New York ISO
Independent System Operator

Manual 4

Installed Capacity Manual

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Revision History

Version	Effective Date	Revisions
1.0	09/01/1999	Initial Release
2.0	03/31/2000	Stage 1 – Forward requirements, eliminated back-buy provisions
3.0	02/15/2001	Stage 1A Monthly OPP, UCAP
4.0	03/20/2002	Demand Curve, SCR Energy Strike Price and Miscellaneous
4.1	08/30/2002	Supplemental Supply Fee changes
4.2	12/04/2003	Version 4.2 of the NYISO Installed Capacity Manual – SSF language changes and Removal of Attachments ➢ Clean Copy of ICAP WG November 2003 Revisions ➢ Small editorial changes made such as on 4-17 and 4-18: replaced "EST" with "ET"; Attachments removed from body of Manual (each posted separately on the NYISO Web site). Attachment D ➢ Converted to Excel spreadsheet and added automatic functionality such as calculating averages and error checking. Attachment F ➢ F-1: removed "Deficiency auction" and replaced with language pertaining to the Spot Market in the first paragraph of the Recitals section; added text fields that can be modified electronically in the PDF document ➢ F-4: replaced "Deficiency" with "Spot Market" in section 2 bullet (c) ➢ F-7, F-8: added text fields that can be modified electronically in the PDF document. Attachment G ➢ G-1: removed “Administered” from attachment title to be consistent with Attachment F; removed "Deficiency auction" and replaced with language pertaining to the Spot Market in the first paragraph of the Recitals section; added text fields that can be modified electronically in the PDF document; ➢ G-8: added text fields that can be modified electronically in the PDF document. Attachment I ➢ I-5: replaced "[to be determined]" price cap value with appropriate language referring to $112.95/kW-year UCAP in the first paragraph of section 3.1. Attachment K ➢ K-5, K-6: replaced "if known," with "(Assigned)" for both the Utility Code and Unit Code fields ➢ K-7: replaced SCR Commitment/Verification forms with reference to SCR Commitment Workbook on the NYISO Web site ➢ K-8, K-9, K-10: deleted.

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5.0	04/08/2004	Complete Format Change Section 4.12.2-General Requirements ➢ Added (3rd para) "An SCR may specify generation in excess of its facility load, provided that it has installed metering capability satisfactory to the NYISO in order to quantify the net load change during a curtailment. Such resources must certify to the NYISO that they have obtained all necessary regulatory approvals to sell energy at wholesale and meet applicable utility interconnection and delivery (including metering) requirements. Energy payment rates for such generation in excess of load shall not exceed the applicable real-time LBMP." ➢ Deleted (2nd para) "may not use a DMNC in calculating its Unforced Capacity that exceeds the total Load at the site of the distributed generator; (ii) must deduct from the output of such generator any auxiliary power consumed by the generator and supplied from an external source; and (ii)"
5.1	05/27/2004	Changed Sections Changed Version to Revision within the title and revision history pages. Section 5.2 – Capacity Period Auctions ➢ Replaced 4th paragraph. Section 5.3 – Monthly Auctions ➢ Added to para 3 – Monthly price caps that are applicable to such generation that are consistent with the annual price cap shall be calculated as described in Section 5.2 ➢ Deleted para 4.
5.2	07/28/2005	Global Changes ➢ Formatting change ➢ Changed all instances of "ISO" to "NYISO" ➢ Changed all instances of "EFORD" to "EFORd" ➢ Changed all instances of "website" to "web site". Section 2.2 ➢ First sentence – added "up to date"; "can be found by selecting the provided"; "found in this detailed timeline." Removed "is posted under the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO web site:" and "posted on the aforementioned page of the NYISO web site." Section 2.7 ➢ Last paragraph – Changed "Unforced Capacity" to "Installed Capacity." Section 3.4 ➢ Last two paragraphs – extensively rewritten. Section 3.5.1 ➢ First paragraph – extensively rewritten. Second paragraph - removed time line text and replaced with actual link to time line. Section 3.5.2

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		➢ First and Fourth bullet – removed time line text and replaced with actual link to time line. Section 3.5.4 ➢ First bullet – added "LSE that gains"; "from another LSE" and removed "gaining (or Load obligations gaining) LSE". Also removed time line text and replaced with actual link to time line. Section 4.2 ➢ Extensively rewritten regarding DMNC. Section 4.2.1 ➢ Last paragraph – extensively rewritten. Section 4.2.4 ➢ First paragraph – removed 1st reference to Attachment D. Section 4.4.11 ➢ First paragraph – changed "Effective" to "Equivalent." Section 4.7 ➢ First paragraph – removed time line text and replaced with actual link to time line. Added last two paragraphs. Section 4.8 ➢ First paragraph – removed from first sentence "rounded down to the nearest whole MW." Section 4.9.2 ➢ Under "Contents of Request" removed number 1 and a and b. First paragraph-removed "Resource Reliability" and second paragraph added along with a and b. Under "Response from the NYISO" - first paragraph extensively rewritten. Fourth paragraph - removed "either or both" and replaced with "any". Added 3rd bullet. Under para 5, added "the initial requests for" and removed "requests" after Import Rights. Under "Response from NYISO," added "the initial requests for" and removed "requests" after Import Rights. Section 4.9.2 ➢ Under "Other Allocations" italicized "Initial requests for Import Rights" Section 4.9.3 ➢ Second bullet – extensively rewritten. Section 4.12.2 ➢ Removed "submit an appropriate" added "provide to the". Second paragraph removed reference to Attachment D. Section 5 ➢ Second paragraph, last sentence – removed "when submitting their Installed Capacity certifications." Section 5.1 ➢ First and second paragraph – removed time line text and replaced with actual link to time line. ➢ Second paragraph-removed "when submitting their Installed Capacity certifications."

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		Section 5.1.1 ➢ First and third paragraph – removed time line text and replaced with actual link to time line. Section 5.2 ➢ First and seventh paragraph – removed time line text and replaced with actual link to time line. ➢ Second paragraph, last sentence – removed "excess" and added "that is not otherwise already committed and wish to make that Unforced Capacity available." Section 5.3 ➢ First paragraph – removed time line text and replaced with actual link to time line. ➢ Second paragraph – added "owns Unforced Capacity that is not otherwise already committed and wishes to make that Unforced Capacity available" and removed "owns excess Unforced Capacity." ➢ Fifth paragraph – removed time line text and replaced with actual link to time line. Section 5.4 ➢ First paragraph – removed time line text and replaced with actual link to time line. ➢ Second paragraph – added "acquired through Bilateral Transactions" and removed "(through Bilateral Transactions, self-supply or ISO administered auctions)." Section 5.8 ➢ First paragraph – removed time line text and replaced with actual link to time line. Section 5.9 ➢ Italicized text after number 4 – added to second sentence "detailed timeline that can be found by selecting the link provided" and removed "applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO website" Sections 5.10 and 5.11 ➢ Second/fourth paragraph – removed time line text and replaced with actual link to time line. Section 5.13 ➢ First paragraph – removed "but is not limited to" from last sentence. ➢ Number 2 – removed "for the time period appropriate to the auction" added "per month." ➢ Number 5 – removed "and if so, which Control Area(s)." added "or outside any specific Locality within the NYCA." ➢ Second paragraph – added "In order to participate in the Installed Capacity market, each LSE must sign." Section 5.14 ➢ First paragraph – added (excerpt where noted).

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		➢ Number 2 – deleted "for the time period appropriate to the auction" and added "per month." ➢ Number 4 – added (PTID) and "(this provision is not a requirement of Offers submitted for the Capability Period and Monthly auctions by Installed Capacity Suppliers offering Unforced Capacity from Generators located within the NYCA)." ➢ Removed number 5 "Documentation of that Installed Capacity Supplier's DMNC (described above);" Section 5.15.1 ➢ First paragraph – under (2) added "limitation placed on the Unforced Capacity that can be procured from" and removed "quantity of accepted Bids that specified that Unforced Capacity could be located in." ➢ Sixth paragraph, first sentence – removed "of the locational constraints specified by Bidders whose Bids have been selected, violations of the limitations." ➢ Twelfth paragraph, last sentence – removed "Again, the ISO will only do this in order to avoid violating locational constraints specified by Bidders that state that a Bid is only valid for Unforced Capacity that is not located in a given External Control Area (or group of Areas)." Section 5.16 ➢ Removed second paragraph and numbers 1 and 2. ➢ Replaced formula and added new text. ➢ Removed 1 after anywhere in the NYCA. Section 5.17 ➢ First paragraph – removed "subject to the locational constraints specified in that Bidder's Bid." ➢ Removed numbers 2 and 3. Section 6 ➢ 6.1.1 – first paragraph- removed time line text and replaced with actual link to time line. ➢ 6.2-, first paragraph – removed time line text and replaced with actual link to time line. Attachment L ➢ Reworded and reworked the example to remove 10% UCAP Requirement and 10% excessive capacity Attachment B ➢ Ministerial changes.
5.3	09/27/2005	Section 4.2.1 ➢ Third paragraph – changed "2 calendar days" to "7 calendar days" and removed "provided, however, that Resources shall submit such results by 5:00 PM on the Friday immediately preceding an auction when such auction is scheduled on a Monday." ➢ Third paragraph – changed "Tuesday" to "Thursday" and removed "If the NYISO administers an auction on Monday, new Resources shall submit such results by 5:00 PM on the Friday preceding the auction."

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		➢ Fifth paragraph – changed "2 calendar days" to "7 calendar days" and removed "provided, however, that Resources shall submit the results of an appropriate demonstration test, production data or Special Case Resource commitment prescribed by this Manual by 5:00 PM on the Friday immediately preceding the Certification Day when such Certification Day is a Monday." ➢ Fifth paragraph – changed "Tuesday" to "Thursday" and removed "If the Certification Day is a Monday, new Resources shall submit such results by 5:00 PM on the Friday preceding the Certification Day." Section 4.9.4 ➢ Other Allocations – Added Web page under "Request." Changed "3 business days to 4 business days" in last bullet. ➢ Under "Contents of Request" removed "is to support" and replaced with "equal to the Installed Capacity Equivalent of." Number 5 - Changed second sentence to read "For example, a request for 100 MW of Import Rights from a Resource with 10% EFORd will support a UCAP sale of 90 MW. In third paragraph, added "By 5:00 PM of the day on which requests are received, the NYISO will notify all requestors that have submitted a complete and adequate request for Import Rights of their priority." ➢ Added new section "Priority" under this section added forth sentence "Priority is assigned to each request and assumes that supporting documents are received by the NYISO within the time period set forth below. Late submissions of supporting documentation will result in the automatic rejection of the Import Rights request." Removed "The submission of incomplete or inadequate information does not alter the time frame in which such documents are due." ➢ Added new section "Supporting Documents" under this section- removed from second paragraph - Late submissions of supporting documentation will result in the automatic rejection of the underlying Import Rights request." Added new third paragraph. ➢ Under "Response from the NYISO" removed first sentence "The NYISO shall respond to requests for External Installed Capacity Import Rights in a timely fashion." Added new 4th and 5th bullets. Under third paragraph added "using the assigned priorities" Sections 5.5 and 5.6 ➢ Extensive rewrite
5.4	11/18/2005	Section 4.14.2 ➢ First paragraph – change/insert "after a formal request to the NYISO that includes the pertinent technical information needed to determine such award. The NYISO may request additional information as necessary and will grant UDRs to the requestor, or designated rights holder, quantified as the Installed Capacity Equivalent of the Unforced Capacity to be delivered to the Interconnection Point in." ➢ Second paragraph - New Section 4.14.3 ➢ First paragraph – removed "Unforced" and replaced with "Installed." ➢ Second paragraph – added "Installed Capacity" before Unforced Capacity. ➢ Third and fourth Paragraphs – New

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		Section 4.14.4 ➢ Third and fourth Paragraphs – New
5.5	02/06/2006	Section 5.7 ➢ Updated table "Levelized Peaking Unit Costs" under heading Supplemental Supply Fee to conform with the FERC Demand Curve Order dated April 21, 2005.
6.0	04/06/2006	Section 4 ➢ Substantial changes made to this section regarding revised procedures for intermittent power resources, limited control run-of-river hydro resources, and special case resources. ➢ Included capacity limited resources to the manual, and made DMNC clarifications throughout the manual. ➢ Added footnote "NYISO note: To the extent the addition of this deferral to the beginning of the Summer 2007 Capability Period conflicts with the requirements of §5.12.11(a) of the Services Tariff, the NYISO and the Market Participants are obligated to comply with the tariff." ➢ Removed Section 4.3.1 and 4.4.5 on "Interruptible Load Resources" (intentionally left blank so as not to disturb surrounding numbering) Section 5.5 ➢ Added footnote "In the Automated ICAP Market System, each ICAP Demand Curve is represented by a piece-wise linear function (step function). Each linear segment has a length of 0.1 MW and a price as calculated based on the slope of the Demand Curve." ➢ Added footnote "A peaking unit is defined as the unit with technology that results in the lowest fixed costs and highest variable costs among all other units' technology that are economically viable." ➢ Removed references to "GT" with "peaking unit" Section 5.6 ➢ Section 5.6.5 – Deleted from first bullet "A peaking unit is defined as the unit with technology that results in the lowest fixed costs and highest variable costs among all other units' technology that are economically viable;"
6.1	08/28/2006	Section 4.9.2 (In response to a 6/29/06 order, NYISO filed on 8/28/06 compliance changes to its Installed Capacity Manual to improve the transparency of the external ICAP imports rights allocation procedures.) ➢ Under "Request" added, "by facsimile" and "(at the number listed below)" ➢ Added entire section labeled "Determination of Start Time for Submission of Requests." ➢ Under "Contents of Requests" added, "NYISO Fax Machine" ➢ Under "Priority" added in first paragraph the sentence starting with "The start time for these time periods…" through "…rejected upon expiration of that time period." Also added entire second paragraph. ➢ Under "Priority" deleted entire paragraph starting with "If a request is resubmitted for any reason…"
6.2	10/12/2006	Section 3.8 ➢ First equation – corrected "Demonstrated" to "Dependable"

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		Section 4.1 ➢ First paragraph – corrected DMNC acronym from "Demonstrated" to "Dependable" Section 6.1.2 ➢ Third paragraph ➢ Deleted "will be" ➢ Added "may be up to one and one-half…NYISO Services Tariff)" ➢ Deleted "based on the table…pro-rated on a daily basis." Attachment M ➢ Accepted as new Attachment.
6.3	07/11/2007	Section 4.12.4 ➢ Eighth paragraph ➢ Deleted "will"…"only during DMNC Test Period" ➢ Added "may"…"any time during the applicable Capability Period" ➢ Tenth paragraph ➢ Added to second sentence after "Performance"…"for each Special Case Resource"… "shall"… "for all hours"…"one-hour audits: ➢ Deleted "will"…" based on all"…"and will apply to the next like Capability Period and the immediately succeeding Capability Period. ➢ Added all text starting at the third sentence. Section 4.12.6 ➢ Second paragraph – deleted "within two (2) hours" Section 4.12.7 ➢ Third bullet – added "for all hours during all called…in a Capability Period" ➢ Fifth bullet – deleted "four (4) hour" and "two (2) hour" from fourth line. Attachment J ➢ In section 3.3 replaced all instances of "requested" with "required"
6.4	03/19/2008	Section 5.5 ➢ Bottom of page – removed text and link information to the Demand Curve location on NYISO Web site. ➢ Footnote 1 – removed Automated and Market from footnote, implied by ICAP System. ➢ First paragraph after discussion on the Monthly ICAP Reference Point was removed. ➢ Second paragraph after discussion on the Monthly ICAP Reference Point was reworded to point to reader to Section 5.14(b) of the NYISO Services tariff for information on ICAP Demand Curves and removed subsequent table. ➢ A last paragraph was added to point the user to the NYISO Web site for the Unforced Capacity Demand Curves.

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		Section 5.7 ➢ First paragraph – added ICAP to second reference to Spot Market, clarified Locational Unforced Capacity Requirements as Locational Minimum Installed Capacity Requirements. ➢ Second and Third Paragraphs – replaced "Installed Capacity" with ICAP. ➢ Fourth Paragraph and Subsequent Table and Note removed.
6.5	05/21/2008	Section 4.2.1 ➢ Updated to reflect Event Calendar changes for In-City Mitigation as well as to correct typographical errors
6.6	08/04/2008	Global ➢ Reformatted per new template to standardize presentation Revision History Table ➢ Column headings changed as follows: ➢ "Revision" changed to "Version" ➢ "Changes" changed to "Revisions" ➢ Date format standardized to mm/dd/yyyy. ➢ Minor stylistic changes to entries ➢ Last entry edited to change Version from "Initial Release" to "1.0" and to change Revisions from "Initial NYISO Installed Capacity Manual" to "Initial Release" Section 4 ➢ Edited and moved most of Section 4.2.1 to Section 4.2 ➢ Added language in Section 4.2.2 regarding DMNC for the PTID as a whole ➢ Clarified need for Special Case Resources to provide advance notification in Section 4.3.3 ➢ Section 4.4 updated to add discussion of NERC and NYISO GADS data reporting. Also added Section 4.4.12 covering treatment of Retired, Mothballed and Inactive generating units. ➢ Section 4.5 changed periods used for converting Installed Capacity to Unforced Capacity values ➢ Section 4.6 updated to clarify treatment of transmission outages; also treatment of state changes during outages ➢ Added instructions in Section 4.9 for submitting transaction numbers for inter-area transactions ➢ Added clarifications in Section 4.12 for Small Customer Aggregations and RIP authorizations by individual Special Case Resources ➢ Miscellaneous edits and clarifications
6.7	09/03/2008	Section 5 ➢ Edited/added hyperlinks ➢ Introduced Event Calendar references in lieu of the term "timeline" ➢ Conformed Sections 5.2, 5.3, 5.4, 5.7, and 5.16 to new In-city mitigation rules

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		➢ Updated/corrected ICAP Demand Curve references in Section 5.5 ➢ Other miscellaneous edits Attachments ➢ Reformatted per new template to standardize presentation Attachment B ➢ Updated Unforced Capacity Deliverability Rights table to include information on Linden VFT – PJM to New York City, Zone J Attachment D ➢ Added noted citing online location of forms Attachment M ➢ Implemented ministerial changes
6.8	10/03/2008	Section 4 ➢ Section 4.4.7 – increased SCR reporting requirements from 60 days to 75 days ➢ Section 4.12.2 – clarified metering requirements for aggregations of SCRs ➢ Section 4.12.7 – added paragraph to cover settlements for early reporting of event performance ➢ Other miscellaneous edits
6.9	04/28/2009	Section 4 ➢ Section 4.5 – Revised Limited Control Run-of-River Unforced Capacity description to conform with Tariff revision ➢ Revised Special Case Resource testing requirements ➢ Added Special Case Resource uneconomic entry language Section 5 ➢ Added language for new Special Case Resources auction participation
6.10	08/12/2009	Global ➢ Implemented minor stylistic changes. ➢ Revised external-document links to explicitly cite URLs from which documents may be accessed. Section 4.2.2 ➢ Clarified heading of Intermittent Power Resources to eliminate parenthetical. Section 4.4.9 ➢ Revised cross-references to Import Rights. Section 4.9 ➢ Updated to reference Transitional Grandfathered Import Rights (i.e., rights only associated with Winter 2009-2010 Capability Period). Section 4.9.1 ➢ Clarified to specify timing is in accordance with ICAP Event Calendar and as set forth in other sections of the ICAP Manual.

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		Section 4.9.2 ➢ Inserted terms that would govern both 4.9.1.1 (on Import Rights and wheels-through associated with Winter 2009-2010) and 4.9.2.1 (for Capability Periods other than Winter 2009-2010). Section 4.9.3 ➢ Specified that "deliverability" in this section means to the NYCA border. Section 5.3 ➢ Added paragraph to cover NYISO bidding into Monthly Auction for approved Transitional Grandfathered Import Rights that are Chateauguay Day 1 requests that did not timely provide documentation.
6.12	10/13/2009	Global ➢ Revised to clarify that words *receive*, *provide*, or *register* in place of *submit*, and *receipt of* in place of *submittal of*. ➢ Included specific times along with dates that material is due, or referenced date and time specific in ICAP Event Calendar. Section 1 ➢ Specified that only exception to the receipt date and time is if exception to the receipt date and time is if the Market Participant's effort to deliver the information was impossible due to a failure of a NYISO process. Section 4.9.2.2 ➢ Changed *immediately* to *promptly*. Section 4.12.6 ➢ Clarified that written permission is required for SCR to take two or more hours to reach load reduction. Section 4.12.8 ➢ Clarified that NYISO pays RIPS. Section 4.12.9 ➢ Identified RIPs' obligation regarding SCRs cooperate with NYISO audits. Section 4.14 ➢ Identified additional UDR information required. Section 5.11 ➢ Added "offers of" Unforced Capacity. Section 5.15.1 ➢ Changed *marginal bid cost* to *Marginal Offer Price.*
6.11	10/13/2009	Section 4.2.2 ➢ Edited to clarify material regarding Intermittent Power Resources. Section 4.3.3 ➢ Implemented revisions detailing reporting and registration requirements when an SCR's availability changes. Section 4.4.7.2

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		➢ Edited to clarify material regarding 75-day reporting on tests. Section 4.8.5 ➢ Implemented revisions regarding reporting of SCR unavailability. Section 4.8.6 ➢ Edited to clarify material on wind Intermittent Power Resources. Section 4.12 ➢ Implemented revisions regarding reporting and registration requirements when an SCR's availability changes, timing of tests, and general conforming clarifying revisions.
6.13	02/12/2010	Section 1 ➢ Revised to indicate that NYISO will compute Locational Minimum Installed Capacity Requirements based on the election, if any, of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area meeting specified criteria. Section 2.1 ➢ Added that Locational Minimum Installed Capacity Requirements, and allocations to LSEs thereof, would be recognize an election by an Installed Capacity Supplier holding the rights to UDRs from an External Control Area in accordance with the Services Tariff revisions. Section 2.6 ➢ Added to recognize an election by Installed Capacity Supplier holding rights to UDRs from an External Control. Section 2.3 ➢ Indicated that LSE Locational Minimum Installed Capacity Requirements would be monthly. Section 3.5.1 ➢ Indicated that LSE Locational Minimum Installed Capacity Requirements would be monthly. Section 3.6.1 ➢ Updated the formula to compute LSEs Locational Minimum Installed Capacity Requirements to recognize revisions regarding the election of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area. Section 3.5.1 ➢ Indicated that LSE Locational Minimum Installed Capacity Requirements would be monthly. Section 4.7 ➢ Inserted required verification from an Installed Capacity Supplier holding the rights to UDRs from an External Control Area that makes an election. Section 4.9 ➢ Implemented ministerial revision to abbreviation. Section 4.14 ➢ Implemented ministerial revision to abbreviation.

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		Section 4.14.3 ➢ Inserted eligibility requirement for an Installed Capacity Supplier holding the rights to UDRs from an External Control Area to make an election, and information that the Supplier must provide with its notification of making an election. Section 5.6 ➢ Changed Market Monitoring Advisor to Market Monitoring Unit. ➢ Implemented ministerial revisions. Section 5.15.2 ➢ Implemented ministerial revision to abbreviation.
6.14	02/16/2010	Section 2.5 ➢ Corrected name for EFORd. Section 2.6 ➢ Replaced references to Attachment B with a link to the Web page where Locational Requirements will be posted. Section 4.9.2 ➢ Corrected section references. ➢ Inserted defined term of Summer Transitional Grandfathered Import Rights. ➢ Insert new section 4.9.2.3 to set forth the allocation of Import Rights for Summer 2010 only. Section 4.9.6 ➢ Inserted new section to establish maximum allowances for ICAP provided by Resources outside the NYCA (similar to provisions formerly in Attachment B). Section 4.12.8 ➢ Updated for RIPs to submit required data and payment requests on two separate forms, and inserted Web link to forms.
6.15	05/06/2010	Global ➢ Incorporated changes to reflect terminology used in Demand Response Information System (DRIS), including *enroll* instead of *register*. Section 4.3.3 ➢ Added separate Change of Status Form. ➢ Required change of declared value to be accomplished in DRIS. ➢ Changed method of enrollment from SCR Workbook to DRIS. Section 4.4.7 ➢ Added separate Event Test Report. Section 4.8.5 ➢ Changed method of enrollment from SCR Workbook to DRIS. Section 4.12.2 ➢ Changed method of enrollment from SCR Workbook to DRIS.

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		➢ Added DRIS Event Calendar. ➢ Changed certification from SCR Workbook to certification by enrolling resources. ➢ Added separate Event Test Report. Section 4.12.3 ➢ Changed method of providing Minimum Payment Nomination from SCR Workbook to DRIS. Section 4.12.4 ➢ Changed method of enrollment from SCR Workbook to DRIS. ➢ Added separate Peak Load Generation Form. ➢ Clarified that the default assumption that all resources are assumed sold at their full value does not apply to aggregations that sell zero MW. Section 4.12.5 ➢ Clarified notification procedures. Section 4.12.7 ➢ Changed method of reporting Load reduction from SCR Workbook to DRIS. ➢ Added separate Event Test Report. Section 4.12.8 ➢ Added DRIS Event Calendar.
6.16	06/28/2010	Global ➢ Updated tariff citations to reflect section renumbering secondary to e-Tariff implementation. ➢ Implemented minor stylistic edits. ➢ Removed Conditional approval language for UDR election of treatment when modeling Locality Requirements. Section 1 ➢ Added Deliverability overview. Section 2.7 ➢ Added paragraph specifying that external ICAP is subject to Deliverability. Section 3.4 ➢ Removed language on LSE discretionary submission of additional certification data for remaining months of Obligation Procurement Period. Section 4.5 ➢ Defined CRIS-adjusted DMNC Section 4.6.2 ➢ Updated outdated link to NERC GADS reporting guideline. Section 4.9.2

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		➢ Removed Sections 4.9.2.1 and 4.9.2.2 referring to previous Capability Periods ➢ Added 4.9.2.4 to cover External CRIS beginning in Winter 2010-2011 Capability Period going forward. Section 4.10 ➢ Added new section with procedures for External CRIS. Section 4.11 ➢ Renumbered old section 4.10 to 4.11. Section 4.14.1 ➢ Added sentence on UDR deliverability test. Section 5.1.1 ➢ Added language on offer cap for External CRIS. Section 5.2 ➢ Corrected reference to Summer Transitional Grandfathered Capability Period Section 5.8 ➢ Added sentence on External CRIS penalty payment. Section 6.3 ➢ Dispute and Claims Committee replaces Discretionary Acts Committee.
6.17	11/24/2010	Section 4.3.3.4 ➢ Added Change of Status reporting method in the Demand Response Information System (DRIS). ➢ Identified that resource status will be under review in specified circumstances. Section 4.3.3.5 ➢ Added reporting method for changes in Change of Status in DRIS. ➢ Revised rule so that resource status will be under review in specified circumstances. Section 4.12.2 ➢ Changed the reporting method of event and test performance data. ➢ Added specification for method of reporting event and test performance data for small customer aggregations. Section 4.12.3. ➢ Revised section on the process of reporting the Special Case Resource Minimum Payment Nominations. ➢ Revised section on the process of reporting a change to the Special Case Resource (SCR) Minimum Payment Nomination. Section 4.12.4 ➢ Adjusted the time frame for requirement to perform in the first and second tests within a Capability Period.

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		➢ Added reference to the ICAP and DRIS calendar entries for a Responsible Interface Party (RIP) reporting sales less than 100% and more than 0% of an SCR's total registered megawatts. Section 4.12.7 ➢ Changed the reporting method of event and test performance data. Section 4.12.8 ➢ Revised section on the payment of SCRs that performed concurrently in a Day Ahead Demand Response Program (DADRP) or Demand Side Ancillary Services Program (DSASP) scheduled commitment. ➢ Added reference to the *Emergency Demand Response Program Manual* regarding the CBL calculation. ➢ Changed the reporting method of event and test data for energy payments. ➢ Revised payment eligibility period for an SCR that participates in a deployment that begins at a time that is not the top of the hour.
6.18.1	3/18/2011	Sections 2.4 and 2.6 ➢ Updates and clarifications Section 4.9.6 ➢ External ICAP Interface Table values update
6.17.1	04/11/2011	➢ Revisions approved by BIC on January 26, 2011, subject to FERC approval of tariff changes to SCR baseline, aggregation performance and RIP deficiency. FERC letter order accepting tariff changes received on 04/11/2011. Changes associated with approved FERC order are shown as shaded text. Section 4.3.3.1 ➢ Changed reference of Average Peak Monthly Demand to Average Coincident Load. Section 4.3.3.4 ➢ Changed reference of Average Peak Monthly Demand to Average Coincident Load. ➢ Changed abbreviation of Average Peak Monthly Demand ("APMD") to "ACL". Section 4.3.3.5 ➢ Changed abbreviation of Average Peak Monthly Demand ("APMD") to "ACL". Section 4.3.3.6 ➢ Changed abbreviation of Average Peak Monthly Demand ("APMD") to "ACL". ➢ Removed procedures specific to calculation of APMD. Section 4.12.2 ➢ Changed section references from Attachment J to new sections within Section 4.12.2. ➢ Revised aggregation references to tariff term: SCR Aggregation.

