STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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

REPLY COMMENTS OF NATURAL RESOURCES DEFENSE COUNCIL, SUSTAINABLE FERC PROJECT, SIERRA CLUB, NEW YORKERS FOR CLEAN POWER, ENVIRONMENTAL ADVOCATES OF NEW YORK, AND VOTE SOLAR

The Natural Resources Defense Council (NRDC), Sustainable FERC Project, Sierra Club, New Yorkers for Clean Power, Environmental Advocates of New York, and Vote Solar (Clean Energy Supporters) submit these reply comments on the questions and issues raised in the Public Service Commission's (PSC) August 8, 2019 Order instituting this proceeding and soliciting comments. These reply comments, and the attached affidavit of James F. Wilson, primarily respond to initial comments filed by other parties, in particular suggestions for improving the capacity market filed by the NYISO, Joint Utilities, Potomac Economics, Advanced Energy Economy Institute et al., the New York Power Authority, and the Utility Intervention Unit. As Clean Energy Supporters indicated in our initial comments, NYISO's capacity market is a significant obstacle to achieving the requirements of New York's landmark Climate Leadership and Community Protection Act (CLCPA). We commend the PSC for initiating this proceeding to examine methods to improve NYISO's market design so that it facilitates the goals of the CLCPA rather than inhibits them while continuing to ensure the state's resource adequacy.

In the immediate future, NYISO's proposed application of Buyer Side Mitigation (BSM) to state-incentivized resources will increase consumer costs and frustrate the CLCPA's clean energy goals by retaining unneeded fossil fuel plants. Given FERC's December 19, 2019 decision concerning PJM's Minimum Offer Price Rule (MOPR),¹ it is increasingly likely that FERC will approve pending proposals to apply BSM to state-supported resources in certain constrained capacity zones in New York,² effectively prohibiting these resources from participating in NYISO's capacity market. New York should not accept or remain part of any wholesale market regime that fails to fully credit state supported resources for their system capacity values.

¹ 169 FERC ¶ 61,239 (Dec. 19, 2019).

² For example, NYISO has proposed to apply BSM to energy storage resources. *See* Docket No. ER19-467-000, NYISO Proposed Tariff Filing per Order 841 Compliance (Dec. 3, 2018).

Beyond BSM, NYISO's current market design is incompatible with New York's future resource adequacy needs. By design, NYISO's capacity market focuses solely on meeting the system's peak demand during a specified time period. Although in theory the market should be resource neutral, it was designed primarily around dispatchable thermal resources capable of meeting a largely predictable peak demand. In a system focused on reducing carbon emissions primarily through renewable energy (including distributed energy resources), the focus shifts from peak demand to total demand on any given operating day using the most efficient combination of resources available to meet demand. Considering both the economic and operating characteristics of most new renewable energy, a capacity market designed to meet peak system needs is ill-suited to help meet the broader spectrum of resource adequacy.³ Meeting the goals of the CLCPA, and taking full advantage of the low operating costs of renewable energy, will require NYISO to develop new products to fully integrate renewable energy, including, for example, reserves that can respond to the inherent variability of most zero-carbon resources, together with flexibility such as energy storage.⁴ As explained below and in the attached affidavit of James F. Wilson, the ICAP market is not the right foundation for these other products.⁵

For these reasons, Clean Energy Supporters recommend that the state reduce its reliance on the NYISO capacity market as a resource adequacy tool. Instead, the state should urge NYISO to improve competition in its energy and ancillary services markets, including the development of products needed to meet the needs of an increasingly renewable-heavy grid.⁶

Furthermore, as stated in our initial comments, Clean Energy Supporters recommend that the PSC insist upon fundamental changes to the current capacity market construct from a mandatory to a residual market. Under such a construct, wholesale customers could satisfy their mandatory reliability requirements by demonstrating that they have self-supplied or procured enough capacity through bilateral contracts, either for capacity value alone or for the full energy and capacity value of a resource. The bilateral procurement process would be overseen by the state rather than NYISO. The ICAP market could be used by LSEs to procure additional required capacity, but they would not be required to do so. This could allow wholesale customers to enter into long-term bilateral transactions for energy and capacity for the types of resources needed to

³ Mays, Jacob and Morton, David and O'Neill, Richard P., Asymmetric Risk and Fuel Neutrality in Capacity Markets (February 8, 2019). USAEE Working Paper No. 19-385, *available at*

SSRN: https://ssrn.com/abstract=3330932 or http://dx.doi.org/10.2139/ssrn.3330932. ⁴ *Id*.

