UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Hybrid Resources	)	**Docket No. AD20-9-000**

REPORT OF
THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

In accordance with the Federal Energy Regulatory Commission's ("Commission's") January 19, 2021 Order Directing Reports ("Order") in the above-referenced docket, the New York Independent System Operator, Inc. ("NYISO") hereby submits its Report responding to the Commission's questions.[1]

On January 29, 2021, the NYISO proposed a participation model for Co-located Storage Resources ("CSR"), which will permit an Energy Storage Resource ("ESR") and a wind or solar-fueled Intermittent Power Resource ("IPR")[2] to locate behind a single Point of Injection for the purpose of participating in the NYISO-administered markets.[3] As described in Part II.C of this Report, Generators that participate as CSR will submit offers, receive schedules, and be settled separately. Schedules for CSR Generators will account for limitations on their combined output due to the capabilities of the CSR's interconnection facilities (*i.e.*, the CSR injection Scheduling

[1] *Hybrid Resources*, Order Directing Reports, 174 FERC ¶ 61,034 (Jan. 19, 2021) (directing RTOs and ISOs to submit information related to hybrid resource participation in the wholesale markets).

[2] Capitalized terms that are not otherwise defined in this filing letter shall have the meaning specified in Section 1 of the Open Access Transmission Tariff ("OATT") and Section 2 of the Market Administration and Control Area Services Tariff ("Services Tariff").

[3] New York Indep. Sys. Operator, Inc. January 29, 2021 Filing Proposing Tariff Revisions to Implement Co-located Storage Resources, Docket No. ER21-1001-000 (hereinafter January 29 Filing).

Limit). The Commission accepted the NYISO's filing on March 31, 2021, and the NYISO anticipates implementing the CSR participation model in the fourth quarter of 2021.[4]

The NYISO has also initiated an effort to develop a participation model for Hybrid Storage Resources ("HSR"). The HSR model will offer the opportunity for multiple assets behind a common Point of Injection to operate as a single Resource. Under this participation model, a HSR will be able to submit offers, receive schedules, and be settled as a single Resource.

These two participation models join the NYISO's Distributed Energy Resource ("DER")[5] and Behind-the-Meter Net Generation Resource[6] participation models in providing asset owners and operators with flexible wholesale market participation options that meet their physical and operational capabilities, and the opportunity to meet their business needs. Over the last five years, the NYISO has worked to develop wholesale market opportunities for advanced technologies, distributed resources, and small power producers. Continued innovation in wholesale market design is a critical component of the NYISO's transition to the grid of the future.

[4] *New York Indep. Sys. Operator, Inc.*, 174 FERC ¶ 61,242 (Mar. 30, 2021).

[5] The DER and Aggregation participation model offers Market Participants the opportunity to aggregate individual facilities and provide services as a single unit. Aggregations are distinct from a CSR by, among other things, gathering facilities located at separate Points of Injection.

[6] The Behind-The-Meter Net Generation Resource participation model permits one or more Generators that is co-located with Load to provide the NYISO-administered markets with excess Energy, Ancillary Services, and Installed Capacity after serving its co-located Load.

I. COMMUNICATIONS AND COORESPONDENCE

All communications and correspondence concerning this Report should be directed to:

Robert E. Fernandez, Executive Vice President & General Counsel
Karen G. Gach, Deputy General Counsel
Raymond Stalter, Director, Regulatory Affairs
Alex M Schnell, Assistant General Counsel/
Registered Corporate Counsel
*Gregory J. Campbell, Senior Attorney
10 Krey Boulevard
Rensselaer, NY 12144
Tel: (518) 356-6000
Fax: (518) 456-8825
gcampbell@nyiso.com

* Person designated for receipt of service.