Version	Effective Date	Revisions
		➢ Added procedure for SCR Aggregation performance factor. ➢ Added procedure for RIP performance factor. ➢ Revised RIP deficiency procedure to apply on a Load Zone basis. ➢ Attachment J of the ICAP Manual was incorporated into the body of the Manual and its content revised to support Average Coincident Load (ACL). • Added section 4.12.2.1 Calculation of UCAP and Installed Capacity Equivalent for Special Case Resources. • Added section 4.12.2.1.1 Determining the Amount of UCAP for a Non-Generator Based Special Case Resource with a Provisional ACL. • Added section 4.12.2.1.2 Determining the Amount of UCAP for a Non-Generator Based Special Case Resource using the Average Coincident Load Baseline. • Added section 4.12.2.1.3 Determining the Amount of UCAP for a Generator Based Special Case Resource. • Added section 4.12.2.1.4 Determining the Amount of UCAP for an SCR Aggregation of Special Case Resources. • Added section 4.12.2.2 Determining the Installed Capacity Equivalent of the Amount of UCAP Supplied. • Added section 4.12.2.2.1 ICE for a Non-Generator Based Special Case Resource with a Provisional ACL. • Added section 4.12.2.2.2 ICE for a Non-Generator Based Special Case Resource using the Average Coincident Load baseline. • Added section 4.12.2.2.3 ICE for a Generator Based Special Case Resource. Section 4.12.2.3 ➢ Added new section for Average Coincident Load. Section 4.12.2.4 ➢ Added new section for Provisional Average Coincident Load. Section 4.12.2.5 ➢ Added new section break for Changes to ACL. Section 4.12.2.6 ➢ Added new section break for Use of Generation by a Special Case Resource. Section 4.12.2.7 ➢ Added new section break for Testing of Special Case Resources. Section 4.12.2.8 ➢ Added new section break for RIP Deficiency Determination. ➢ Revised APMD references to ACL and deficiency calculation on a Load Zone basis. Section 4.12.2.9 ➢ Added new section break for Reporting Partial Sales. ➢ Changed reference from Attachment J to relevant section. Section 4.12.2.10 ➢ Added new section break for Reporting SCR Performance Data. Attachment J,

Version	Effective Date	Revisions
		➢ Section 3.3 removed. Content has been incorporated into Section 4.12.2 and revised for ACL. Attachment K ➢ Removed SCR workbook section. SCR workbook is no longer used to report SCR data to the NYISO. References to data provided in the Demand Response Information System (DRIS) is identified throughout the *ICAP Manual*.
6.19	8/2/2011	Sections 4.1, 4.2, 4.4.7.1, 4.4.7.2 ➢ Supplier sanction reference changed from sec. 6.1 to Services Tariff Sections 5.15.1, 5.15.2 ➢ Added language on external clearing price under specific offer conditions Section 5.16 ➢ Changed "pay" to "charge", 3rd paragraph before 5.17 Section 5.18 ➢ Changed language to reflect three month bid and offer disclosure Section 6.1 ➢ Removed specific language on supplier sanctions and replaced with reference to the Services Tariff
6.19	8/15/2011	Section 4.5 ➢ Added provisions for the calculation of Unforced Capacity for solar energy generators Section 4.5.1 ➢ Added this new section to specify the calculation of UCAP for solar energy generators; moved the calculation of UCAP for wind generators from Att. J Section 3.4 into this new section Section 4.8.6 ➢ Added provisions to exclude solar resources from the daily bidding and scheduling requirements Attachment J ➢ Removed Section 3.4, incorporated content into Section 4.5.1 and revised to include solar energy generators
6.19	8/24/2011	Section 4.12.2.1.1 ➢ Changed definition of value "b" and value "e" in the calculation of UCAP for a Non-Generator Based Special Case Resource with a Provisional ACL. Definitions now refer to Capability Periods rather than months for reference to a time period. Section 4.12.2.1.2 ➢ Changed definition of value "b" and value "e" in the calculation of UCAP for a Non-Generator Based Special Case Resource using the Average Coincident Load baseline. Definitions now refer to Capability Periods rather than months for reference to a time period. Section 4.12.2.1.3

Version	Effective Date	Revisions
		➢ Changed definition of value "b" and value "e" in the calculation of UCAP for a Generator Based Special Case Resource. Definitions now refer to Capability Periods rather than months for reference to a time period. Section 4.12.2.1.4 ➢ Changed definition of value "b" and value "e" in the calculation of UCAP for an SCR Aggregation of Special Case Resources. Definitions now refer to Capability Periods rather than months for reference to a time period. Section 4.12.4,1 ➢ Clarifying changes made from NYCA peak load hours to the defined term SCR Load Zone Peak Hours. ➢ Added reference to when SCR Load Zone Peak Hours will be imported into DRIS. ➢ Updated to explain process for RIP requirement for importing Summer 2011 ACL verification data into DRIS. ➢ Added rule to clarify the process of revisions to an SCR Load Zone Peak Hour of a resource. Section 4.12.4,2 ➢ Added rule that a resource enrolled with a Provisional ACL cannot revise the Provisional ACL value or transfer to a different RIP in the Capability Period. ➢ Added requirements for the import of the resource Meter Installation Date when enrolling with a Provisional ACL. ➢ Added rules for the import of resource in-period verification data and the calculation of the resource ACL based on imported data. Section 4.12.4,2 ➢ Added new section with rules defining the continued use of a Provisional ACL after the first Capability Period of enrollment of the resource. Section 4.12.4,9 ➢ Added section with rules defining adjustments to metered load for resource demand reductions in a Transmission Owner's Demand Response Program.
6.20	1/24/2012	Section 4.9.6. ➢ External ICAP Interface Table values update
6.21	3/01/2013	Section 4.9.6. ➢ External ICAP Interface Table values update
6.22	3/13/2013	Sections 4.2.2, 4.12.4.8, and 4.12.7 ➢ Added "at the direction of the NYISO" to clarify when the interruption upon demand was required by Special Case Resources Sections 4.3.3 ➢ Changed references from distributed generator to tariff¬ defined term "Local Generator" Section 4.12

Version	Effective Date	Revisions
		➢ Modified definition of Special Case Resource to be consistent with proposed tariff changes Sections 4.12.4.1 and 4.12.4.4, clarified: ➢ Behind-the-meter generation should not be included in ACL values, report only load supplied from the Transmission or Distribution System ➢ Terminology, using tariff-defined "Local Generator" ➢ SCRs cause a reduction at the direction of the NYISO, and base load behind-the-meter generators do not qualify ➢ The generation reporting requirement for NYCA and Locality peak does not apply to amount of generation normally operating to serve Load ➢ Ministerial changes in Section 4.12.4
6.24	01/22/2014	Section 4.9.6 ➢ Updated the table and wording to reflect 2014-2015 import rights limits
6.23	01/27/2014	Section 1 ➢ Updated to add the G-J Locality and changed the number of demand curves from three to four Section 2.1 ➢ Updated to add the G-J Locality and changed the number of demand curves from three to four Section 2.6 ➢ Updated to add the G-J Locality and changed the number of localities from two to three ➢ Removed the reference to localities in Attachment C Section 3.1 ➢ Updated language to use coincident peak load forecast Section 3.3 ➢ Updated language to use coincident peak load forecast ➢ Updated the formula Section 3.4 ➢ Updated language to use coincident peak load forecast ➢ Updated the formula for calculation of LSE requirements Section 3.5.3 ➢ Updated the notification Section 3.6.1 ➢ New section and formula for calculation of Minimum Unforced Capacity Requirement for each Transmission District in a Locality Section 3.6.2 ➢ Extensive rewrite of the formula for calculate the Minimum Unforced Capacity Requirements for each LSE Section 4.11.1 ➢ Added in the G-J locality

Version	Effective Date	Revisions
		➢ Added language to clarify the aggregation for G,H and I and J Section 4.12.2 ➢ Added exemption language for New Special Case Resources enrolled in a Mitigated Capacity Zone at the time the ISO proposes a New Capacity Zone Section 5.1.1 ➢ Added G-J Locality Section 5.4 ➢ Replaced references to In-City with Mitigated Capacity Zone Section 5.5 ➢ Added in the G-J Locality ➢ Updated the temperature parameter at which the DMNC is taken for the establishment of the ICAP Demand Curve Section 5.15.1 ➢ Updated In-City Language ➢ Clarified wording on offers Section 5.15.2 ➢ Clarified wording on offers Section 5.16 ➢ Removed reference to New York City
6.25	05/01/2014	Section 4.3 ➢ Updated the title to include additional reference to the *NYISO Services Tariff* ➢ Replaced defined terms with the acronym of the term throughout Section 4.3.3 ➢ Added reference to the *NYISO Services Tariff* ➢ Added reference to sections of this *ICAP Manual* Section 4.3.3.1 ➢ Incorporated Section 4.3.3.3 Reporting Change of Load ➢ Added references to the *NYISO Services Tariff* ➢ Added clarification for reporting SCR Change of Load when the 5MW threshold is reached within a Load Zone ➢ Added table of procedures for the SCR Change of Load Reporting Requirement Section 4.3.3.2 ➢ Incorporated Section 4.3.3.4 Reducing ACL if a Change of Status ➢ Added references to the *NYISO Services Tariff* ➢ Added table of procedures for the SCR Change of Status Reporting Requirement ➢ Relocated language from Section 4.3.3.7 No Relief for Failure to Perform

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		Section 4.3.3.3 ➢ Removed from manual, incorporated into Section 4.3.3.1 Section 4.3.3.4 ➢ Removed from manual, incorporated into Section 4.3.3.2 Section 4.3.3.5 ➢ New section for procedures for determining fluctuations in Load not attributed to weather Section 4.3.3.7 ➢ Removed from manual, incorporated into Section 4.3.3.2 and Section 4.12.4 Section 4.4.7 ➢ Replaced defined terms with the acronym of the term Section 4.12 ➢ Updated the title to include additional reference to the *NYISO Services Tariff* ➢ Replaced defined terms with the acronym of the term throughout Section 4.12.1 ➢ Clarified a New SCR in a Mitigated Capacity Zone Section 4.12.2 ➢ Extensive reorganization for clarity ➢ Relocated RIP Deficiency paragraph to Section 4.12.4.6 ➢ Relocated reporting of SCR performance to Section 4.12.4.8 ➢ Added requirement to include the SCR Aggregation ID on the enrollment file upload to the DRIS ➢ Added reference to TB-201 for metering requirements of a SCR ➢ Renamed subheading RIP Performance Factor to Assignment of Performance Factors and added reference to the calculation Section 4.12.4.2.1 of the manual ➢ Added subheading for Small Customer Aggregations ➢ Added subheading for New SCR in a Mitigated Capacity Zone and updated the terminology throughout the section ➢ Added subheading for SCRs with Local Generators and clarified when SCRs with Local Generators may participate in the ICAP/SCR program Section 4.12.2.1 ➢ Renamed section heading and added subsections for specific calculations ➢ Added descriptions for all calculations, clarified and replaced existing formulas ➢ Removed all current language and formulas from Section 4.12.2.1 ➢ Incorporated Section 4.12.2.2 Section 4.12.2.2 ➢ Removed from manual, incorporated into Section 4.12.2.1

Version	Effective Date	Revisions
		Section 4.12.3 ➢ Clarified procedure for assigning a Minimum Payment Nomination to a SCR Section 4.12.4 ➢ Clarified SCR performance obligations ➢ Relocated language from Section 4.3.3.7 No Relief for Failure to Perform Section 4.12.4.1 ➢ Removed description of how ACL is determined as it is now detailed in Section 5.12.11.1.1 of the *NYISO Services Tariff* ➢ Added additional references to the *NYISO Services Tariff* for calculation of an ACL< enrollment with a Provisional ACL, Incremental ACL, or SCR Change of Status ➢ Removed description of rules applicable only to Summer 2011 verification Section 4.12.4.2 ➢ Removed rules and added reference to the *NYISO Services Tariff* for enrollment with a Provisional ACL ➢ Added subheading and new procedure for determining eligibility to enroll with a Provisional ACL ➢ Clarified existing procedures to reference new defined terms: Capability Period SCR Load Zone Peak Hours and Verified ACL ➢ Clarified how the Verified ACL is determined for a SCR enrolled with a Provisional ACL ➢ Added language and reference to *NYISO Services Tariff* for shortfalls related to enrollment with a Provisional ACL ➢ Added language and reference to *NYISO Services Tariff* for sanctions related to enrollment with a Provisional ACL ➢ Removed description of determination of the Provisional ACL shortfall now located in the tariff Section 4.12.4.2.1 ➢ Renamed section heading based on new rules for continued enrollment with a Provisional ACL ➢ Added references to the *NYISO Services Tariff* ➢ Revised existing procedures for continued use of a Provisional ACL Section 4.12.4.2.2 ➢ Added new section for ACL data request enrollment procedures Section 4.12.4.3 ➢ Divided existing section into two subsections for an increase or a decrease to ACL Section 4.12.4.3.1 ➢ Added references to the *NYISO Services Tariff* ➢ Added procedure for enrollment with an Incremental ACL ➢ Added procedure for Incremental ACL verification process

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		➢ Added procedure for identifying SCRs required to re-test in the second performance test in the Capability Period ➢ Added language and reference to *NYISO Services Tariff* for shortfalls related to enrollment with an Incremental ACL ➢ Added language and reference to *NYISO Services Tariff* for sanctions related to enrollment with an Incremental ACL Section 4.12.4.3.2 ➢ Added references to the *NYISO Services Tariff* and *ICAP Manual* sections for program rules of reporting a SCR Change of Status ➢ Added procedure for identifying SCRs required to re-test in the second performance test in the Capability Period ➢ Added language and reference to *NYISO Services Tariff* for shortfalls related to SCRs with a SCR Change of Status ➢ Added language and reference to *NYISO Services Tariff* for sanctions related to SCRs with a SCR Change of Status Section 4.12.4.4 ➢ Clarified the type of data required to be reported on the NYCA/Locality Peak Hour Load Generation Form Section 4.12.4.5 ➢ Added procedure to determine from what range of hours the Capability Period SCR Load Zone Peak Hours a Summer and a Winter Capability Period test may be conducted ➢ Added tariff and manual references for SCRs required to re-test based on enrollment with an Incremental ACL or reporting of a SCR Change of Status ➢ Clarified procedure used to determine performance when a SCR is enrolled by more than one RIP in the same Capability Period Section 4.12.4.6 ➢ Renamed section heading to align with NYISO Services Tariff ➢ Relocated paragraph from Section 4.12.2 describing the RIP portfolio performance ➢ Clarified how the RIP portfolio performance is determined ➢ Added procedure for determination of the RIP portfolio performance when the RIP is subject to multiple deficiency charges for the same SCR for the same months in the Capability Period Section 4.12.4.8 ➢ Relocated paragraph from Section 4.12.2 describing the procedure for reporting performance data into the DRIS ➢ Added “required one-hour” clarification to describe test data Section 4.12.4.9 ➢ Renamed section heading based on new rules which adjust the ACL for SCR participation in the NYISO DADRP and DSASP ➢ Rearranged section to show procedures which relate to the three types of adjustments ➢ Added three new subsections, one for each adjustment type

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		Section 4.12.6 ➢ Removed section, incorporated some into calculations section 4.12.2.1 Section 4.12.7 Removed requirements to enter SCR DMNC ratings into the NYISO's ICAP software, the values are automatically transferred from the DRIS to the AMS
6.26	09/25/14	Section 4.3.3.2 ➢ Removed references for submitting SCR Change of Status Form ➢ Added procedure for reporting SCR Change of Status through the Demand Response Information System (DRIS) Section 4.3.3.3 ➢ Removed references for submitting SCR Change of Status Form ➢ Clarified reporting of a return from a SCR Change of Status Section 4.12 ➢ Incorporated new program rule that allows a mandatory event hour to be used to demonstrate the maximum enrolled megawatt capability of a SCR Section 4.12.2.1.2 ➢ Clarified description for hour selected as the test hour value as input into the SCR performance factor calculation Section 4.12.2.1.5 ➢ Clarified description for hour selected as the test hour value as input into the SCR aggregation performance factor calculation Section 4.12.4.2 ➢ Added clarification of determination of the greatest deficiency charge for an individual SCR Section 4.12.4.3.1 ➢ Revised description of procedure for determining requirement to perform in the second performance test ➢ Added "performance" to "test" when describing the SCR performance test in a Capability Period ➢ Added clarification of determination of the greatest deficiency charge for an individual SCR Section 4.12.4.3.2 ➢ Revised description of procedure for determining requirement to perform in the second performance test ➢ Added "performance" to "test" when describing the SCR performance test in a Capability Period ➢ Added clarification of determination of the greatest deficiency charge for an individual SCR Section 4.12.4.5 ➢ Added language to distinguish proxy test value from a mandatory event hour and actual performance in the performance test hour called by the NYISO

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		➢ Revised description of procedure for determining requirement to perform in the second performance test when the SCR is enrolled with an Incremental ACL or a reported SCR Change of Status ➢ Revised timeframe when first performance test is conducted in the Capability Period ➢ Added rule for the option for a SCR to retest in the first performance test in the Capability Period ➢ Clarified description and example of procedure to determine SCRs required to perform in the first performance test and SCRs required to perform in the second performance test in the Capability Period ➢ Added language describing the performance test values to be used in performance factor and shortfall calculations ➢ Added "performance" to "test" when describing the SCR performance test in a Capability Period Section 4.12.4.6 ➢ Clarified determination of total load reduction for the first performance test hour ➢ Revised timeframe when first performance test is conducted in the Capability Period Section 4.12.4.8 ➢ Clarified language for determination of test value for an individual SCR ➢ Added "performance" to "test" when describing the SCR performance test in a Capability Period
6.27	10/30/2014	Section 4.2 ➢ Added DMNC procedures Section 4.2.2 ➢ Added new DMNC value 'Run-of-River Hydro Resource' to detail test conditions Section 4.2.5 ➢ Added new section 'New Resources'. Taken from former location Section 4.2. Section 4.2.6 ➢ Incorporated contents of TB-126 into new section 'NYISO Distribution of Resource Capacity Data to the NYCA Transmission Owners' Section 4.9.2.3 ➢ Removed Section 'Allocation of Import Rights - Summer 2010'
6.28	03/13/2015	Section 4.9.6 ➢ Updated the Maximum Amount of External ICAP Permitted to be imported for the 2015/2016 Capability Year, for each Capability Period, and at each neighboring Control Area interface ➢ Added language to allow different Winter 2015/2016 values to be allocated at the NYCA Interfaces Section 4.11.1 ➢ Modified language to permit resources in the Ontario Control Area to qualify as Installed Capacity Resources for Winter 2015/2016

Version	Effective Date	Revisions
6.29	04/30/2015	Section 4.4.12 ➢ Modified language to follow new NYISO tariff definitions of outage states ➢ Added language outlining the different outages states and the transition between those states and normal operation Section 4.4.13 ➢ New section to define rules allowing the NYISO to place units who have taken substantial actions inconsistent with an intention to operate into an ICAP Ineligible Forced Outage Section 4.5 ➢ Added language defining how UCAP is calculated for units that are returning from a state that made them ineligible to participate in the NYISO ICAP market
6.30	09/16/2015	Section 2.5 and 2.6 ➢ Clarified that the ICAP to UCAP translation uses the derating factors of resources as calculated in Section 4.5 Section 3.4 and 3.5.1 ➢ Removed the requirement for Estimates before the Strip Auction to be submitted, and instead requires the actual forecast to be submitted before the Strip Auction Section 4.2 ➢ Inserted cross references Section 4.2.5 ➢ Added language to add requirements for units returning from an Inactive state Section 4.4.12 ➢ Added language explaining how to report GADS data for ICAP Ineligible Forced Outage units Section 4.8 ➢ Clarified that ICAP Suppliers utilizing a UDR to provide UCAP do not have to notify the NYISO of outages on the UDR facility Section 4.8.1 ➢ Added cross reference to obligations in Outage Scheduling Manual Section 4.9.2.4 ➢ Added requirement of MIS Transaction Number Section 4.10.6 ➢ Increased clarity of calculation of offer requirement Section 4.10.7 ➢ Updated External Offer Cap to use an annual price for the Capability Period Section 4.14.5 ➢ Added link to ICAP Event Calendar Section 5.3

Version	Effective Date	Revisions
		➢ Removed paragraph about Summer Transitional Grandfathered Capability Period Section 5.4 ➢ Added language about Excess MW purchased in the Spot Auction Section 5.5 ➢ Increased Clarity of ICAP to UCAP translation
6.31	12/29/2015	Section 4.2 ➢ Adjusted the months used to identify Transmission Districts peaks for temperature correction to exclude the shoulder months (For Winter, removed November and April and for Summer, removed May and October)
6.32	02/26/2016	Section 4.9.6 ➢ Updated the table and wording to reflect 2016-2017 import rights limits
6.33	06/03/2016	Section 4.2.2 ➢ Removed obsolete language requiring RIPs enrolling SCRs with Local Generators to submit DMNC data Section 4.12.2 ➢ Incorporated Technical Bulletin 201 and clarified the process for enrolling SCRs with multiple account numbers located at a single service address ➢ Clarified that a SCR's Local Generator must only have the approvals needed to operate for the purposes of reducing wholesale Load; removed obsolete language requiring a SCR to have utility interconnection agreements ➢ Described in detail the determination of a SCR's "Response Type" that must be identified at enrollment ➢ Clarified that a SCR enrolling as Response Type G must only report the amount of generation that facilitates Load reduction from the grid during a NYISO event or performance test Section 4.12.4 ➢ Incorporated Technical Bulletin 164 about requesting SCRs to participate in a Targeted Demand Response Program (TDRP) activation and added reference to Section 6 of the EDRP Manual Section 4.12.4.2 ➢ Added language requiring RIPs to maintain records of compliance with Section 5.1 of the EDRP Manual and of a SCR's meter installation date Sections 4.12.4.3 and 4.12.4.5 ➢ Clarified language that the NYISO will use a SCR's greatest Load reduction across all mandatory event hours and the first performance test hour in a Capability Period for purposes of evaluating the SCR's first test performance Section 4.12.4.9 ➢ New section explaining the process for requesting meter data correction for SCRs

Version	Effective Date	Revisions
		Section 4.12.6 ➢ Provided an explanation of the documentation needed to verify a SCR's enrollment information ➢ Clarified that a RIP must enroll a SCR with its exact service address ➢ Added language to explain that a SCR's declared value for the auction month for which the NYISO requested documentation must not exceed the sum of kW Load relief described in the SCR's load reduction plan ➢ Removed obsolete language regarding submission of operations logs to demonstrate SCR's performance Section 4.12.7 ➢ NYISO proposes removing language made obsolete with the Tariff revisions implemented in 2013 as part of the Enhanced Scarcity Pricing Project (Docket Number ER13-909-000) ➢ Clarified CBL data reporting process for a SCR that has fewer than five CBL days.
6.34	12/13/2016	Section 2.5 ➢ Updated The NYCA Minimum Unforced Capacity Requirement to include NYCA translation factor for BTM:NG Resource Sections 4.1, 4.2 and 4.2.1 ➢ Added DMGC for BTM:NG Resources Section 4.2.2 ➢ Clarifies Language for Limited Control Run-of-River Hydro Resources Section 4.2.3 ➢ Incorporated requirements for measuring Station Power in regards to BTM:NG Resources Section 4.5 ➢ Incorporated NET UCAP derating factors for BTM:NG Resources Section 4.5.1 ➢ Updated references from "Wind and Solar Energy Generators" to "Intermittent Power Resources" ➢ Increases clarity for UCAP calculation for Intermittent Power Resources Section 4.9.1 ➢ Operating data clarification Section 4.9.2.4 ➢ Updates references Section 4.9.3 ➢ Clarifies MIS transaction ID requirement Section 4.9.5 ➢ Updates references and wording Section 4.15 ➢ Added Definition for BTM:NG Resource

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		Section 4.15.1 ➢ Added Adjusted Host Load for BTM:NG Resources Section 4.15.1.1 ➢ Added Average Coincident Host Load for BTM:NG Resources ➢ Added BTM:NG Resources Peak Load Hours ➢ Added Metered Proxy Load Data ➢ Forecasted Peak Proxy Load Data Section 4.15.1.2 ➢ Added Adjustments for the BTM:NG Resource's Station Power Section 4.15.1.3 ➢ Added NYISO Verification for BTM:NG Resources Section 4.15.2 ➢ Added Net-ICAP Calculation for BTM:NG Resources Section 4.15.2.1 ➢ Added Adjusted DMGC for the BTM:NG Resources Section 4.15.3 ➢ Added Net-UCAP Calculation for BTM:NG Resources
6.35	02/24/2017	Section: 4.9.6 ➢ Updated the tables to reflect 2017-2018 Import Rights Limits
6.36	3/14/2017	Section: 3.4, 3.6.1, 3.6.2 and 4.9.5. ➢ The revisions to this manual related to incorporate changes for Capacity Exports from Import Constrained Localities.
6.37	08/25/2017	Section: 5.5 ➢ Updated the periodicity of the ICAP Demand Curve reset process ➢ Updated the monthly ICAP Demand Curve reference point calculation ➢ Updated to reflect the ICAP Demand Curve annual update process Sections: 5.6, 5.6.1, 5.6.3, 5.6.4 and 5.6.5 ➢ Updated the periodicity of the ICAP Demand Curve reset process ➢ Updated to reflect the ICAP Demand Curve annual update process ➢ Removed redundant and obsolete language ➢ Clarified the description of ICAP Demand Curve reset process Section: 5.6.6 ➢ Updated the periodicity of the ICAP Demand Curve reset process ➢ Updated to reflect the ICAP Demand Curve annual update process ➢ Clarified the NYISO Board review process Section: 5.6.7

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		➢ Updated the periodicity of the ICAP Demand Curve reset process ➢ Updated to reflect the ICAP Demand Curve annual update process Section: 5.6.8 ➢ Added a new section describing the ICAP Demand Curve annual update process
6.38	01/30/2018	Section: 4.9.6 ➢ Updated the tables to reflect 2018-2019 Import Rights Limits
6.39	03/02/2018	Section: 4.9.6 ➢ Updated the tables to reflect 2018-2019 Import Rights Limits
6.40	12/03/2018	Section 4.9.2.4 ➢ End dated section 4.9.2.4 ➢ End dated the use of the facsimile for requesting Import Rights Section 4.9.2.5 ➢ Added new section for Allocation of Import Rights – Summer 2019 and Beyond Section 4.9.2.5.1 ➢ Inserted ETCNL language from 4.9.2.4 Section 4.9.2.5.2 ➢ Inserted deliverability test language from 4.9.2.4 Section 4.9.2.5.3 ➢ Added new section detailing Import Rights requests processes and requirements Section 4.9.2.5.4 ➢ Inserted language detailing external capacity sales in an Installed Capacity Auction
6.41	02/13/2018	Section: 4.9.6 Updated the tables to reflect 2019-2020 Import Right Limits

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6.42	03/13/2018	Sections 2.7, 4.1, 4.8, 4.9, 4.9.3, 4.14.1, 4.14.5, 5.15.2 ➢ Added references to EDRs where applicable Section 4.9.6 ➢ Added a table to show EDRs awarded Section 4.14 ➢ Provides the process for requesting, using and offering MW associated with EDRs Section 4.14.2 ➢ Establishes the process for requesting EDRs Section 4.14.3 ➢ Provides that capacity combined with EDRs can be used to meet capacity requirements set for LSEs within the NYCA, but not a Locality Section 2.7 ➢ Fixed a broken web link Table of Contents ➢ Updated the page numbers
6.43	08/07/2019	Section 4.9.4 ➢ Added reference to new external SRE requirements, penalty, and cost recovery
6.44	9/11/2019	Section 4.9.1 ➢ Added detail to requirements to qualify as an External Installed Capacity Supplier Section 4.9.3.2 ➢ Restructured section and added detail on deliverability requirements for External Installed Capacity Suppliers that are electrically located in ISO-NE or IESO
6.45	01/30/2020	Section: 4.9.6 ➢ Updated the tables to reflect 2020-2021 Import Rights Limits. Table of Contents ➢ Updated the page numbers Ministerial Changes ➢ Updated format & logo to NYISO's 2020 branding ➢ Updated hyperlinks

Version	Effective Date	Revisions
6.46	04/23/2020	Section 4.1.1 ➢ Added new section "Energy Duration Limitations and Duration Adjustment Factors for Installed Capacity Suppliers" under this section to include the requirement for Resources with a limited run-time to elect an Energy Duration Limitation for participation in the Installed Capacity market Section 4.1.2 ➢ Added for Dual Participation: Section contains language describing the market entry/exit requirements pertaining to retail load modifiers entering the NYISO markets, and further information for Capacity market participation for resources engaged in Dual Participation Section 4.12.2 ➢ Clarified a new SCR in a Mitigated Capacity Zone ➢ Clarified limitation of SCR capacity participation to those subject to an Offer Floor ➢ Removed outdated exemption language for new Special Case Resources in a Mitigated Capacity Zone Section 4.12.4.9 ➢ Replaced Meter Data Service Provider (MDSP) with Meter Services Entity (MSE)
6.47	05/20/2020	Section 4.2.2 ➢ Added DMNC requirements for Energy Storage Resources Section 4.5 ➢ Clarified the Unforced Capacity calculation ➢ Added the Unforced Capacity calculation for Energy Storage Resources Section 4.8.1 ➢ Added Bidding requirements for Energy Storage Resources
6.48	02/10/2021	Recertified Section 1 ➢ Revisions to the Unforced Capacity calculation Section 2.5 ➢ Added Adjusted Installed Capacity value and Duration Adjustment Factor terms to the Unforced Capacity calculation Section 4.1.1 ➢ Added requirements for Installed Capacity Suppliers with an Energy Duration Limitation Section 4.2 ➢ Clarified DMNC requirements for Installed Capacity Suppliers without an Energy Duration Limitation ➢ Added DMNC requirements for Installed Capacity Suppliers with an Energy Duration Limitation Section 4.4 ➢ Revisions to the Unforced Capacity calculation Section 4.5 ➢ Added Adjusted Installed Capacity value and Duration Adjustment Factor terms to the Unforced Capacity calculation ➢ Revisions to the Unforced Capacity calculation Section 4.8.1 ➢ Added Bidding requirements for Installed Capacity Suppliers with an Energy Duration Limitation Section 4.9.6

Version	Effective Date	Revisions
		➢ Updated the tables to reflect the 2021-2022 Import Rights Section 4.12 ➢ Added Duration Adjustment Factor term to the Unforced Capacity calculation
6.49	05/25/2021	Section 5.5 ➢ Revisions to the description of the maximum clearing price calculation for ICAP Demand Curves ➢ Clarified reference point price calculation to account for Duration Adjustment Factors
6.50	12/15/2021	Section 4.1.3 ➢ Revisions to incorporate CSR addressing that each resource must fulfill all obligations applicable to each respective resource type Section 4.2.2.1 ➢ Revisions to incorporate CSR addressing that each resource must fulfill all DMNC requirements Section 4.4.9 ➢ Revisions to incorporate CSR addressing that each resource must fulfill all data reporting obligations applicable to each respective resource type Section 4.5 ➢ Revisions to incorporate CSR including high-level discussion of UCAP calculation methodologies ➢ Discussion of the derating factor dispute process Section 4.8.7 ➢ Revisions to incorporate CSR addressing the requirement that CSR Generators must submit a CSR injection Scheduling Limit and CSR withdrawal Scheduling Limit for each hour of the DAM
6.51	03/04/2022	Section 4.9.6 ➢ Updated the tables to reflect the 2022-2023 Import Rights
6.52	06/06/2022	Section 4.2 ➢ Revisions to DMNC submittal deadline to remove requirement to submit within 60 days following the end of test period ➢ Removed obsolete language regarding submission of DMNC tests prior to software implementation
6.53	11/01/2022	Section 4.12 ➢ Added Critical Electric System Infrastructure Load eligibility criteria to Special Case Resources section.
6.54	01/03/2023	Section 2.5 ➢ Clarified the calculation of the NYCA Minimum Unforced Capacity Requirement and replaced “Adjusted Installed Capacity” with “Installed Capacity” in the calculation of the NYCA Minimum Unforced Capacity Requirement starting with the Capability Period that begins May 1, 2024. ➢ Sunset the calculation of “Adjusted Installed Capacity” with the Capability Period that begins May 1, 2024. Section 2.6 ➢ Clarified the calculation of the Locational Minimum Unforced Capacity Requirements and replaced “Adjusted Installed Capacity” with “Installed Capacity” in the calculation of the Locational Minimum Unforced Capacity Requirements starting with the Capability Period that begins May 1, 2024. Section 4.1.1

Version	Effective Date	Revisions
		➢ Sunset the Duration Adjustment Factors for ICAP Suppliers with Energy Duration Limitations and the existing Peak Load Windows starting with the Capability Year that begins May 1, 2024 Section 4.3.1 ➢ Removed empty bullet Section 4.2.1 ➢ Revised to reflect the DMNC test period requirements for ICAP Suppliers with Energy Duration Limitations longer than the Peak Load Window Section 4.2.2.2 ➢ Revised to reflect the DMNC test period requirements for ICAP Suppliers with Energy Duration Limitations longer than the Peak Load Window Section 4.5 ➢ Added the updated Adjusted Installed Capacity calculation that becomes effective for the Capability Period that begins May 1, 2024 ➢ Updated the calculation of UCAP for IPRs, LCROR Hydro Resources, and IPRs participating as CSRs starting with the Capability Period that begins May 1, 2024 ➢ Updated the initial UCAP calculation for new generating Resources to reflect the use of CAFs ➢ Removed empty table Section 4.8.1 ➢ Revised to reflect the bidding, scheduling, and notification requirements for Generators and System Resources with Energy Duration Limitations longer than the Peak Load Window Section 4.8.2 ➢ Revised to reflect the bidding, scheduling, and notification requirements for Energy Limited Resources with Energy Duration Limitations longer than the Peak Load Window Section 4.12.2.1 ➢ Replaced the Duration Adjustment Factor with the applicable Capacity Accreditation Factor in the UCAP calculation for SCRs starting with the Capability Period that begins May 1, 2024 Section 4.15.3 ➢ Specified that a BTM:NG Resource's assigned CAF would be applied to the BTM:NG Resource's Gen UCAP Section 5.5 ➢ Removed the Duration Adjustment Factor of the peaking plant from the monthly reference point price calculation for the ICAP Demand Curves ➢ Updated the translation of the quantities on each ICAP Demand Curve to quantities on the corresponding UCAP Demand Curve to be consistent with the ICAP to UCAP translations in Section 2.5 and 2.6, starting with the Capability Year that begins May 1, 2024 ➢ Revised the translation of the prices on each ICAP Demand Curve to prices on the corresponding UCAP Demand Curve starting with the Capability Year that begins May 1, 2024 Section 7 ➢ New section describing the annual process for establishing CARCs, calculating CAFs, assigning CARCs and CAFs to ICAP Suppliers and establishing the Peak Load Windows, starting with the Capability Year that begins May 1, 2024
7.0	03/03/2023	Section 4.9.2.4 ➢ Section deleted Section 4.9.2.5 ➢ Deleted "Summer 2019 and Beyond" from section title

Version	Effective Date	Revisions
		Section 4.9.6 ➢ Updated the tables to reflect the 2023-2024 Import Rights ➢ Added footnote 3 "CRIS Rights for the HTP scheduled line expired 4/30/2020"
8.0	04/27/2023	Section 4.5 ➢ The Unforced Capacity percentages for off-shore wind resources
9.0	03/01/2024	NOTE: The below changes were approved at the 2/14/2024 BIC without incorporating changes that were subsequently made effective in v10.0. Section 4.1.1 ➢ Updated web page location ➢ Updated email related to an election by August 1 Section 4.9.6 ➢ Removed the Import Rights tables and replaced in Attachment B of this ICAP Manual Section 4.2.2.2 ➢ Updated email related to an election by August 1 Sections 4.15, 7.1, 7.1.1, 7.2, 7.3.1, 7.3.3 ➢ Updated web page location
10.0	04/16/2024	NOTE: The below changes were approved at the 7/12/2023 BIC. Section 1 ➢ Added statement to address Aggregations Section 3.6.1 ➢ Updated Generator to Resource Section 4.1 ➢ Added statement market rules applicable to Aggregations Section 4.1.1 ➢ Added time-stacking ➢ Updated Generator to Resource ➢ Updated contact information Section 4.1.3 ➢ Added section to address DER and Aggregations Section 4.2 ➢ Updated Generator to Resource Section 4.2.2.1 ➢ Added language to address DER Aggregations Section 4.2.2.2 ➢ Added DER Aggregations and Energy Storage Resources ➢ Addressed Aggregations with an EDL Section 4.2.6 ➢ Updated Generator to Resource ➢ Added Aggregations Section 4.4.1 ➢ Added statement to address generating assets in an Aggregation Section 4.4.9 ➢ Added section to address generating assets in an Aggregation

Version	Effective Date	Revisions
		Section 4.4.13 ➢ Updated units to Resource Section 4.4.14 ➢ Added statement to address DER outage reporting requirements Section 4.5 ➢ Added language to address Aggregation UCAP and unavailability Section 4.6.2 ➢ Updated Generator to Resource, added Aggregations Section 4.8.1 ➢ Added Aggregations Section 4.9 ➢ Added statement to address Aggregations Section 4.11.1 ➢ Ministerial update Section 4.12.2 ➢ Removed SCR language Section 5.4 ➢ Updated Generator to Resource Section 5.14 ➢ Updated Generator to Resource Section 7.1.1 ➢ Added DER Aggregations
X.X	MM/DD/YYYY	Section 4.3.3.2 ➢ Added PMD reporting requirements Section 4.3.3.5 ➢ Modified ambient weather adjustment process Section 4.12.4.9 ➢ Added ability to correct PMD meter data ➢ Updated Transmission Owner/Meter Services Entity to Meter Authority

1. Introduction

The New York Independent System Operator's (NYISO) *Installed Capacity (ICAP) Manual* (the "Manual") contains the procedures that will be followed by the NYISO and its Customers with regard to the Installed Capacity markets and auctions administered by the NYISO pursuant to the *NYISO Market Administration and Control Area Services Tariff* (*Services Tariff*) (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer). The Installed Capacity Market provisions are discussed generally at Sections 5.9 through 5.16 of the *NYISO Services Tariff* as filed at Federal Energy Regulatory Commission (FERC).