⁵ Reply Affidavit of James F. Wilson on behalf of Natural Resources Defense Council, Sustainable FERC Project, Sierra Club, New Yorkers for Clean Power, Environmental Advocates of New York, and Vote Solar (Wilson Aff.) ¶¶ 15-19.

⁶ Wilson Aff. ¶ 7. NYISO has recommended several enhancements to both of these markets in its Grid in Transition whitepaper released this past December. In particular, NYISO is pursuing a number of efforts, including enhanced shortage pricing to align prices with reliable grid operations as supply conditions tighten and a review of current E&AS product design, including evaluating the need for new products as well as certain requirements that would provide incentives for more flexible resources to be retained or attracted as new entry.

meet the state's clean energy requirements.⁷ Increased energy and ancillary services market revenues and a residual capacity market coupled with bilateral contracts would help facilitate the accomplishment of CLCPA requirements in the most cost-effective way.

I. New York Should Participate in, but Not Defer to, the NYISO Stakeholder Process

A number of parties, including IPPNY and NYISO, acknowledge that the current capacity market is not aligned with the state's clean energy mandates but recommend that any changes be done through the NYISO stakeholder process.⁸ As part of its ICAP and Market Issues stakeholder group process, NYISO is in the process of conducting a "Comprehensive Mitigation Review" centered on BSM to determine "whether the rules efficiently mitigate concerns of buyer-side market power for both traditional and new resource types with both private and public funding considerations."⁹ To this end, NYISO has proposed a number of revisions to its current BSM rules, including revisions to the Part A and Part B Exemption Tests for Public Policy Resources (PPRs).

Under the first prong of this analysis, PPR-examined facilities would be placed in the supply stack before non-PPR examined facilities (currently, projects are placed in the supply stack from lowest to highest unit Net Cost of Net Entry (CONE)). This change would allow PPR resources be awarded a Part A exemption before non-PPR resources that may be more economic but do not further the State's clean energy objectives. Under the second prong, the mitigation study period would be revised to apply to each project based upon the characteristics of that technology (currently, this period is three years for all facilities). This would allow for shorter study periods for technologies, like storage, that can be placed into service quickly.

While these are slight improvements from the status quo, none of the proposed changes touch on the core issue of BSM: that resources mandated by state law should not be considered a market distortion. Even within the narrow scope of changes NYISO has proposed, there are several issues that remain to be addressed, including what will qualify as a PPR and whether shortening of the mitigation study period will be on a case-by-case basis or will be technology specific. Moreover, it is not at all clear whether these changes will be approved in the NYISO stakeholder process given that they could lead to reduced revenues for incumbent fossil generators which make up a significant percentage of voting members. In short, none of these proposals, even if approved, change the core of the BSM problem.

⁷ Wilson Aff. ¶¶ 13, 28.

⁸ See Comments of Independent Power Producers of New York, Inc. at 6-7; Comments of New York Independent System Operator at 20-21.

⁹ See NYISO, Comprehensive Mitigation Review Presentation, ICAPWG/MIWG (Dec. 13, 2019), available at https://www.nyiso.com/documents/20142/9766969/Comprehensive%20Mitigation%20Review.pdf/dda25f2b-8fdf-e50b-7547-94709cf4b02f