II. REPORT IN RESPONSE TO COMMISSION QUESTIONS

The NYISO provides the following responses to the topics the Commission instructed it to address in this Report:

A. Terminology

Commission Questions

1. Explain whether the RTO/ISO has a definition of hybrid resources in its tariff or in a business practice manual and, if so, provide the definition and citation. If the RTO/ISO does not have a definition of a hybrid resource in its tariff or a business practice manual, explain whether there are hybrid resources in its interconnection queue, and if so, how such resources are categorized, *e.g.*, co-located or integrated hybrid resources.

2. If the RTO/ISO does not have a definition, but there are hybrid resources participating in the RTO/ISO markets, explain how such resources have been participating to date.

NYISO Response

a. Definition of Co-located Storage Resources and Hybrid Storage Resources

The NYISO's January 29 Filing defined Co-located Storage Resources as:

> [a] wind or solar Intermittent Power Resource and an Energy Storage Resource (two Generators) that: (a) are both located behind

> a single Point of Injection; (b) participate in the ISO Administered Markets a two distinct Generators; and (c) share a set of CSR Scheduling Limits. Resources that serve a Host Load may not participate in the ISO Administered Markets as components of a CSR.[7]

The NYISO is also developing a definition of a HSR, which will be distinct from a CSR. A HSR will be (i) a single Resource (and Point Identifier ("PTID")) including storage and at least one other technology, (ii) that is located behind a single Point of Injection, and (iii) that does not serve behind-the-meter Load. Thus, unlike a CSR, all assets comprising the HSR will be modeled, offered, scheduled, dispatched, and settled as a single unit. The HSR's assets will be required to be behind the same Point of Injection on the transmission or distribution system. This requirement distinguishes a HSR from a DER Aggregation, where the aggregated facilities are located at separate points of interconnection across a region that is electrically downstream of a common designated Transmission Node. Finally, a HSR will not be permitted to serve behind-the-meter Load.[8]

b. Hybrid Resource Participation in the NYISO-Administered Markets

The NYISO does not currently have hybrid resources participating in the Energy, Ancillary Services, and Installed Capacity markets it administers. Facilities that are located at the same physical location are required to have separate Interconnection Agreements, distinct metering and telemetry, and are modeled, offered, scheduled, and settled separately.

[7] January 29 Filing at 8, Services Tariff Sec. 2.3. Many of the market rules proposed and accepted in Docket No. ER21-1001-000, *et al.*, have not yet become effective. Such market rule citations are identified as an "accepted" Tariff Section in the instant filing to make clear that they are accepted, but not yet effective.

[8] The NYISO's Tariffs define Energy withdrawals by an ESR as negative injections, not "Load." Services Tariff Sec. 2.12 (at definition of "Load"). Therefore, Energy withdrawn from the grid or provided by the co-located Generator to the ESR is not considered "Load" for this purpose.

B. Interconnection

Commission Questions

1. Describe the interconnection process for both a hybrid resource newly entering the interconnection queue and a resource adding a storage component to an existing interconnection request. Include a description of interconnection request requirements that are specific to hybrid resources (such as parameters necessary for transmission providers to adequately model hybrid resources), how the RTO/ISO models these types of resources both for reliability and market participation, and how the RTO/ISO would treat a request for the addition of storage to an existing interconnection request.

2. Describe any changes to the tariff or business practice manual that would directly affect the interconnection of hybrid resources and that the RTO/ISO is planning or are being discussed in the stakeholder process.

NYISO Response

a. Description of Interconnection Processes for Hybrid Resources

The NYISO's January 29 Filing proposed, and the Commission accepted, new interconnection rules applicable to CSR. The tariff modifications permit multiple Generators behind a single Point of Interconnection to submit a single Interconnection Request. It also permits Projects[9] with separate queue positions that were in the NYISO Interconnection Queue as of March 31, 2021, to combine to become a proposed CSR under a single Interconnection Request as a single Project upon satisfaction of specific transition rule requirements.[10] Each CSR proposed in a single Interconnection Request will be studied and modeled as a single

[9] The NYISO defined a "Project" as "[t]he proposed facility as described in a single Interconnection Request, to the extent permitted by [the Large Facility Interconnection Procedures] or [Small Generator Interconnection Procedures]." Open Access Transmission Tariff Sec. 25.1.2 (at definition of "Project").