The NYISO uses an Unforced Capacity methodology to determine the amount of Capacity that each Resource is qualified to supply to the New York Control Area (NYCA), and to determine the amount of Capacity that Load Serving Entities (LSEs) must procure. The Unforced Capacity methodology estimates the probability that a Resource will be available to serve Load, taking into account forced outages. Section 2.21 of the *NYISO Services Tariff* defines Unforced Capacity as follows: The measure by which Installed Capacity Suppliers will be rated, in accordance with formulae set forth in the NYISO Procedures, to quantify the extent of their contribution to satisfy the NYCA Minimum Installed Capacity Requirement, and which will be used to measure the portion of that NYCA Minimum Installed Capacity Requirement for which each LSE is responsible.

While the NYISO uses an Unforced Capacity methodology, this *Installed Capacity (ICAP) Manual* and the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) refer to the term "Installed Capacity" to describe the market as opposed to the product. For example, the NYISO administers "Installed Capacity auctions" where "Installed Capacity Suppliers" offer "Unforced Capacity" that LSEs will purchase to meet their "NYCA Minimum Installed Capacity Requirements."

Every Capability Period, the NYISO will translate the NYCA Minimum Installed Capacity Requirement and the Locational Minimum Installed Capacity Requirement into a NYCA Minimum Unforced Capacity Requirement and a Locational Minimum Unforced Capacity Requirement (see Sections 2.5, 2.6, 3.1, and 3.2 of this *ICAP Manual*). The NYISO will compute the Locational Minimum Installed Capacity Requirements for each month in the Capability Period consistent with the election, if any, of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area with a dissimilar capability year without the UDRs for the first month in a Capability Year, and as Unforced Capacity for the remaining months. (See later sections in this *ICAP Manual* regarding such election and other requirements.) From the NYCA Minimum Unforced Capacity Requirement and the Locational Minimum Unforced Capacity Requirement, the NYISO

will then calculate and establish each LSE's minimum Unforced Capacity requirement ("Minimum Unforced Capacity Requirement"). On the supply side, the NYISO will compile Capability Period averages of Operating Data that it will use to determine the amount of Unforced Capacity that each Installed Capacity Supplier is qualified to supply to the NYCA (see section 4.5 of this *ICAP Manual*). Thus, Market Participants will transact Unforced Capacity in Installed Capacity auctions and Bilateral Transactions.

As set forth in Sections 5.12.1 and 5.12.2 of the *NYISO Services Tariff*, to qualify as an Installed Capacity Supplier, certain Resource must meet the requirements for or have been granted Capacity Resource Interconnection Service (CRIS) status.

The NYISO conducts three (3) types of Installed Capacity auctions: the Capability Period Auction, the Monthly Auction, and the ICAP Spot Market Auction. LSEs may use Unforced Capacity procured in the Installed Capacity auctions to meet their respective LSE Unforced Capacity Obligations for the applicable Obligation Procurement Period. Participation in the Monthly Auction and the Capability Period Auction shall consist of: (i) LSEs seeking to purchase Unforced Capacity; (ii) any other entity seeking to purchase Unforced Capacity; (iii) qualified Installed Capacity Suppliers; and (iv) any other entity that owns excess Unforced Capacity. Participation in the ICAP Spot Market Auction shall consist of all LSEs and any other entity that has an Unforced Capacity shortfall. Separate ICAP Demand Curves shall be used in the ICAP Spot Market Auction: to determine the locational component of LSE Unforced Capacity Obligations for each Locality, and to determine the total LSE Unforced Capacity Obligations for all LSEs in the NYCA.

Capitalized terms used in this *ICAP Manual* shall have the same meaning as prescribed in the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer), unless otherwise defined, excepted, or noted in this *ICAP Manual*.

References in this *ICAP Manual*, including all of its Attachments, to a date shall mean the date and time specified on the ICAP Event Calendar, and if not specified on the ICAP Event Calendar, as specified herein. Any specified date means the information or material must be received by the NYISO no later than the specific date and prevailing Eastern Time. Unless otherwise set forth in this *ICAP Manual*, required information or material submitted after the specified date and time (including any proposed modification to timely submitted material) will not be accepted and will be as if never received. References in this *ICAP Manual* to data to be uploaded on or before a date shall mean that the data must be successfully uploaded into and received by the NYISO's system. The only exception to the receipt date and time is if the Market Participant's effort to deliver the information was impossible due to a failure of a NYISO process, in which case, the receipt date and time will be extended only (a) for the period of time of such impossibility, and (b)

if the Market Participant demonstrates that it attempted to deliver the information in a manner that, but for the failure of the NYISO process, otherwise was reasonably likely to have resulted in the information having been received by the NYISO on the applicable date and by the applicable time.

Throughout this ICAP Manual, the term "Resource" is used to refer to both Generators and DER Aggregations. Additional information on Aggregations can be found in Market Administration and Control Area Services Tariff Section 4.1.10 and in the Aggregation Manual. The manual can be found at Manuals/Guides/Technical Bulletins library (Manuals, Tech Bulletins & Guides - NYISO).

Throughout this ICAP Manual, any explicit reference to an existing NYISO participation model is also applicable to Aggregations classified under the same model. For example, Generators, ESR, Wind (IPR), Solar (IPR), ELR and CLR Aggregations shall follow the same rules as set forth for single resources of those types. An Aggregation comprised of a heterogenous mix of IPRs of differing technologies (E.g., Wind, Solar, and Landfill Gas in an Aggregation) shall be treated as a DER Aggregation.

2. Overview of Installed Capacity Planning and Procurement Process

This section contains overviews of:

- the major elements of New York's Installed Capacity planning and procurement process;
- the New York Control Area ("NYCA") Installed Reserve Margin;
- the NYCA Minimum Installed Capacity Requirement, Locational Minimum Installed Capacity Requirements within the NYCA, and limitations on Unforced Capacity from External Control Areas; and
- the NYCA Minimum Unforced Capacity Requirement.

The *NYISO Services Tariff* reference for this section of the Manual is Section 5.10. (*NYISO Services Tariff* is available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer.)

2.1. Overview

- The New York State Reliability Council ("NYSRC") sets the Installed Reserve Margin and the NYISO determines the NYCA Minimum Installed Capacity Requirement in accordance with the criteria and standards of the NYSRC, the Northeast Power Coordinating Council ("NPCC") and the New York Public Service Commission ("PSC").
- The NYISO converts the NYCA Minimum Installed Capacity Requirement into a NYCA Minimum Unforced Capacity Requirement.
- The NYISO determines Locational Minimum Installed Capacity Requirements and converts them into Locational Minimum Unforced Capacity Requirements. The NYISO's determination will reflect the election, if any, of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area with a dissimilar capability year as provided for in Sections 5.11.4 and 5.12.4 of the *NYISO Services Tariff* and this *ICAP Manual*.
- The NYISO assigns Minimum Unforced Capacity Requirements, including Locational Minimum Unforced Capacity Requirements, to LSEs on a Transmission District basis. Assignment of Locational Minimum Unforced Capacity Requirements to LSEs will reflect the election, if any, of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area with a dissimilar capability year as provided for in Sections 5.11.4 of the *NYISO Services Tariff* and this *ICAP Manual*.

- The NYISO establishes, with the collaboration and assent of Market Participants, standards, qualifications and requirements that will apply to Transmission Owners, LSEs, and Installed Capacity Suppliers that are Internal and External to the NYCA.
- The NYISO determines the amount of Unforced Capacity that Installed Capacity Suppliers may supply within the NYCA based upon these standards and qualifications.
- The NYISO determines the amount of Unforced Capacity that may be supplied by Resources that are External to the NYCA, as specified in Sections 2.7 and 4.9.2 of this *ICAP Manual*.
- The NYISO conducts three (3) types of Installed Capacity auctions: the Capability Period Auction, the Monthly Auction, and the ICAP Spot Market Auction.
- LSEs may procure adequate Unforced Capacity from Installed Capacity Suppliers, either bilaterally or through NYISO-administered auctions, to meet their requirements.
- Participation in the Monthly Auction and the Capability Period Auction shall consist of: (i) LSEs seeking to purchase Unforced Capacity; (ii) any other entity seeking to purchase Unforced Capacity; (iii) qualified Installed Capacity Suppliers; and (iv) any other entity that owns excess Unforced Capacity.
- Separate ICAP Demand Curves shall be used in the ICAP Spot Market Auction: to determine the locational component of LSE Unforced Capacity Obligations for each Locality, and to determine the total LSE Unforced Capacity Obligations for all LSEs in the NYCA.
- Participation in the ICAP Spot Market Auction shall consist of all LSEs and any other entity that has an Unforced Capacity shortfall.
- The NYISO monitors the compliance of Transmission Owners, LSEs, and Installed Capacity Suppliers with the rules and procedures set forth in the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) and in this *ICAP Manual*.

2.2. Timeline

An up-to-date detailed timeline can be found by selecting "ICAP Event Calendar" at the link provided: (https://www.nyiso.com/installed-capacity-market). Throughout the text of this *ICAP Manual*, there are references to events that will occur on non-specific dates (e.g., "early in the month"). The specific dates for these events will be found in this detailed timeline.

2.3. The NYCA Installed Reserve Margin

The NYCA Installed Reserve Margin is established annually by the NYSRC and is based on the NPCC standard for Resource adequacy ("NPCC Resource Adequacy Standard"). The NPCC Resource Adequacy Standard requires the probability of disconnecting firm Load due to a Resource deficiency (Loss of Load Expectancy, or "LOLE") to be, on the average, no more than once in ten years after due allowance for:

- Scheduled and forced outages and scheduled and forced deratings;
- Assistance over interconnections with neighboring Control Areas and regions; and
- Capacity and/or Load relief from available operating procedures.

The NYISO uses a base model of the NYCA electric power system and its interconnections with neighboring control areas to perform this analysis for the NYSRC.

2.4. The NYCA Minimum Installed Capacity Requirement

The NYISO calculates the NYCA Minimum Installed Capacity Requirement in megawatts for the Capability Year as the product of the forecasted NYCA peak Load and the quantity one (1) plus the NYSRC Installed Reserve Margin (IRM). The specific IRM value can be found on the NYSRC website, under "Installed Reserve Margin (IRM) Reports" at http://www.nysrc.org/NYSRC_NYCA_ICR_Reports.html. In deriving the Load forecast, the NYISO uses the procedures in the *NYISO Load Forecasting Manual* (available from the NYISO Web site at the following URL: https://www.nyiso.com/manuals-tech-bulletins-user-guides).

2.5. The NYCA Minimum Unforced Capacity Requirement

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the NYISO calculates the NYCA Minimum Unforced Capacity Requirement by multiplying the NYCA Minimum Installed Capacity Requirement by one (1) minus the NYCA translation factor. The NYCA translation factor is the weighted average of the derating factors associated with all Resources electrically located in the NYCA for that Capability Period. The NYCA translation factor shall be calculated by taking the quantity one (1) minus the ratio of: (a) the total amount of Unforced Capacity that the specified Resources are qualified to provide during such Capability Period (as described in Section 4.5), to (b) the sum of Adjusted Installed Capacity values used to determine the Unforced Capacity of such Resources for such Capability Period.

Prior to the Capability Period that begins May 1,2024, the Adjusted Installed Capacity for an Installed Capacity Supplier shall be calculated using the applicable Duration Adjustment Factor, and in accordance with Section 5.12.14 of the *NYISO Services Tariff*, and Sections 4.1.1, 4.5, and 4.12.2 of this *ICAP Manual*.

Installed Capacity Suppliers without an Energy Duration Limitation will have a Duration Adjustment Factor of 100%.

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the NYISO will calculate the NYCA Minimum Unforced Capacity Requirement by multiplying the NYCA Minimum Installed Capacity Requirement by one (1) minus the NYCA translation factor. The NYCA translation factor shall be calculated by taking the quantity one (1) minus a value equal to: (a) the total amount of Unforced Capacity that all resources electrically located in the NYCA are qualified to provide during such Capability Period (as described in Section 4.5 of this ICAP Manual), divided by (b) the sum of the Installed Capacity values used to determine the Unforced Capacity of such resources for such Capability Period.

2.6. Locational Minimum Installed Capacity Requirements

Due to transmission limitations into certain areas within the NYCA, LSEs serving Load in these areas must procure a percentage of their total Minimum Unforced Capacity Requirement from Installed Capacity Suppliers electrically located within the constrained areas. Currently, there are three areas called Localities, within the NYCA where Locational Minimum Installed Capacity Requirements are imposed. These are New York City, Long Island, and the G-J Locality. The Locational Minimum Installed Capacity Requirements are established annually by the NYISO. The specific Locational Minimum Installed Capacity Requirements established each year are found in the Locational Minimum Installed Capacity Requirements Study (LCR Report) found in the Installed Capacity Market page of the NYISO's website, under Reference Documents -> LCR Calculation Process. by activating the following link:

https://www.nyiso.com/installed-capacity-market

The NYISO will compute the Locational Minimum Installed Capacity Requirements for each month in the Capability Period consistent with the election, if any, of an Installed Capacity Supplier holding the rights to UDRs from an External Control Area with a dissimilar capability year without the UDRs for the first month in a Capability Year, and as Unforced Capacity for the remaining months, as provided for in *NYISO Services Tariff* Sections 5.11.4. If no Installed Capacity Supplier holding the rights to UDRs makes a one-time election for a Capability Period, the UDRs shall be modeled consistently for all months in the Capability Period.

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the NYISO converts the Locational Minimum Installed Capacity Requirements of LSEs into Locational Minimum Unforced Capacity Requirements by multiplying such Locational Minimum Installed Capacity Requirements by the quantity one (1) minus the weighted average of the derating factors associated with all Resources

electrically located in the relevant Locality for that Capability Period (as described in Section 4.5). Within a Capability Period, the Locational Minimum Installed Capacity Requirements for each month will reflect the election, if any, of an Installed Capacity Supplier holding rights to UDRs as provided for in Sections 5.11.4 of the *NYISO Services Tariff* and this *ICAP Manual*.

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the NYISO will convert the Locational Minimum Installed Capacity Requirements of LSEs into Locational Minimum Unforced Capacity Requirements by multiplying such Locational Minimum Installed Capacity Requirements by the quantity one (1) minus the Locational translation factor. The Locational translation factor shall be calculated by taking the quantity one (1) minus a value equal to: (a) the total amount of Unforced Capacity that all resources electrically located in the relevant Locality are qualified to provide during such Capability Period (as described in Section 4.5 of this ICAP Manual), divided by (b) the sum of the Installed Capacity values used to determine the Unforced Capacities of such resources for such Capability Period. Within a Capability Period, the Locational Minimum Installed Capacity Requirements for each month will reflect the election, if any, of an Installed Capacity Supplier holding rights to UDRs as provided for in Section 5.11.4 of the NYISO Services Tariff and this ICAP Manual.

For the purpose of specifying Locational Minimum Installed Capacity Requirements, the remainder of the NYCA is grouped together as "All other NYCA Zones." Maps of the NYCA Transmission Districts and NYCA Zones can be found in Attachment C. (The *NYISO Services Tariff* is available from the NYISO Web site at the following URL: https://nyisoviewer.etariff.biz/ViewerDocLibrary/MasterTariffs/9FullTariffNYISOMST.pdf .)

2.7. Limitations on Unforced Capacity from External Control Areas

The amounts of Unforced Capacity that can be supplied by Resources outside the NYCA are constrained by three factors. The first is the requirement in Section 5.12.2.1 of the *NYISO Services Tariff* that an External Installed Capacity Supplier must:

- Demonstrate that the Installed Capacity Equivalent of the amount of Unforced Capacity it supplies to the NYCA is deliverable to the NYCA; and
- Demonstrate that the Installed Capacity Equivalent of the amount of Unforced Capacity it supplies to the NYCA will not be recalled or curtailed to satisfy the Load of the External Control Area, or that the External Control Area in which it is located will afford NYCA Load the same curtailment priority that it affords its own Control Area Native Load.

The Installed Capacity Equivalent of a given amount of Unforced Capacity supplied by a Supplier using a Resource is the portion of that Resource's Capacity that is subject to the requirements set forth in the *NYISO Services Tariff* and this *ICAP Manual*. The Installed Capacity Equivalent of a given amount of Unforced Capacity may exceed that amount of Unforced Capacity, because a MW of Installed Capacity may translate into less than 1 MW of Unforced Capacity. Procedures for calculating the Installed Capacity Equivalent of the amount of Unforced Capacity provided by a given Installed Capacity Provider using a given Resource are set forth in Attachment J.

> *Only neighboring Control Areas that meet these criteria will be included in the modeling described in this Section 2.7 of this ICAP Manual.*

The second constraint results from transmission limitations. The NYISO will determine the amount of Unforced Capacity that may be supplied from Resources External to the NYCA while meeting the NPCC Resource Adequacy Standard described in Section 2.3. Starting with the forecast Loads for the upcoming Capability Year, known Capacity within the NYCA, grandfathered External Installed Capacity, and accounting for a variety of assumptions and uncertainties in consultation with the NYSRC, a NYCA Installed Reserve Margin will be determined. Once the NYCA Installed Reserve Margin is established, the NYISO will determine the total NYCA Minimum Installed Capacity Requirement. The maximum Installed Capacity that may be supplied by each qualified neighboring Control Area is determined as part of the process described in the paragraph above. This is achieved by varying Rest of State Installed Capacity with External Installed Capacity from each adjacent Control Area. In subsequent simulations, an Installed Capacity import amount from each Control Area is determined. To determine the simultaneous maximum External Installed Capacity that may be procured from all neighboring Control Areas, the total of the maximum External Installed Capacity determined above, for each neighboring Control Area, is reduced in direct proportion until the LOLE matches that of the base case. The analyses used to determine the maximum amount of Installed Capacity that can be provided from Resources located in neighboring Control Areas will be open to review by all Market Participants. The allocation of Installed Capacity rights associated with transmission expansions is not addressed at this time.

The third factor constraining the amount of External Installed Capacity is the requirement that External Installed Capacity is subject to the deliverability test as specified in Attachment S of the *NYISO Open Access Transmission Tariff* (*OATT*). The procedure for evaluating the deliverability of External Installed Capacity not associated with UDRs, External-to-Rest of State Deliverability Rights ("EDRs") or External CRIS Rights is described in Section 4.9.3 of this *ICAP Manual*. The deliverability requirement applicable to UDRs and EDRs is described in Attachments S and X of the *NYISO OATT* and Section 4.14 of this *ICAP Manual*. The

deliverability requirement applicable to External CRIS Rights is described in Attachments S and X of the *NYISO OATT* and Section 4.10 of this *ICAP Manual*.

3. Minimum Unforced Capacity Requirements of Load Serving Entities

This section contains information and procedures related to:

- Calculating the New York Control Area (NYCA) Minimum Installed Capacity Requirement;
- Calculating the NYCA Minimum Unforced Capacity Requirement;
- The Transmission District Minimum Unforced Capacity Requirements;
- Establishing an LSE's Minimum Unforced Capacity Requirement for an Obligation Procurement Period;
- Customer-switching;
- Procedures for calculating Locational Minimum Installed Capacity Requirements of LSEs;
- Procedures for calculating Locational Minimum Unforced Capacity Requirements of LSEs;
- Grandfathered External Installed Capacity Resources;
- The Capacity adjustment for firm Capacity sales by NYPA; and
- Calculating the LSE Unforced Capacity Obligation for each LSE. The *NYISO Services Tariff* reference for this section of this *ICAP Manual* is Section 5.11. (The *NYISO Services Tariff* is available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer.)

The NYISO Services Tariff reference for this section of this ICAP Manual is Section 5.11.

3.1. The NYCA Minimum Installed Capacity Requirement

The NYISO calculates the NYCA Minimum Installed Capacity Requirement in megawatts for the Capability Year as the product of the forecast NYCA coincident peak Load and the quantity one (1) plus the NYSRC Installed Reserve Margin.

For detailed Load forecasting methodology, refer to the *NYISO Load Forecasting Manual* (available from the NYISO Web site at the following URL: https://www.nyiso.com/documents/20142/2924447/load_fcst_mnl.pdf/e5bbbd2f-fe2f-9ab2-43ac-32f8049b4628).

3.2. The NYCA Minimum Unforced Capacity Requirement

The NYISO calculates the NYCA Minimum Unforced Capacity Requirement as described in Section 2.5 of this *ICAP Manual*.

3.3. Transmission District Minimum Unforced Capacity Requirements

The Minimum Unforced Capacity Requirement for each Transmission District will be calculated as the product of the NYCA Minimum Unforced Capacity Requirement and the ratio of the Transmission District's forecast coincident peak Load to the sum of the forecast coincident peak Loads for all Transmission Districts. In equation form:

$$\mathrm{UCR_t} = \mathrm{UCR_{NYCA}} * \mathrm{CPL_t} / \sum_{t \epsilon T} \mathrm{CPL_t}$$

Where:

UCR_t = Minimum Unforced Capacity Requirement for a Transmission District t;

UCR_{NYCA} = NYCA Minimum Unforced Capacity Requirement;

CPL_t = Forecast Capability Year Coincident Peak Load for Transmission District t;

T = the set of all Transmission Districts in the NYCA

3.4. Establishing an LSE's Minimum Unforced Capacity Requirement for an Obligation Procurement Period

A Load Serving Entities (LSE's) minimum Installed Capacity requirement ("Minimum Installed Capacity Requirement") is the sum of the Installed Capacity Requirements of each of its customers. The Minimum Installed Capacity Requirement is set before each Capability Year and remains constant throughout the Capability Year unless an Installed Capacity Supplier with rights to UDRs from an External Control Area with a dissimilar capability year elects to treat the UDRs as Unforced Capacity for the first month of a Capability Year. If such an election for a UDR is made, each LSE in a Locality will have two (2) Locational Minimum Installed Capacity Requirements: one for the first month of the Capability Period in which an Installed Capacity Supplier holding rights to UDRs from an External Control Area with a dissimilar capability year has made an election to have such requirements be determined without the UDRs, and the other for the remaining months in the Capability Year (and years thereafter) with the UDRs.

Each LSE's Minimum Installed Capacity Requirement is translated into a Minimum Unforced Capacity Requirement as noted in Sections 2.5 and 2.6 of this *ICAP Manual*. Sections 3.5.1 and 3.5.2 of this *ICAP Manual* describe the only conditions that would require a change of an individual LSE's Minimum Installed Capacity Requirement during the Capability Year.

Every month, each LSE must procure sufficient Unforced Capacity to meet its monthly Minimum Unforced Capacity Requirement for the following Obligation Procurement Period. The NYISO will perform a calculation in March prior to providing each LSE with its binding monthly Summer Capability Period

Minimum Unforced Capacity Requirement. This calculation may be subject to monthly revisions, including to account for Locality Exchange MW. Prior to the Winter Capability Period the NYISO will perform a calculation in September and provide each LSE with a binding Winter Capability Period Minimum Unforced Capacity Requirement. This calculation may be subject to monthly revisions, including to account for Locality Exchange MW. These calculations will be made in accordance with this Section 3.4 and Sections 2.5 and 2.6 of this *ICAP Manual*. Following the initial Capability Period assignment, each month within a Capability Period the Minimum Unforced Capacity Requirement will be adjusted to reflect customer-switching. The adjusted value is binding with regard to the LSE's obligation to procure Unforced Capacity for each Obligation Procurement Period within the corresponding Capability Period.

The Minimum Unforced Capacity Requirement for each LSE will be calculated separately for each Transmission District in which it serves Load. The requirement is based upon the ratio of the LSE's contribution to each Transmission District's forecast coincident peak to the LSE's actual contributions to the Transmission District's coincident peak Load for the prior calendar year. (This ratio is represented by the term "GF_t" in the formulas below.) Where an LSE serves end-use partial requirement customers (i.e., customers for whom the LSE provides service up to a specified amount), the portion of the LSE's contribution to the coincident peak attributable to such partial requirement customers shall be equal to the lesser of their actual contribution to the coincident peak or the contract demands of such partial requirement customers, if fully utilized, at the time of the Transmission District's coincident peak.

The precise formulation of the requirement is as follows:

$$UCR_{x,t} = UCR_t * CPD_{x,t}/CPL_t$$

where:

$UCR_{x,t}$ = Minimum Unforced Capacity Requirement for LSE x within Transmission District t;

UCR_t = Minimum Unforced Capacity Requirement for Transmission District t;

$CPD_{x,t}$ = Forecasted contribution to peak demand in Transmission District t for LSE x, as defined further below; and

CPL_t = Forecast Capability Year Coincident Peak Load for Transmission District t.

The forecasted contribution to peak demand of each LSE x within each Transmission District t is calculated according to the following equation:

$$CPD_{x,t} = GF_t \sum_{c \in FRC_{x,t}} HPD_{c,t} + \sum_{c \in PRC_{x,t}} \min(PRCA_{c,t}, GF_t * HPD_{c,t})$$

$$+ \sum_{c \in SRC_{x,t}} \max(GF_t * HPD_{c,t} - PRCA_{c,t}, 0)$$

and

$$GF_t = \frac{CPL_t}{\sum_c HPD_{c,t}}$$

where:

GF_t = the growth factor applied to each Load in Transmission District t to determine the Minimum Installed Capacity Requirements for LSEs serving that Load;

CPL_t = the forecast Capability Year Coincident Peak Load for Transmission District t; $FRC_{x,t}$ = set of full-requirement retail customers of LSE x in Transmission District t;

$HPD_{c,t}$ = demand by retail customer c in Transmission District t during the coincident peak demand hour for the NYCA of the last calendar year

$PRC_{x,t}$ = set of retail partial-requirement customers of LSE x in Transmission District t;

$PRCA_{c,t}$ = the maximum contractual purchase in Transmission District t by a retail partial requirements customer c; and

$SRC_{x,t}$ = set of supplemental-requirements retail customers of LSE x in Transmission District t.

Prior to each Obligation Procurement Period, LSEs must certify to the NYISO demonstrating the amount of Unforced Capacity they have obtained for the upcoming Obligation Procurement Period. The certification shall require LSEs to: (i) designate the total amount of Unforced Capacity they have procured; (ii) specify how much Unforced Capacity is associated with Installed Capacity Suppliers located in each NYISO defined Locality, the remainder of the NYCA and each External Control Area; and (iii) identify any Installed Capacity Supplier from which they have procured Unforced Capacity pursuant to Bilateral Transactions. The specific monthly dates by which all certifications are due can be found by selecting the link provided:

(https://icap.nyiso.com/ucap/public/evt_calendar_display.do)

To the extent an LSE certifies that it is procuring Unforced Capacity through a Bilateral Transaction for any Obligation Procurement Period(s), the Installed Capacity Supplier to that Bilateral Transaction must

also confirm to the NYISO that it is obligated to supply UCAP to the LSE for the indicated Obligation Procurement Period(s) of the Capability Period. In the event an LSE-certified Bilateral Transaction is not confirmed by the associated Installed Capacity Supplier and the Bilateral Transaction remains unconfirmed at the close of certification, then the UCAP associated with an unconfirmed Bilateral Transaction purchase will not be credited to the originally certifying LSE. If the LSE does not procure other UCAP to replace an unconfirmed Bilateral Transaction, the LSE may then be deemed deficient and entered into the ICAP Spot Market Auction for the associated Obligation Procurement Period(s).

3.5. Customer-Switching

3.5.1. General Requirements for Customer-Switching within a Capability Year

Establishing LSE Minimum Unforced Capacity Requirements

Specific monthly deadlines for NYISO receipt of customer-switching data can be found by selecting the link provided (https://icap.nyiso.com/ucap/public/evt_calendar_display.do) The Transmission Owners shall provide supporting data which reflects verified customer-switching that has occurred or is scheduled for the current month to the NYISO on or before the specific monthly deadline.

Each Transmission Owner shall also provide aggregate peak Load data to the NYISO, coincident with the Transmission District peak, for all customers served by each LSE within its Transmission District, excluding those served by the municipal electric systems (specific monthly time for the NYISO's receipt of aggregate peak Load data is set forth at the following link: http://icap.nyiso.com/ucap/public/evt_calendar_display.do. This data shall reflect verified customer-switching and may be derived from direct meters or Load profiles of customers served.

Based on documented customer-switching adjustments provided by each Transmission Owner to the NYISO in March that are scheduled to occur before May 1, the NYISO will provide each LSE with its final monthly Minimum Unforced Capacity Requirement for each year. In the event of a dispute as of April 10 regarding a Transmission Owner's forecast, the NYISO shall nevertheless establish each LSE's final monthly Minimum Unforced Capacity Requirement, subject to possible adjustments required from a resolution of the dispute.

Monthly Adjustments to LSE Minimum Unforced Capacity Requirement

The Transmission Owners will update the NYISO and affected LSEs on a monthly basis concerning customer-switching. Each Transmission Owner will provide updated aggregated LSE reports to the NYISO for each LSE serving Load in the Transmission District no later than the date and time provided in the

detailed timeline that can be found by selecting the link provided (https://icap.nyiso.com/ucap/public/evt_calendar_display.do) . It is each Transmission Owner's responsibility to ensure the NYISO's receipt of all customer-switching information no later than the specified time. The NYISO will determine the net change in Load for a Transmission Owner's Transmission District customer-switching if the NYISO has not received the appropriate customer-switching information in a timely manner.

The updated aggregated LSE reports, which are received by the NYISO early in each month, shall reflect all customer-switching through the end of the respective month that were reported to Transmission Owners as of the last day of the previous month. In addition to customer switches scheduled for the month of the report, the report will include previously unreported customer switches that occurred in past months and corrections for customer switches that were incorrectly reported in an earlier report.

As an example, a Transmission Owner will provide to the NYISO an LSE update report on or prior to the time due of July 8, 2009 at 5:00:00 P.M. that represents all customer-switching changes occurring through July 31st that the Transmission Owner received notice of by June 30th. This report might include the following customer switches: a customer switch scheduled to occur on July 20th, notification of a switch that occurred on June 5th that the Transmission Owner was unaware of at the time of its report in June, and a date correction for a switch that occurred in May.

Based on customer-switching, the NYISO will make monthly adjustments to each LSE's Minimum Unforced Capacity Requirement for the month or months remaining in the Capability Year that follows the month in which the Transmission Owner's report was submitted. These adjustments will reflect each individual LSE's gain and loss of customers. The adjustments will be made in such a way as to keep the total Minimum Unforced Capacity Requirement for the Transmission District constant.

