Attachment III

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.	**)**	**Docket No. ER20-___-000**

AFFIDAVIT OF SHAUN JOHNSON

Mr. Shaun Johnson declares:

1. I have personal knowledge of the facts and opinions herein and if called to testify could and would testify competently hereto.

2. I am the Director of the Market Mitigation and Analysis Department for the New York Independent System Operator, Inc. ("NYISO"). My business address is 10 Krey Boulevard, Rensselaer, NY 12144.

3. I have worked in the energy industry for over 17 years, working for both the NYISO and NRG Energy, Inc. I received a Bachelor of Arts in Economics from the State University of New York, Albany.

4. My current responsibilities include implementing the NYISO's market power mitigation measures and assisting the NYISO's and the independent Market Monitoring Unit's efforts to administer the NYISO's Market Monitoring Plan [including with respect to the NYISO's implementation of the "buyer side" capacity market power mitigation measures (the "BSM Rules")].

5. I oversee the administration of the Part A Exemption Test and the Part B Exemption Test, as well as the other Buyer Side Mitigation Exemptions set forth in the Market Administration and Control Area Services Tariff ("Services Tariff"). I also have worked closely with the independent Market Monitoring Unit ("MMU") on various potential initiatives to modify the BSM Rules to better reflect expected future changes in the resource mix in New York State.

6. The proposed changes to the Part A Exemption Test presented by the NYISO ("Part A Enhancements") arise out of recommendations initially put forth by the MMU. I have worked closely with the MMU to develop an approach that would allow those recommendations to be implemented. I have directly overseen the development of the Part A Enhancements. I also helped to develop the presentations that the NYISO made to its stakeholder working groups regarding the Part A Enhancements, and participated in internal discussions concerning stakeholder input.

7. The purpose of this affidavit is to support the NYISO's filing by explaining the key components of the Part A Enhancements. I have reviewed the transmittal letter which describes and explains the rationale for the proposed tariff revisions. The statements therein are true and accurate to the best of my knowledge, information, and belief. In the following paragraphs, I outline the key facets of the proposed enhancements and walk through a simple example to illustrate how it would be implemented in practice.

8. One of the fundamental changes of the proposal is to better align the evaluation period for the Part A Exemption Test with the expected entry period of a new resource. This enhancement incorporates several changes to the current process which will better align the NYISO's evaluation of a resource under the Part A Exemption Test with the years that it is reasonably likely to enter service. It also reflects the short lead times several technologies have that provide them a first mover advantage if the NYISO evaluations were better aligned with their entry. The current Part A Exemption Test takes a one-year snapshot look for the Capability Year that starts three years from the start of the Class Year. This may be appropriate for some resources, but for others it may bear little resemblance to the expected market conditions of when the entrant is expected to enter into service, which could be earlier, or several years later. The NYISO is therefore proposing to evaluate each Examined Facility under the Part A Exemption Test for each of the three years associated with its Mitigation Study Period.

9. Recognizing the practical difficulties in forecasting the exact entry date of a new resource – due to a variety of factors such as receiving permitting and regulatory approvals, construction delays, and market conditions affecting financing or cash flows – the NYISO is also proposing to establish two time periods to be used to evaluate Examined Facilities under the

Part A Exemption Test: the Part A Mitigation Study Period Years 1 through 3 and the Part A Mitigation Study Period Years 4 through 6.