[10] Such a Developer may, prior to the return of the executed Interconnection Facility Study Agreement to the ISO, modify the Project by combining it with another Project in the Interconnection Queue if (i) the Projects propose to be co-located behind the same Point of Interconnection; (ii) Developer submits a revised Interconnection Request reflecting the modification to become a Project comprised of multiple Generators as well as identifying the Developer of record for purposes of the interconnection process; and (iii) Developer demonstrates the manner in which such Developer of record retains Site Control for the combined Project. OATT Sec. 30.4.4.2.

Project.[11] For Projects that complete the Interconnection Study process and propose to move forward, the NYISO will permit the CSR to execute a single Interconnection Agreement.

The NYISO also modified the data collected in the Interconnection Request form to accommodate CSR. For example, the Project developer must identify its requested Energy Resource Interconnection Service ("ERIS") and Capacity Resource Interconnection Service ("CRIS"), and for a CSR, the developer must specify the allocation of the ERIS and CRIS among the CSR Generators. For ERIS, the applicable Developer will request ERIS for the entire Project, and specify the allocation of ERIS among the Generators in the Interconnection Request. The Developer will not be permitted to request ERIS in excess of the CSR's injection Scheduling Limit (*see* NYISO Response in Part II.C) plus the full Energy withdrawal capability of the ESR participating in the CSR. Setting the maximum ERIS value to the sum of the injection Scheduling Limit and the Energy withdrawal capability of the ESR allows the Intermittent Power Resource to simultaneously inject Energy onto the grid at the full injection Scheduling Limit and charge the co-located Energy Storage Resource.

Each Developer will also request CRIS for the entire Project, and allocate the total CRIS among the individual Generators. The maximum amount of CRIS that a Developer may request is the minimum of: (i) the expected maximum injection capability (in MW), (ii) the nameplate capacity of the Project (*i.e.*, the collective injection capability of all units within the proposed project (in MW)), and (iii) the sum of the facility's requested and existing ERIS.

b. Description of Planned Interconnection Processes for Hybrid Resources

The NYISO is in the early stages of evaluating its interconnection rules as they would apply to a HSR, and identifying any necessary tariff modifications. The NYISO has not yet

[11] The NYISO's study and modeling for the purposes of interconnection is distinct from the modeling conducted for market participation. As discussed in Part II.C, the NYISO will model each CSR Generator separately in its market systems.

discussed HSR interconnection proposals with its stakeholders. The NYISO expects to complete this evaluation and identification in 2021, and include any necessary revisions in its planned 2021 HSR proposal.

C. Market Participation

Commission Questions

1. Describe how hybrid resources are currently participating in the wholesale energy, ancillary services, and capacity markets. Include the services that hybrid resources are eligible to provide and how modeling and bidding is accomplished for such resources. Provide specific modeling and bidding rules unique to hybrid resources, or, in the alternative, provide an explanation of whether and how hybrid resources have participated in its markets to date.

2. Describe any changes to the RTO/ISO tariffs or business practice manuals that relate to the market participation of hybrid resources that the RTO/ISO is planning or that are currently being discussed in the stakeholder process.

NYISO Response

a. Description of Existing Hybrid Participation Opportunities—Co-located Storage Resources

There are currently no hybrid resources participating in the NYISO's Energy, Ancillary Services, or Installed Capacity ("ICAP") markets. However, the January 29 Filing proposed a participation model for CSR, which the NYSIO anticipates implementing in the fourth quarter of 2021.

Under the NYISO's accepted rules, a CSR comprises an ESR and a wind or solar IPR that share a common Point of Injection.[12] The rules permit the two Generators[13] participating in a CSR to submit a single, shared interconnection request, or to consolidate two interconnection

[12] The Point of Injection is also the ESR's Point of Withdrawal.