To continue the example, in response to the Transmission Owners customer-switching report submitted in early July (based on changes reported to the Transmission Owner by June 30th), the NYISO will recalculate affected LSE's Minimum Unforced Capacity Requirement for the months of August through April (the last month of the Capability Year). The NYISO will provide affected LSEs with their new Minimum Unforced Capacity Requirement prior to the Monthly Auction occurring in July, allowing those LSEs affected ample time to acquire, as necessary, sufficient Unforced Capacity for the month of August.

See the detailed timeline that can be found by selecting the link provided: (https://icap.nyiso.com/ucap/public/evt_calendar_display.do) for details concerning the schedule of updates and notification requirements related to monthly customer-switching.

3.5.2. Assignment of Minimum Installed Capacity Requirements for a New Customer in a Transmission District

A new customer is defined as any entity with a new service connection for which the Transmission Owner cannot identify the entity's contribution to the relevant prior peak period. The Minimum Unforced Capacity Requirements related to new customers are estimated by Transmission Owners and are reflected in the Load growth assumptions of the Capability Year forecasts provided by the Transmission Owners and approved by the NYISO. Load growth assumptions typically include a component for new customers and a component for existing customers.

The Minimum Unforced Capacity Requirements of LSEs in each Transmission District shall initially reflect all Load growth for such Transmission District. Two different methods shall be used to adjust the Minimum Unforced Capacity Requirements of LSEs serving Load when new Loads enter that Transmission District.

- To the extent that a Transmission Owner has the ability to assign an estimated peak Load coincident with the Transmission District peak Load to a new customer in its Transmission District, it shall be permitted to do so. The LSE serving that new customer shall assume the Minimum Unforced Capacity Requirement. The Minimum Unforced Capacity Requirement of each LSE serving Load within that Transmission District shall then be reduced by its share of the new customer's total Unforced Capacity obligation, which is assumed by the LSE serving that new customer. The NYISO will provide each affected LSE with its new Minimum Unforced Capacity Requirement in accordance with the dates provided in the detailed timeline that can be found by selecting the link provided (https://icap.nyiso.com/ucap/public/evt_calendar_display.do) .
- In the absence of a direct assignment mechanism, the Minimum Unforced Capacity Requirement of each LSE serving Load within that Transmission District will not be normalized.

The following procedures will be used to account for the direct assignment of an Unforced Capacity obligation for a new customer within the Capability Period.

- The relevant Transmission Owner shall notify the NYISO and the relevant LSE of the new customer's Load based on its estimated peak Load coincident with the TD peak Load.
- The NYISO shall normalize the Minimum Unforced Capacity Requirements of all LSEs serving Load in the Transmission District at the time of the new customer's assignment to the relevant LSE such that the total Minimum Unforced Capacity Requirement for the Transmission District remains constant. The NYISO will provide each affected LSE of its new Minimum Unforced

Capacity Requirement in accordance with the dates in the detailed timeline that can be found by selecting the link provided: (https://icap.nyiso.com/ucap/public/evt_calendar_display.do) .

If a dispute occurs concerning the assignment of Minimum Unforced Capacity Requirements related to new customers, it shall be resolved in accordance with Section 3.5.5 of this *ICAP Manual*. If the direct assignment of the Unforced Capacity obligation for a new customer takes place within the Capability Period, the LSE with the new customer obligation shall be required to have sufficient Unforced Capacity to cover that assignment on the first day of the month after the first Monthly Auction following the assignment and for each month thereafter in the Capability Year, in accordance with the monthly LSE certification requirements. For example, if the NYISO provides notification of an assignment of a new customer Minimum Unforced Capacity Requirement to an LSE on July 10th (prior to the Monthly Auction taking place in mid-July), that LSE is required to have sufficient Unforced Capacity to cover that assignment from August through the following April, on a monthly basis.

3.5.3. Load Lost due to Departing Customers

To account for Load lost when a customer leaves a Transmission District, the NYISO will:

- Reduce the Minimum Unforced Capacity Requirement of the Load-losing LSE within the Transmission District.
- Relieve the LSE responsible for the Unforced Capacity obligation of the departing customer of that obligation. The LSE may sell any excess Unforced Capacity. In order for the Load-losing LSE to be relieved of this obligation, the Transmission Owner must notify the NYISO of the customer's departure, by providing adequate supporting documentation that it has left New York State. (For example, either a countersigned letter between the Transmission Owner and the departing customer or documentation that the departing customer has requested service disconnection would meet this requirement.)
- Normalize the Minimum Unforced Capacity Requirements of all LSEs serving Load (including the Load-losing LSE) in the relevant Transmission District such that the total Minimum Unforced Capacity Requirement for the Transmission District remains constant.

Promptly after receiving notice from a Transmission Owner, the NYISO will either (a) notify the LSE that it has been relieved of the LSE Unforced Capacity Obligation of that departing customer for the remaining months in the Capability Year, or (b) notify the Transmission Owner that supporting documentation is deemed inadequate, in which case the LSE must continue to carry the Unforced Capacity associated with the departing customer until such time as the NYISO's documentation requirement is

satisfied. Upon request, the NYISO will provide guidance as to how the documentation could be made acceptable.

3.5.4. Financial Arrangements to Cover Customer Switching

If a customer switches LSEs or if LSE Load is normalized pursuant to Section 3.5.1 of this *ICAP Manual*, the following financial arrangements will be executed. Refer to Section 5 of this *ICAP Manual* for details concerning the Monthly Auctions referred to below. Also, refer to Section 5.11.3 of the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer) and Attachment L of this *ICAP Manual*.

- The LSE that gains customers from another LSEs will financially cover the portion of the LSE Unforced Capacity Obligation associated with its new customers by paying the LSE that lost the customers for each day that the customer-gaining LSE serves that new customer, until the first day of the month following the month in which the NYISO provides each LSE with its new Minimum Unforced Capacity Requirement associated with the customer-switching (in the detailed timeline that can be found by selecting the link provided : http://www.nyiso.com/public/products/icap/index.jsp), at which time the Minimum Unforced Capacity Requirement of each LSE will reflect the switch. (This paragraph, and those following in this subsection, also apply to shifts in LSE Load obligations due to periodic normalizing. See Sections 3.5.2 and 3.5.3 above, and Attachment L to this *ICAP Manual*.)
- The NYISO will use the monthly Installed Capacity billing cycle, in the same month in which the NYISO notified each affected LSE, to bill the customer-gaining LSE, for the period referred to directly above.
- The rate that will be used to calculate this financial exchange for each month in which the obligation to procure Installed Capacity shifts, as described above, will be the monthly clearing price established for that month in the most recent, previous ICAP Spot Market Auction, prorated on a daily basis. (See Attachment L of this *ICAP Manual* for information in connection with the financial reconciliation process.)
- If the customer-losing LSE received a rebate associated with the lost customer (see Section 5.12 and Attachment L of this *ICAP Manual* for information concerning rebates), a proportionate share of the rebate will reduce the amount paid by the customer-gaining LSE.
- For example, if a Transmission Owner is notified prior to the end of June of a customer switch in its Transmission District that will occur on July 20th, it will report this occurrence in early July to the NYISO and affected LSEs. Shortly thereafter, the NYISO will recalculate the Minimum

Unforced Capacity Requirement of the affected LSEs and provide them prior to the Monthly Auction occurring in mid-July. Each affected LSE will be responsible for its new Minimum Unforced Capacity Requirement starting August 1st. In the meantime, in order to reflect the gain and loss of customers of each affected LSE during the month of July (in this instance, from July 20th through July 31st), in Unforced Capacity terms, the customer-gaining LSE will be required to cover the cost of the portion of the LSE Unforced Capacity Obligation previously procured by the customer-losing LSE for the month of July to satisfy the customer's Load by reimbursing the customer-losing LSE on a pro rata basis (in this case, for 12 days). This amount will be calculated using the clearing price for Installed Capacity for the month of July determined in the ICAP Spot Market Auction, which took place in June. This financial reconciliation will be reflected in the July billing cycle.

3.5.5. Disputes Related to Customer Switching

Any disputes among Market Participants concerning customer-switching shall be resolved either by the NYISO Expedited Dispute Resolution Procedures [as set forth in Section 5.16 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer)], or the relevant Transmission Owner's retail access procedures, as applicable.

If a dispute occurs, the NYISO will make its monthly Unforced Capacity adjustments as if the customer-shift had occurred as reported by the Transmission Owner and will retroactively modify these adjustments based on the outcome of the applicable Dispute Resolution Process, if necessary.

3.6. Procedures for Calculating the Locational Minimum Unforced Capacity Requirements of LSEs

3.6.1. Minimum Unforced Capacity Requirements for Transmission Districts in a Locality

The Minimum Unforced Capacity Requirement for each Transmission District in a Locality will be calculated as the product of the Locality Minimum Unforced Capacity Requirement and the ratio of the Transmission District's forecast Locality peak Load to the sum of the forecast Locality peak Loads for the portion of all Transmission Districts in the Locality. In equation form:

$$\mathrm{ULR}_{t,L} = \mathrm{ULR}_{L} * \mathrm{LPL}_{t,L} \Big/ \sum_{t \in L} \mathrm{LPL}_{t,L}$$

where:

$ULR_{t,L}$ = Minimum Unforced Capacity Requirement for that portion of a Transmission District t in Locality L;

ULR_{L} = Locality L Minimum Unforced Capacity Requirement;

$LPL_{t,L}$ = Forecast Capability Year Non-Coincident Peak Load for that portion of a Transmission District t in Locality L

L = the set of all Transmission Districts t in Locality L.

The minimum Unforced Capacity Requirement for a Locality is:

$$ULR_{L} = (ILR_{L} - LEM_{L}) * (1 - DF_{L})$$

Where:

ULR_{L} = minimum Unforced Capacity Requirement for Locality L;

ILR_{L} = minimum Installed Capacity Requirement for Locality L, as calculated in Section 2.6 of this *Installed Capacity Manual*;

LEM_{L} = Locality Exchange MW, if any, for Locality L;

DF_{L} = the weighted derating factor for the applicable Capability Period for all capacity Resources electrically located in Locality L, as calculated in Section 4.5 of this *Installed Capacity Manual*;

The Locational Minimum Unforced Capacity Requirement for LSEs in an Import Constrained Locality will be based on the removal of Locality Exchange MW. The formula for calculating the Locality Exchange MW for a month for an Import Constrained Locality is:

$$\mathrm{LEM_L} = \sum_{e \in ECA} \left(\left(\sum_{c \in ICL_L} (\mathrm{LEC_{e,c}} * \mathrm{LEF_{L,e,c}}) \right) + \mathrm{LEC_{e,L}} * \mathrm{LEF_{L,e,L}} \right)$$

Where:

LEM_{L} = Locality Exchange MW for Import Constrained Locality L;

ECA = the External Control Area(s) associated with Locality Exchange MW(s)

ICL_{L} = the Localities located within Import Constrained Locality L;

$LEC_{e,c}$ = MW of Locational Export Capacity from Resource(s) electrically located in Locality c, and not electrically located in any Locality located within Locality c, being exported to External Control Area e;

$LEF_{L,e,c}$ = Locality Exchange Factor for Import Constrained Locality L for MW of Locational Export Capacity that are electrically located in Locality c, and not electrically located in any Locality located within Locality c, and being exported to External Control Area e;

$LEC_{e,L}$ = MW of Locational Export Capacity from Resource(s) electrically located in Import Constrained Locality L, and not electrically located in any Locality located within Locality L, being exported to External Control Area e;

$LEF_{L,e,L}$ = Locality Exchange Factor for Import Constrained Locality L for MW of Locational Export Capacity that are electrically located in Import Constrained Locality L, and not electrically located in any Locality located within Import Constrained Locality L, being exported to External Control Area e;

Locality Exchange Factors for a Capability Year are available at https://www.nyiso.com/installed-capacity-market under the Information and Announcements folder located in the Information and Announcements folder located in the Announcements folder. Locality Exchange Factors will be posted by January 31st for the subsequent Capability Year (i.e. January 31st, 2017 for Capability Year 2017).

3.6.2. Minimum Unforced Capacity Requirements for LSEs Serving Loads in a Locality

Load Serving Entities (LSEs) serving Loads within Localities will be required to obtain a certain percentage of their total Unforced Capacity from Installed Capacity Suppliers located in that Locality. Each LSE's Locational Minimum Installed Capacity Requirement is set before each Capability Year and remains constant throughout the Capability Year unless an Installed Capacity Supplier with rights to UDRs from an External Control Area with a dissimilar capability year elects to treat the UDRs as Unforced Capacity for the first month of a Capability Year. If such an election for a UDR is made, each LSE in a Locality will have two (2) Locational Minimum Installed Capacity Requirements: one for the first month of the Capability Period in which an Installed Capacity Supplier holding rights to UDRs from an External Control Area with a dissimilar capability year has made an election to have such requirements be determined without the UDRs, and the other for the remaining months in the Capability Year (and years thereafter) with the UDRs. An LSE in an Import Constrained Locality will also have different monthly Locational Minimum Unforced Capacity Requirements if there are Locality Exchange MW for that Obligation Procurement Period. The

formula for calculating the Locality Exchange MW for a month for an Import Constrained Locality is located in Section 3.6.1 of this *Installed Capacity Manual*.

The Minimum Unforced Capacity Requirement for each LSE in a Locality will be calculated separately for each Transmission District in which it serves Load in that Locality. The requirement is based upon the ratio of the LSE's contribution to each Transmission District's forecast Locality peak to the Transmission District's coincident peak Load for the prior calendar year. (This ratio is represented by the term "$GF_{t,L}$ " in the formulas below.) Where an LSE serves end-use partial requirement customers (i.e., customers for whom the LSE provides service up to a specified amount), the portion of the LSE's contribution to the peak attributable to such partial requirement customers shall be equal to the lesser of their actual contribution to the peak or the contract demands of such partial requirement customers, if fully utilized, at the time of the Transmission District's peak.

The precise formulation of the requirement is as follows:

$$ULR_{x,t,L} = ULR_{t,L} * LPD_{x,t,L}/LPL_{t,L}$$

where:

$ULR_{x,t,L}$= Minimum Unforced Locality Requirement for LSE x within Transmission District t in Locality L;

$ULR_{t,L}$= Minimum Unforced Locality Capacity Requirement for a Transmission District t in Locality L;

$LPD_{x,t,L}$= Forecasted contribution to locality peak demand of Transmission District t in Locality L for LSE x, as defined further below; and

$LPL_{t,L}$= Forecast Capability Year Locality Peak Load for Transmission District t in Locality L.

The monthly forecasted contribution to peak demand of each LSE x within each Transmission District t in a Locality L is calculated according to the following equation:

$$LPD_{x,t,L} = GF_{t,L} \sum_{c \in FRC_{x,t}} HPD_{c,t,L} + \sum_{c \in PRC_{x,t}} \min\left(PRCA_{c,t,L}, GF_{t,}L * HPD_{c,t,L}\right) + \sum_{c \in SRC_{x,t,L}} \max\left(GF_{t,L} * HPD_{c,t,L} - PRCA_{c,t}L, 0\right)$$

and

$$GF_{t,L} = \frac{LPL_{t,L}}{\sum_c HPD_{c,t,L}}$$

where:

$LPD_{x,t,L}$= Forecasted contribution of LSE x to locality peak demand of Transmission District t in Locality L;

$GF_{t,L}$ = the growth factor applied to each Load in Transmission District t in Locality L to determine the Minimum Installed Capacity Requirements for LSEs serving that Load;

$LPL_{t,L}$ = the forecast Capability Year Locality Peak Load for Transmission District t in Locality L;

$FRC_{x,t,L}$ = set of full-requirement retail customers of LSE x in Transmission District t in Locality L;

$HPD_{c,t,L}$ = demand by retail customer c in Transmission District t in Locality L during the coincident peak demand hour for the NYCA of the last calendar year;

$PRC_{x,t,L}$ = set of retail partial-requirement customers of LSE x in Transmission District t in Locality L;

$PRCA_{c,t,L}$ = the maximum contractual purchase in Transmission District t by a retail partial requirements customer c in Locality L; and

$SRC_{x,t,L}$ = set of supplemental-requirements retail customers of LSE x in Transmission District t in Locality L.

3.7. Grandfathered External Installed Capacity Resources

The NYISO will make adjustments to the allocations of External Capacity rights to LSEs to ensure that all LSEs holding rights to grandfathered External Installed Capacity Resources will be able to claim these Resources to satisfy their Minimum Unforced Capacity Requirement.

3.8. Capacity Adjustment for Firm Capacity Sales by NYPA

In cases in which NYPA sells firm Capacity to an existing New York Transmission Owner, a municipal or cooperative system or to a neighboring state bargaining agency from the Niagara, St. Lawrence or Fitzpatrick generating plants, an adjustment factor is applied by NYPA to determine the number of MW that each such purchaser of NYPA firm Capacity may count towards its Minimum Unforced Capacity Requirement. The adjustment factor shall be calculated separately for the Niagara, St. Lawrence and Fitzpatrick plants and each such adjustment factor shall be applied only to firm Capacity sales from that plant.

$$\text{Adjustment Factor by plant} = ICAF_{plant} = \frac{\text{Dependable Net Plant Capability}}{\text{Sum of all firm Capacity Sales from Plant}}$$

These adjustment factors cannot exceed one plus the NYSRC's Installed Reserve Margin. Once the Adjustment Factors are obtained, the Adjusted Unforced Capacity from NYPA plants is calculated as:

$ICAF_{plant}$ = *NYPA adjustment factor applied to the contractual amount from plant;*

IC_{plant} = *the contractual Capacity amount purchased from plant; and*

plant = *Niagara, St. Lawrence, or Fitzpatrick.*

Adjusted

$$Adjusted\ IC_{NYPA} = \sum (ICAF_{plant} * IC_{plant})$$

where:

Adjusted UC_{NYPA} = *the amount that the purchasers of firm capacity and NYPA use in their Unforced Capacity calculations;*

The NYISO will use this adjustment factor to determine whether an LSE purchasing from these NYPA Resources has procured sufficient Unforced Capacity to meet its Minimum Unforced Capacity Requirement.

4. Installed Capacity Requirements Applicable to Installed Capacity Suppliers

4.1. Overview

Resources must follow certain procedures and provide pertinent information to the NYISO on or before a specified date and time in order to qualify as Installed Capacity Suppliers. The requirements necessary to qualify as an Installed Capacity Supplier can be found in Sections 4.2 and 4.3 below, and include Dependable Maximum Net Capability (DMNC) and for BTM:NG Resources Dependable Maximum Gross Capability (DMGC) testing and maintenance schedule reporting.

After completing the procedures listed above, Resources that have qualified as Installed Capacity Suppliers must fulfill certain additional requirements provided by the NYISO in order to retain all of the privileges to which an Installed Capacity Supplier is entitled. These requirements are provided in detail in Sections 4.4 through 4.8 below. The requirements include reporting Operating Data; planned or scheduled maintenance and forced outage notification requirements; the Installed Capacity certification requirements; and bidding, scheduling, and notification responsibilities.

Certain Installed Capacity Suppliers must fulfill alternative or additional requirements provided by the NYISO in addition to or in place of the requirements found in Sections 4.2 through 4.8. These alternative or additional requirements can be found in Sections 4.9 through 4.13. Each of these sections addresses a different individual Resource.

Installed Capacity Suppliers that fail to fulfill the requirements detailed in Sections 4.2 through 4.13 are subject to sanctions, as provided in Section 5.12.12 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

Section 4.14 details the procedures for requesting, granting and applying UDRs and EDRs.

Resources may be physically located in the NYCA, or in an External Control Area that meets the recall and Curtailment requirements and the locational limitations specified in Section 2.7 of this *ICAP Manual*.

For Aggregations participating as Installed Capacity Suppliers, the specific market rules that will apply to them will be based on the mix of facilities included in the Aggregation. For example, an Aggregation comprised solely of Energy Storage Resources will be subject to the Energy Storage Resource-specific requirements in the NYISO Tariffs.

Throughout this section, any explicit reference to an existing NYISO participation model is also applicable to Aggregations classified under the same model. For example, Generators, ESR, Wind (IPR),

Solar (IPR), ELR and CLR Aggregations shall follow the same rules as set forth for single resources of those types. An Aggregation comprised of a heterogenous mix of IPRs of differing technologies (E.g., Wind, Solar, and Landfill Gas in an Aggregation) shall be treated as a DER Aggregation.

4.1.1 Energy Duration Limitations and Duration Adjustment Factors for Installed Capacity Suppliers

Starting with the Capability Year that begins on May 1, 2021, Resources with a limited run-time that meet the Energy Duration Limitations identified in Section 5.12.14 of the *NYISO Services Tariff* may qualify to participate as Installed Capacity Suppliers. Energy Duration Limitations and corresponding Duration Adjustment Factors for Resources with Energy Duration Limitations identified in the tables below are applicable through the Capability Year beginning May 1, 2023, based upon the incremental penetration (CRIS MW and SCR ICAP Value for July, as appropriate) of Resources with Energy Duration Limitations.

Incremental Penetration of Resources with Energy Duration Limitations is less than 1000 MW	
Energy Duration Limitations (hours)	Duration Adjustment Factors (%)
8	100
6	100
4	90
2	45

Incremental Penetration of Resources with Energy Duration Limitations 1000 MW and above	
Energy Duration Limitations (hours)	Duration Adjustment Factors (%)
8	100
6	90
4	75
2	37.5

Facilities able to provide Energy for a minimum of one 1-hour block each day will be able to group with other facilities in an Aggregation through sequential time-stacking, in order to participate in any of the four tiers of Resources with Energy Duration Limitations, pursuant to Services Tariff Section 5.12.13.2. Each eligible facility that is applying to be time-stacked shall be able to provide energy daily for a minimum

consecutive period of 1 hour and such capability will be rounded down to the nearest whole-hour increment for the sequential time-stacking. Section 5.12.13.2.3 of the Service Tariff further provides that Aggregations comprised of time-stacked Distributed Energy Resources, Energy Storage Resources, or Energy Limited Resources will qualify for the amount of Capacity sustained over the run-time requirement associated with the Energy Duration Limitation. For example, a DER Aggregation with an elected EDL of two (2) hours shall receive the minimum net output capacity sustained over a 2-hour test period in accordance with section 4.2.2. of this ICAP Manual. Please refer to section 4.2.2. for additional details pertaining to DMNC test requirements for time-stacked Aggregations.

Time-stacking is only available to an Aggregation with an Energy Duration Limitation (EDL). The NYISO requires an Aggregator to provide its EDL election upon enrollment of an Aggregation, if applicable, in the Aggregation System. Individual DER duration capabilities shall be assessed during the DMNC test associated with the Aggregation – the Aggregator is required to provide an individual DER-specific breakdown of the time-stacked Aggregation's DMNC. DMNC test data procedural information can be found in the Aggregation System User's Guide.

An Aggregation may configure its individual DER duration and capacity to meet a desired EDL. For example, consider an Aggregation comprised of three DER:

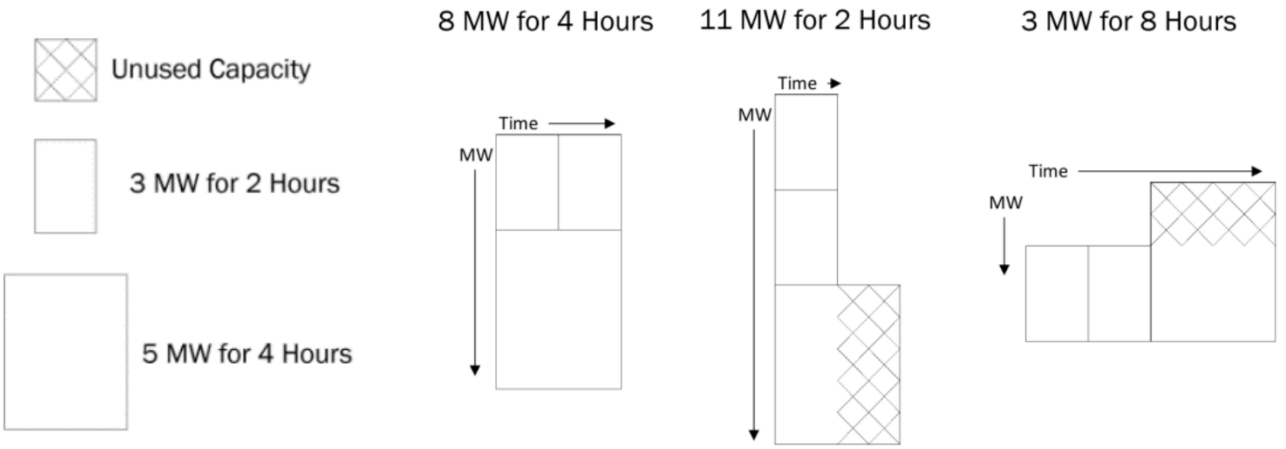
1) DER #1: 3 MW with 2-hour capability
2) DER #2: 3 MW with 2-hour capability
3) DER #3: 5 MW with 4-hour capability

The Aggregation in this example may time stack in any of the following configurations:

1) 8 MW Aggregation with a 4-hour capability
2) 11 MW Aggregation with a 2-hour capability (5 MW for 2-hour duration leftover)
3) 3 MW Aggregation with an 8-hour capability (2 MW for 4-hour duration leftover)

Please refer to the figure below.

DER Time-stacking Examples



Installed Capacity Suppliers with an Energy Duration Limitation must comply with the applicable Peak Load Window availability requirements pursuant to section 5.12.7 of the *NYISO Services Tariff* and Section 4.8.1 of this *ICAP Manual*, including when the ISO shifts the Peak Load Window for a given day. The 6 and 8-hour Peak Load Windows that are normally in effect are defined below through the Capability Year beginning May 1, 2023.

6-hour Peak Load Window	
Summer Capability Period	Winter Capability Period
HB 13 through HB 18	HB 16 through HB 21

8-hour Peak Load Window	
Summer Capability Period	Winter Capability Period
HB 12 through HB 19	HB 14 through HB 21

Starting with the Capability Year that begins May 1, 2024, Resources with a limited daily run-time less than 24 hours may qualify to participate as Installed Capacity Suppliers in accordance with Section 5.12.14 of the NYISO Services Tariff. Resources may elect from the table below an hourly Energy Duration Limitation that is less than or equal to the resource's ability to demonstrate sustained output at its qualified MW amount.

Energy Duration Limitations (hours)
8
6
4
2

Facilities able to provide Energy for a minimum of one 1-hour block each day will be able to group with other facilities in an Aggregation through sequential time-stacking, in order to participate in any of the four tiers of Resources with Energy Duration Limitations, pursuant to Services Tariff Section 5.12.13.2.

Each eligible facility that is applying to be time-stacked shall be able to provide energy daily for a minimum consecutive period of 1 hour and such capability will be rounded down to the nearest whole-hour increment for the sequential time-stacking. Section 5.12.13.2.3 of the Service Tariff further provides that Aggregations comprised of time-stacked Distributed Energy Resources, Energy Storage Resources, or Energy Limited Resources will qualify for the amount of Capacity sustained over the run-time requirement associated with the Energy Duration Limitation. For example, a DER Aggregation with an elected EDL of two (2) hours shall receive the minimum net output capacity sustained over a 2-hour test period in accordance with section 4.2.2. of this ICAP Manual. Please refer to section 4.2.2. for additional details pertaining to DMNC test requirements for time-stacked Aggregations.

Time-stacking is only available to an Aggregation with an Energy Duration Limitation (EDL). The NYISO requires an Aggregator to provide its EDL election upon enrollment of an Aggregation, if applicable, in the Aggregation System. Individual DER duration capabilities shall be assessed during the DMNC test associated with the Aggregation – the Aggregator is required to provide an individual DER-specific breakdown of the time-stacked Aggregation's DMNC. DMNC test data procedural information can be found in the Aggregation System User's Guide.

An Aggregation may configure its individual DER duration and capacity to meet a desired EDL. For example, consider an Aggregation comprised of three DER:

1) DER #1: 3 MW with 2-hour capability
2) DER #2: 3 MW with 2-hour capability
3) DER #3: 5 MW with 4-hour capability

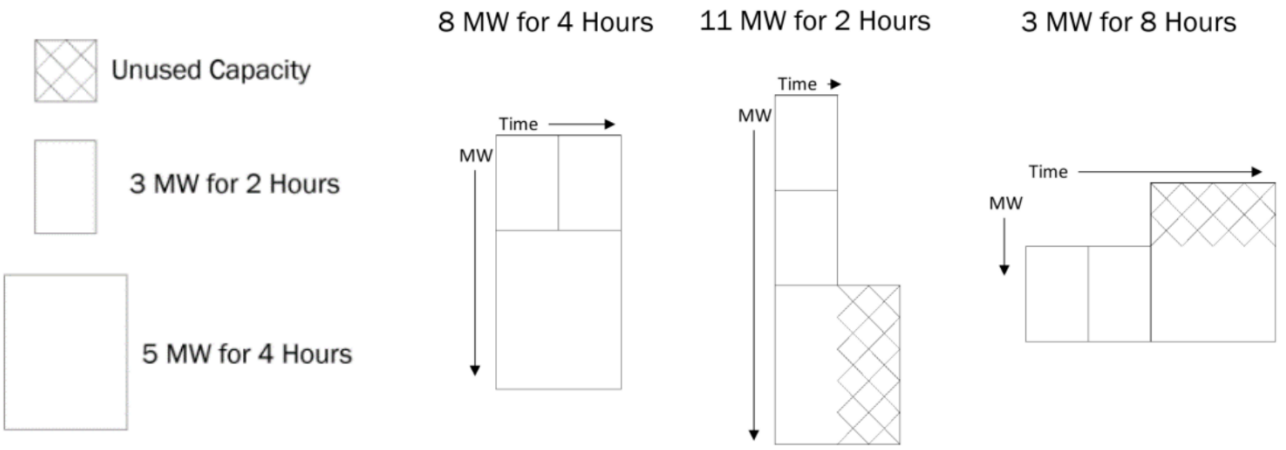
The Aggregation in this example may time stack in any of the following configurations:

1) 8 MW Aggregation with a 4-hour capability
2) 11 MW Aggregation with a 2-hour capability (5 MW for 2-hour duration leftover)

3) 3 MW Aggregation with an 8-hour capability (2 MW for 4-hour duration leftover)

Please refer to the figure below.

DER Time-stacking Examples



Installed Capacity Suppliers with an Energy Duration Limitation must comply with the applicable Peak Load Window availability requirements pursuant to section 5.12.7 of the NYISO Services Tariff and Section 4.8.1 of this ICAP Manual, including when the ISO shifts the Peak Load Window for a given day.

The Peak Load Window for each Capability Period will be available on the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) and determined through the annual process detailed in Section 7.3 of this ICAP Manual.

The ISO has the authority to shift the Peak Load Window for Installed Capacity Suppliers with an Energy Duration Limitation. Shifting the Peak Load Window that applies to Installed Capacity Suppliers with Energy Duration Limitations does not modify the Peak Load Window length. The ISO anticipates it will exercise this authority when necessary to support reliable grid operations. The ISO will evaluate factors including but not limited to load levels, system conditions, topology, and weather in its determination of whether or not to shift the Peak Load Window for Installed Capacity Suppliers with an Energy Duration Limitation. In the event that ISO shifts the Peak Load Window for Installed Capacity Suppliers with an Energy Duration Limitation for a given day, the ISO will publish an alert to the NYISO Market & Operations web page at least four (4) hours before the close of the DAM, specifically on the System Conditions page (https://www.nyiso.com/system-conditions), which is also available in the Real Time Events data (http://mis.nyiso.com/public/). This alert serves as NYISO's instruction to shift the bidding window for Installed Capacity Suppliers with an Energy Duration Limitation for a given day. An email will also be sent

to the appropriate contact for each Installed Capacity Supplier with an Energy Duration Limitation provided in the NYISO Market Information System (MIS).

Installed Capacity Suppliers with a limited run-time must elect an Energy Duration Limitation and inform the ISO by August 1, as specified in the ICAP Event Calendar, preceding a Capability Year. If an election is received by the NYISO after August 1, as specified in the ICAP Event Calendar, the election will not be effective.

A request to change an ICAP Supplier's Energy Duration Limitation must include the following information:

- Resource name and PTID
- Duration election
- Technical basis of the resource's daily run-time limitation

The request must be provided in writing and must be received via electronic mail at participation@nyiso.com and DRO (DER@nyiso.com).

4.1.2. Dual Participation

Effective May 1, 2020, Resources that are electrically located in the NYCA may simultaneously participate in the Installed Capacity market and in programs or markets operated to meet the needs of distribution systems located in the NYCA, or of host facilities. Resources that engage in Dual Participation, and seek to participate in the Installed Capacity market will be required to meet all the eligibility, participation, measurement, and performance rules and requirements of Installed Capacity Suppliers.

Resources that switch from a retail load modifier to NYISO wholesale market participation must do so at the beginning of the Capability Year.