While BSM is the most immediate issue, the problems of the capacity market are larger and cannot be fixed by simply addressing BSM. We are not alone in thinking this. Many parties agree that NYISO markets as currently constructed are incompatible with New York's clean energy mandates as set forth in the CLCPA,¹⁰ including NYISO itself.¹¹ The CLCPA requires 70% renewable electricity by 2030 and 100% emissions-free electricity by 2040. These legally binding standards will require significant changes to NYISO's market design. Given these requirements, focusing solely on reforming BSM is too narrow a scope. A review must examine all deficiencies of the capacity market that impede the state from achieving the goals of the CLCPA, not just those related to BSM. NYISO's review process only includes an examination of BSM, not the entire capacity market. However, because NYISO stakeholders approved the instigation of the BSM review prior to the commencement of this proceeding, it is unlikely that the scope will be broadened to address more fundamental issues concerning the capacity market that have been brought to light, and stakeholders have been resistant to efforts to more holistically address issues presented by the capacity markets.

As Clean Energy Supporters have stated, we are encouraged that NYISO recognizes the need for market reform and has begun to propose solutions, but the proposals advanced by NYISO will not result in the changes necessary to accommodate the large numbers of clean energy resources expected to come online in the next ten years at least cost.¹² For these reasons, we recommend

¹⁰ See, e.g., New York Power Authority Comments at 4 ("comprehensive re-evaluation of not only our capacity procurement approach, but also our energy and ancillary services (E&AS) market design and our transmission and distribution (T&D) system planning protocols and incentives"); Multiple Intervenors Comments at 8 ("There currently are potential conflicts between New York's energy policies and mandates and the NYISO's administration of ICAP markets. Inasmuch as the design of ICAP markets has remained largely unchanged for well over a decade, such potential conflicts stem from the State's energy policies and mandates, which are changing rapidly and have become far more aggressive in the past year or so than ever before."); Comments of Advanced Energy Economy Institute, Alliance for Clean Energy New York, the American Wind Energy Association, and the Solar Energy Industries Association at 2 ("It is our view that NYISO market rules are already colliding and interfering with the achievement of state policy objectives, and that, on the current trajectory, this interference will only worsen."); IPPNY Comments at 3 ("IPPNY agrees that changes must be explored to address resource adequacy on the system following enactment of the Climate Act and that existing wholesale market mechanisms to date have been expressly designed to deliver reliable electric service at lowest cost, and, therefore, have not been designed to account for the value provided by certain resources to achieve the additional outcomes now envisioned by the State."); Market Monitor Comments at 9 ("[Our] recommendations are based on our findings that low-cost flexible resources are systematically under-compensated for operating reserves, while the costs borne by emitters of carbon dioxide emissions are far below the level that New York State environmental policy is based on. Hence, enhancing the NYISO market rules to recognize the value of these resources would promote investment in resources that would reduce emissions and help integrate intermittent renewables in a cost-effective manner.").

¹¹ NYISO Comments at 1-2 ("Specifically, the NYISO acknowledges the need to better harmonize the wholesale electricity markets with state environmental policies, in particular those embodied in the [CLCPA], while maintaining competitive price signals.").

¹² Even if NYISO's proposed changes were sufficient, which they are not, it is unlikely that they will ultimately be approved for two reasons. First, incumbent fossil-fuel generators, which make up a significant percentage of voting members, are unlikely to vote in favor of proposals that would result in reduced revenues for them and place them on a more competitive playing field with intermittent renewable resources. Second, given FERC's recent MOPR decision in PJM, it appears unlikely that FERC would approve any changes that would reduce the impact of BSM on

that the State continue to engage in the NYISO stakeholder process, but that it also proceed on a state-led parallel track to ensure that necessary changes to resource adequacy occur.

II. Responses to Concerns Regarding Increased Reliance Upon Bilateral Contracts to Meet Capacity Requirements

Several parties have voiced concerns about market reform changes that would decrease the role of the capacity market in favor of increased reliance on bilateral contracts to ensure resource adequacy. Because Clean Energy Supporters contend that a residual capacity market that serves as a backstop to state-driven procurement of clean energy resources is the best model for New York state, we address some of these concerns below.

