonable, or unduly discriminatory or preferential pursuant to Section 206 of the Federal Power Act. In so ruling, the Commission granted exemptions for a variety of reasons, including that the resources further legitimate State policy objectives or have little or no ability and/or incentive to suppress ICAP prices.

12. New Energy Storage Resources, however, to the extent they do not qualify for an exemption, remain subject to a “buyer-side mitigation test” in the Mitigated Capacity Zones. The BSM test determines whether bids submitted by an ICAP auction participant are subject to a “bid floor” (the “Offer Floor”). Energy Storage Resources that do not pass the test are mitigated and cannot submit UCAP bids less than the Offer Floor, which is calculated by the NYISO. If the Offer Floor is above the auction price, the Energy Storage Resources will be “priced out of the market” and will not receive any ICAP revenues despite its contribution to reliability. This also leads to New York State consumers paying more for capacity than is necessary because

mitigated Energy Storage Resources will not count toward meeting the IRM and Locality requirements.

13. The BSM test applied to Energy Storage Resources is essentially the same test that is applied to “traditional” generation resources that run on fossil fuel. One part of this test centers on determining the Unit’s Net Cost of New Entry (“Unit Net CONE”). The Unit Net CONE is defined in MST Section 23.4.5 as the embedded costs of an ICAP supplier, net of projected Energy and Ancillary Services revenues, and revenues associated with other energy products (such as energy services and renewable energy credits). For purposes of the NYISO’s ICAP Mitigation Measures, which are contained in MST Attachment H, Section 23.4.5, Unit Net CONE equals the localized levelized embedded costs of a specified Installed Capacity Supplier, including interconnection costs. For an Installed Capacity Supplier located outside a Mitigated Capacity Zone, the Unit Net CONE also includes the embedded costs of transmission service for deliverability into the Mitigated Capacity Zone. In either case, the Unit Net CONE is net of likely projected annual Energy and Ancillary Services revenues and revenues associated with other energy products (such as energy services and renewable energy credits), as determined by the NYISO, translated into a seasonally-adjusted monthly UCAP value using an appropriate class outage rate. The Unit Net CONE is compared to forecast capacity prices and the supplier is deemed to be either (i) “economic,” if Unit Net CONE is less than forecast capacity prices, or (ii) “uneconomic,” if Unit Net CONE exceeds forecast capacity prices. The test, therefore, is sensitive to, and its outcome determined by, the costs and revenues that are included in and excluded from the evaluation.

14. The ICAP Demand Curves currently used in the Mitigated Capacity Zones have steep slopes. Consequently, small changes in supply elicit large changes in price that signal the

need for market entry or exit. The markets tend to respond quickly to these price signals, thus limiting the duration of wholesale capacity price changes.

15. When a facility that does not use a renewable fuel source to generate electricity enters the market, the main benefits of its entry are the energy provided to the grid and the capacity provided to support system reliability. It is possible, therefore, to estimate the Unit Net CONE as the embedded costs of the plant less its expected energy and ancillary services revenues.

16. Supply resources that are either located on the distribution system or rely on renewable fuel or do not combust fossil fuels to produce electricity, while providing energy and capacity, may also provide environmentally-beneficial attributes, distribution system reliability, and other benefits and services that are not compensated by the wholesale markets. Some of these benefits instead may be compensated by competitive mechanisms outside the wholesale markets including, for instance, through participation in State-mandated programs designed to achieve public policy objectives. One example of such program in New York is the Clean Energy Standard, in which participating resources compete to sell Renewable Energy Credits that represent the environmental value of electricity produced from facilities with an emissions profile that satisfies State policy objectives.

**Mitigating Potential New Energy Storage Resources  
Interferes With State Policy Objectives**

17. The NYISO includes the value of Renewable Energy Credits as a “revenue” that may be reflected in the BSM test. The NYISO, however, has stated at ICAP Working Group meetings that it might not include in the BSM test the total compensation earned from participation in a State-mandated program designed to accelerate the penetration of emerging

technologies. Excluding this legitimate revenue stream increases the likelihood that a participating resource will be deemed uneconomic and subject to BSM measures.

18. Based on my experience working with New York State, I have seen that buyer-side mitigation plays an enormous role in project development decisions. Incentives currently are needed to catalyze investment so that Energy Storage Resources are developed in a timeframe and on a scale that will achieve the State's energy and environmental policy objectives. The incentives offered through State policy programs are purposely crafted to minimize the potential impact on consumers. Markets are expected to respond relatively quickly to price changes associated with increasing the deployment of Energy Storage Resources. Balancing these factors requires Energy Storage Resources to be compensated for all products and services they provide, including reliability benefits. Buyer-side mitigation obstructs this balance by ignoring the value that an Energy Storage Resource provides for its availability and ability to perform as needed. It also creates a circumstance in which mitigated Energy Storage Resources may be viable only outside Mitigated Capacity Zones. Consequently, Energy Storage Resource developers may avoid locating in Mitigated Capacity Zones even though those are the locations where these resources would provide the most reliability benefits.

19. Subjecting Energy Storage Resources to potential mitigation in the ICAP market creates a powerful barrier to market entry because project owners know they may not be compensated for the capacity value their resources provide to the system. This market barrier will significantly reduce the magnitude and rate of Energy Storage Resource deployment in the Mitigated Capacity Zones, thereby interfering with and impeding legitimate State policy objectives designed to increase reliance on a cleaner energy resource portfolio.