- Resources must notify the NYISO of this change prior to August 1 of the year preceding the Capability Year.

Resources engaged in Dual Participation that exit the NYISO wholesale market to be a load modifier on the distribution system must notify the NYISO of its intention to exit.

- If the NYISO received notification prior to August 1 of a year preceding a Capability Year, the resource's transition to a retail load modifier will be reflected in the requirements for the Transmission District.
- If the NYISO does not receive notification prior to August 1 of a year preceding a Capability Year, the resource's transition to a retail load modifier will not be reflected in the requirements for the Transmission District.

4.1.3 DER and Aggregations

Aggregations must qualify as Installed Capacity Suppliers. Aggregators must verify that all Aggregations and DER comply with requirements pursuant to Services Tariff Section 5.12 and this *ICAP Manual*. For example, Aggregations seeking to participate as Installed Capacity Suppliers must have a minimum injection capability of 0.1 MW. An Aggregation's capability to participate in the ICAP Market will be based on the capabilities of the DER facilities comprising the Aggregation that are eligible for the ICAP Market.

The following are additional rules for DERs entering Aggregations:

- When an existing Distributed Energy Resource enters an Aggregation, the Installed Capacity associated with the DER will be assigned to the Aggregation on the first day of the month the DER enters the Aggregation. This rule generally allows a DER participating in a DER Aggregation to switch Aggregations on a monthly basis.
- When a new Distributed Energy Resource enters an Aggregation, there will be no Installed Capacity associated with this DER (no historical data registered or DMNC test). The DER will have to participate as a new DER with no Capacity and participate only in the Energy and Ancillary Services market for the first month.
    - When a Demand Side Resource participating as an SCR, or a standalone Generator, seeks to transition into the DER participation model, and the SCR or Generator intends to continue capacity market participation as a DER in an Aggregation, the resource may continue uninterrupted capacity market participation if the Aggregator responsible for the resource submits a provisional DMNC into the NYISO's Aggregation System, in accordance with the rules set forth in the Aggregation Manual and Aggregation System User's Guide.

An individual DER is permitted to switch from one Aggregation to another, pursuant to the rules outlined in Services Tariff Section 5.12. The following are additional rules for DERs changing Aggregations:

- A Distributed Energy Resource changing from an Aggregation using a specific participation model to an Aggregation using a different participation Model can only do so at the beginning of the Capability Year and must notify the NYISO of this change prior to August 1 of the year preceding the Capability Year. The NYISO will calculate its historic availability based on the default class average for the Aggregation 'type' of the new Aggregation, and apply that value to the newly added DER.
- A Distributed Energy Resource participating in a Single Resource Type Aggregation can switch its participation to another Single Resource Type Aggregation monthly. For example, an ESR participating in a Single Resource Type Aggregation of ESRs can switch its participation to another

Single Resource Type Aggregation of ESRs on a monthly basis. The NYISO will retain its historic availability data for calculating UCAP in the new Aggregation.

- A Distributed Energy Resource participating in a heterogeneous DER Aggregation can switch its participation to another heterogenous DER Aggregation monthly. For example, an ESR participating in a DER Aggregation can move to another DER Aggregation on a monthly basis. The NYISO will retain its historic availability data for calculating UCAP in the new Aggregation.

For more information about the UCAP calculations for all viable types of Aggregations, please refer to Attachment J of this manual.

4.1.4. Provisions Applicable to Installed Capacity Suppliers that Participate as Co-located Storage Resources (CSR)

Installed Capacity Suppliers participating in NYISO markets as part of a CSR must fulfill all obligations applicable to Installed Capacity Suppliers of their respective resource type. The NYISO will treat each Installed Capacity Supplier within a CSR consistently with the rules applicable to its respective resource type (*i.e.*, the rules applicable to Energy Storage Resources and Intermittent Power Resources), with the exception of Unforced Capacity calculations, as detailed in Attachment J of this ICAP Manual.

4.2. DMNC and DMGC Procedures (Section 5.12.8 *NYISO Services Tariff*)

As specified in Section 4.2.2 below, in order for a Resource to establish a DMNC, or for BTM:NG Resources only, DMGC, rating, Installed Capacity Suppliers must submit results from a DMNC/DMGC test or data from actual operation ("DMNC/DMGC Demonstration") from within the DMNC Test Periods ("in-period") specified in Section 4.2.1 below, to the NYISO no later than the time specified in the ICAP Event Calendar. Refer to Section 4.12 of this *ICAP Manual* for additional information about requirements for Special Case Resources (SCRs). The submittal must provide the NYISO with the required documentation of the DMNC or DMGC test data or data from actual operation and be in accordance with the procedures described below (unless exempt in accordance with the provisions of Section 4.4.3 of this *ICAP Manual*). In addition, Section 5.12.8 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) provides for submitting DMNC or DMGC test data or data from actual operation from outside the DMNC Test Period ("out-of-period") and prior to the next Capability Period. Failure to submit DMNC or DMGC test data or data from actual operation may result in financial sanctions pursuant section 5.12.12 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

DMNC and DMGC test data or data from actual operation that has been validated as described below constitutes a DMNC or DMGC rating for the purpose of establishing a generating Resource's Installed Capacity value. A subsequent adjustment is made pursuant to Section 4.5 and Attachment J of this *ICAP Manual* to determine each Resource's Unforced Capacity value.

DMNC and DMGC test data or data from actual operation must be complete and submitted in an acceptable format or it will be rejected. A validation and approval period starts with a determination that the data has been determined by the NYISO to be complete and in an acceptable format. Upon determination that the information that has been submitted is complete, the NYISO will validate and approve the DMNC or DMGC rating or reject it within 30 days. The NYISO will validate the DMNC and DMGC data received from Suppliers against NYISO billing information and will notify the Supplier if there is a discrepancy. Discrepancies must be resolved through the audit process described below within the 30-day validation and approval period or the DMNC/DMGC data will be rejected. If the NYISO approves the Installed Capacity Supplier's submittal, the submitted DMNC or DMGC value will be valid for the subsequent like Capability Period, and at the request of the Installed Capacity Supplier, may also serve as the valid DMNC or DMGC rating for the balance of the current Capability Period beginning in the month following approval.

If the NYISO rejects the submitted DMNC or DMGC value, the Installed Capacity Supplier may:

a. resubmit DMNC/DMGC test results or data from actual operation from within the current DMNC Test Period, or
b. accept the NYISO determined DMNC/DMGC value and resubmit it, or
c. request an audit.

If the Installed Capacity Supplier requests an audit, the NYISO will work with the Installed Capacity Supplier to schedule the audit. If the audit results reveal that the Installed Capacity Supplier DMNC or DMGC rating is correct, the DMNC or DMGC test data or data from actual operation submitted by the Installed Capacity Supplier will remain in place. If the audit reveals that the NYISO rating is correct, the NYISO will instruct the Installed Capacity Supplier to resubmit the DMNC or DMGC test data or data from actual operation with the DMNC/DMGC rating established through the audit and the Installed Capacity Supplier will be subject to deficiency charges, if applicable.

An Installed Capacity Supplier offering to supply Unforced Capacity as a System Resource must submit DMNC/DMGC test data or data from actual operation for each Generator that it seeks to aggregate.

All generating Resources must test using usual and customary industry practices. For example, the operating configuration and fuel mix used to test must be the same configuration and fuel mix expected to be used during the summer or winter peak Load conditions, as applicable. This requirement is not meant to exclude testing based on operating configurations of Capacity Limited Resources that have been approved by the NYISO and are in compliance with this *ICAP Manual* and Attachment M hereto.

All DMNC and DMGC tests on internal combustion, combustion units and combined cycle units must be temperature adjusted. For DMNC/DMGC test results applicable to Capability Periods prior to Summer 2017, the Average Ambient Temperature to be used for the temperature adjustment is the average of the ambient temperatures recorded at the time of the Transmission District's seasonal peak during the previous four like Capability Periods (as posted at the link given here), as recorded at the nearest approved weather station or recorded on an auditable recording device at the generator site. For DMNC/DMGC test results applicable to the Summer 2017 Capability Period and beyond, the Average Ambient Temperature to be used for the temperature adjustment is the average of the ambient temperatures recorded at the time of the Transmission District's seasonal peak during the previous four like Capability Periods if such peak occurs in June through September for Summer Capability Periods, or December through March for Winter Capability Periods (as posted at the link in this paragraph), as recorded at the nearest approved weather station or recorded on an auditable recording device at the generator site. If the Transmission District's seasonal peak occurs in April, May, October or November, the Average Ambient Temperature to be used in its place for that like Capability Period will be the next highest peak not occurring in such months. Once the decision is made where the temperature is obtained, that location may not change for future test data submittals. The dates and times of the Transmission District peak in each Capability Period are posted on the ISO website under Announcements at:

https://www.nyiso.com/installed-capacity-market

Subject to applicable interconnection and deliverability requirements, existing Resources that have increased Capacity due to changes in their generating equipment may demonstrate the DMNC/DMGC of the incremental Capacity for and within a Capability Period by following the procedures described in Section 4.2.5.

Existing Resources submitting DMNC or DMGC Demonstration results from outside the normally applicable DMNC Test Period ("out-of-period") must verify the approved "out-of-period" DMNC/DMGC rating during the next DMNC Test Period. If the supplier is unable to verify the "out-of-period" DMNC/DMGC rating in the next DMNC Test Period, then deficiency charges shall be applied at no more than the absolute difference between the Generator's Unforced Capacity based upon the previous approved in-

period DMNC or DMGC test and the amount of Unforced Capacity the Generator supplied for the obligation month. The NYISO's Market Monitoring Unit will verify the DMNC and DMGC test data received from Suppliers against NYISO billing information and will notify the Supplier if there is a discrepancy. Approval will be indicated via the ICAP Market System.

DMNC data submitted for External Resources will be verified with the External Control Area in which the Resource is electrically located. DMNC data for External Resources must be in accordance with procedures as required in this Installed Capacity Manual. If External Control Area does not possess DMNC data for the Resource as required by this ICAP Manual, the Resource shall provide the NYISO with additional information upon request so that the NYISO can validate the information. External Resources must also demonstrate that the submitted DMNC MW amount of capacity is available (net of sales in other Control Areas) on a prospective basis for export to the NYISO during the proposed Capability Period. That amount of MW must be validated by the External Control Area.

4.2.1. DMNC Test Periods

Prior to the Capability Year that begins May 1, 2024, the DMNC Test Period for the Summer Capability Period is June 1st through September 15th and for the Winter Capability Period is November 1st through April 15th. Installed Capacity Suppliers with an Energy Duration Limitation must conduct their DMNC test during the applicable Peak Load Window as determined in accordance with Section 4.1.1 of this *ICAP Manual*. Pursuant to Section 2.4 of the NYISO Services Tariff, BTM:NG Resources that are required to perform a DMGC test will perform such test during the DMNC Test Periods. Installed Capacity Suppliers with an Energy Duration Limitation performing an "out-of-period" DMNC or DMGC test must submit corresponding test data or actual operation data within the Peak Load Window for the effective date's capability season. For example, a resource submitting an "out-of-period" DMNC in the winter for the summer Capability Period must perform the test within the Peak Load Window hours for the summer Capability Period as determined in accordance with Section 4.1.1 of this *ICAP Manual*, and within the "out-of-period" DMNC Test Period. All "out-of-period" DMNC/DMGC tests must be validated with an "in-period" test during the following DMNC Testing Period or deficiency penalties may apply as described in Section 5.14.2 and 5.12.8 of the *NYISO Services Tariff*.

Starting with the Capability Year that begins May 1, 2024, the DMNC Test Period for the Summer Capability Period is June 1st through September 15th and for the Winter Capability Period is November 1st through April 15th. Installed Capacity Suppliers with an Energy Duration Limitation must conduct their DMNC test during the applicable hourly window in accordance with Section 4.2.2.2 of this *ICAP Manual*. BTM:NG Resources that are required to perform a DMGC test will perform such test during the DMNC Test

Periods. Installed Capacity Suppliers with an Energy Duration Limitation performing an "out-of-period" DMNC or DMGC test must submit corresponding test data or actual operation data within the hourly window for the effective date's capability season. For example, a resource submitting an "out-of-period" DMNC in the winter for the summer Capability Period must perform the test within the hourly window for the summer Capability Period in accordance with Section 4.2.2.2 of this *ICAP Manual*, and within the "out-of-period" DMNC Test Period. All "out-of-period" DMNC/DMGC Installed Capacity Manual tests must be validated with an "in-period" test during the following DMNC Testing Period or deficiency penalties may apply as described in Section 5.14.2 and 5.12.8 of the *NYISO Services Tariff*.

4.2.2. Resource Specific Test Conditions

The Resources listed below must meet the applicable DMNC test conditions specified below hereto in order to be qualified as Installed Capacity Suppliers. Resources must also report DMNC test results to the NYISO. As used in this Section 4.2.2, DMNC shall mean the power delivered to the transmission system on a clock-hour basis (top-of-hour to top-of-hour), net of station service Load necessary to deliver that power, as described in Section 4.2.3 of this *ICAP Manual*. The resource specific test conditions of this section 4.2.2 are applicable to BTM:NG Resources performing DMGC tests.

4.2.2.1 Installed Capacity Suppliers without an Energy Duration Limitation

Fossil Fuel and Nuclear Stations

Valid DMNCs for fossil fuel or nuclear steam units are determined by the following:

a. The unit's sustained maximum net output averaged over a four (4) consecutive hour period
b. For common-header turbine-generators, the DMNC is determined on a group basis. Each such turbine-generator is assigned a rating by distributing the combined Capacity among them.
c. The sum of the DMNC of individual turbine-generators in a generating station cannot be greater than the capacity of the station taken as a whole; also the sum of the DMNC of individual turbine-generators under a single PTID cannot be greater than the DMNC of the PTID taken as a whole station. Each such turbine-generator is assigned a rating by distributing the combined Capacity among the units comprising the PTID.

Hydro Stations

Valid DMNCs for hydro units are determined by the following:

a. The sustained net output averaged over a four (4) consecutive hour period using average stream flow and/or storage conditions within machine discharge Capacity.

b. For a multi-unit hydro station, the DMNC is determined as a group and each hydro unit in such a station is assigned a rating by distributing the combined station DMNC among them.

c. The sum of the DMNC of individual units in a multi-unit hydro station cannot be greater than the capacity of the station taken as a whole; also the sum of the DMNC of individual hydro units under a single PTID cannot be greater than the DMNC of the PTID taken as a single station. Each such hydro unit is assigned a rating by distributing the combined Capacity among the units comprising the PTID.

Internal Combustion Units and Combustion Turbines

Valid DMNCs for internal combustion units and combustion turbines are determined by the following:

a. The sustained maximum net output for a one (1) hour period.

b. The unit's winter DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's winter peak as described in Section 4.2 of this manual.

c. The unit's summer DMNC is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's summer peak as described in Section 4.2 of this manual.

d. The sum of the DMNC of individual units in a multi-unit station cannot be greater than the capacity of the station taken as a whole; also the sum of the DMNC of individual units under a single PTID cannot be greater than the DMNC of the PTID taken as a single station. Each unit in the station is assigned a rating by distributing the combined Capacity among the units comprising the PTID.

Combined Cycle Stations

Valid DMNCs for combined cycle stations are determined by the following:

a. The sustained maximum net output over four (4) consecutive hours.

b. A combined cycle station's winter DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's winter peak as described in Section 4.2 of this manual.

c. A combined cycle station's summer DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's summer peak as described in Section 4.2 of this manual.

d. In cases where the sum of the DMNC rating of individual units in a combined cycle plant is greater than the DMNC of the plant taken as a single station, each unit is assigned a rating by distributing the plant DMNC among the units.

Intermittent Power Resources

DMNC tests are not required of Intermittent Power Resources. The DMNC value of Intermittent Power Resources will be the combined nameplate capacity of all units (usually aggregated in groups of small individual units) in each station, net of any station service Load required for operation and delivery to the NYCA transmission system. The sum of the DMNC values of all units under a single PTID cannot be greater than the DMNC of the PTID taken as a single unit. Each such individual unit is assigned a rating by distributing the combined Capacity among the units comprising the PTID.

Limited Control Run-of-River Hydro Resources

DMNC tests are not required of Limited Control Run-of-River Hydro Resources. The DMNC value of Limited Control Run-of-River Hydro Resources is the combined nameplate capacity of all units in each PTID, net of any station service Load required for operation and delivery to the NYCA transmission system. The sum of the DMNC values of all units under a single PTID cannot be greater than the DMNC of the PTID taken as a single unit. The NYISO will determine the rating of each such individual unit by distributing the combined Capacity among the units comprising the PTID.

Special Case Resources

A Special Case Resource must demonstrate its Load reduction capability as specified in Sections 4.12.4.5 and 4.12.4.8 of this ICAP Manual.

Energy Storage Resources

Valid DMNCs for Energy Storage Resources that utilize electrochemical technology (for example, a lithium ion battery) are determined by the following:

a. The sustained maximum net output over one (1) hour.
b. An Energy Storage Resource may derate its output to meet the applicable Services Tariff Section 5.12.14 run-time requirement.
c. For a multi-unit station, the DMNC is determined for the PTID and each unit in such a station is assigned a rating by distributing the combined station DMNC among them.

Valid DMNCs for Energy Storage Resources that do not utilize electrochemical technology are determined by the following:

a. The sustained maximum net output over four (4) consecutive hours.
b. An Energy Storage Resource may provide a derated output to meet the applicable Services Tariff Section 5.12.14 run-time requirement.
c. For a multi-unit station, the DMNC is determined for the PTID and each unit in such a station is assigned a rating by distributing the combined station DMNC among them.

Capacity Limited Resources

Valid DMNCs for Capacity Limited Resources are determined by the following:

a. The sustained maximum net output averaged over a four (4) consecutive hour period, with the exception of Internal Combustion units or Combustion Turbines that are approved as Capacity Limited Resources, which will instead use the sustained maximum net output for a one (1) hour period.
b. For a multi-unit station, the DMNC is determined for the group and each unit in such a station is assigned a rating by distributing the combined station DMNC among them.
c. The sum of the DMNCs of individual units in a multi-unit station cannot be greater than the capacity of the station taken as a whole; also the sum of the DMNC of individual units under a single PTID cannot be greater than the DMNC of the PTID taken as a single plant. Each such unit is assigned a rating by distributing the combined Capacity among the units comprising the PTID.

Installed Capacity Suppliers participating as a CSR

Each Installed Capacity Supplier participating in the NYISO Installed Capacity market as part of a CSR must adhere to the DMNC testing provisions applicable to an Energy Storage Resource or an Intermittent Power Resource, as appropriate, as detailed in this section 4.2.2 of the *ICAP Manual*.

Installed Capacity Suppliers participating as a DER Aggregation

Valid DMNCs for DER Aggregations are determined by the following:

a. DER Aggregation's sustained maximum net output averaged over a four (4) consecutive hour period.
b. If an Aggregator adds one or more DER to an Aggregation, thereby increasing the amount of capacity the Aggregation can supply, a new DMNC test reflective of the Aggregation's new DER capabilities is required for the applicable Capability Period.
c. An Aggregator need not supply a new DMNC test for an Aggregation for the applicable Capability Period if any of the following conditions are true:
    i. One or more DER(s) are removed from an Aggregation.
    ii. The capacity of the Aggregation does not increase.
    iii. If the capacity of the Aggregation increases but the Aggregator does not intend to use the new capacity.

4.2.2.2 Installed Capacity Suppliers with an Energy Duration Limitation

Prior to the Capability Year that begins May 1, 2024, valid DMNCs for Installed Capacity Suppliers with an Energy Duration Limitation, including Energy Limited Resources, DER Aggregations, and Energy Storage Resources are determined by the following:

a. For an initial DMNC the unit shall sustain maximum net output, during the applicable Peak Load Window as determined in accordance with Section 4.1.1 of this *ICAP Manual*, for the number of hours that correspond to its elected Energy Duration Limitation, in accordance with Attachment M of this *ICAP Manual.*
b. For each Capability Period following its initial registration, a unit should perform a DMNC test during the applicable Peak Load Window as determined in accordance with Sections 4.1.1 and 4.2.1 of this *ICAP Manual*, for a minimum of either (i) its elected Energy Duration

Limitation or (ii) the duration required by its technology type outlined in *ICAP Manual* Section 4.2.2.1.

1. If the unit elected an Energy Duration Limitation that is longer that the DMNC test required by its technology type, then the following applies:
    i. Information corresponding to the unit's total storage capability and Energy Level (i.e. state of charge) must be provided in writing and must be received via electronic email at participation@nyiso.com by August 1st of a given Capability Year; and
    ii. Note that the NYISO has the authority to request a duration audit of the unit to prove that is can sustain output consistent with its elected Energy Duration Limitation.

c. If the unit increases its elected Energy Duration Limitation for an upcoming Capability Year, the unit's DMNC test must demonstrate its ability to sustain its maximum net output for the number of hours that correspond to its newly elected Energy Duration Limitation.

d. For Aggregations with an EDL:
    1. A new DMNC test reflective of the Aggregation's new EDL for the applicable Capability Period is required if the Aggregator elects to increase the value of an Aggregation EDL (e.g., modifying from a 2-hour duration to a 4-hour duration). An Aggregator may only increase the EDL of an Aggregation on a Capability Year boundary, after notifying the NYISO prior to August 1 and submitting said modification in the Aggregation System, to become effective the following May 1.
    2. ii. An Aggregator need not supply a new DMNC test for an Aggregation for the applicable Capability Period if the Aggregator elects to decrease the value of an Aggregation EDL (e.g., modifying from a 4-hour duration to a 2-hour duration). An Aggregator may only decrease the EDL of an Aggregation on a Capability Year boundary, after notifying the NYISO prior to August 1 and submitting said modification in the Aggregation System, to become effective the following May 1.

Starting with the Capability Year that begins May 1, 2024, valid DMNCs for Installed Capacity Suppliers with an Energy Duration Limitation, including Energy Limited Resources, DER Aggregations, and Energy Storage Resources are determined by the following:

a. For an initial DMNC the unit shall sustain maximum net output for the number of hours that correspond to its elected Energy Duration Limitation, in accordance with Attachment M of this *ICAP Manual*. If the unit has elected an Energy Duration Limitation less than or equal in

length to the number of hours comprising the applicable Peak Load Window, the unit shall sustain maximum net output for the number of hours that correspond to its elected Energy Duration Limitation during the applicable Peak Load Window. If the unit has elected an Energy Duration Limitation greater in length than the number of hours comprising the applicable Peak Load Window, the unit shall sustain maximum net output during the entirety of the Peak Load Window and for additional hours immediately preceding and following the Peak Load Window covering the remaining hours of the unit's Energy Duration Limitation that are not captured in the Peak Load Window. The number of additional hours both preceding and following the Peak Load Window for which the unit must demonstrate sustained maximum net output shall be determined by subtracting the length of the Peak Load Window from the Energy Duration Limitation and dividing the result by two.

b. For each Capability Period following its initial registration, a unit should perform a DMNC test during the applicable Peak Load Window as determined in accordance with Section 7.3 of this ICAP Manual, for a minimum of either (i) its elected Energy Duration Limitation or (ii) the duration required by its technology type outlined in ICAP Manual Section 4.2.2.1.

1. If the unit elected an Energy Duration Limitation that is longer that the DMNC test required by its technology type, then the following applies:
    i. Information corresponding to the unit's total storage capability and Energy Level (i.e. state of charge) must be provided in writing and must be received via electronic email at participation@nyiso.com by August 1st of a given Capability Year; and
    ii. Note that the NYISO has the authority to request a duration audit of the unit to prove that is can sustain output consistent with its elected Energy Duration Limitation.

c. If the unit increases its elected Energy Duration Limitation for an upcoming Capability Year, the unit's DMNC test must demonstrate its ability to sustain its maximum net output for the number of hours that correspond to its newly elected Energy Duration Limitation.

1. For Aggregations with an EDL:
    i. A new DMNC test reflective of the Aggregation's new EDL for the applicable Capability Period is required if the Aggregator elects to increase the value of an

Aggregation EDL (e.g., modifying from a 2-hour duration to a 4-hour duration). An Aggregator may only increase the EDL of an Aggregation on a Capability Year boundary, after notifying the NYISO prior to August 1 and submitting said modification in the Aggregation System, to become effective the following May 1.

ii. An Aggregator need not supply a new DMNC test for an Aggregation for the applicable Capability Period if the Aggregator elects to decrease the value of an Aggregation EDL (e.g., modifying from a 4-hour duration to a 2-hour duration). An Aggregator may only decrease the EDL of an Aggregation on a Capability Year boundary, after notifying the NYISO prior to August 1 and submitting said modification in the Aggregation System, to become effective the following May 1.

4.2.3. Treatment of Station Service Load

In general, the DMNC rating for a Resource is the amount of power delivered to the transmission grid. The DMNC rating should reflect a reduction in gross output of the Resource for station service Load. In most cases, this determination is straightforward because the Resource is connected to the Transmission System, and the amount of power provided to the Transmission System reflects the station service Load reduction.

In other cases, a portion of the station service Load may be provided from sources other than the Resource. In these cases, separate measurements must be made of the station service Load and subtracted from the Resource's gross output measured at the generator leads at the time of the DMNC test.

In the event of disagreement concerning the station service Load for facilities that fall into the latter category, the relevant Transmission Owners will provide to the NYISO any information available to it, which relates to the configuration of the Resource and its station service Load. If the disagreement concerning the station service Load is not resolved by the additional information the Transmission Owners provide, the NYISO Expedited Dispute Resolution Procedures [as set forth in Section 5.16 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) shall be used to determine the station service Load in dispute.

If the station service Load of a BTM:NG Resource is separately metered from all other Load of the resource, such that the station service Load can be independently measured and verified, the Generator of a BTM:NG Resource may elect to perform a DMNC Test instead of a DMGC Test pursuant to Services Tariff section 5.12.6.1.1 (see also section 4.2 of this ICAP Manual). Such election must be made in writing to the NYISO prior to the start of the DMNC Test Period.

The term "separately metered" means, for the purposes of this section, that the Station Power (as defined in Services Tariff section 2.19) of the Generator serving the BTM:NG Resource is metered by an individual meter located at the Generator such that it measures only the Station Power consumed by the Generator.

If the meter measures any Load that is not required for the operation of the Generator or the incidental need of the station house, the BTM:NG Resource must perform a DMGC test.

If a BTM:NG Resource elects to perform a DMNC Test, the station service Load measured during such DMNC Test shall not be included in the Resource's Host Load as described in Section 4.15.2.5 of this ICAP Manual. A BTM:NG Resource's DMNC value for the Capability Period shall be used in lieu of a DMGC value in the calculation of the resource's Adjusted DMGC for the purposes of Sections 4.15.3.1.

4.2.4. Required DMNC Generating Capability Test Data

An entity that wants to establish a DMNC rating for its Resources must report the DMNC test data for each of its Resources to the NYISO using the ICAP Market System. The *ICAP Automated Market User's Guide* can be found at: https://www.nyiso.com/installed-capacity-market

4.2.5. New Resources and Resources Returning from an Inactive State

New Resources and Resources returning from an Inactive state must qualify as Installed Capacity Suppliers based on the results of an appropriate DMNC Demonstration or Special Case Resource (SCR) registration before participating as an Installed Capacity Supplier in the NYISO Installed Capacity market. DMNC test data or data from actual operation must be received by the NYISO as prescribed by this *ICAP Manual* by the date and time specified in the ICAP Event Calendar. They will also be subject to validation requirements as set forth herein. All simple-cycle gas turbine and combined cycle units must temperature-adjust the results of their DMNC test data or data from actual operation using the procedures noted in this *ICAP Manual* or in the *ICAP Automated Market User's Guide* as noted above. New Resources and Resources returning from an Inactive state approved as qualified Installed Capacity Suppliers after submitting the necessary DMNC test data or data from actual operation from outside the normally applicable DMNC Test Period ("out-of-period") must verify the approved "out-of-period" DMNC rating during the next DMNC Test Period. If the supplier is unable to verify the "out-of-period" DMNC rating in the next DMNC Test Period, then deficiency charges shall apply to any shortfall between the Installed Capacity equivalent of the UCAP sold from the unit and the results of the "in-period" test.

In addition to reporting appropriate DMNC Demonstration results, new generating Resources that want to participate in NYISO-administered auctions shall notify the NYISO in a letter. SCR notification is detailed

in Section 4.12 of this *ICAP Manual*. The new generating Resource notification letter must include the unit's point ID (PTID) and shall state the intention of the Resource to seek qualification as an Installed Capacity Supplier, and include the Resource's name, location, and other information as the NYISO may reasonably request. This letter does not obligate a Resource to qualify as an ICAP Supplier; it allows the NYISO to prepare and be able to accommodate a Resource should that Resource request qualification and if the NYISO receives appropriate DMNC Demonstration results before an auction. A Resource shall notify the NYISO via a letter on or before 5:00:00 P.M. on the first business day of the month before that month in which it wishes to qualify as an Installed Capacity Supplier. For example, to qualify in the month of April to participate in the May Installed Capacity market, the NYISO must receive the notification letter no later than 5:00:00 P.M. on the first business day of March.

To qualify Installed Capacity for a Bilateral Transaction or for a self-supplying LSE, new Resources shall report to the NYISO the results of an appropriate DMNC Demonstration or Special Case Resource registration prescribed by this *ICAP Manual* by the date and time specified in the ICAP Event Calendar, which can be found at:

http://icap.nyiso.com/ucap/public/evt_calendar_display.do.

4.2.6. NYISO Distribution of Resource Capacity Data to the NYCA Transmission Owners

The NYISO provides the DMNC data collected pursuant to this ICAP Manual to the operating function unit of the appropriate Transmission Owners (TOs) sixty (60) days following the end of the capability period. Provision of Resource reactive capability data to TOs is described in Section 3.6.4 of the Ancillary Services Manual.

4.3. Maintenance Scheduling Requirements (Sections 5.12.3 and 5.12.11 *NYISO Services Tariff*)

All Resources intending to supply Capacity to the NYCA must comply with the following procedures, unless specific exceptions are noted below.

1. Notify the NYISO, in a confidential notice, of proposed outage schedules for the next two (2) calendar years on or before September 1 at 5:00:00 P.M. of the current calendar year.
2. If Operating Reserve deficiencies are projected to occur in certain weeks for the upcoming calendar year, based upon the ISO's reliability assessment, Resources may be requested to voluntarily reschedule planned maintenance.
3. The NYISO will provide the Resource with alternative acceptable times for the rescheduled maintenance.

4. If the Resource is a Generator or an Aggregation that qualifies as an Installed Capacity Supplier that does not voluntarily re-schedule its planned maintenance within the alternative acceptable times provided by the NYISO, the NYISO will invoke mandatory re-scheduling using the procedures prescribed in the *NYISO Outage Scheduling Manual (*available from the NYISO Web site at the following URL: https://www.nyiso.com/documents/20142/2923301/outage_sched_mnl.pdf/1c2cc085-0fce-6540-fded-c95d0c662568).
5. A Resource that did not qualify as an Installed Capacity Supplier prior to the Obligation Procurement Period and that intends to be an Installed Capacity Supplier within the Obligation Procurement Period must provide the NYISO with its proposed outage schedule for the current Capability Year and the following two (2) calendar years, no later than 5:00:000 P.M. on the first business day of the month preceding the month in which it intends to supply Unforced Capacity, so that it may be subject to the voluntary and mandatory rescheduling procedures described above.

An Installed Capacity Supplier that does not accept the NYISO's forced rescheduling of its proposed outages shall not qualify as an Installed Capacity Supplier for that unit for any month during which it schedules or conducts an outage.

4.3.1. (This Section intentionally left blank)

4.3.2. External System Resources

The NYISO and the External Control Area in which the External System Resource is located will coordinate the maintenance schedules for the interconnections that link these Resources to the NYCA. External System Resources are not subject to the voluntary and mandatory re-scheduling procedures described above.

4.3.3. Special Case Resources (Section 4.12 of this *ICAP Manual*)

Although SCRs are not subject to maintenance scheduling requirements, each SCR must be capable of being interrupted on demand at the direction of the NYISO, as specified in Section 5.12.11.1 of the *NYISO Services Tariff* and this *ICAP Manual*. The RIP for a SCR that meets the criteria of the SCR Load Change Reporting Threshold as defined in Section 2.19 of the *NYISO Services Tariff*, or that is not capable of being interrupted on demand at the direction of the NYISO shall report such an occurrence to the NYISO in accordance with the requirements set forth in Sections 4.3.3.1 and 4.3.3.2 of this *ICAP Manual*.

4.3.3.1. Reporting SCR Change of Load

RIPs shall report a SCR Change of Load, as defined in Section 2.19 of the *NYISO Services Tariff*, in accordance with Section 5.12.11.1.3.1 of the *NYISO Services Tariff* and meeting the criteria of a Qualified Change of Load Condition as defined in Section 2.17 of the *NYISO Services Tariff*.