Comments filed by the Advanced Energy Economy Institute, on behalf of the Alliance for Clean Energy New York, the American Wind Energy Association, and the Solar Energy Industries Association, express support for increasing the role of NYISO's energy and ancillary service markets relative to the ICAP market. However, these parties also note that "extensive carve-outs risk bifurcating the market, and may erode price signals, harming resources need[ed] to meet state policy goals that rely on the capacity market (e.g., demand response, some DERs)."¹³ We agree that demand response and distributed clean energy resources are essential to meeting the CLCPA's goals, and recognize that business models for some demand response and some distributed energy resources currently rely substantially on capacity market revenues.¹⁴ This is in part because energy prices have been relatively anemic in recent years due in part to the excess capacity in NYISO engendered by the ICAP, *see* Wilson Aff. ¶10, as well as other E&AS market design problems noted by AEEI, et al.¹⁵ If the rules for market participation are nondiscriminatory, improved E&AS markets can provide ample revenue opportunities for demand response, but we recognize that a transition period may be appropriate as these suppliers adapt to the changing market structure.

A second major area of concern relates to the increased role of bilateral long-term capacity contracts. NYISO urges the PSC to rely primarily on competitive markets and to a lesser extent

state-supported resources or otherwise reform the markets to ensure that they do not conflict with state clean energy mandates.

¹³ AEEI et al. Initial Comments at 27.

¹⁴ Whether or not capacity prices in the residual market will actually decline meaningfully has not been established. Price setting in that market would presumably be cured of any possible interference by offers from state-supported resources, which would instead obtain bilateral contracts outside that market.

¹⁵ See id. at 17 ("the current oversupply of capacity in NYISO and lack of sufficient price formation in the energy market all contribute to a failure to provide sufficient signals through the market to incentivize entry of resources needed to meet state goals. Addressing efficient market exit (as discussed below), improving energy market price formation (through mechanisms like the Operating Reserve Demand Curve or other features), and addressing gaps in the ancillary services markets will all help to ensure that advanced energy resources are compensated according to the value they provide to the grid.").

on these types of contracts,¹⁶ advocating that "[s]olutions should be market-based to the greatest extent practicable."¹⁷ We agree that competitive markets are the preferred means for procurement, but reject the implicit suggestion that NYISO's markets are the only ones that count as competitive. Utilities and centralized procurement agencies such as NYSERDA can run highly competitive procurements that allow consumers to benefit from competition based not only on price, but also on a range of characteristics important to satisfying state policy. Also, bilateral long-term contracting for capacity does not supplant reliance on other NYISO-administered markets such as energy and ancillary services. As noted in our initial comments, improvements to these markets are critical to accurately valuing the energy and other services provided by carbon-free resources, and the flexibility needed to integrate high levels of renewables. In short, increased reliance on bilateral contracts for capacity does not constitute a rejection of a mandatory capacity construct that has not worked to procure resources preferred by state policy, and which will only continue to get worse as BSM rules become expanded and entrenched.

NYISO and Joint Utilities also express concerns that long-term contracts can shift some risk to consumers or even subject utilities to stranded-cost risk.¹⁸ While customers do assume some additional risk associated with long-term contracts, the status quo, in which renewable and storage developers bear all investment risk, is not working. Renewable energy and storage development are capital-intensive investments that are extremely challenging to finance without some long-term revenue certainty, which NYISO's competitive markets do not provide.¹⁹ Long-term contracts enable these projects to be financed much more affordably than they could be based solely on NYISO market prices and forecasts. Consumers procuring capacity through NYISO's market bear little risk of being stuck in uneconomic long-term contracts, but they also are not able to purchase the capacity they want through that market due to BSM rules and other structural disadvantages that renewables face, and the capacity they do have to buy through that market is more expensive than it needs to be. This is not a good outcome for consumers either.

Although long-term contracts shift some risk to consumers, it is an overstatement to suggest that *all* risk is shifted to consumers. The objective in forming a long-term contract is to allocate the risk in a manner acceptable to all parties through negotiation of terms such as contract length or prices that reflect changes in other revenues that may become available to the generator in the future. Risk to consumers is also likely to be less than some parties fear because bilateral capacity contracts need not include all the revenue required by state-supported resources. Indeed, the more expansive energy and ancillary service markets that many parties support in

¹⁶ NYISO Initial Comments at 74.