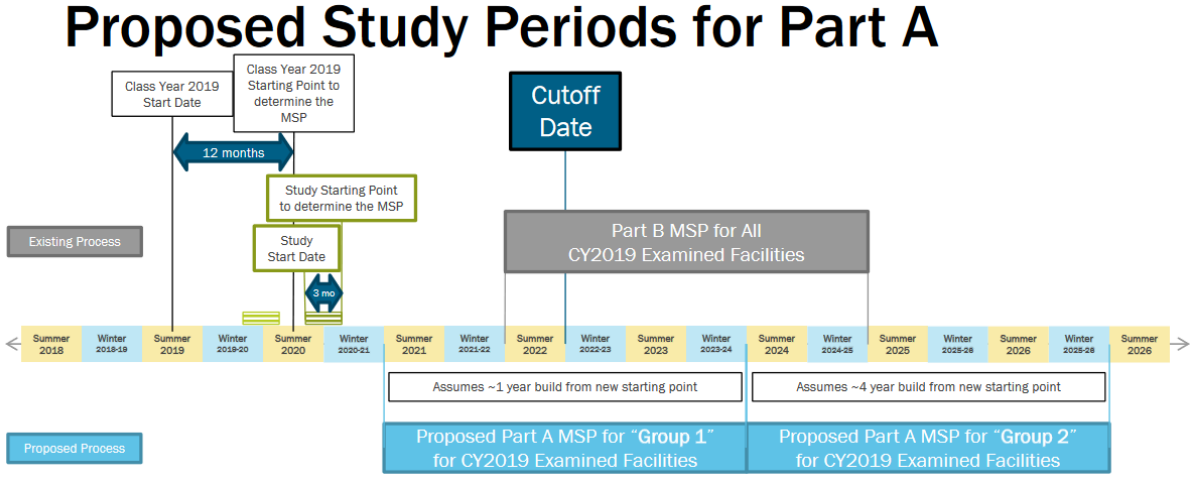
10. The NYISO will organize the Examined Facilities into two groups to correspond with these two time periods, based upon the NYISO's determination of each project's likely entry date into the market for purposes of the Part A Exemption Test. While there is some variation in actual entry date, technologies have likely windows within which they will enter. The NYISO will categorize those resources that can complete construction and enter the market quickly into the Part A Group 1 Examined Facilities category and evaluate these resources using the Part A Mitigation Study Period Years 1 through 3. For Class Year 2019, this results in the Part A evaluations beginning in the Capability Year that is a year earlier than the current process. The default category, however, will be the Part A Group 2 Examined Facilities, which will use the Part A Mitigation Study Period Years 4 through 6 and will include all Examined Facilities that the NYISO has determined will not likely enter the market in the time required to be identified as part of Part A Group 1 Examined Facilities.

11. The NYISO is proposing to place all Examined Facilities evaluated under the Part A Exemption Test into one of two groups that are evaluated using the proposed Part A Mitigated Study Period Years 1 through 3 or Part A Mitigation Study Period Years 4 through 6 based upon information the NYISO obtains for each Examined Facility. All Examined Facilities, except those already in-service, will be placed in the Part A Group 2 category unless the NYISO determines that the Examined Facility qualifies to be identified as part of Part A Group 1 Examined Facilities. The NYISO will post its identification for Part A Group 1 and Group 2 Examined Facilities early in the study process. The groupings will be based on factors, such as size and technology, which inform the timing of the Examined Facility's entry into the market. The NYISO could amend this determination based on unique circumstances that the NYISO learns for an individual project. For example, a solar project being evaluated that proposes to not enter until five years later. Although the technology could be expected to enter the market faster, this specific project has a longer timeline and should be categorized in Part A Group 2.

12. Part A Group 1 Examined Facilities will be evaluated during a three year period starting with the first Capability Year following when the study is expected to conclude (*i.e.*, the

Estimated Initial Decision Period). The proposal requires that the NYISO establish this period "to be twelve months from the Class Year Study Start Date and three months from the Expedited Deliverability Study Start Date for the purpose of establishing the starting Capability Years for the Part A Mitigation Study Period Years 1 through 3 and Part A Mitigation Study Period Years 4 through 6." When compared to Class Year 2019 under the current rules, the Part A Mitigation Study Period Years 1 through 3 establishes a period that would start one year earlier than the current Mitigation Study Period. Part A Group 2 Examined Facilities will be evaluated for a three-year period starting with the fourth Capability Year from when the study is expected to conclude. Under the current rules, this period would start two years later than the current Mitigation Study Period for Class Year 2019. The current Mitigation Study Period is a three-year period starting with the Capability Year of the calendar year three years from the year of the Class Year Study.