Procedures for identifying a SCR Change of Load for individual SCRs are defined in the table below. The RIP is required to document a SCR Change of Load and when the total Load reduction for SCRs that have a SCR Change of Load within the same Load Zone is greater than or equal to 5 MWs, the RIP shall report the SCR Change of Load for each SCR in accordance with Section 5.12.11.1.3.1 of the *NYISO Services Tariff*.

Qualified Change of Load Condition	SCR Change of Load Reporting Requirement
(i) The SCR is expected to have a reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold that is expected to continue for a total period that is greater than seven (7) consecutive days.	Submit SCR Change of Load form no later than 5:00:00 P.M. two (2) business days prior to the onset of the SCR Change of Load. Include start and expected end dates of the SCR Change of Load.
(ii) The SCR is experiencing a reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold that is expected to continue for a total period that is greater than seven (7) consecutive days.	Submit SCR Change of Load form no later than 5:00:00 P.M. on the seventh calendar day of the onset of the SCR Change of Load. Include date when the SCR Change of Load began and the expected end date.
(iii) The SCR experienced an unanticipated reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold for a period greater than seven (7) consecutive days within any month in which the SCR sold capacity or adjoining months in which the SCR sold capacity in either month.	Submit SCR Change of Load form no later than 5:00:00 P.M. on the day following the day the RIP became aware of the SCR Change of Load, include start and end dates of the SCR Change of Load.

The SCR Change of Load report shall be in writing on the SCR Change of Load form and must be received via electronic mail to SCR_Registration@nyiso.com. RIPs shall also notify the NYISO in writing as soon as practicable but no later than 5:00:00 P.M. two (2) business days following the date on which the SCR's load returns from a SCR Change of Load. The RIP's written notice shall be on the SCR Change of Load form and must be received via electronic mail to SCR_Registration@nyiso.com.

4.3.3.2. Reporting SCR Change of Status

RIPs shall report a SCR Change of Status, as defined in Section 2.19 of the *NYISO Services Tariff* in accordance with Section 5.12.11.1.3.2 of the *NYISO Services Tariff* and meeting the criteria of a Qualified Change of Load Condition as defined in Section 2.17 of the *NYISO Services Tariff*. When the SCR Change of Status is being reported for a future month(s) in the Capability Period, RIPs shall report the SCR Change of

Status by uploading the required information into the Demand Response Information System (DRIS) using the enrollment file. When the SCR Change of Status is being reported for a month(s) in the Capability Period that has closed for enrollment, RIPs shall report the SCR Change of Status in the DRIS as specified in the *DRIS User's Guide*.

Qualified Change of Status Condition	SCR Change of Status Reporting Requirement

(i) The SCR is expected to have a reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold that will extend for a period of greater than sixty (60) consecutive days.	• When enrollment for a month(s) corresponding to the SCR Change of Status has not closed:
	  • Upload SCR Change of Status value and any change to the SCR declared value into the DRIS.
	• When enrollment for a month(s) corresponding to the SCR Change of Status has already closed:
	  • Report partial auction sales through the DRIS in accordance with 4.12.4.7 of this ICAP Manual.
	  • Report SCR Change of Status value in the DRIS as specified in the *DRIS User's Guide*. Upload SCR Change of Status value and any change to the SCR declared value into the DRIS during next SCR enrollment period for any additional future months the SCR Change of Status will be in effect.

(ii) The SCR is experiencing a reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold that is expected to continue for a total period that is greater than sixty (60) consecutive days.	• When enrollment for a month(s) corresponding to the SCR Change of Status has not closed: • Upload SCR Change of Status value and any change to the SCR declared value into the DRIS using the enrollment file. • When enrollment for a month(s) corresponding to the SCR Change of Status has already closed: • Report partial auction sales through DRIS in accordance with 4.12.4.7 of this ICAP Manual. • Report SCR Change of Status value in the DRIS as specified in the *DRIS User's Guide*. Upload SCR Change of Status value and any change to the SCR declared value into the DRIS during next SCR enrollment period for any additional future months the SCR Change of Status will be in effect.

Qualified Change of Status Condition	SCR Change of Status Reporting Requirement

(iii) The SCR has experienced an unanticipated reduction in total Load that meets or exceeds the SCR Load Change Reporting Threshold that has existed for a period greater than sixty (60) consecutive days in which the SCR sold capacity.	• When enrollment for a month(s) corresponding to the SCR Change of Status has already closed:
	  • Report partial auction sales through the DRIS in accordance with 4.12.4.7 of this ICAP Manual.
	  • Upload SCR Change of Status value and any change to the SCR declared value into the DRIS during next SCR enrollment period for any additional future months the SCR Change of Status will be in effect.
	• If the SCR has a Qualified Change of Status Condition that persists for more than sixty (60) days:
	  • Report SCR Change of Status value in the DRIS as specified in the *DRIS User's Guide* including start and end dates no later than 5:00:00 P.M. two (2) business days after the load reduction that meets the criteria of the SCR Change of Status has exceeded sixty (60) days.
	• If the SCR Change of Status occurred in the past:
	  • Report SCR Change of Status value in the DRIS as specified in the *DRIS User's Guide* including start and end dates no later than 5:00:00 P.M. on the last day of the Capability Period in which the SCR Change of Status began.
	The NYISO will not accept a SCR Change of Status after 5:00:00 P.M. on the last day of the Capability Period in which the SCR Change of Status began.

The RIP is required to report the end date of the SCR Change of Status regardless of whether the end date is in the current Capability Period or a future Capability Period.

For each month in which (a) the SCR Change of Status is in effect for a SCR and (b) the RIP imports into the DRIS any change in the enrollment for the SCR, the RIP shall upload to the DRIS (i) the SCR Change of Status value and (ii) any corresponding changes in the declared values. While a SCR Change of Status is in effect, the Net ACL for the month will be equal to the applicable ACL plus the Incremental ACL minus the

reduction amount reported for the SCR Change of Status on the SCR Change of Status record with the most recent reporting date that applies to the month. For any SCR with a SCR Change of Status for at least one day in a month, the reduced ACL shall be applied for the entire month.

For SCR that are eligible candidates for Change of Status evaluation, the RIP must submit meter data including peak monthly demand ("PMD") upon NYISO request. The RIP must submit PMD data occurring in HB11 through HB19, and for the entire Capability Period in which the SCR Change of Status occurred and for the first month of the immediately following Capability Period. For example, if a SCR is being evaluated for Change of Status for a Summer Capability Period, the RIP shall submit PMD load data for each month of the Summer Capability Period and the following November. RIPs must provide the required data by the deadline established in the ICAP and DRIS Event Calendar.

There shall be no relief from penalties or other obligations for failure to perform if the RIP was an Installed Capacity Supplier in any month within the Capability Period.

4.3.3.3. Increasing ACL in Conjunction with Change of Status Event Ending within Same Capability Period as Initiated

For a SCR that increases its load due to the end of a SCR Change of Status event in the same Capability Period in which the reduction pursuant to a SCR Change of Status report began, the RIP for a SCR whose ACL was reduced in accordance with 4.3.3.2, may (a) increase the SCR's ACL for any months remaining in the Capability Period in which the reduction occurred, (b) provided such increase corresponds to the 4.3.3.2 reduction, (c) in an amount not to exceed the ACL for that Capability Period prior to the 4.3.3.2 reduction. For the first month after the SCR Change of Status has ended, the SCR Change of Status value reported in the enrollment file uploaded to the DRIS must be zero, and any corresponding change to the declared value associated with the SCR Change of Status must be included as part of the enrollment file upload to the DRIS on or before the monthly deadline for resource enrollment changes.

4.3.3.4. Option for ACL if a Change of Status Event in Like Capability Period Different than Initiated

For a SCR returning from a SCR Change of Status in an equivalent Capability Period other than the Capability Period in which it began to reduce load in respect of a Change of Status report, the RIP for that SCR may claim as an ACL for that current Capability Period the ACL for the equivalent Capability Period established in the enrollment file imported into the DRIS (whether by the SCR's current or former RIP) immediately prior to reporting the SCR Change of Status.

4.3.3.5. Ambient Weather Adjustment Procedures for SCRs that have a Qualified Change of Status Condition

A RIP shall report a SCR Change of Status in accordance with NYISO Services Tariff Sections 2.17, 2.19, 5.12.11.1.3 and Sections 4.3.3.2 and 4.12.4.3.2 of this Installed Capacity Manual. However, when an SCR

meets a Qualified Change of Status Condition that is attributable to ambient weather conditions, it may present data to the NYISO, as described in this Section 4.3.3.5, to demonstrate that an SCR Change of Status Condition has not occurred. A RIP that seeks to demonstrate that an SCR Change of Status Condition has not occurred must submit (i) the Microsoft Excel file(s) evidencing the calculations described in Steps 1 and 2 below to the NYISO at mmascrcos@nyiso.com. All data must be received by the NYISO no later than the deadline established in the ICAP and DRIS Event Calendars.

Step 1: Identify the historical relationship between SCR load kW and temperature

In this Step 1, a RIP shall:

- In Microsoft Excel, record: (i) the hour of maximum load (ii) the maximum load kW, and the maximum temperature for each day of the Prior Equivalent Capability Period. The maximum temperature shall be obtained from the weather station physically nearest to the SCR using the Load Forecast Weather Data posted on the NYISO website.
    - The NYISO posts Weather Station names at: https://www.nyiso.com/documents/20142/38389687/Weather-Station-Names.pdf.
    - Load Forecast Weather Data is available at https://www.nyiso.com/load-data. Under "Load Forecast" > "Load Forecast Weather Data."
- Develop a temperature-load model in Microsoft Excel based on the load kW and temperature identified in this Step 1 , and:
    - Create a scatter chart in Excel with temperature values on the x-axis and load kW values on the y-axis.
    - Add trend line to this scatter chart. Select the Excel Trend/Regression Type "Linear." Select the Excel options to "Display equation on chart" and "Display R-squared value on chart." After this step, Excel should display a trend line on the scatter chart, equation of the trend line, and the associated R-squared value.
- When the R-squared value of the trend line identified in Step 1 is less than 0.70 the SCR's load will not be adjusted to account for ambient weather conditions, and will be evaluated for a SCR Change of Status.

Step 2: Calculate the weather adjusted load kW for the subject Capability Period

- When the R-squared value of the trendline identified in Step 1 is equal to or greater than 0.70:
    - Record the (i) date, (ii) hour, and (iii) load kW of the SCR's monthly peak load that occurs within one of the Capability Period SCR Load Zone Peak Hours.
    - For each monthly peak recorded in this Step 2, identify the day's maximum temperature at the applicable weather station identified in Step 1 using the Load Forecast Weather Data obtained from the NYISO website.
    - For each monthly peak recorded in this Step 2, calculate the weather adjusted monthly peak load kW for the current Capability Period using the equation of the trend line developed in Step 1 and each day's maximum temperature identified in this Step 2. The weather adjusted monthly peak load kW represents the expected load value on that day's temperature if the load responded to weather similarly to the previous year.
- When the SCR's actual peak load kW for a month is greater than or equal to 90% of the weather adjusted monthly peak load kW as calculated in this Step, then the reduction in the SCR's total load in that month will be adjusted to account for ambient weather conditions for purposes of this Section 4.3.3.5 and, therefore, shall not constitute a SCR Change of Status.
- If the SCR's actual peak load kW for a month is lower than 90% of the weather adjusted monthly peak load kW as calculated in this Step 2, then the reduction in the SCR's total load in that month will not be adjusted to account for ambient weather conditions for the purposes of this Section 4.3.3.5, and may be required to be reported as a SCR Change of Status to that extent that such reduction meets the requirements of a SCR Change of Status as defined in Section 2.19 of the NYISO Services Tariff.

If the RIP uses the above procedure to determine SCR load changes attributable to weather, the RIP shall retain records supporting the information, and provide the information to the NYISO upon request.

4.4. Operating Data Reporting Requirements (Section 5.12.5 *NYISO Services Tariff*)

Installed Capacity Suppliers shall submit Operating Data to the NYISO every month in accordance with the following subsections. Further details applicable to generating Resources are included in Attachment K to this *ICAP Manual*, at the NERC-GADS Web site https://www.nerc.com/pa/RAPA/gads/Pages/GeneratingAvailabilityDataSystem-(GADS).aspx and in the NERC Data Reporting Instructions at

https://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx. The NYISO collects a subset of the data covered by the NERC Data Reporting Instructions and is focused principally on outage types. For example, an exception to the NERC Data Reporting Instructions is covered in Section 4.6.2 of this *ICAP Manual*. The completeness, accuracy, and validity of the performance data sent to the NYISO are the responsibility of the Resource making such data submission. Installed Capacity Suppliers that do not comply with the following subsections shall be subject to the sanctions provided in Section 5.12.12 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

When an Installed Capacity Supplier (the "Seller") sells Unforced Capacity to another Installed Capacity Supplier (the "Purchaser"), such as an Installed Capacity Marketer, the Seller and the Purchaser may designate the Purchaser as the entity responsible for fulfilling the obligations and requirements set forth in Section 4.4 of this *ICAP Manual*. Such designation shall be made in writing and received by the NYISO no later than 5:00:00 P.M. on the seventh (7th) calendar day before the date by which any of the relevant obligations or requirements must be fulfilled.

If no designation is made to the NYISO, the Seller shall be responsible for fulfilling all the obligations and requirements set forth in this Section 4.4 of this *ICAP Manual*. The Purchasers that are designated pursuant to the preceding paragraph shall be subject to the sanctions provided in Section 5.12.12 of the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer) as if they were a Seller.

4.4.1. Generators

Generators and generating assets participating in an Aggregation shall report to the NYISO Generating Availability Data System (GADS) Data or data equivalent to GADS Data pertaining to the previous month, which must be received no later than the 20th day of each month. For example, Generators shall report to the NYISO, which must be received by the NYISO on or before May 20, GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April. Generators shall submit GADS Data or data equivalent to GADS Data in accordance with Attachment K of this *ICAP Manual*.

4.4.2. System Resources

System Resources shall provide to the NYISO GADS Data or data equivalent to GADS Data pertaining to the previous month, which must be received no later than the 20th day of each month. For example, System Resources shall report to the NYISO, which must be received by the NYISO on or before May 20, GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April. System Resources

shall submit GADS Data or data equivalent to GADS Data in accordance with Attachment K of this *ICAP Manual*.

4.4.3. Control Area System Resources

Control Area System Resources or the purchasers of Unforced Capacity from those Resources shall report to the NYISO CARL (Control Area Resource and Load) Data pertaining to the previous month, so that it is received by the NYISO no later than the 20th day of each month. For example, Control Area System Resources shall report to the NYISO, so that it is received by the NYISO on or before October 20, CARL Data pertaining to their operations during the month of September.

CARL Data submitted on a monthly basis shall cover (1) the prior month and (2) each individual hour during that month in which the Control Area System Resource was unable to supply the Energy associated with the Installed Capacity Equivalent of the Unforced Capacity it supplied to the NYCA. CARL Data submitted for a Control Area System Resource providing Installed Capacity from Control Area c shall consist of actual data and include the following information for each hour identified above and for each month:

1. The maximum actual total generating Capacity in Control Area c;
2. The actual External firm Capacity purchases by Control Area c, other than purchases from Resources in the NYCA;
3. The actual amount of load management (i.e., interruptible load) in Control Area c;
4. The actual peak Load for Control Area c, including system losses;
5. The actual External firm Capacity sales by Control Area c, other than firm capacity sales to the NYCA;
6. Actual losses, up to the border of the NYCA, that were incurred on transactions corresponding to sales of Unforced Capacity by that Control Area System Resource outside Control Area c;
7. The amount of generating Capacity in Control Area c that is actually unavailable due to planned maintenance;
8. The amount of generating Capacity in Control Area c that was actually unavailable due to forced outages; and
9. The amount of operating reserve that was actually available for Control Area c.

Control Area System Resources shall report forecasted CARL Data for items (1) through (7) above for each month of the following Capability Period, so that it is received by the NYISO no later than forty-five (45) days prior to the first day of each Capability Period. Control Area System Resources shall report data for items (8) and (9) for each month for the NYISO's receipt no later than 20 days before the conclusion of each month.

During each Capability Period, a Control Area System Resources may submit revised forecasts of items (1) through (8) above for each month of that Capability Period. These forecasts may be revised to reflect changes in the allocation of planning reserve among the months of that Capability Period resulting from the amount of Installed Capacity actually sold by that Control Area System Resource earlier in the Capability Period. Such forecasts must be received on or before the 25th day before a month if they are to be used to determine the amount of CARL Data for the whole Capability Period in light of the External firm Capacity engaged in the previous months.

4.4.4. Energy Limited and Capacity Limited Resources

Energy and Capacity Limited Resources shall report to the NYISO GADS Data or data equivalent to GADS Data pertaining to the previous month, so that it is received by the NYISO no later than the 20th day of each month. For example, Energy and Capacity Limited Resources shall report to the NYISO, which must be received by the NYISO on or before May 20, GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April. Energy and Capacity Limited Resources shall submit GADS Data or data equivalent to GADS Data in accordance with Attachment K of this *ICAP Manual*.

4.4.5. (This Section intentionally left blank)

4.4.6. Intermittent Power Resources

Intermittent Power Resources shall report to the NYISO data pertaining to their net dependable Capacity, actual generation, maintenance outage hours, planned outage hours, and other information as may be reasonably requested by the NYISO, such as the location and name of the Intermittent Power Resource, so that such data and information is received by the NYISO no later than the 20th day of each month. Intermittent Power Resources shall report actual operating data pertaining to the previous month on or before the 20th day of each month and in accordance with Attachment K of this *ICAP Manual*. For example, data from Intermittent Power Resources shall be received on or before May 20 pertaining to their operations during the month of April.

4.4.7. Special Case Resources (Section 4.12 of this *ICAP Manual*)

RIPs shall report the performance data of each individual SCR directly into the DRIS, as specified in Section 4.12.4.8, each time the SCR is called upon to operate, using an import file formatted as specified in the *NYISO Demand Response Information System User's Guide* (available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides).

4.4.7.1. Reporting of SCR Operating Data

The NYISO will treat the SCR-specific operating data that is received by the NYISO as confidential Transmission System Information and shall provide copies of such resource-specific (disaggregated) operating data to the transmission function of the Transmission Owner in whose transmission district the SCR is located in accordance with Section 4.0 of the NYISO's Code of Conduct (Attachment F to the *NYISO OATT*).

4.4.8. Municipally Owned Generation

Municipally owned generation shall report to the NYISO GADS Data or data equivalent to GADS Data pertaining to the previous month so that it is received by the NYISO no later than the 20th day of each month. For example, municipally owned generation shall report to the NYISO, which must be received by the NYISO on or before May 20, data equivalent to GADS Data pertaining to their operations during the month of April.

4.4.9. Generating Assets that Participate in an Aggregation

Aggregators shall report operating data for each individual injection-capable asset comprising a DER according to its corresponding technology type in compliance with the NYISO Services Tariff and Procedures [Section]. For more information about the definition of an asset please refer to the Aggregation Manual [link].

An Aggregator shall report to the NYISO, for all injection-capable assets that participate in an Aggregation, Generating Availability Data System (GADS) Data, or data equivalent to GADS Data, pertaining to the previous month, which must be received no later than the 20th day of each month. For example, NYISO must receive, on or before May 20, GADS Data or data equivalent to GADS Data pertaining to injection-capable asset operations in an Aggregation during the month of April. Aggregators shall submit, for all injection-capable assets in an Aggregation, GADS Data, or data equivalent to GADS Data, in accordance with Attachment K of this ICAP Manual.

4.4.10. Co-Located Storage Resources

Generators that are Co-located Storage Resources must each, individually, comply with the requirements of Section 5.12.5.1 of the NYISO Services Tariff. Generators that are Co-located Storage Resources must submit outage data or other operational information in accordance with ISO Procedures that will allow the ISO to validate the CSR Scheduling Limits associated with the Co-located Storage Resources. CSR Scheduling Limits will be incorporated into each CSR Generator's UCAP calculation (see NYISO Services Tariff Section 5.12.6.2 as well as Section 4.5 and Attachment J of this Installed Capacity Manual.)

4.4.11. Resources Capable of Supplying Unforced Capacity in New York

This subsection applies to Resources that (1) have not previously been in operation in the NYCA, (2) are not subject to the requirements of Subsection 4.4.1 through Subsection 4.4.8 of this *ICAP Manual*, and (3) want to supply Unforced Capacity to the NYCA in the future.

No later than the tenth (10th) day of the month preceding the month when a Resource wants to supply Unforced Capacity to the NYCA, the NYISO must receive from a Resource the appropriate Operating Data pertaining to its operations over the two previous like-Capability Periods, if it was in operation. A Resource that wants to continue to supply Unforced Capacity in the NYCA immediately thereafter shall report the appropriate Operating Data, and such data must be received by the NYISO on or before 5:00:00 P.M. on the twentieth (20th) day of each month.

For example, a Resource that wants to supply Unforced Capacity during the month of July 2021, must report to the NYISO Operating Data pertaining to Summer Capability Period 2020 and Summer Capability Period 2019, inclusively, so that the NYISO receives such data on or before 5:00:00 P.M. on June 10. Thereafter, the NYISO must receive the Resource's Operating Data in accordance with Subsections 4.4.1 through 4.4.8 of this *ICAP Manual*, as applicable.

If an Installed Capacity Supplier intends to request rights to import Installed Capacity from a neighboring control area (as defined by and in accordance with this *ICAP Manual*, "Import Rights") in accordance with this *ICAP Manual*, the NYISO must receive the results of an appropriate demonstration test of the Resource (i.e., DMNC test data) and Operating Data pertaining to its operations covering at least the two previous like-Capability Periods, if it was in operation, as prescribed by this *ICAP Manual*, and in the above paragraph, no later than 5:00:00 P.M. at least seven (7) business days before such Import Rights are to be requested.

4.4.12. Resources not in Operation for the Entirety of the Past Two Like-Capability Periods

A Resource that is required to report GADS Data or data equivalent to GADS Data that was not in operation for the entirety of the previous two like-Capability Periods and that wants to qualify as an Installed Capacity Supplier shall report any previously available like-Capability Period Operating Data so that the NYISO receives it no later than 5:00:00 P.M. on thirtieth (30th) day after that Resource commenced commercial operation, in accordance with Subsections 4.4.1 through 4.4.8 of this *ICAP Manual*, as applicable. New Resources with no historic Operating Data will be assigned a class average derating factor based upon the Resource's technology type in accordance with section 4.5 of this *ICAP Manual.*

A Resource that was in operation for part of, but not all of the previous two like-Capability Periods, but was operating prior to the start of the last two-like Capability Periods, will replace any missing month's data with the next available like-month's data. For example, a Resource that wants to supply Unforced Capacity for Summer Capability Period 2021, but has missing data for months August – October 2019, should replace those months with the next available like-months, i.e. August – October 2018.

A Resource that was not in operation for the previous two like-Capability Periods, but was operating prior to the start of the last two like-Capability Periods, should use the two next available like-Capability Period Operating Data. For example, a Resource that wants to supply Unforced Capacity for Summer Capability Period 2021, but was not operating for Summer Capability Periods 2020 and 2019, should replace those Capability Periods with the two next available like-Capability Periods, i.e. Summer Capability Periods 2018 and 2017.

A Resource that was in operation for part of, but not all of the previous two like-Capability Periods, and was not operating prior to the start of the last two-like Capability Periods, should replace any missing data with the default derating factor values, in accordance with section 4.5 of this *ICAP Manual.* For example, a Resource that wants to supply Unforced Capacity for Summer Capability Period 2021, but only has Operating Data for Summer Capability Period 2020, should use the default derating factor for the missing period of the Summer Capability Period 2019.

4.4.13. Temporary Interruption in Availability

If a Generator in an otherwise operational state at the time of notice (that is, not otherwise forced out) does not sell or certify its Unforced Capacity (UCAP) on a temporary basis (i.e., elects not to participate in the UCAP Market or is not successful in selling its UCAP at auction or in a bilateral transaction), such interruption in availability of UCAP shall be taken on a monthly basis and may be treated for purposes of calculating the Equivalent Demand Forced Outage Rate (EFORd) for that unit as a maintenance outage with prior notification to the NYISO. If the Resource elects to bid into the NYISO energy markets during such

period, all such service hours and forced outage hours shall be included in the computation of the Resource's EFORd, but periods where the Resource is not selected may be reported as Reserve Shutdown Hours, as defined in Attachment J.

4.4.14. Generating Units that are Retired, Mothballed, in Inactive Reserves or in a Forced Outage or ICAP Ineligible Forced Outage

With the effective date of Section 5.18 of the Services Tariff, the NYISO Services Tariff defines five outage states; Inactive Reserve (IR), Mothballed (MB) or Retired (RU), ICAP Ineligible Forced Outage and Forced Outage. The outage states of Inactive Reserves, Mothball and Retired are considered to be "Inactive states". A Resource that is a Generator that is in an Inactive state or in an ICAP Ineligible Forced Outage is not qualified to participate in the NYISO Installed Capacity Market. A Market Participant that has a Generator defined to be in an Inactive state, ICAP Ineligible Forced Outage or Forced Outage state shall be required to comply with all requirements detailed in Section 5.18 of the NYISO Services Tariff as of the effective date of those requirements including, for purposes of this Manual, reporting requirements.

A Generator beginning a Forced Outage on or after the effective date of Section 5.18 of the Services Tariff shall have its Forced Outage expire on the last day of the month which contains the 180th day of its Forced Outage unless the Generator has Commenced Repair in accordance with Section 5.18 of the Services Tariff. Generators that have Commenced Repair may remain in the ICAP market in a Forced Outage state provided the repairs have not ceased or been unreasonably delayed. The Forced Outage of a Generator that Commenced Repair shall terminate on the last day of the month containing the date that the repairs ceased or were unreasonably delayed and the Generator shall be placed in an ICAP Ineligible Forced Outage.

A Generator whose Forced Outage has expired or been terminated shall be placed in an ICAP Ineligible Forced Outage on the day following the day its Forced Outage expired or was terminated.

A unit in an ICAP Ineligible Forced Outage shall report its status as a Forced Outage in its GADS Data submitted to the NYISO.

A Generator may voluntarily reclassify itself from a Forced Outage to an ICAP Ineligible Forced Outage if the Generator has been in a Forced Outage for at least sixty (60) days. Such Generator shall begin its ICAP Ineligible Forced Outage on the first day of the month following the month in which it voluntarily reclassified its outage.

A Generator in an ICAP Ineligible Forced Outage or in a Mothball Outage shall be Retired if either the CRIS rights for the unit have expired or if the unit has been in an ICAP Ineligible Forced Outage or Mothball Outage for 36 consecutive months in accordance with Section 5.18 of the NYISO Services Tariff unless the

tolling provisions of Sections 5.18.2.3.2 or 5.18.3.3.2 apply. A Generator in an ICAP Ineligible Forced Outage or in a Mothball Outage that has qualified for and is in a tolling period pursuant to the provisions of Sections 5.18.2.3.2 or 5.18.3.3.2 , respectively, shall be Retired on the earlier of i) 120 days from the date the outage would have otherwise expired or an ii) NYISO determination that the repairs have ceased or been unreasonably delayed.

A Generator in an Inactive Reserve state is unavailable for service for a limited period of time not to exceed six months for reasons that are not equipment related and that do not meet the criteria for classification of the Generator as in any other outage. This does not include units that may be idle because of equipment failure or reserve shutdown. A unit that is unavailable for reasons that are equipment related should be on a forced, maintenance or planned outage and remain on that outage until the proper repairs are completed and the unit can operate. With the effective date of Section 5.18 of the Services Tariff, Generators in Inactive Reserves are ineligible to participate in the ISO Installed Capacity market.

Individual DER participating in an Aggregation are not required to report outage states, pursuant to Services Tariff 5.18. Individual DER participating in an Aggregation are required to submit GADS data, including reporting of outages and derates.

4.4.15. Units that have taken substantial actions inconsistent with an intention to Operate

With the effective date of Section 5.18 of the Services Tariff, a unit that has taken substantial actions inconsistent with an intention to return the Generator to operations and the Energy market shall be in an ICAP Ineligible Forced Outage as of the day following the day such actions began. Substantial actions inconsistent with an intention to return the Generator to operations and the Energy market include dismantling or disabling essential equipment without an active replacement plan. ICAP ineligibility continues until the actions taken that were inconsistent with an intention to return the Generator to operations and the Energy market have ceased and the generator demonstrates it has returned to the market.

4.5. Calculation of the Amount of Unforced Capacity each Resource may Supply to the NYCA (Section 5.12.6.2 *NYISO Services Tariff*)

(a) Definitions

For purposes of Sections 4.5 and 4.5.1:

"Solar Farm" means a collection of solar installations with its electrical output metered at the interconnection with the NYCA Transmission System and which metering determines the Solar Farm's delivery to the NYCA.

(b) Calculation Procedure

Prior to the Capability Period that begins May 1, 2024, the NYISO will calculate the amount of Unforced Capacity that Resources are qualified to supply to the NYCA for each Capability Period. The Unforced Capacity methodology estimates the probability that a Resource will be available to serve Load, taking into account forced outages and forced deratings. To evaluate this probability, the NYISO will use the Operating Data submitted by each Resource in accordance with Section 4.4 of this *ICAP Manual*, and the mathematical formulae included in Attachment J of this *ICAP Manual*. The value (termed "CRIS-adjusted DMNC") used in determining the ICAP equivalent of the Unforced Capacity will be the smaller of the then currently-effective DMNC rating or the CRIS value, as applicable. Unforced Capacity values will remain in effect for the entire Capability Period, except in cases where corrections to historical data are necessary. The amount of Unforced Capacity that an Installed Capacity Supplier qualifies to supply shall be calculated by multiplying the Resource's Adjusted Installed Capacity value by the quantity 1 minus the Resource's applicable derating factor.

Starting with the Capability Period that begins May 1, 2024, the NYISO will calculate the amount of Unforced Capacity that Resources are qualified to supply as Installed Capacity Suppliers to the NYCA for each Capability Period. The Unforced Capacity methodology estimates a Resource's respective marginal reliability contributions toward meeting NYSRC resource adequacy requirements for the upcoming Capability Year. To calculate Unforced Capacity, the NYISO will use the Operating Data submitted by each Resource in accordance with Section 4.4 of this ICAP Manual, and the mathematical formulae included in Attachment J of this ICAP Manual. The value (termed "CRIS-adjusted DMNC") used in determining the ICAP equivalent of the Unforced Capacity will be the smaller of the then currently- effective DMNC rating or the CRIS value, as applicable. A Resource's Adjusted Installed Capacity shall be equal to the Resource's Installed Capacity multiplied by its assigned Capacity Accreditation Factor, in accordance with Section 5.12.14 of the NYISO Services Tariff. The amount of Unforced Capacity that an Installed Capacity Supplier qualifies to supply shall be calculated by multiplying the Resource's Adjusted Installed Capacity value by the quantity 1 minus the Resource's applicable derating factor. Unforced Capacity values will remain in effect for the entire Capability Period, except in cases where corrections to historical data are necessary.

NYISO shall post Resource derating factors prior to the deadline identified in the ICAP Event Calendar for seasonal derating factors to be available in the ICAP Automated Market System. Installed Capacity

Suppliers may review their assigned derating factor prior to the deadline in the ICAP Event Calendar for seasonal derating factors to be considered final. In the event that an Installed Capacity Supplier disputes a Resource derating factor, the Installed Capacity Supplier may calculate and provide, and the NYISO shall use, a derating factor to establish the Resource's derating factor for the upcoming Capability Period. The NYISO's Market Mitigation and Analysis department may perform an audit of the Installed Capacity Suppler-provided derating factor. If the Market Mitigation and Analysis department determines that the derating factor provided by the Installed Capacity Supplier is inaccurate, based on the applicable UCAP calculation rules in Attachment J of this ICAP Manual, then the Installed Capacity Supplier shall be subject to an ICAP shortfall penalty as described in Services Tariff Section 5.14.2 and section 5.8 of this ICAP Manual. Unforced Capacity values will remain in effect for the entire Capability Period. Refer to Attachment J of this *ICAP Manual* for additional information.

A Generator returning to the market after being in Inactive Reserves or before its Mothball Outage or ICAP Ineligible Forced Outage has expired that returns with modifications to its operating characteristics determined by the NYISO to be material, and which, therefore, require the submission of a new Interconnection Request will receive, as the initial derating factor for calculation of the Generator's Unforced Capacity upon its return to service, the derating factor it would have received as a newly connected unit in lieu of a derating factor developed from unit-specific data.