[13] An ESR is a type of Generator. A wind or solar IPR is also a type of Generator.

requests in the NYISO's interconnection queue.[14] These rules require the Generators in a CSR to share an injection limit called a CSR injection Scheduling Limit, which can be less than the combined capability of the participating Generators.[15]

For most purposes the ESR and the wind or solar IPR that participate in a CSR will participate in the NYISO's markets and operate as two discrete Generators. Each Generator will be assigned its own PTID. Each will submit resource-specific Bids and each will receive a resource-specific schedule. The Generators that participate in a CSR will also be settled individually. With a few limited exceptions (outlined below), an ESR that participates in a CSR follows the same market participation rules as other New York Control Area ("NYCA") ESRs, and a wind or solar IPR that participates in a CSR follows the same market participation rules as other NYCA wind or solar IPRs.

The CSR Generators' Energy injections, Operating Reserve schedules, and Regulation Service schedules, will be subject to a shared CSR injection Scheduling Limit. The same Locational Based Marginal Price ("LBMP") will apply to both participating Generators because they will inject or withdraw Energy at the same electrical location. Net injection schedules at the Point of Injection will not be permitted to exceed the CSR injection Scheduling Limit. Energy withdrawals from the grid by the ESR will not be permitted to exceed the CSR withdrawal Scheduling Limit. The NYISO's Day-Ahead and real-time scheduling and dispatch software will develop Energy, Operating Reserve, and Regulation Service schedules for the CSR Generators that respect the CSR Scheduling Limits.

[14] There are already several CSR interconnection requests in the NYISO's Interconnection Queue.

[15] The CSR Scheduling Limits will be determined based on the associated interconnection and transmission facilities' physical capabilities. The CSR injection Scheduling Limit can be less than the capability of one or both of the Generators that participate in a CSR. For example, a 100 MW (maximum output) solar IPR and a 50 MW (maximum injection) ESR will be able to share interconnection facilities that allow a maximum of 80 MW of Energy to be simultaneously injected onto the New York State Transmission System.

To ensure that the NYISO has up-to-date information on the ability to support injections and withdrawals, each CSR Generator will be required to include MW values for the CSR injection Scheduling Limit and the CSR withdrawal Scheduling Limit with its Day-Ahead and real-time Bids. The NYISO expects the CSR Scheduling Limit information submitted with the CSR Generator Bids to accurately reflect the physical capabilities of the relevant facilities to accommodate the injection and withdrawal of Energy.[16] The NYISO is implementing enhancements to its Market Mitigation Measures to address possible physical withholding, and will give its operators additional tools to address CSR that do not operate consistent with their NYISO-issued schedules and dispatch.[17]

A key proposed change to the operation of a wind or solar IPR that participates in a CSR is that when a pair of CSR Generators' combined Energy and Ancillary Services Schedules is within 10%[18] of the CSR injection Scheduling Limit, the NYISO will instruct the wind or solar IPR not to exceed its NYISO-issued schedule. This instruction will be effectuated via the application of a Wind or Solar Output Limit. The purpose of this instruction is to provide a buffer to ensure the deliverability of scheduled Ancillary Services and Energy from the participating ESR given the potential for unexpected increases in output from the co-located IPR. When a Wind and Solar Output Limit applies, the IPR will not be paid for output in excess of its

[16] Because the CSR injection and withdrawal Scheduling Limits submitted by each of the CSR Generators will address the physical capabilities of the same set of facilities, the NYISO will implement a Bid validation or similar measure to ensure that consistent values are submitted by both Generators.

[17] The NYISO's Operators will be able to modify CSR Scheduling Limits by issuing an Out-of-Merit instruction. Modifying the CSR Scheduling Limits is a tool that the NYISO's operators can use to address CSR Generators' repeated failure to operate consistent with NYISO-issued real-time schedules and dispatch.