13. The image below displays the current timeline and the new proposed timeline.



14. This new structure will accommodate the test to be performed for each Examined Facility for each year within the three-year Part A Mitigation Study Period – Years 1 through 3 and Years 4 through 6. Thus, the NYISO will conduct Part A Exemption Test evaluations for a total of six separate years – instead of the current practice of just one year – but each Examined Facility will only be evaluated in the three consecutive Capability Years that correspond to its grouping. If at any point during these evaluations an Examined Facility passes the Part A Exemption Test for the given Locality, it will be eligible to receive a Part A Exemption that starts from the Capability Year in which the test was met. Prior to that

Capability Year however, it will have an Offer Floor, assuming it does not otherwise qualify for another exemption or have had its Offer Floor cease to apply because its capacity cleared in the markets for 12 not necessarily consecutive months in accordance with Section 23.4.5.7.

15. For example, assume a 15 MW lithium-ion battery project is evaluated under the Part A Exemption Test in Part A Group 1 Examined Facilities for Class Year 2020, which begins in late 2020. Its Part A Mitigation Study Period is expected to be Capability Years 2022-23, 2023-24, and 2024-25. Assume that this project only passes Part A and receives an exemption in "Year 3" starting with Summer 2024. Prior to that summer, it would be subject to an Offer Floor. Furthermore, assume this project actually enters service in May 2022. The resource would then be required to submit an offer no less than its Offer Floor into the Installed Capacity (ICAP) Spot market. Further assume that it actually clears at its Offer Floor for the first 12 months of its full Capacity Resource Integration Service ("CRIS") . In that case, the resource would no longer have an Offer Floor for 2023.

16. The Part A Exemption Test is a Locality-specific test that allows for entry as the market nears the point where available supply is equal to the requirement in the Locality. It does this by creating exemptions when market conditions are expected to be greater than 75% of Cost of New Entry ("CONE"). Under current market conditions this is roughly 400MW before the need would exceed supply in Zone J and 500MW before the need would exceed demand in the G-J Locality. This higher market proxy is a reflection of a need for supply in the Locality.

17. Historically, the NYISO has evaluated Examined Facilities under the Part A Exemption Test in ascending order by their unit specific Net CONE. The theory for this has been that the most economic resources were the ones likely to enter the market first. While this theory is still accurate as a general matter, it needs to be augmented to acknowledge the changing scenario of entry into the New York wholesale electrical markets.

18. Resources that meet public policy needs are likely to come on-line and be operational, even if they do not have the lowest Net CONE. These resources are more likely to have firm offer takers and receive favorable financing terms. In addition, these resources often have fewer

regulatory hurdles for siting and approval. For example, the "Accelerated Renewable Energy Growth and Community Benefit Act" was recently enacted and took effect immediately upon enactment on April 3, 2020 as part of New York State's budget.[1] The law creates an Office of Renewable Energy Siting in the Department of State ("DOS") to consolidate the environmental review and permitting of "Major Renewable Energy Facilities". Given the new laws in New York, the expectation is that policy resources will be built to meet current and future needs. Thus, if the current testing mechanism (ordering by lowest Net CONE) is not augmented, it is possible that exemptions will be granted under the Part A Exemption Test to resources that may not be needed and therefore may not even come into existence.

19. The NYISO's proposal addresses this by specifically acknowledging the increased likelihood that Public Policy Resources (PPRs) will enter into service. It would do this by evaluating PPRs first under the Part A Exemption Test. These PPRs would be organized into the appropriate Part A Group 1 or Group 2 Examined Facilities and will be evaluated in order of their respective Net CONE, but all PPRs will be placed ahead of non-PPRs for each year of the Part A Mitigation Study Period. Reordering the testing in this fashion ensures that the resources most likely to enter into service are evaluated first.