¹⁷ *Id*. at 60.

¹⁸ See id. at 69; Joint Utilities Comments at 33-37.

¹⁹ See, e.g., AEEI et al., Initial Comments at 17.

this proceeding will make up a significant portion of revenue for state-supported resources and will continue to reflect the centralized competitive markets run by NYISO.

In sum, the fact that consumers will take on some additional risk as utilities enter into long-term contracts is a feature, not a bug, of moving toward a residual capacity market model. Shifting some risk away from renewable energy and storage developers is critical to enable financing of those projects on affordable terms, which is itself essential to achieving the CLCPA's goals. Furthermore, the risk to consumers of long-term capacity contracts can be managed through careful oversight by the PSC.

Nor does reliance on capacity markets protect consumers from risk as NYISO and Joint Utilities would have us believe. Capacity market rules are subject to constant flux and have been implicated in driving systematic overprocurement of capacity at ratepayer expense.²⁰ Further, BSM and MOPR rules expose capacity market consumers to something akin to stranded asset risk, as market rules change to keep otherwise uneconomic plants in service at ratepayers' expense. Any evaluation of the risks New York consumers face will be incomplete if it does not include the regulatory and financial risk taken on by continued exposure to market rules outside the State's jurisdiction.

III. Responses to Concerns Regarding Increased Reliance Upon Bilateral Contracts to Meet Capacity Requirements

Many parties submitted recommendations in response to the Commission's question about market designs that would better support state policy. Many of these recommendations were aligned with the recommendations in our initial comments.²¹ Others are incremental changes that may be beneficial but should not be mistaken for transformations that would resolve the fundamental tensions between NYISO's current market design and New York's decarbonization policy. Other parties suggest that the proper course is to take NYISO's capacity market in the opposite direction that we recommend by increasing the complexity and significance of the capacity market. Responses to these recommendations are set forth in more detail below.

A. Incremental Changes

Potomac Economics, Ltd., which serves as the Market Monitoring Unit for NYISO, proposes adjustments to the capacity values of certain resource types.²² First, Potomac Economics recommends adjusting the capacity value of resources based on size, because "large generators provide less reliability value than an equivalent amount of capacity of small generators because a

²⁰ See, e.g. Overpowered; PJM Market Rules Drive an Era of Oversupply. Tsao, Stephanie and Martin, Richard. (Dec. 2019) S&P Global Market Intelligence, *available at* https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/54111666.

²¹ Wilson Aff. ¶ 7.

²² Initial Comments of Potomac Economics, Ltd. at 13.

portfolio of large generators is more likely to experience an unusually large amount of unavailable supply than a portfolio of small generators."²³ Potomac Economics highlights an important reason why the reliability contributions of renewable energy resources are often undervalued relative to large central station thermal generators. However salubrious this change may be, it does not resolve the fundamental tensions at issue in this proceeding.

Second, Potomac Economics recommends adjusting the reliability value of long-lead time units as penetration of intermittent renewable generation increases, because "low capacity factor units with long start-up notification times are less likely to be on-line and available during reserve shortage conditions . . . and [a]s the penetration of intermittent generation increases, it will become harder to predict when long start-up notification units need to be started-up to maintain reliability."²⁴ We agree that increased flexibility is needed as renewable penetration increases. However, the capacity market is a poor tool to procure services such as fast start-up times. Rather than seeking to ensure the availability of that service on the system through the crude means of docking resources' capacity values slightly for not providing the service, a better option would be to specifically procure this service or incentivize it more directly through operating reserve markets.