[18] The NYISO will have the ability to change the value that is ordinarily used (which will initially be set at > 90% of the CSR injection Scheduling Limit), based on its experience with actual CSR operation in its markets. The NYISO is required to post the % value that is currently in-effect on its website, so CSRs will know when to expect that the NYISO will apply a Wind and Solar Output Limit to the IPR.

schedule plus a 3% of upper operating limit ("UOL") tolerance.[19] The IPR may also be subject to additional charges in accordance with Sections 15.3A.1.1 of the NYISO's Services Tariff for overproducing Energy. By providing financial incentives to maintain the output of an IPR at or below its NYISO-issued schedule at times when the combined Energy and Ancillary Service schedules of a pair of CSR Generators approaches the CSR injection Scheduling Limit, the Tariff rules will enable the participating ESR to operate consistent with its NYISO-issued schedules and dispatch.

IPRs are not eligible to supply Operating Reserves or to provide Regulation Services in New York. ESRs that participate in a CSR will remain eligible to provide these Ancillary Services in the same manner as other ESRs. The CSR Scheduling Limits will account for a participating ESR's Operating Reserve and Regulation Service Schedules, and a Wind or Solar Output Limit may be assigned to a co-located IPR in order to permit the ESR to provide scheduled Operating Reserves and Regulation Service.

Both the ESR and the IPR that participate in a CSR will be eligible to provide Voltage Support Service ("VSS"). The compensation paid to each VSS supplier in a CSR will be calculated from its Reactive Power capability or will be limited to the total Reactive Power capability at the CSR's Point of Injection if the total Reactive Power capability at the Point of Injection is less than the capability of the individual resource.

The settlement rules for ESRs and wind or solar IPRs that participate in a CSR are the same rules that apply to stand-alone Generators of the same type, with two exceptions. First, the NYISO will not assess a Transmission Service Charge ("TSC") or a New York Power Authority

[19] Section 4.5.2.1 of the Services Tariff identifies exceptions to this rule that apply when LBMPs are negative, or during reserve pickup reliability events.

Transmission Adjustment Charge ("NTAC") to an ESR for charging Energy the ESR receives from its co-located wind or solar IPR behind the CSR Generators' shared Point of Injection/Point of Withdrawal.[20] Second (and related), if a New York Load Serving Entity ("LSE") decides to apply retail charges to an ESR that participates in a CSR for its Energy withdrawals, then the NYISO will credit the ESR and charge the LSE the wholesale costs associated with all net withdrawals at the shared Point of Injection/Point of Withdrawal.[21]

The capacity market participation rules that apply to a stand-alone wind or solar IPR, or to a stand-alone ESR, also apply to the Generators that participate in a CSR. However, the rules are modified to account for the impact of the CSR injection Scheduling Limit and CSR withdrawal Scheduling Limit on the availability and capability of the CSR Generators. Specifically, the NYISO modified its Operating Data Reporting Requirements, Availability Requirements, and the Unforced Capacity Calculations to incorporate the effects of the CSR Scheduling Limits on the CSR Generators. Unforced Capacity calculations for a participating ESR will incorporate both an availability factor for the shared interconnection facilities and any limitations on the ability to provide capacity that are imposed by the CSR injection Scheduling Limits. Unforced Capacity calculations for a participating IPR will incorporate the potential impact of the CSR Scheduling Limits on the IPR's Production Factor.

In addition to the traditional Bid/Schedule/Notify requirement that applies to the ESR in a CSR,[22] each Installed Capacity Supplier in a CSR must, on a daily basis and for each hour of the Day-Ahead Market Day: (i) provide a CSR injection Scheduling Limit; and (ii) notify the NYISO of any derate or outage to the interconnection facilities comprising the Point of

[20] *See* Accepted OATT Section 2.7.

[21] *See* Accepted Services Tariff Section 7.2.

[22] *See* Services Tariff Section 5.12.7.