A Generator returning to the market after being in an Inactive Reserves or before its Mothball Outage or ICAP Ineligible Forced Outage has expired that, upon its return, uses as its primary fuel a fuel not previously used at the facility for any purpose other than for ignition purposes will receive, as the initial derating factor for calculation of the Generator's Unforced Capacity upon its return to service, the NERC class average derating factor in lieu of a derating factor developed from unit-specific data even if the modifications to allow use of a new primary fuel are not material and do not require the submission of a new Interconnection Request.

For each Capability Period, the NYISO will base the amount of Unforced Capacity a Generator (other than an Energy Storage Resource, an Intermittent Power Resource, or a Limited Control Run-of-River Hydro Resource) is qualified to supply on the average of the two previous like-Capability Period EFORd values calculated for that Generator. Detailed procedures for calculating the Capability Period EFORd values are described in Attachment J of this *ICAP Manual*. Such EFORd values shall be for the same interval used to determine the Minimum Installed Capacity Requirement to Minimum Unforced Capacity Requirement translation for a given Capability Period, as noted in Sections 2.5 and 2.6 of this *ICAP Manual*. For a Generator (other than an Energy Storage Resource, an Intermittent Power Resource, or a Limited

Control Run-of-River Hydro Resource) in Inactive Reserves, a Mothball Outage or an ICAP Ineligible Forced Outage that started on or after the effective date of Section 5.18 of the Services Tariff and that precluded its eligibility to participate in the Installed Capacity market at any time during any month from which GADS or other operating data would otherwise be used to calculate an individual Equivalent Demand Forced Outage Rate, the ISO shall replace such month's GADS or other Operating Data with GADS or other Operating Data from the most recent like-month in which the Generator was not in an outage state that precluded its eligibility to participate in the Installed Capacity market.

For each Capability Period, the NYISO will base the amount of Unforced Capacity an Energy Storage Resource is qualified to supply on the average of the previous two like-Capability Period Unavailability Factors calculated for that Resource. Detailed procedures for calculating the Capability Period Unavailability Factors are described in Attachment J of this *ICAP Manual*. Such Unavailability Factors shall be for the same interval used to determine the Minimum Installed Capacity Requirement to Minimum Unforced Capacity Requirement translation for a given Capability Period, as noted in Sections 2.5 and 2.6 of this *ICAP Manual*. For an Energy Storage Resource in Inactive Reserves, a Mothball Outage or an ICAP Ineligible Forced Outage that started on or after the effective date of Section 5.18 of the Services Tariff and that precluded its eligibility to participate in the Installed Capacity market at any time during any month from which other operating data would otherwise be used to calculate an individual Unavailability Factor, the ISO shall replace such month's operating data with other operating data from the most recent like-month in which the Energy Storage Resource was not in an outage state that precluded its eligibility to participate in the Installed Capacity market.

For each Capability Period, the NYISO will base the amount of Unforced Capacity a DER Aggregation is qualified to supply on the average of the previous two like-Capability Period Unavailability Factors calculated for that Resource. Detailed procedures for calculating the Capability Period Unavailability Factors are described in Attachment J of this ICAP Manual. Such Unavailability Factors shall be for the same interval used to determine the Minimum Installed Capacity Requirement to Minimum Unforced Capacity Requirement translation for a given Capability Period, as noted in Sections 2.5 and 2.6 of this ICAP Manual. The calculation of Unforced Capacity of a DER Aggregation containing both injection-capable and Demand Side Resources is detailed in Attachment J of this ICAP Manual.

For DER Aggregations with an Energy Duration Limitation, the Unavailability calculation applied to all DER comprising the Aggregation shall be measured over the number of hours corresponding to the Aggregation's duration requirement. For Aggregations that receive a schedule in DAM for their full duration, availability will be measured over the hours in which the Aggregation received a schedule in the

DAM. For Aggregations that receive a schedule in DAM for a portion of their duration requirement, the measurement window will begin prior to the start of the Aggregation's DAM schedule, such that the total measurement window is the same duration as the Aggregation's duration requirement. If the Aggregation receives a schedule in real time prior to its DAM schedule, the Aggregation's availability will be measured starting at the hour when it received a real time schedule and measure over the number of consecutive hours corresponding to the Aggregation's duration requirement. If the Aggregation does not receive a real time schedule prior to its DAM schedule, the measurement window will move forward in time, capping at the first hour of the Aggregation's DAM schedule, and measure over the number of consecutive hours corresponding to the Aggregation's duration requirement. For Aggregations that do not receive a schedule in DAM, availability will be measured over all hours in Peak Load Window, and will be capped at the Aggregation's duration if the resource receives a schedule.

For Special Case Resources, Unforced Capacity values will be based on two successive seasonal performance factors of each individual Special Case Resource as described in Section 4.12 of this *ICAP Manual*.

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the NYISO shall compute the amount of Unforced Capacity that each Limited Control Run-of-River Hydro Resource is authorized to provide in the NYCA separately for Summer and Winter Capability Periods. The amount for each Capability Period shall be equal to the rolling average of the hourly net Energy provided by each Limited Control Run-of River Hydro Resource during the twenty (20) highest NYCA-integrated real-time load hours in each of the five (5) previous Summer or Winter Capability Periods, as appropriate, stated in megawatts. For a Limited Control Run-of-River Hydro Resource in an outage state that started on or after the effective date of Section 5.18 of the NYISO Services Tariff and that precluded its eligibility to participate in the Installed Capacity market during one of the 20 highest NYCA integrated real-time load hours in any one of the five previous Summer or Winter Capability Periods, the ISO shall replace the 20 highest NYCA integrated real-time load hours from that Winter or Summer Capability Period, as appropriate, with the 20 highest NYCA integrated real-time load hours from the next most recent Winter or Summer Capability Period such that the rolling average of the hourly net Energy provided by each such Resource shall be calculated from the 20 highest NYCA integrated real-time load hours in the five most recent prior Summer or Winter Capability Periods in which the Resource was not in an outage state that precluded its eligibility to participate in the Installed Capacity market on one of the 20 highest NYCA integrated real-time load hours in that Capability Period.

For each Capability Period, prior to the Capability Period that begins May 1, 2024, Intermittent Power Resource Unforced Capacity values will have Unforced Capacity values based on seasonal performance factors calculated in accordance with Attachment J of this *ICAP Manual*. Unforced Capacity from an Intermittent Power Resource for the summer Capability Period shall be based on the average weighted production during the specified Peak Load Windows for the months of June, July and August during the previous like-Capability Period. Unforced Capacity from an Intermittent Power Resource for the winter Capability Period shall be based on the average weighted production during the specified Peak Load Windows for the months of December, January, and February during the previous like-Capability Period. This calculation shall not include hours in any month that the Intermittent Power Resource was in an outage state that started on or after the effective date that precluded its eligibility to participate in the ICAP market in accordance with section 5.12.6.1 of the NYISO Services Tariff. For an Intermittent Power Resource in Inactive Reserves, a Mothball Outage or an ICAP Ineligible Forced Outage that started on or after the effective date of Section 5.18 of the *NYISO Services Tariff* and that precluded its eligibility to participate in the Installed Capacity market at any time during any month from which other operating data would otherwise be used to calculate an individual Production Factor, the ISO shall replace such month's Operating Data with other Operating Data from the most recent like-month in which the Intermittent Power Resource was not in an outage state that precluded its eligibility to participate in the Installed Capacity market in accordance with section 5.12.6.1 of the *NYISO Services Tariff*. If the Intermittent Power Resource was not in operation for any previous like-month prior to the start of the Inactive Reserves, a Mothball Outage, or an ICAP Ineligible Forced Outage, the ISO will replace such month's Operating Data with the class average derating factor based upon the applicable Resource type.

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the NYISO will calculate the amount of Unforced Capacity that each Limited Control Run-of River Hydro Resource and each Intermittent Power Resource is qualified to supply based on the Resource's Adjusted ICAP and resource specific derating factor. The resource specific derating factor for Limited Control Run-of River Hydro Resources and Intermittent Power Resources will be calculated, in accordance with Attachment J of this ICAP Manual, as a comparison of the Resource's applicable average capacity factor to the applicable average capacity factor of the representative unit used to calculate the Resource's Capacity Accreditation Factor. The measurement window for the calculation of the average capacity factor of the Resource and representative unit for use in calculating the Resource's Unforced Capacity for a summer Capability Period will be the specified Peak Load Windows for the months of June, July and August during the previous two like-Capability Periods. The measurement window for the calculation of the average capacity factor of the Resource and representative unit for use in calculating the Resource's Unforced Capacity for a winter

Capability Period will be the specified Peak Load Windows for the months of December, January, and February during the previous two like-Capability Periods.

For an Intermittent Power Resource or Limited Control Run-of River Hydro Resource in Inactive Reserves, a Mothball Outage or an ICAP Ineligible Forced Outage that started on or after the effective date of Section 5.18 of the Services Tariff and that Precluded its eligibility to participate in the Installed Capacity market at any time during any month from which other operating data would otherwise be used to calculate an individual average capacity factor, the ISO shall replace such month's operating data with other operating data from the most recent like-month in which the Intermittent Power Resource or Limited Control Run-of River Hydro Resource was not in an outage state that precluded its eligibility to participate in the Installed Capacity market.

Unforced Capacity values for Installed Capacity Suppliers participating in the NYISO Installed Capacity market as part of a CSR will be calculated in accordance with the applicable procedure for each respective resource type described in this section 4.5 of this *ICAP Manual*, with the following modifications:

i) The Unforced Capacity for an Intermittent Power Resource that is participating in the NYISO Installed Capacity market as part of a CSR is calculated in accordance with Attachment J of this *ICAP Manual*. Prior to the Capability Period that begins May 1, 2024, the Production Factor for an Intermittent Power Resource participating in a CSR will not consider output in excess of the real-time CSR Injection Limit. The Unforced Capacity calculation compares the lower of the Generator's output or the real-time CSR Injection Limit, against the lower of the Generator's Nameplate or the registered CSR Injection Limit, across the applicable measurement hours. Starting with the Capability Period that begins May 1, 2024, the average capacity factor for an Intermittent Power Resource participating in a CSR will not consider output in excess of the real-time CSR Injection Limit. The Unforced Capacity calculation compares the lower of the Generator's output or the real-time CSR Injection Limit, against the lower of the Generator's Nameplate or the registered CSR Injection Limit, across the applicable measurement hours.

ii) The Unforced Capacity for an Energy Storage Resource that is participating in the NYISO Installed Capacity market as part of a CSR is calculated in accordance with Attachment J of this *ICAP Manual*. The Unforced Capacity calculation for an Energy Storage Resource will consider the availability of the shared interconnection facilities in addition to the unavailability of the ESR itself.

Prior to the Capability Period that begins May 1, 2024, initial Unforced Capacity values for new generating Resources will be based on the 1-year NERC class average EFORd values for Resources of the

same type. If no NERC class average exists, the NYISO will estimate a class average using capacity values for at least three (3) Resources of the same type currently providing capacity in the NYISO market and have sufficient operational data; provided however, that for a new Intermittent Power Resource that depends upon wind or solar as fuel, the initial Unforced Capacity value (which is to be measured as the amount of capacity it can reliably provide during system peak Load hours) will be the product of the applicable Unforced Capacity percentage in the Table shown below and that resource's DMNC value (nameplate rating net of station power). The Unforced Capacity percentages for the land-based wind resources set forth below are based on the average annual Unforced Capacity percentages of all the existing wind resources between 2015 and 2019, where the annual Unforced Capacity percentages are the weighted averages using the existing wind resources' Installed Capacity from the corresponding Gold Book, and the historical wind production during the hours within the applicable Peak Load Windows, as well as the associated hourly weighting factors as specified in Section 3.4.(c) in the *ICAP Manual Attachment J*. The Unforced Capacity percentages for off-shore wind resources set forth below are based on the average annual Unforced Capacity percentages between Winter 2016-17 and Summer 2021, where the annual Unforced Capacity percentages are the weighted averages using the simulated off-shore wind historical production during the hours within the applicable Peak Load Windows, as well as the associated hourly weighting factors as specified in Section 3.4(c) in the *ICAP Manual Attachment J*. The simulated off-shore wind historical production is based on the off-shore wind profiles for proposed offshore wind development areas near New York state, available on the NYISO website. These initial Unforced Capacity percentages will be reviewed and updated every four years as part of the study to reevaluate the hourly weighting factors as specified in Section 3.4.(c) in the *ICAP Manual Attachment J*. The initial Unforced Capacity value, whether based on the 1-year NERC class average EFORd or the NYISO estimate, is used for all applicable months in the Resource's derating factor calculation.

Until there are at least three (3) Energy Storage Resources with operational data for all months used in the Unavailability Factor calculation, the initial Unforced Capacity value for an Energy Storage Resource will be based on the NERC class average EFORd of Pumped Hydro Stations. Once there are at least three (3) Energy Storage Resources with operational data for all months used in the Unavailability Factor calculation, the NYISO class average for ESRs will replace the NERC class average EFORd of Pumped Hydro Stations as the initial Unforced Capacity value, including all applicable months in the derating factor calculation.

Until there are at least three (3) DERs with operational data for all months used in the Unavailability Factor calculation, the initial Unforced Capacity value for a DER will be based on the applicable Duration Adjustment Factor and the effective seasonal NYCA translation factor. Once there are at least three (3) DERs with operational data for all months used in the Unavailability Factor calculation, the NYISO class average for DERs will replace the NYCA translation factor as the initial Unforced Capacity value, including all applicable months in the derating factor calculation. For more information on NYCA translation factor, please see section 2.5 of this Manual.

Unforced Capacity values for BTM:NG Resources are net values (i.e., Generation - Load), and will be based on two separate derating factors: (1) the EFORd for the Generator of BTM:NG Resource, as described in this section above, and (2) the NYCA Translation factor as described in Section 2.5 of this ICAP Manual. Detailed procedures for calculating the Unforced Capacity values are described in Section 4.15.3.2 of this *ICAP Manual*.

Unforced Capacity Percentage – Land-Based Wind		
	6-Hour Peak Load Window	**8-Hour Peak Load Window**
Summer	16%	16%
Winter	34%	34%

Unforced Capacity Percentage – Off-shore Wind (Zone J and K)*		
	6-Hour Peak Load Window	**8-Hour Peak Load Window**
Summer	35%	35%
Winter	54%	53%

For a new Intermittent Power Resource that is a Solar Farm, the Unforced Capacity value shall be equal to the product of (a) the Summer or Winter Unforced Capacity percentage for the Solar Farm based on the characteristics at the time the Unforced Capacity value is determined using the Tables in this Section, (i) if a fixed array, the Unforced Capacity Percentage for fixed tilt arrays determined using the azimuth angle and the tilt angle for the Solar Farm, (ii) if a tracking array, the Unforced Capacity Percentage for tracking arrays, (b) the solar inverter and transformer efficiency multiplier determined based on the inverter

efficiency supplied by the Installed Capacity Supplier on behalf of the Intermittent Power Resource, and (c) the sum of the nameplate DC power rating for all installations within the Solar Farm.

Summer Unforced Capacity Percentage – Solar (Fixed Tilt Arrays)											
Azimuth Angle (Degrees)	Tilt Angle (Degrees)										
	Below 3	3 - 7	8 - 12	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	Above 47
Below 163	36%	36%	36%	35%	35%	34%	33%	31%	30%	28%	26%
163 - 167	36%	36%	36%	36%	35%	35%	34%	33%	31%	30%	28%
168 - 172	36%	37%	37%	36%	36%	36%	35%	34%	33%	31%	30%
173 - 177	36%	37%	37%	37%	37%	36%	36%	35%	34%	33%	31%
178 - 182	36%	37%	37%	37%	37%	37%	37%	36%	35%	34%	33%
183 - 187	36%	37%	38%	38%	38%	38%	38%	37%	36%	36%	34%
188 - 192	36%	37%	38%	38%	39%	39%	39%	38%	38%	37%	36%
193 - 197	36%	37%	38%	39%	39%	40%	39%	39%	39%	38%	37%
198 - 202	36%	37%	39%	39%	40%	40%	40%	40%	40%	39%	38%
203 - 207	36%	38%	39%	40%	40%	41%	41%	41%	41%	40%	39%
208 - 212	36%	38%	39%	40%	41%	41%	42%	42%	42%	41%	41%
213 - 217	36%	38%	39%	40%	41%	42%	42%	42%	42%	42%	41%
Above 217	36%	38%	39%	41%	42%	42%	43%	43%	43%	43%	42%

Winter Unforced Capacity Percentage – Solar (Fixed Tilt Arrays)											
Azimuth Angle (Degrees)	Tilt Angle (Degrees)										
	Below 3	3 - 7	8 - 12	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	Above 47
Below 163	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
163 - 167	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
168 - 172	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
173 - 177	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%
178 - 182	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%
183 - 187	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%
188 - 192	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%
193 - 197	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%
198 - 202	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	2%
203 - 207	0%	0%	1%	1%	1%	1%	1%	1%	1%	2%	2%
208 - 212	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
213 - 217	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Above 217	0%	0%	1%	1%	1%	1%	1%	2%	2%	2%	2%

Unforced Capacity Percentage – Solar (Tracking Arrays, 1 or 2 Axis)	
Summer	46%
Winter	2%

Solar Inverter and Transformer Efficiency Multiplier											
Inverter Efficiency	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98
Applicable Multiplier	0.96	0.97	0.98	0.99	1	1.01	1.02	1.03	1.04	1.05	1.07

Starting with the Capability Period that begins May 1, 2024, initial Unforced Capacity values for new generating Resources will be based on the applicable Capacity Accreditation Factor for the generating Resource's Capacity Accreditation Resource Class and the 1-year NERC class average EFORd value for Resources of the same type. If no NERC class average exists, the NYISO will estimate a class average using EFORd values for at least three (3) Resources of the same type currently providing capacity in the NYISO market and have sufficient operational data; provided however, that for a new Limited Control Run-of River Hydro Resource or Intermittent Power Resource , the initial Unforced Capacity value will be based on the applicable Capacity Accreditation Factor for the Resource's Capacity Accreditation Resource Class and a derating factor of zero. The initial Unforced Capacity value, whether based on the 1-year NERC class average EFORd or the NYISO estimate, is used for all applicable months in the Resource's derating factor calculation.

Until there are at least three (3) Energy Storage Resources with operational data for all months used in the Unavailability Factor calculation, the initial Unforced Capacity value for an Energy Storage Resource will be based on the applicable Capacity Accreditation Factor for the Resource's Capacity Accreditation Resource Class and the NERC class average EFORd of Pumped Hydro Stations. Once there are at least three (3) Energy Storage Resources with operational data for all months used in the Unavailability Factor calculation, the NYISO class average for ESRs will replace the NERC class average EFORd of Pumped Hydro Stations as the initial Unforced Capacity value, including all applicable months in the derating factor calculation.

Until there are at least three (3) DERs with operational data for all months used in the Unavailability Factor calculation, the initial Unforced Capacity value for a DER will be based on the applicable Capacity Accreditation Factor and the effective seasonal NYCA translation factor. Once there are at least three (3) DERs with operational data for all months used in the Unavailability Factor calculation, the NYISO class average for DERs will replace the NYCA translation factor as the initial Unforced Capacity value, including all applicable months in the derating factor calculation. For more information on NYCA translation factor, please see section 2.5 of this Manual.

Unforced Capacity values for BTM:NG Resources are net values (i.e., Generation - Load), and will be based on two separate derating factors: (1) the EFORd for the Generator of BTM:NG Resource, as described in this section above, and (2) the NYCA Translation factor as described in Section 2.5 of this ICAP Manual. Detailed procedures for calculating the Unforced Capacity values are described in Section 4.15.3.2 of this *ICAP Manual*.

4.6. Operating Data Default Value and Exception for Certain Equipment Failures (Section 5.12.6.3 and 5.12.6.4 NYISO Services Tariff)

4.6.1. Default Value

In its calculation of the amount of Unforced Capacity that each Resource is qualified to supply to the NYCA and notwithstanding the provisions of Section 4.5 of this *ICAP Manual*, the NYISO will deem a Resource to be completely forced out during each month for which the Resource has not submitted its Operating Data in accordance with Section 4.4 of this *ICAP Manual*. Pursuant to Section 5.12.12 of the*NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer), Resources that do not comply with Section 4.4 of this *ICAP Manual* also are subject to information submission requirements sanctions.

Resources that are deemed to be completely forced out during any month may submit new Operating Data to the NYISO at any time. The format and substance of the new Operating Data shall comply with the requirements set forth in Sections 4.4.1 through 4.4.8, as applicable. Within ten (10) calendar days of receipt of new Operating Data that comply with such requirements, the NYISO shall use this new Operating Data to recalculate the amount of Unforced Capacity that such Resources may supply to the NYCA.

Upon a showing of extraordinary circumstances, the NYISO retains the discretion to accept at any time Operating Data which have not been submitted in a timely manner, or which do not fully conform with Section 4.4 of this *ICAP Manual*.

4.6.2. Exception for Certain Equipment Failures

When a Generator, DER Aggregation, Energy/Capacity Limited Resource, System Resource, Intermittent Power Resource or Control Area System Resource is forced into an outage by an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer, the NYISO shall not treat the outage as a forced outage for purposes of calculating the amount of Unforced Capacity such Installed Capacity Suppliers are qualified to supply in the NYCA. This exception is not limited to equipment failures that occur on the New York State electrical network and extends to equipment failures that occur on electrical networks operated by External Control Areas

This exception is limited to an equipment failure that involves equipment located on the electric network beyond the generator step-up transformer, and including such step-up transformer on the output side of the Generator, DER, Energy/Capacity Limited Resource, System Resource, Intermittent Power Resource or Control Area System Resource. This exception does not apply to fuel related outages or derates

or other cause codes that might be classified as Outside Management Control in the NERC Data reporting Instructions. In reporting Operating Data (GADS data), a Generator, DER Aggregation, Energy/Capacity Limited Resource, or System Resource shall report a generator outage or derating caused by an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer, in accordance with normal outage reporting procedures and document them as a forced outage (U1, U2, U3, D1, D2 or D3) with a cause code of 9300.

Intermittent Power Resources will report generator outage and derated hours caused by an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer, in accordance with normal outage reporting procedures and document them in accordance with instructions for Intermittent Power Resources to be found in Attachment K to this *ICAP Manual*.

If an outage occurs on the transmission system beyond the generator step-up transformer, and including such step-up transformer, at a time when a Resource has not placed its unit on a maintenance outage, such interruption in availability shall be treated for purposes of calculating the unit's EFORd rating as a maintenance outage (MO) in the case of a forced outage (U1, U2, U3) or as a maintenance derate (D4) in the case of a forced derating (D1, D2, D3).

If an outage occurs on the transmission system beyond the generator step-up transformer, and including such step-up transformer, at a time when a Resource is on a maintenance outage, such interruption in availability shall be treated for purposes of calculating the unit's EFORd rating as a maintenance outage. In the event that service resumes on the transmission system but the unit categorized as being on a reserve shutdown is not able to perform, the unit shall be charged with a forced outage from the time that the transmission outage ended until the time it resumes operations (the "post transmission outage period"); provided however, that if the unit had been scheduled to take a maintenance outage during the post transmission outage period, the unit shall be charged with a Forced Outage, as defined in Attachment J, until the scheduled start date of its maintenance outage, at which time it will be charged with a maintenance outage until the end of its scheduled maintenance period.

If a forced outage or derate extends into a previously approved scheduled outage, or an equipment failure or problem beyond the scope of a previously approved scheduled outage extends beyond the scheduled return date from such a scheduled outage, the GADS data must address both outage types by breaking the outage into a maintenance outage and a forced outage with the duration of the forced outage properly reflected in the data. For further explanation, refer to the NERC Data Reporting Instructions at: https://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx.

4.7. Monthly Installed Capacity Supplier Certification

Each Installed Capacity Supplier must certify its Unforced Capacity to the NYISO no later than the deadline for monthly certification as provided in the detailed ICAP Event Calendar that can be found by selecting the link provided: (http://icap.nyiso.com/ucap/public/evt_calendar_display.do), demonstrating that the Unforced Capacity it is supplying is not already committed to meet the Minimum Installed Capacity Requirement of an External Control Area.

Each Installed Capacity Supplier holding rights to UDRs from an External Control Area that has made such an election shall confirm to the NYISO no later than the deadline for monthly certification for May as provided in the detailed ICAP Event Calendar that it will not use as self-supply or offer, and has not sold, Installed Capacity associated with the quantity of MW for which it has made its one time capability adjustment year election.

In addition, each Installed Capacity Supplier that has been derated (i.e., has had an amount of Unforced Capacity it is authorized to supply in the NYCA reduced by the NYISO in accordance with section 4.5 of this *ICAP Manual*) shall demonstrate in its monthly certification that it has procured sufficient additional Unforced Capacity to cover any shortage, due to such de-rating, of Unforced Capacity it has previously committed to supply in the following month or go into the ICAP Spot Market Auction.

If an Installed Capacity Supplier has sold UCAP and subsequently sells those UCAP assets on a date prior to the expiration of the UCAP sale, the responsibility for certifying the sold UCAP remains with the Installed Capacity Supplier that initially sold the UCAP. It is the responsibility of the selling Installed Capacity Supplier to either (1) arrange a bilateral agreement with the new owner of the UCAP assets to cover this requirement or (2) purchase the requirement through another bilateral transaction or through the NYISO-administered auctions.

If an Installed Capacity Supplier has sold UCAP that includes New Special Case Resources (as defined in subsection 4.12.2 of this *ICAP Manual*) in a Capability Period Auction, Monthly Auction, or Bilateral Transaction, the responsibility for certifying the sold UCAP remains with the Installed Capacity Supplier that sold the UCAP.

If a bilateral transaction is certified by an Installed Capacity Supplier, but is not confirmed by the second party to the transaction, the bilateral transaction submitted by the Installed Capacity Supplier remains unconfirmed at the close of the certification period. The UCAP associated with the unconfirmed bilateral transaction sale remains with the Installed Capacity Supplier that submitted the bilateral transaction for certification.

4.8. Bidding, Scheduling, and Notification Requirements (Sections 5.12.7 and 5.12.11 *NYISO Services Tariff*)

On any day for which it supplies Unforced Capacity, each Installed Capacity Supplier (except as noted below) must schedule or Bid into the Day-Ahead Market, or declare to be unavailable an amount of Energy that is not less than the Installed Capacity Equivalent of the amount of Unforced Capacity it is supplying to the NYCA from each Resource that it uses to supply Unforced Capacity. Planned or Maintenance outages must be scheduled ("scheduled outages") in advance of any Day-Ahead bidding. Any declared or unavailable Energy/Capacity not previously scheduled and approved as out of service must be reported as a Forced Outage or Forced Derating in accordance with the operating data reporting requirements in Section 4.4 and Attachment K of this *ICAP Manual*. Each Installed Capacity Supplier that utilized a UDR or EDR for an Unforced Capacity obligation for a month must report scheduled and Forced Outages and Forced Deratings of each generator associated with its UDRs and EDRs in the AMS, but it is not required by this provision to report outages of the UDR or EDR transmission facility. Nothing in this Installed Capacity Manual relieves the owner or operator of the UDR or EDR facility from its reporting obligations.

Each Installed Capacity Supplier providing Unforced Capacity must designate the entity that will be responsible for complying with these bidding, scheduling, and notification requirements.

4.8.1. Generators, Aggregations, and System Resources

For every hour of any day for which Generators, Aggregations and System Resources supply Unforced Capacity, they must provide the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA through a combination of scheduling or Bidding in the Day-Ahead Market, or in accordance with the notification procedure below. In addition to providing the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA, Energy Storage Resources must also provide the maximum of the (i) negative Installed Capacity Equivalent, or (ii) Lower Operating Limit, through a combination of scheduling or Bidding in the Day-Ahead Market, or in accordance with the notification procedure below such that the amount scheduled, bid, or declared to be unavailable reflects the entire withdrawal to injection operating range. See the NYISO's *Day-Ahead Scheduling Manual* (available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides) and *Market Participants User Guide* (available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides) for scheduling and bidding procedures.

Prior to the Capability Year that begins May 1, 2024, Generators, Aggregations, and System Resources that have an Energy Duration Limitation, pursuant to Section 5.12.14 of the *NYISO Services Tariff*, must on a daily basis during the applicable Peak Load Window as determined in accordance with Section 4.1.1 of this

ICAP Manual, and for the number of consecutive hours that correspond to its Energy Duration Limitation, or for the entirety of the Peak Load Window for an Energy Storage Resource: (i) schedule a Bilateral Transaction; (ii) Bid Energy in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of the *NYISO Services Tariff*; or (iii) notify the ISO of any outages. Energy Storage Resources with an Energy Duration Limitation must, on a daily basis, and for each hour outside of the Peak Load Window: (i) Bid in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of the *NYISO Services Tariff*; or (ii) notify the ISO of any outages, the maximum of the Energy Storage Resource's (a) negative Installed Capacity Equivalent, or (b) Lower Operating Limit. The amount scheduled, Bid, and/or declared to be unavailable must reflect the Energy Storage Resource's entire withdrawal operating range.

Starting with the Capability Year that begins May 1, 2024, Generators, Energy Storage Resources, and System Resources that have an Energy Duration Limitation less than or equal in length to the number of hours comprising the applicable Peak Load Window must, on a daily basis during the Peak Load Window and for at least the number of consecutive hours that correspond to its Energy Duration Limitation, or for the entirety of the Peak Load Window for an Energy Storage Resource: (i) schedule a Bilateral Transaction; (ii) Bid Energy in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of this Tariff; or (iii) notify the ISO of any outages. Generators, Energy Storage Resources, and System Resources that have an Energy Duration Limitation greater in length than the number of hours comprising the Peak Load Window must, on a daily basis during the entirety of the Peak Load Window and for additional hours immediately preceding and following the Peak Load Window covering the remaining hours of its Energy Duration Limitation that are not captured in the Peak Load Window,: (i) schedule a Bilateral Transaction; (ii) Bid Energy in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of this Tariff; or (iii) notify the ISO of any outages. The number of additional hours both preceding and following the Peak Load Window for which this obligation applies shall be determined by subtracting the length of the Peak Load Window from the Resource's Energy Duration Limitation and dividing the result by two.

- For example, if the applicable Peak Load Window is HB 13 through HB 18 and the Generator, Energy Storage Resource, or System Resource has an 8-hour Energy Duration Limitation then the Energy Duration Limitation exceeds the length of the Peak Load Window by two hours, so the obligation will begin one hour before the start of the Peak Load Window and will end one hour after the Peak Load Window ends. Thus, the Generator, Energy Storage Resource, or System Resource must be able to provide, and produce if scheduled, the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA during HB 12 through HB 19.

In addition, Energy Storage Resources that have an Energy Duration Limitation less than or equal in length to the number of hours comprising the Peak Load Window must, on a daily basis, and for each hour beyond the Peak Load Window: (i) Bid in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of this Tariff; or (ii) notify the ISO of any outages, the maximum of the Energy Storage Resource's (a) negative Installed Capacity Equivalent, or (b) Lower Operating Limit. Energy Storage Resources that have an Energy Duration Limitation greater in length than the number of hours comprising the Peak Load Window must, on a daily basis, and for each of the hours beyond the hours that the Energy Storage Resources must schedule, bid, or declare to be unavailable in accordance with paragraph three of Section 4.8.1 of this ICAP Manual: (i) Bid in the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of the NYISO Services Tariff or (ii) notify the ISO of any outages, the maximum of the Energy Storage Resource's (a) negative Installed Capacity Equivalent, or (b) Lower Operating Limit. The amount scheduled, Bid, and/or declared to be unavailable must reflect the Energy Storage Resource's entire withdrawal operating range.

For any hour of any day that the Installed Capacity Supplier cannot provide the full amount of Energy associated with its Installed Capacity Equivalent, due to maintenance or forced outage, the supplier must notify the NYISO Operations department in accordance with the *Outage Scheduling Manual* (available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides).

4.8.2. Energy Limited and Capacity Limited Resources

Energy and Capacity Limited Resources that are Installed Capacity Suppliers must be able to provide the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA as well as conform to all of the requirements of Attachment M to this *ICAP Manual*.

Prior to the Capability Year that begins May 1, 2024, Energy Limited Resources must be able to provide, and provide if scheduled, the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA for a minimum of the number of consecutive hours that correspond to its Energy Duration Limitation during the applicable Peak Load Window as determined in accordance with Section 4.1.1 of this ICAP Manual. Capacity Limited Resources must Bid or schedule in the Day-Ahead Market each day in such a way as to enable the NYISO to schedule them for the period in which they are capable of providing the Energy. See Attachment M to this *ICAP Manual* for additional details on qualifying Energy/Capacity Limited Resources and bidding and scheduling procedures for these resources.