B. Wrong Direction: Deepening Reliance on the Capacity Market and Complex Forward Mechanisms

We strongly agree with the Utility Intervention Unit that "[A]ny workable approach likely does not involve defining a more complex multi-dimensioned version of the ICAP product."²⁵ The Joint Utilities propose a Multiple Value Pricing (MVP) approach that would subdivide the capacity market, establishing separate demand curves for each resource class required under the CLCPA.²⁶ While we appreciate that the MVP approach is intended to ensure that resource types required under state law have a "place" in NYISO's capacity market, in our view it is unnecessarily complex, prevents competition *among* resource types, and will not succeed in procuring resources the grid actually needs. As James Wilson explains, "[t]o define and price additional characteristics or services within a forward capacity construct would be complex and ultimately inefficient and unsatisfactory."²⁷ This is because it requires definition of a single product, which will inevitably be arbitrary and "necessarily over-value some attributes and under-value others (and the relative value of various characteristics changes over time with a changing resource mix), and thereby arbitrarily favor some types of resources and disfavor others."²⁸

²³ Id.

²⁴ Id.

²⁵ UIU Initial Comments at 6; *see also* Wilson Aff. ¶¶ 15-20.

²⁶ Initial Comments of the Joint Utilities on the Order Instituting Proceeding and Soliciting Comments (JU Initial Comments) at 22.

²⁷ Wilson Aff. ¶ 18.

²⁸ Id.

Joint Utilities note that offshore wind could be procured separately from so-called "flexible capacity." Such a distinction makes assumptions, possibly unjustified, about the services that resource types can provide, and then subdivides the market, heightening risks of market power. Moreover, NYISO's system does not need flexible "capacity" per se—it needs actual flexible performance such as fast and accurate ramping to adjust to swings in net load, in specific places and at specific times. Such a service is better procured through the energy and ancillary service markets where all resources, even those that haven't cleared in the capacity market, can be compensated in exchange for actually providing the service at the time and in the location where it's needed.²⁹ As James Wilson explains, "energy and ancillary services markets naturally price the specific operating characteristics needed by RTOs in a highly granular manner with respect to operating characteristics, location, and time. By contrast, a forward capacity construct sets prices for one or a few standard products for an extended period and with very little locational detail."³⁰

This is not to suggest that planning for future flexibility needs is misplaced. To the extent that planning authorities identify a possible future shortfall in ramping capability, it can be addressed either through wholesale customers' reliability requirements or by directed state procurements for storage and other highly flexible resources. It would be ill-considered to introduce a new capacity market just as the problems with existing capacity markets are reaching crisis levels.

A simpler approach is to allow utilities to receive credit for capacity associated with resources they have procured pursuant to the CLCPA and buy only the residual that they need through the ICAP; while other reliability services are procured through day ahead and real time markets. Joint Utilities tout the benefit of the MVP to address their concerns about price suppression "because the demand curve for a particular class would allow the market to solve for supply to meet appropriate levels of demand for that resource class."³¹ The residual market has the same effect, in that resources required by the CLCPA would be procured outside the market, thus reducing the demand (and shifting the demand curve) for resources not required by state policy.

Joint Utilities offer a second proposal, the Future Clean Capacity Requirement (FCCR), which would increase the installed reserve margin used to establish the demand curve based on assumptions about reduced capacity value provided by state-supported resources, as well as impose a clearing price floor.³² As James Wilson states, "[t]he goal is apparently to support the capacity quantities and prices for conventional resources."³³ The premise of the FCCR is that

²⁹ See Wilson Aff. ¶16 ("RTOs should rely on energy and ancillary services markets for pricing operating characteristics and attracting the resources that can provide them, rather than defining additional products within capacity markets.").

³⁰ Wilson Aff. ¶ 19.

³¹ *Id.* at 23.

³² *Id.* at 24-25.

³³ Wilson Aff. ¶ 24.

"there may... be differences between the contributions that State Policy Resources and conventional dispatchable resources would make with respect to meeting transmission security or other local reliability requirements, given intermittency and duration limitations, that are not reflected in the UCAP calculations."³⁴ Unforced Capacity (UCAP) calculations are designed to factor in various limitations on a resource's availability, such as intermittency or forced outage rates, that rightly affect how much capacity the resource should be able to offer into the market. Implicit in Joint Utilities' FCCR proposal is that NYISO is somehow not calculating UCAP accurately and that, rather than refining the UCAP methodology to account for emerging factors, NYISO should instead just procure extra capacity "to account for the difference between the amount of UCAP that a given portfolio of State Policy Resources can provide, and the amount of UCAP that a given portfolio of state policy resources can provide, so it is not clear why Joint Utilities think this is a better proposal than actually calculating the UCAP values for all resources correctly.