20. New York State has adopted many policy objectives that are implemented through its agencies and authorities including, for example, the NYSPSC, NYSEDA, and the New York State Department of Environmental Conservation. The policies are designed to achieve a variety of legitimate state environmental and public health, safety, and welfare objectives. They might lead to increases or decreases in capacity supply, which could elicit a temporary, short-term decrease or increase in capacity prices. Regardless of their directional impact, if impacts do occur, however, they are incidental to the primary state policy objective. Further, State policy does not operate in a vacuum and it is one of many factors that may increase or decrease capacity prices in the ever-changing multi-variable market dynamic.

21. In my experience, it is clear that state policies may lead to an increase or a decrease in capacity supply. These changes in capacity supply can lead to short-term capacity price changes in either direction. These fluctuations are typically short-lived, especially in mitigated capacity zones where the Demand Curves are steep and the market tends to respond quickly.

22. The BSM measures have been applied to State policies in an inconsistent and disparate manner. Where State policies may elicit an incidental and temporary decrease in capacity supply, wholesale market rules recognize the validity of those policies by not attempting to counteract the potential capacity price increases that may result from those policies. The NYISO instead has relied on rigorous study and stakeholder engagement to ensure system reliability while supporting policy decisions, thereby accommodating legitimate policies that New York State is empowered to select and implement. In recent years, however, the BSM measures have been applied to counteract the impact of State policies that elicit an increase in capacity supply and a subsequent incidental and temporary short-term decrease in capacity

prices. Market rules should not be used to offset the incidental impacts of State policy objectives, regardless of whether the result is a temporary increase or decrease in capacity supply and price. Nor should they be applied in a selective manner that seeks to counteract legitimate State policies that may increase capacity supply and result in incidental capacity price decreases.

23. Federal and State energy storage policies instead can and should be harmonized through complementary market rules that enable Energy Storage Resource deployment, facilitate market participation to the full extent of the resources' technical ability, and maximize the reliability and environmental benefits that Energy Storage Resources provide. Energy Storage Resources are often designed to participate in both retail and wholesale markets and support the reliable operation of both the distribution and transmission systems. Designing and implementing wholesale market rules that do not interfere with the State's reserved authority under the Federal Power Act to regulate generation and supply, and retail market rules that do not interfere with the Commission's wholesale rate-setting authority, is particularly important to removing market barriers for Energy Storage Resources.

24. This concludes my affidavit.

**ATTESTATION**

I am the witness identified in the foregoing affidavit. I have read the affidavit and am familiar with its contents. The facts set forth herein are true to the best of my knowledge, information, and belief.



Adam B. Evans

July 29, 2019

Subscribed and sworn to before me  
this 29<sup>th</sup> day of July, 2019

  
Notary Public

My Commission expires:

**CAROL ELIZABETH COYNE**  
Notary Public, State of New York  
Qual. in Rensselaer Co. No. 02CO4940511  
Commission Expires July 18, 20 22

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on the respondent, the New York Independent System Operator, Inc., to the attention of the following individual:

Robert E. Fernandez, Esq.  
EVP, General Counsel, & Chief Compliance Officer  
New York Independent System Operator, Inc.  
10 Krey Boulevard  
Rensselaer, New York 12144

Dated: Albany, New York  
July 29, 2019

/s/ S. Jay Goodman  
S. Jay Goodman  
Assistant Counsel  
3 Empire State Plaza  
Albany, NY 12223-1305  
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UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

New York State Public Service  
Commission and  
New York State Energy Research  
& Development Authority

Docket No. EL19-\_\_\_\_\_

v.

New York Independent System  
Operator, Inc.

NOTICE OF COMPLAINT

(July 29, 2019)

Take notice that on July 29, 2019, pursuant to sections 206 and 306 of the Federal Power Act, 16 USC 824e and 825e (2012) and Rule 206 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.206, New York State Public Service Commission and the New York State Energy Research & Development Authority (collectively the Complainants) filed a formal complaint against New York Independent System Operator, Inc. (NYISO or Respondent) alleging that application of the NYISO's buyer-side market (BSM) power mitigation measures contained in section 23.4 of attachment H of the NYISO's Market Administration and Control Area Services Tariff results in BSM rules that limit full market entry and participation by Energy Storage Resources and interfere with Federal and State policy objectives and, therefore, are unjust and unreasonable, as more fully explained in the complaint.

Complainants certifies that copies of the complaint were served on the contacts for Respondent as listed on the Commission's list of Corporate Officials.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent's answer and all interventions, or protests must be filed on or before the comment date. The Respondent's answer, motions to intervene, and protests must be served on the Complainant.

Docket No. EL19-\_\_\_\_

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The Commission encourages electronic submission of protests and interventions in lieu of paper using the “eFiling” link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the “eLibrary” link and is available for review in the Commission’s Public Reference Room in Washington, DC. There is an “eSubscription” link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5:00 pm Eastern Time on (insert date).

Kimberly D. Bose,  
Secretary.

Document Content(s)

NYSPSC-NYSERDA Complaint.PDF.....1-59