20. For every year of a Part A Mitigation Study Period, PPRs will be evaluated for the Zone J Locality (if they are Zone J resources) and then the G-J Locality (as Zone J resources are supply in the G-J Locality, they are tested against both Localities). After all eligible PPRs have been evaluated in ascending Unit Net CONE order in that year, then all non-PPRs will be evaluated in the same ascending Unit Net CONE order for that year and relevant Locality.

21. The image below outlines the process:

[1] See, S.7508-B/A.9508-B, Chapter 58 of the Laws of 2020, Part JJJ, Accelerated Renewable Energy Growth and Community Benefit Act, § 7(2).

- **EFs exempt by Renewable Exemption included in forecast as price-takers**
- **Year 1**
  - Group 1 Public Policy Resources (in ascending order by Unit Net CONE)
    - Tested in J
    - Tested in G-J
  - Group 1 non-PPR EFs (in ascending order by Unit Net CONE)
    - Tested in J
    - Tested in G-J
- **Year 2**
  - EFs exempt in Year 1 included in forecast as price-takers
  - Remaining Group 1 PPRs
    - Tested in J
    - Tested in G-J
  - Remaining Group 1 non-PPR EFs
    - Tested in J
    - Tested in G-J
- **Year 3**
  - EFs exempt in Years 1 & 2 included in forecast as price-takers
  - Remaining Group 1 PPRs
    - Tested in J
    - Tested in G-J
  - Remaining Group 1 non-PPR EFs
    - Tested in J
    - Tested in G-J
- **Year 4**
  - Group 1 EFs exempt in Years 1 - 3 included in forecast as price-takers
  - Group 2 Public Policy Resources
    - Tested in J
    - Tested in G-J
  - Group 2 non-PPR EFs
    - Tested in J
    - Tested in G-J
- **Year 5**
  - Group 1 EFs exempt in Years 1 - 3 included in forecast as price-takers
  - EFs exempt in Year 4 included in forecast as price-takers
  - Remaining Group 2 PPRs
    - Tested in J
    - Tested in G-J
  - Remaining Group 2 non-PPR EFs
    - Tested in J
    - Tested in G-J
- **Year 6**
  - Group 1 EFs exempt in Years 1 - 3 included in forecast as price-takers
  - EFs exempt in Years 4 & 5 included in forecast as price-takers
  - Remaining Group 2 PPRs
    - Tested in J
    - Tested in G-J
  - Remaining Group 2 non-PPR EFs
    - Tested in J
    - Tested in G-J

22. It is important to note that this approach to evaluate PPRs first does not lead to price suppression effects, as the amount of exemptions that would be available under the Part A Exemption Test is the same in either scenario. For example, let us assume in an upcoming Class Year, the Part A Exemption Test forecasts an ICAP price for a given year that would indicate 100 MW are available in Zone J before 75% of CONE is reached. These 100 MW would be available to PPRs first, before other resources. However, no more than 100 MW of exemptions would be granted; the same as today. Also, let us assume the G-J Locality is forecasted with an ICAP price at 50% of CONE. In this case, 0 MW would be available for exemption to any resource and no exemptions would be granted under the Part A Exemption Test; the same as today. The proposed changes simply reorder units in the evaluation, but do not result in incremental exemptions.

23. Since technologies qualifying for the Renewable Exemption are also PPRs for the Part A Exemption Test, ordering the Renewable Exemption Test to occur before the Part A Exemption Test is important to ensure the amount of PPRs already receiving an exemption (and thus expected to enter) were properly accounted for in the market tests for each Locality under the Part A Test. As such, it is imperative that the Renewable Exemption be calculated first so the outcomes from that test may feed into the base supply set for the Part A Exemption Test.

24. Likewise, both the Renewable Exemption Test and the Part A Exemption test must now occur before the Part B Exemption Test. This is necessary so that the individual unit's economics being evaluated in the Part B Exemption Test account for the expected entry from

the resources having been found exempt in the previous tests, and thus expected to enter. The new exemption test order will now be the Renewable Exemption, followed by the Part A Exemption Test, concluding with the Part B Exemption Test. The process and the interactions between the tests are further described below. The Competitive Entry Exemption is applied separately.