At best, the FCCR is an imprecise way to ascertain how much capacity NYISO needs; at worst, it is a transparent effort to keep more fossil resources online even when they could be displaced by state-supported resources without affecting reliability. The problems with the FCCR are magnified by its inclusion of a clearing price *floor* based on the highest going-forward cost among the resources that NYISO determines is necessary for reliability, which the Joint Utilities seem to define as conventional resources.³⁶ While the design is not spelled out in detail, this clearing price floor presumes that conventional resources provide some peak resource adequacy benefit that newer technologies cannot, and seems designed to protect those resources from competition from zero-carbon resources. In sum, "[t]his proposal would result in both an artificial increase in the UCAP procured in the capacity construct (beyond the quantity needed for resource adequacy) and also an administrative price floor applied to the excessive quantity."³⁷

The Comments on Resource Adequacy Matters submitted by Marc D. Montalvo on behalf of the Utility Intervention Unit proposes an alternative organized market-based method of satisfying New York's policy preferences. As Mr. Montalvo explains, "the better approach is to clearly define the desired attributes and to structure a procurement mechanism and set of products that, in aggregate, meets the demand for those attributes; no single resource needs to sell all products and meet all attributes."³⁸ A significant virtue of this approach compared to the Joint Utilities' MVP is that it is not built upon the shaky foundation of the capacity market, and does not limit

³⁴ *Id.* at 24.

³⁵ Id.

³⁶ JU Initial Comments at 26.

³⁷ Wilson Aff. ¶ 25.

³⁸ UIU Comments at 7.

resources' ability to provide other attributes only if they can also provide capacity. However, it is unclear whether the complexity involved in the approach—"select[ing] the lowest cost set of portfolios that in aggregate simultaneously meet all attribute demands"³⁹—is justified compared to discrete organized market or state-driven procurements of the attributes needed. We also note that Clean Energy Supporters' preferred option would allow individual wholesale customers to optimize their procurements in just the way Dr. Montalvo envisions. Indeed, as James Wilson notes, even if the complexity of the UIU proposal could be managed, it is unclear what advantage this approach offers "compared to soliciting resource proposals, and evaluating alternative combinations through an approach that considers how an entire portfolio works together, such as within an integrated resource planning ("IRP") model. An IRP approach would take into account how different resources interact as substitutes or complements within a portfolio that meets all of the system needs at lowest cost/highest value."⁴⁰ In other words, where the state wants to ensure a generation mix that meets multiple criteria, reliance on a centralized forward market—the administrative details of which are out of the PSC's control—is a risky bet when compared to state-driven procurement backstopped by a residual capacity market.

IV. Conclusion

As we explain in our initial comments, we recommend that the PSC develop a resource adequacy regime that appropriately accounts for and values state-sponsored resources. To this end, the PSC should hold a technical conference as soon as possible to address the major topics in this docket and to help identify the next steps to take. These questions include: how state regulators can more effectively oversee a resource adequacy program within a state while maintaining and enhancing reliability; gaps between current resource adequacy constructs and the needs of the zero-carbon power system mandated by New York law; and how to align a PSC-run resource adequacy construct with NYISO markets.

Given FERC's recent MOPR decision that effectively prevents state-supported resources from participating in PJM's capacity market, there is a strong likelihood that FERC will apply the same flawed reasoning concerning BSM in NYISO. New York should proactively avoid the potential imposition of BSM by considering a market design that limits NYISO's control over capacity procurement, under which BSM would have reduced or no relevance. FERC's imposition increases the stakes under which the PSC must act: New York must assert its authority over resource adequacy to ensure that it can reach its ambitious decarbonization mandate through a safe and cost-effective pathway.

³⁹ *Id.* at 8.

⁴⁰ Wilson Aff. ¶ 22.

Respectfully submitted on the 31st day of January 2020.

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