Interconnection.[23] The scheduling limit values submitted by the Generators that participate in a CSR are expected to be identical because they address the same set of interconnection facilities.

Finally, the NYISO will require each CSR Generator to individually acquire CRIS. The total amount of CRIS allocated to the CSR Generators cannot be greater than the amount of capacity found to be deliverable at the CSR's Point of Injection.

The NYISO confirms that the information provided to the Commission in Docket No. ER21-1001-000 remains relevant and is up-to-date for CSR. The NYISO will provide an update to the Commission regarding its progress implementing the accepted CSR rules on or before August 1, 2021.

b. Description of Planned Hybrid Resource Participation Opportunities

The NYISO is currently developing a HSR participation model that will permit an ESR and one or more additional Generators that are electrically located behind the same Point of Injection to act as a single Resource. Like a CSR, a HSR will have a single Point of Injection on the New York State Transmission System or a distribution system. Unlike a CSR, the Generators comprising a HSR will have a single PTID, will offer into the Energy, Ancillary Services, and ICAP markets as a single Resource, will be scheduled and dispatched as a single Resource, and will be settled as a single Resource. A HSR will be eligible to qualify to provide Energy, Operating Reserves, Regulation Service, and Capacity.

D. Capacity Valuation

Commission Questions

1. Explain how the capacity value of hybrid resources is currently determined in the RTO/ISO markets.

[23] *See* Accepted Services Tariff Section 5.12.7.1.

2. Describe the method used to calculate the capacity value of hybrid resources, and any changes to that calculation that are being planned or that are currently being discussed in its stakeholder process.

NYISO Response

a. Description of Existing Capacity Valuation for Hybrid Resources

Under the NYISO's CSR participation model, the capacity value of the ESR and wind or solar IPR will be measured consistent with the methodology applicable to stand-alone ESRs and stand-alone IPRs.

An ESR participating in a CSR will be eligible to qualify as an Installed Capacity Supplier with an Energy Duration Limitation.[24] Consistent with these rules, an ESR participating in a CSR will be permitted to elect a two, four, six or eight hour Energy Duration Limitation.[25] The available Energy Duration Limitations correspond to individual Duration Adjustment Factors.[26] The NYISO utilizes Duration Adjustment Factors to align the payments for Installed Capacity Suppliers with the appropriate value that each Resource with an Energy Duration Limitation provides to maintain the resource adequacy of the system. IPRs are not eligible to elect an Energy Duration Limitation, and participate as performance-based (rather than availability-based) Installed Capacity Suppliers.

The NYISO's Duration Adjustment Factors were informed by a 2018 study that evaluated the capacity value of run-time limited Resources and extensive stakeholder discussion, and align with the capacity values observed for different penetration levels of Resources with Energy Duration Limitations. The current Duration Adjustment Factor for Resources that elect a

[24] *See* Services Tariff Section 5.12.11.5.

[25] A Resource with an Energy Duration Limitation's two, four, six, or eight hour election represents the consecutive number of hours it is capable of providing service on each day.

[26] *See* Services Tariff Section 5.12.14.

two hour Energy Duration Limitation is 45%, is 90% for Resources that elect a four hour Energy Duration Limitation, and is 100% for Resources that can perform for at least six consecutive hours each day. These values will be effective until incremental penetration of Resources with an Energy Duration Limitation since January 1, 2019 reaches 1000 MW.[27]

The Installed Capacity of a Resource with an Energy Duration Limitation, including an ESR participating in a CSR, will reflect the Resource's elected Energy Duration Limitation and Duration Adjustment Factor. The Resource's "Adjusted Installed Capacity" is equal to its Installed Capacity multiplied by the Duration Adjustment Factor. For example, the Adjusted Installed Capacity for an ESR with an Installed Capacity of 20 MW and an Energy Duration Limitation of 4 hours would be 18 MW (20*0.9). The Adjusted Installed Capacity Value is, in turn, used to calculate the amount of Unforced Capacity the Resource is eligible to sell.