25. The NYISO's proposal is meant to integrate these changes within the framework of the current BSM rules. As the NYISO filed in its compliance filing to the Renewable Exemption Order,[2] the Renewable Exemption (RE) determinations would be conducted first, prior to the NYISO conducting any Part A Exemption Test evaluations. Any MW receiving an exemption under the RE would be included as in-service when the NYISO determines the ICAP price forecast for Part A Exemption Tests for the year they are proposed to enter. The NYISO would then perform the Part A Exemption Test in the manner described above – a year-by-year look for two separate three-year periods.

26. As illustrated above, each year would evaluate first the PPRs in ascending order by Unit Net CONE for Zone J, then the G-J Locality. Then the non-PPRs would be evaluated for that year. Once the Part A Exemption Test was completed, the NYISO would then perform the Part B Exemption Test with any MW receiving an exemption under RE or Part A Exemption Test included in the base case for the relevant years. It should be noted that resources receiving a Part A Exemption would also be tested under the Part B Exemption Test. For this test, the resource is removed from the Part B base case and evaluated economically under the Part B Exemption Test. Should the resource be found exempt under Part B, it no longer has the Offer Floor timing restrictions associated with Part A Exemption. However, no additional MWs are awarded under the Part A Exemption Test in this case. In addition, the Competitive Entry Exemption will continue to be granted to qualifying resources as it is today.

[2] *See* New York Independent System Operator, Inc., *Compliance Filing of the New York Independent System Operator, Inc.,* Docket No. ER16-1404-002 (April 7, 2020).

27. Consistent with the currently effective rules, Examined Facilities in an Expedited Deliverability Study would be evaluated for Part A Exemption before Examined Facilities in the ongoing Class Year.

28. The following is intended to provide an example of how the process would work:

29. Assume a Class Year with the following Examined Facilities – 100 MW Off-Shore Wind Neptune in Zone J; 10 MW lithium-ion battery Jupiter in Zone J; 250 MW combined cycle Mercury in Zone J; 10 MW solar photovoltaic Venus in Zone G; and 25 MW lithium-ion battery Mars in Zone H.

30. The RE test results in Neptune receiving a 95 MW exemption, while Venus only receives a 5 MW RE.

31. The Part A Exemption Test would now be performed such that the 100 MW from the RE test are included in the base case and Group 1 consists of Jupiter (10 in J), the remaining Venus (5 in G-J), and Mars (25 in G-J). Group 2 consists of Mercury (250 in J) and the remainder of Neptune (5 in J). For assumption purposes, let us assume their Unit Net CONE order is consistent with the order of their namesake planets (Mercury, Venus, Mars, Jupiter, Neptune).

32. Year 1 – Venus, Mars, Jupiter all fail; Year 2 – Venus, Mars fail, Jupiter passes NYC; Year 3 – Jupiter included, Venus passes G-J and Mars fails; Year 4 – Mercury, Neptune both fail; Year 5 – Mercury, Neptune both fail; Year 6 – Mercury, Neptune both fail.

33. The Part B test would now be performed with a base case including 95 MW of Neptune starting in Year 4 (its proposed in service date), 5 MW of Venus starting in Year 1 (its proposed in service date), 5 MW of Venus starting Year 3, and 10 MW of Jupiter starting in Year 2. Under this scenario, we will assume only Mercury passes Part B. As noted above both Jupiter and Venus are also evaluated under Part B, but do not pass in this example. In addition, no resources qualified for a Competitive Entry Exemption.

34. The end result for our Examined Facilities:

    34.1. Mercury – Fully Exempt all years

34.2. Venus – 5 MW Exempt all years, 5 MW Exempt starting Year 3

34.3. Mars – Not Exempt (receives an Offer Floor)

34.4. Jupiter – Fully Exempt starting Year 2

34.5. Neptune – 95 MW Exempt all years, 5 MW not Exempt (Offer Floor)

35. This concludes my affidavit.

Respectfully Submitted,

/s/ Shaun Johnson

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