The NYISO calculates the amount of Unforced Capacity each Installed Capacity Supplier is qualified to sell in the NYISO's ICAP market, accounting for each Resource's derating factor. The Unforced Capacity calculation for an ESR that is a CSR Generator will be similar to the calculation that applies to ESRs that do not participate in a CSR, with an adjustment for the availability of the shared interconnection facilities. The modified calculation allows the derating factor to account for both the availability of the ESR and the availability of the CSR interconnection facilities.[28] The calculation for the Unforced Capacity that a wind or solar IPR that participates as a part of a CSR is authorized to supply will similarly account for the unavailability of the CSR interconnection facilities.[29]

[27] Once the incremental MW of Resources with an Energy Duration Limitation hits 1000 MW, the Duration Factors will be 37.5% for 2-hour Resources, 75% for 4 hour Resources, 90% for 6-hour Resources, and 100% for 8-hour Resources. Services Tariff Section 5.12.14.

[28] Accepted Services Tariff Section 5.12.6.2.

[29] *Id*.

The NYISO will engage in a process to evaluate the capacity value of Resources with an Energy Duration Limitation (including ESRs) and IPRs every four years. This process recognizes that the capacity value of run-time limited and intermittent generation varies in relationship to their MW penetration on the system, and is designed to assess the impacts of energy duration limitation, penetration of MW, persistence of use throughout the year, diversity of resources, seasonal performance variations and limitations, IPR generation during the NYISO-identified Peak Load Window, and how these parameters impact resource adequacy criterion. The results of the study will inform the Duration Adjustment Factors described above for Resources with an Energy Duration Limitation, and the time-weighted calculation of IPR performance metrics.

b. Description of Planned Modifications to Capacity Valuation of Hybrid Resources

The NYISO is currently working on an effort to re-evaluate how to measure resource value in the capacity market. This Capacity Accreditation effort is evaluating various metrics, such as Effective Load Carrying Capability, that may more accurately align a resource's value in the Capacity Market to the resource's contribution to meeting Resource Adequacy Reliability Requirements. Any market rule changes resulting from the Capacity Accreditation effort would apply market-wide, including to Generators that participate as Co-located Storage Resources and to Hybrid Resources. The NYISO recently began discussions with stakeholders regarding its Capacity Accreditation project, and anticipates presenting a set of market rule changes to stakeholders in 2021. The NYISO intends to make the revised capacity valuations developed in the proposal effective for the 2023-2024 Capability Year, which starts May 1, 2023.

III. CONCLUSION

The NYISO supports the Commission's efforts related to hybrid resources. The NYISO's CSR model integrates distinct Generators located behind a single Point of Injection

that allows the facility operator to offer Energy, Ancillary Services, and Capacity in the NYISO-administered markets while respecting the facility's injection limits. The NYISO's fully integrated Hybrid Storage Resource model that is currently under development will treat all assets behind a point of interconnection as a single facility, permitting the facility operator the flexibility to operate the individual units as it wishes to meet a single schedule. These models, along with the NYISO's Distributed Energy Resource participation model provide facility owners and operators with multiple wholesale market participation opportunities to meet their specific business and operational needs.

Respectfully submitted,

/s/ Gregory J. Campbell
Gregory J. Campbell
Senior Attorney
New York Independent System Operator, Inc.
10 Krey Boulevard
Rensselaer, NY 12144

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cc:

Janel Burdick	John C. Miller
Matthew Christiansen	David Morenoff
Jignasa Gadani	Douglas Roe
Jette Gebhart	Frank Swigonski
Leanne Khammal	Eric Vandenberg
Kurt Longo	Gary Will

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 19th day of July, 2021.

/s/ Mohsana Akter

Mohsana Akter
New York Independent System Operator, Inc.
10 Krey Blvd.
Rensselaer, NY 12144
(518) 356-7560