Starting with the Capability Year that begins May 1, 2024, an Energy Limited Resource with an Energy Duration Limitation less than or equal in length to the number of hours comprising the applicable Peak Load Window must, on a daily basis be able to provide, and provide if scheduled, the Installed Capacity

Equivalent of the amount of Unforced Capacity the Energy Limited Resource is supplying to the NYCA during the Peak Load Window and for at least the number of consecutive hours that correspond to the Energy Limited Resource's Energy Duration Limitation. An Energy Limited Resource with an Energy Duration Limitation greater in length than the number of hours comprising the applicable Peak Load Window must, on a daily basis be able to provide, and provide if scheduled, the Installed Capacity Equivalent of the amount of Unforced Capacity the Energy Limited Resource is supplying to the NYCA during the entirety of the Peak Load Window and for additional hours immediately preceding and following the Peak Load Window covering the remaining hours of the Energy Limited Resource's Energy Duration Limitation that are not encompassed in the Peak Load Window. The number of additional hours both preceding and following the Peak Load Window for which this obligation applies shall be determined by subtracting the length of the Peak Load Window from the Resource's Energy Duration Limitation and dividing the result by two.

- For example, if the applicable Peak Load Window is HB 13 through HB 18 and the Energy Limited Resource has an 8-hour Energy Duration Limitation then the Energy Duration Limitation exceeds the length of the Peak Load Window by two hours, so the obligation will begin one hour before the start of the Peak Load Window and will end one hour after the Peak Load Window ends. Thus, the Energy Limited Resource must be able to provide, and provide if scheduled, the Installed Capacity Equivalent of the amount of Unforced Capacity they are supplying to the NYCA during HB 12 through HB 19.

Capacity Limited Resources must Bid or schedule in the Day-Ahead Market each day in such a way as to enable the NYISO to schedule them for the period in which they are capable of providing the Energy. See Attachment M to this *ICAP Manual* for additional details on qualifying Energy/Capacity Limited Resources and bidding and scheduling procedures for these resources.

4.8.3. [This Section intentionally left blank]

4.8.4. Existing Municipally-Owned Generation

Existing municipally-owned generators that qualify as Installed Capacity Suppliers pursuant to Section 5.12.11.2 of the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer) and Section 4.13 of this *ICAP Manual* are not required to Bid or schedule in the Day-Ahead Market but will be required to respond to a NYISO request to make available the uncommitted portion of the Installed Capacity Equivalent of the Unforced Capacity they are qualified to supply.

4.8.5. Special Case Resources (Section 4.12 of this *ICAP Manual*)

SCRs are not subject to daily bidding, scheduling, and notification requirements.

For every month in which a SCR supplies Unforced Capacity, the RIP must offer to reduce Load equal to the Installed Capacity Equivalent of the amount of Unforced Capacity the SCR is supplying to the NYCA. The NYISO must receive from the RIP a Minimum Payment Nomination associated with such Unforced Capacity. This Minimum Payment Nomination will act as a strike price, allowing the NYISO to call on a specific amount of SCRs to perform, based on price and NYCA zone in accordance with the NYISO Emergency Operations Manual. The Minimum Payment Nomination will remain in effect through the month and is not subject to change. SCR Minimum Payment Nomination submission procedures are detailed in Section 4.12.3.

A RIP must notify the NYISO if a SCR is not able to provide the full amount of Load reduction associated with the Unforced Capacity that was uploaded to the Demand Response Information System (DRIS) in the enrollment file. See Sections 4.3.3 of this *ICAP Manual*.

4.8.6. Intermittent Power Resources

As set out in Section 5.12.11.4 of the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer), Intermittent Power Resources that depend on wind or solar energy as their fuel may qualify as Installed Capacity Suppliers, without having to comply with the daily bidding and scheduling requirements set forth in Section 5.12.7 of the *NYISO Services Tariff*. To qualify as Installed Capacity Suppliers, such Intermittent Power Resources shall comply with the notification requirement of Section 5.12.7 of the *NYISO Services Tariff* by notifying the NYISO of all outages.

4.8.7. Co-Located Storage Resources

As set out in Section 4.2.1.3.2 of the NYISO Services Tariff, Co-located Storage Resources must each submit a CSR injection Scheduling Limit and a CSR withdrawal Scheduling Limit for each hour of the Day-Ahead Market to indicate the expected capability of the relevant facilities. An Energy Storage Resource that participates in a CSR shall not submit Day-Ahead Market Bids that would Self-Commit the Generator to inject or to withdraw a quantity of Energy that exceeds an applicable CSR Scheduling Limit. These bid values will be used to calculate the Unforced Capacity values for Co-located Storage Resources, as detailed in Section 3.8 of Attachment J of this Installed Capacity Manual.

4.9. External Resources, Imports, Exports and Wheels Through

External Generators, System Resources, Control Area System Resources, and entities purchasing Installed Capacity from them may participate in the NYCA Installed Capacity market. With the exception of those requirements and procedures regarding Summer Transitional Grandfathered Import Rights, External Installed Capacity Suppliers using UDRs or EDRs must comply with the requirements and procedures identified in this section 4.9. Refer to section 4.14 of this *ICAP Manual* for additional Installed Capacity Supplier requirements and procedures associated with the use of UDRs and EDRs.

External Resources are not eligible to participate within an Aggregation.

4.9.1. Requirements to Qualify as an External Installed Capacity Supplier

Prior to supplying Unforced Capacity to the NYCA, External Generators, System Resources, Control Area System Resources and entities purchasing Installed Capacity from them must qualify as External Installed Capacity Suppliers. In addition to satisfying the requirements for External Installed Capacity specified in Section 2.7 of this *ICAP Manual*, to qualify as External Installed Capacity Suppliers such entities must provide the following information to the NYISO:

1. Name and location of the Resource (if multiple units are involved, identify each unit);
2. Assurance that the External Control Area in which the Resource is located either:

    a. Will not recall or curtail, for the purposes of satisfying its own Resource Adequacy needs, exports from that External Control Area to the NYCA of an amount of Energy equal to the Installed Capacity Equivalent of the amount of Unforced Capacity that Resource is supplying to the NYCA; or

    b. In the case of Control Area System Resources, will afford NYCA Load the same pro-rata curtailment priority that it affords its own Control Area Load;
3. Documentation of a DMNC test, or its equivalent, in accordance with the procedures found in Section 4.2 or 4.10.3 of this *ICAP Manual*;
4. Submission of Operating Data for the prior 24 months in accordance with Sections 4.4 and 4.4.9, and Attachment K of this *ICAP Manual*;
5. Documentation which satisfies the Maintenance Scheduling Requirements in Section 4.3 of this *ICAP Manual*; and
6. Expected return dates from full or partial outages.

7. Demonstration of deliverability to the NYCA border, pursuant to Section 4.9.3 of this *ICAP Manual*.
8. Execution of the Letter Certifying Contractual Control or External Customer Registration Agreement if the External Installed Capacity Supplier does not own the resource being sold.

All of the information required by this Section 4.9.1 must be in accordance with the *ICAP Manual* sections referenced in the items above, and received by the NYISO not later than the date and time set forth in those sections and as further specified on the ICAP Event Calendar, and at such additional times as required by the NYISO and this *ICAP Manual*.

The NYISO may verify this data with the appropriate External Control Area.

4.9.2. External Capacity Processes and Information

Section 4.9.2.5 shall be in effect for all Capability Periods. Nothing in this Section 4.9.2 shall be construed to prohibit or limit revisions to this *ICAP Manual* or create a precedent for any future changes.

4.9.2.1. [This Section intentionally left blank]

4.9.2.2. [This Section intentionally left blank]

4.9.2.3. [This Section intentionally left blank]

4.9.2.4. [This Section intentionally left blank]

4.9.2.5. Allocation of Import Rights

The NYISO establishes the maximum amount of External Installed Capacity that may be imported to the NYCA from each neighboring External Control Area for the upcoming Capability Year according to the procedures in Section 2.7 of this *ICAP Manual* and consistent with the modeling of the Installed Reserve Margin. The NYISO then sets the Import Rights limit at the amount of External Installed Capacity that is deliverable to the NYCA across any individual External Interface and across all of those External Interfaces taken together (collectively, the "NYCA Interface") consistent with the procedures in Section 4.9.2.5.2 of this *ICAP Manual*. The NYISO shall make such Import Rights, up to and including, but not exceeding, the Import Rights limit for the NYCA interface, available for allocation to Market Participants, after identifying the portion of the NYCA interface amount that is available at each individual External Interface. The NYISO will make the Import Rights available to Market Participants through the first-come, first-served (FCFS) Import Right request and allocation process, and if any are remaining thereafter, through the opportunity

to offer Unforced Capacity from an External Control Area across an External Interface into an Installed Capacity auction.

4.9.2.5.1. New York State Electric & Gas Corporation, Inc. ("NYSEG") Existing Transmission Capacity for Native Load ("ETCNL")

New York State Electric & Gas Corporation, Inc. (NYSEG) shall notify the NYISO in writing of its election to use a specified quantity of its Existing Transmission Capacity for Native Load (ETCNL) for each month of the upcoming Capability Period. This notification must be received by the NYISO prior to the fifteenth calendar day before the date on which the NYISO will first receive FCFS Import Right requests for the upcoming Capability Period, as identified by the ICAP Event Calendar.

4.9.2.5.2. Annual External Installed Capacity Deliverability Test for the Upcoming Capability Year

The NYISO will complete the annual External Installed Capacity deliverability test for the upcoming Capability Year prior to the date on which the NYISO will first receive FCFS Import Right requests for the upcoming Summer Capability Period, as identified by the ICAP Event Calendar. The deliverability test will determine the amount of Import Rights that are deliverable across any individual External Interface and for the NYCA Interface for the upcoming Capability Year. In the deliverability test, the NYISO will model the ETCNL quantities set forth in the NYSEG notice, all External CRIS Rights (ECRs), and External-to-ROS Deliverability Rights (EDR) as deliverable. The deliverability test will determine the MW amount of headroom remaining on a set of internal interfaces. If the deliverability test determines that the maximum MW amount of External Installed Capacity determined by the ISO procedures causes the transfer capability across any of a set of internal interfaces to be degraded, then the NYISO will compute shift factors for each External Interface on the internal interface(s) that limit the deliverability of External Installed Capacity.

For each Capability Period, the NYISO will use the maximum allowances for External Installed Capacity to be imported into the NYCA, set forth in Section 4.9.6 of this *ICAP Manual*, and, if necessary, the shift factors computed in the annual deliverability test described in the preceding paragraph to determine the amount of Import Rights that are deliverable at each External Interface individually and simultaneously so that they do not exceed the total for the NYCA Interface.

4.9.2.5.3. FCFS Import Right Request and Allocation Period

FCFS Import Rights may be secured within a FCFS Import Right request and allocation period ("FCFS R&A Period"), on the date identified by the ICAP Event Calendar. The Installed Capacity Supplier that will have the obligation to the NYISO to supply the External Installed Capacity, referred to in this section of the *ICAP Manual* as the "seller", can request the FCFS Import Right in the ICAP AMS and must name the counterparty that will be the purchaser (*i.e.*, the LSE or the Installed Capacity Marketer that is not an Affiliate of the seller), referred to in this section of the *ICAP Manual* as the "buyer". A FCFS Import Right request shall only be received by the NYISO in the ICAP AMS and only within the applicable FCFS Request Period. Any request that is sent to or received by the NYISO by any other means or that is received outside of such applicable FCFS Request Period will not be a valid FCFS Import Right request and shall not be considered for allocation of Import Rights. A FCFS Import Right request must be backed by a written and duly authorized bilateral transaction. FCFS Import Rights can only be used to supply External Unforced Capacity to satisfy an LSE's NYCA Minimum Unforced Capacity Requirement.

Prior to each Capability Period Auction and as identified by the ICAP Event Calendar, the NYISO will open a FCFS Import Right R&A Period for all months within the upcoming Capability Period. The FCFS R&A Period will open not more than thirty (30) days prior to the Capability Period Auction. Prior to each Monthly Auction, the NYISO will open a FCFS R&A Period for any or all months remaining in the Capability Period for which the certification deadline has not passed and Import Rights remain available. After the Monthly Auction results are posted, and prior to the close of the certification period each month, the NYISO will open a FCFS R&A Period for any or all months remaining in the Capability Period for which Import Rights remain available.

If there is a change to the MW amount of remaining available Import Rights following the completion of each FCFS R&A Period, or after the posting of results for each Capability Period and Monthly Auction, the remaining available Import Rights will be posted in the ICAP AMS.

4.9.2.5.3.1. FCFS Import Right Request Period and Confirmation Period

Within each FCFS R&A Period, the NYISO will open a FCFS Import Right Request Period for one business day, as identified in the ICAP Event Calendar. On the following business day, the NYISO will open a FCFS Import Right Confirmation Period for one business day, and within the timeframe shown in the ICAP Event Calendar a buyer must confirm the FCFS Import Right requests to which they are a counterparty. If the buyer does not confirm the Imports Rights request in accordance with this section, the Imports Right request will be invalid and there will be no further opportunity to confirm that FCFS Imports Right request.

4.9.2.5.3.1.1. Seller Requests for FCFS Import Rights

The system clock of the ICAP AMS will govern the begin time and end time of each event within the FCFS R&A Period. For each FCFS R&A Period, the ability of the ICAP AMS to receive requests shall only be enabled at the begin time of 8:00:00 A.M. Eastern time as determined by the system clock of the ICAP AMS. At the end of FCFS Request Period shown in the ICAP Event Calendar, the ability of the ICAP AMS to receive requests shall be disabled.

A clock displaying Eastern time (EST/EDT) in hours, minutes, and seconds (HH:MM:SS) is visible on the NYISO website for convenience only and does not govern the FCFS R&A Period. The ICAP AMS clock governs the beginning and end of the FCFS Request Period.

FCFS Import Right requests in the ICAP AMS may be a single request or may contain multiple requests for FCFS Import Rights. For those requests (a "group") that contain multiple FCFS Import Right requests, the relative priority of each FCFS Import Right request shall be defined by the descending order of the request records in the ICAP AMS (*i.e.*, the first request record shall have the highest relative priority). The relative priority order of individual FCFS Import Right requests in a group cannot be modified by the seller in the ICAP AMS once the request is received in the ICAP AMS.

FCFS Import Right requests (individual or those within a group) may be deleted by the seller in the ICAP AMS within the FCFS Request Period. If the seller deletes a FCFS Import Right request that was within a group, the relative priority of each remaining request in that group of requests will be maintained. The relative priority of FCFS Import Right requests within a group cannot be modified after the requests have been received in the ICAP AMS except by deleting that group of requests, and then recreating the group of requests in the ICAP AMS with a modified relative priority order and during the FCFS Request Period day, as shown in the ICAP Event Calendar.

Each individual FCFS Import Right request (whether individual or within a group) must contain the information enumerated below. If any of the information provided is incomplete or inaccurate, then the individual request or if a group of multiple requests, then all requests in a group, will not be valid and the ICAP AMS will reject them.

Required Information:

1. The seller organization (*i.e.*, Installed Capacity Supplier) that is the supplying party to the bilateral transaction;
2. The buyer organization (*i.e.*, LSE or Installed Capacity Marketer that is not an Affiliate of the seller) that is the purchasing party to the bilateral transaction;
3. The External Control Area in which the qualified External Resource is located;
4. The PTID and name of the qualified External Resource;

5. The Installed Capacity Equivalent MW of Import Rights requested for and the identified month or all months remaining in the Capability Period. (The Installed Capacity Equivalent of the Unforced Capacity offered for sale into the NYCA from the qualified External Resource designated in (4) above is calculated as set forth in *ICAP Manual* Attachment J);

6. E-mail address of the contact for the seller organization to the bilateral transaction in the ICAP AMS that will be associated with the request (which is the address to which the NYISO will send a notice under Section 4.9.2.5.3 of this *ICAP Manual*); and

7. E-mail address of the contact for the buyer organization to the bilateral transaction in the ICAP AMS that will be associated with the request (which is the address to which the NYISO will send a notice under Section 4.9.2.5.3 of this *ICAP Manual*).

The ICAP AMS will permit sellers to create and to "test" a FCFS Import Right request, or group of multiple requests, prior to the beginning of the FCFS R&A Period, for data validation.

4.9.2.5.3.1.2. Buyer Confirmation of FCFS Import Right Requests

The NYISO will open a confirmation period on the business day immediately following the FCFS Request Period as identified by the ICAP Event Calendar. The ICAP Event Calendar will identify the date and time at which FCFS Import Right requests can be confirmed and the date and time after which FCFS Import Right requests cannot be confirmed. The interim period is the "FCFS Confirmation Period". Within a FCFS Confirmation Period, a buyer that is counterparty to a valid FCFS Import Right request may view and shall have the ability to confirm such a request, and in so doing is affirming that the request is supported by the terms of a bilateral contract to which both the seller and buyer are a party. The system clock of the ICAP AMS will govern the begin time and end time of the FCFS Confirmation Period. For each FCFS Confirmation Period, the ability of a buyer to confirm a request shall only be enabled at the begin time of 8:00:00 A.M. Eastern time as determined by the system clock of the ICAP AMS. At the end of time of the FCFS Confirmation Period shown in the ICAP Event Calendar, the ability of the ICAP AMS to confirm a valid FCFS Import Right request shall be disabled.

A clock displaying Eastern time (EST/EDT) in hours, minutes, and seconds (HH:MM:SS) is visible on the NYISO website for convenience only and does not govern the start time for the FCFS Confirmation Period. The ICAP AMS clock governs the FCFS Confirmation Period.

A FCFS Import Right request must be in a buyer-confirmed state in the ICAP AMS at the occurrence of the end time of the FCFS Confirmation Period in order to be to be prioritized by the NYISO for possible allocation of Import Rights. A FCFS Import Right request that is in an unconfirmed state (*i.e.*, not confirmed

by the buyer) in the ICAP AMS at the occurrence of the end time of the confirmation period will be automatically rejected.

4.9.2.5.3.2. Prioritization and Allocation of FCFS Import Right Requests

The NYISO will notify requestor(s) of the priority of their FCFS Import Right request(s) on the business day immediately following the FCFS Confirmation Period, as identified by the ICAP Event Calendar. All FCFS Import Right requests that were valid and that remained in a confirmed state in the ICAP AMS at the occurrence of the end time of the FCFS Confirmation Period shall be assigned a priority, used to allocate FCFS Import Right awards among requesting parties. The priority order shall be the order in which the FCFS Import Right request record was written to the database when it was received in the ICAP AMS *(i.e.*, a request record with an earlier timestamp will be prioritized before a request record with a later timestamp, and likewise with requests that contain a group of requests).

The recorded timestamp of the FCFS Import Right request record and, if the request record was for a group of multiple requests, the relative priority assigned to each request, will be viewable in the ICAP AMS by the seller and buyer organizations that are party to the requests at the deadline shown in the ICAP Event Calendar for the NYISO to notify sellers and buyers of the priority for their FCFS Import Right request.

4.9.2.5.3.2.1. Methodology for Allocation of a FCFS Import Right Request

Prior to a Capability Period Auction, the NYISO will perform the following steps to allocate Import Right awards among valid FCFS Import Right requests that remain in a confirmed state in the ICAP AMS at the end of the FCFS Confirmation Period.

1. The NYISO will prioritize valid and confirmed FCFS Import Right requests and will allocate Import Rights up to and including, but not exceeding, the total amount of External Installed Capacity that has been determined to be deliverable to the NYCA at any individual External Interface or at the NYCA Interface, whichever is more limiting, taking into account the Import Rights awarded to that point and, if necessary, the shift factors computed in the annual External Installed Capacity deliverability test (*i.e.*, such test per Section 4.9.2.5.2 of this *ICAP Manual*). Shift factors will only be taken into account if there is a deliverability constraint found on any of the internal interfaces considered in the annual deliverability test.

2. The NYISO will then recalculate the Capability Period import limit for each External Interface and the NYCA Interface for each month of that upcoming Capability Period which shall be based on the results of the associated FCFS R&A Period that occurred prior to the Capability Period Auction.
    a. For each month remaining in the Capability Period, the available Import Rights remaining after the Capability Period Auction shall be prorated among all External Interfaces in proportion to the column labeled Remaining (MW) in Section 4.9.6 of this ICAP Manual. In no event shall the Capability Period import limit be greater at an External Interface than the MW quantity set forth in Section 4.9.6. Accordingly, to the extent the prorated amount at an External Interface for a month exceeds the quantity for the External Interface set forth in Section 4.9.6, the Capability Period Import Limit for the External Interface shall be fixed for the month at the limit stated in Section 4.9.6. In such a case, the excess will be reallocated proportionally to the other External Interfaces, provided that the MW amount set forth in Section 4.9.6 for each External Interface may not be exceeded.
    b. For the Capability Period Auction, the Import Right limits at all External Interfaces and the NYCA Interface, for all months of the upcoming Capability Period, will be set at the Import Right limits calculated in Subsection 2(a) above, using the month in the Capability Period with the lowest remaining available Import Right limit.
3. For any of the Monthly Auctions or ICAP Spot Market Auctions, and all FCFS Import Rights R&A Periods within a Capability Period, the remaining available Import Right limits at all External Interfaces for any or all months for which the certification deadline has not passed, Import Rights may be allocated up to and including, but not exceeding the amount of the remaining available Import Rights established in Subsection 2(a) above, for the External Interface or for the NYCA Interface.

The NYCA Interface, or an individual External Interface, shall be fully allocated when Import Rights have been allocated up to but not exceeding the amount of the available Import Rights as the result of a FCFS Import Right award or as the result of an Unforced Capacity award in an Installed Capacity Auction.

4.9.2.5.3.3. FCFS Import Right Award

A FCFS Import Right request that has been determined to be valid and that was confirmed may be allocated an Import Right award provided that the remaining available Import Rights established in Section 4.9.2.5.3.2.1(2)(a), for the External Interface or for the NYCA Interface are not to be exceeded. A FCFS

Import Right award may be allocated a zero, partial, or full FCFS Import Right award MW amount and, if awarded a MW amount greater than zero, that FCFS Import Right award shall be assigned a FCFS Import Right award bilateral transaction in the ICAP AMS. The seller and buyer that are party to the award will be able to view the resulting FCFS Import Right award bilateral transaction in the ICAP AMS.

4.9.2.5.3.3.1. Limited Opportunity for Award Return if an External Interface or the NYCA Interface is Fully Allocated

The NYCA Interface or an individual External Interface may become fully allocated for any or all months remaining within a Capability Period as the result of a FCFS Import Right award or by an Installed Capacity Auction Import Right award. If that happens prior to the close of certification in a month (*i.e.*, other than if the full allocation occurs as a result of an ICAP Spot Market Auction award(s)), the NYISO will send a notice via email to the email address for each of the buyer and seller organization that were provided with the request in the ICAP AMS (as required under Section 4.9.2.5.3.1.1(6) and (7) of this *ICAP Manual*). The NYISO also will send an email to the NYISO TIE list stating that there is a fully allocated condition. The buyer and seller to the affected FCFS Import Right awards shall have until 5:00:00 P.M. Eastern time, on the later of the business day following the NYISO's issuance of the notice of the fully allocated condition or until the beginning of the certification period for the obligation month of the award (the "Return Deadline"), to return, through utilizing the functionality in the AMS, the full amount of a FCFS Import Right award for the fully allocated Interface for the affected month(s). If there is a fully allocated condition returns of less than the fully amount a FCFS Import Right Award are not permitted. To return an award, first the buyer must un-confirm the awarded request, and then the seller must delete the unconfirmed request. After those steps are both completed, the NYISO will send an email to the NYISO TIE list stating that there has been a return that has resolved the fully allocated condition. If both the buyer and seller do not so act, the obligation remains.

If the NYCA Interface or an individual External Interface remains fully allocated for any or all months remaining within the Capability Period following the Return Deadline, then any FCFS Import Right award bilateral transaction for any fully allocated External Interface, and if the NYCA Interface is fully allocated, all FCFS Import Right awards bilateral transactions, and all Installed Capacity Auction awards for the affected month or months, shall have an obligation to provide the MIS transaction ID number for the FCFS Import Right awards bilateral transactions to the NYISO in the ICAP AMS on or before the deadline identified by the ICAP Event Calendar for providing such MIS transaction ID numbers. If those affected FCFS Import Right award bilateral transactions do not have the MIS transaction ID number entered in the ICAP AMS for the obligation month(s) of the full allocation, then the buyer will not be credited with the Unforced Capacity

for such month(s) and Unforced Capacity shall automatically be purchased on its behalf in that month's ICAP Spot Market Auction. Additionally, the Unforced Capacity MW amount of that obligation will be automatically offered into that month's ICAP Spot Market Auction from the External Resource PTID designated in the request, at an offer price of $0.00/kW-mo.

If the fully allocated condition occurs for a month as the result of an Import Right award in the Capability Period Auction or a Monthly Auction, then the notification and Return Period described above, which is available only to FCFS Import Right awards and not Installed Capacity Auction awards, will be the schedule established by the ICAP Event Calendar for the next following FCFS Import Right R&A Period for that month in which the fully allocated condition exists.

If the fully allocated condition occurs for a month as the result of an Import Right award in the ICAP Spot Market Auction, there will not be a notification and Return Period. The outcome of the ICAP Spot Market Auction is posted in the AMS and the monthly ICAP Market Report is posted on the NYISO website. All ICAP Spot Market Auction awards of imports rights shall have an obligation to provide the MIS transaction ID number to the NYISO in the ICAP AMS on or before the deadline identified by the ICAP Event Calendar for providing such MIS transaction ID numbers. If an MIS transaction ID number is not entered in the ICAP AMS for the obligation month(s) the Installed Capacity Supplier shall be subject to sanctions and penalties provided under the Services Tariff.

4.9.2.5.3.3.2. Returns if an External Interface or the NYCA Interface is Not Fully Allocated

If the NYCA Interface or an individual External Interface(s) is not fully allocated for the month, either as a result of a FCFS Import Right award bilateral transactions or an Import Right award in the Capability Period Auction or Monthly Auction, then FCFS Import Right award bilateral transactions shall have no obligation to support the import of Unforced Capacity. If both the seller and buyer take the actions described in Section 4.9.2.5.3.3.3 of this *ICAP Manual* in the prescribed period, they can return in the ICAP AMS either a partial or full FCFS Import Right award bilateral transaction.

4.9.2.5.3.3.3. Certification of a FCFS Import Right Award Bilateral Transaction

A seller that has been awarded a FCFS Import Right and has been assigned a bilateral transaction in the ICAP AMS must certify its Unforced Capacity to the NYISO in the ICAP AMS no later than the deadline for providing MIS transaction ID numbers (as set forth in Section 4.9.3 of this *ICAP Manual*) and monthly certification as detailed below and as identified by the ICAP Event Calendar.

Certification of FCFS Import Right award bilateral transactions is completed in the AMS by the seller re-confirming the transaction during the obligation month's open certification period (*i.e.*, in the calendar month prior to the obligation month). The buyer that is the counterparty to the transaction does not have

an affirmative obligation but must not un-confirm the transaction for that same obligation month and during the same open certification period.

If the seller does not certify Unforced Capacity, including providing an MIS transaction number, associated with the FCFS Import Right award bilateral transaction to the NYISO in the ICAP AMS prior to the deadline for monthly certification, then the buyer will not be credited with the Unforced Capacity and Unforced Capacity shall automatically be purchased on its behalf in the Spot Market Auction for the affected month(s), and the External Resource PTID for such a bilateral transaction will not be allocated that amount of Unforced Capacity that is associated with the uncertified FCFS Import Right award bilateral transaction.

In the case where the FCFS Import Right award bilateral transaction occurred that fully allocated either an External Interface or the NYCA Interface, as shown in the ICAP AMS at the deadline for returns of awards, and remains uncertified at the close of the certification period, any uncertified FCFS Import Right award bilateral transactions at that External Interface or at the NYCA Interface are voided, and the buyer(s) will have the equivalent UCAP purchased on their behalf in the ICAP Spot Market Auction and the seller's Resource PTID(s) equivalent UCAP MW amount shall be offered into the Spot auction at $0.00/kW-mo.

4.9.2.5.4. External Installed Capacity Sales With Import Rights in Installed Capacity Auction

All purchasers of Unforced Capacity that is located in an External Control Area in an Installed Capacity Auction shall receive the External Installed Capacity Import Rights necessary for that Unforced Capacity to count towards the LSE Unforced Capacity Obligation; consequently, in order to ensure that there are sufficient External Installed Capacity Import Rights available, the NYISO shall limit the amount of Unforced Capacity from any neighboring External Control Area that can be sold in each auction. The restriction described in this Section 4.9.2.5.4 does not apply to External capacity associated with ETCNL, UDRs, External CRIS rights, or External-to-ROS Deliverability Rights.

In each Capability Period Auction, the NYISO shall limit the amount of Unforced Capacity from any neighboring External Control Area that can be sold to the MW amount of External Unforced Capacity that can be provided that satisfies the deliverability requirements in the NYISO's Tariffs and this *ICAP Manual*, less all External Installed Capacity Import Rights that have been previously allocated for that External Control Area under the provisions of Section 4.9.2 of this *ICAP Manual*.

In the Monthly Auctions, the NYISO shall limit the amount of Unforced Capacity from any neighboring External Control Area that can be sold to the MW amount of Import Rights that the NYISO makes available for the Capability Period from that neighboring Control Area and that satisfies the deliverability

requirements in the NYISO's Tariffs and this *ICAP Manual*, less the amount of Unforced Capacity purchased in that External Control Area for that month and any remaining months in the Capability Period in preceding Monthly Auctions and the Capability Period Auction, less all External Installed Capacity FCFS Import Rights awards that have been previously allocated to FCFS Import Right award bilateral transactions for that month and any remaining months in the Capability Period.

In the ICAP Spot Market Auction, the NYISO shall limit the amount of Unforced Capacity from any neighboring External Control Area that can be sold to the amount of Import Rights that the NYISO makes available for the Capability Period from that neighboring Control Area and that satisfies the deliverability test and this *ICAP Manual*, less the amount of Unforced Capacity purchased in that External Control Area for that month in the Capability Period Auction and the preceding Monthly Auctions, less all External Installed Capacity FCFS Import Rights awards that have been previously allocated to support FCFS Import Right award bilateral transactions for that month.

4.9.3. Additional External Installed Capacity Supplier Requirements

4.9.3.1. Certification

Entities that have received External Installed Capacity Import Rights, External CRIS Rights, or that are using UDRs or EDRs to meet NYCA Minimum Unforced Capacity Requirements (and in the case of a UDR, a Locational Minimum Unforced Capacity Requirement) must certify that Unforced Capacity sold to NYCA LSEs has not been sold elsewhere for each month that they intend to supply Unforced Capacity to the NYCA. These External Installed Capacity Suppliers and any Wheel-Through from an External Control Area to another neighboring Control Area must provide the MIS transaction number to the NYISO on or before the date and time specified in the ICAP Event Calendar.

These External Installed Capacity Suppliers and any capacity that is backed by a Wheels Through from an External Control Area to a neighboring Control Area must provide the MIS transaction numbers for those external transactions to the NYISO on or before the date and time specified in the ICAP Event Calendar.

See also Section 4.7 of this *ICAP Manual* for complete information in connection with monthly Installed Capacity Supplier certification requirements. The NYISO will verify this data with the appropriate External Control Area.

4.9.3.2. Deliverability to NYCA Border

Energy associated with Unforced Capacity supplied to the NYCA must be deliverable to the NYCA border or, when using UDRs to the NYCA interface with the UDR transmission facility, or when using EDRs to the NYCA interface over which it creates increased transfer capability; in all instances using the transmission service rules of the relevant External Control Area. For External Installed Capacity associated with Import Rights, External Installed Capacity Suppliers may secure External Installed Capacity Import Rights during the first-come, first-serve request and allocation process described above with a bilateral agreement, or sell External Unforced Capacity in an NYISO-administered Installed Capacity auction pursuant to the procedures identified in this *ICAP Manual.* For External Installed Capacity associated with UDRs and EDRs, the External Installed Capacity must have a sufficient amount of UDRs or EDRs either owned or under contract for the term of the transaction.

Deliverability of Energy to the NYCA border associated with External Installed Capacity is demonstrated as follows. For External Installed Capacity associated with Import Rights or External CRIS Rights, demonstrate the ability to deliver Energy to the NYCA border, or for External Installed Capacity associated with UDRs, demonstrate delivery of such Energy to the NYCA interface with the UDR transmission facility, and with EDRs, demonstrate delivery of such Energy to the NYCA interface over which it creates increased transfer capability, for the time the Energy may be scheduled in the DAM, included in the real-time market or pursuant to a Supplemental Resource Evaluation ("SRE"), as applicable. External Installed Capacity Suppliers are required to fulfill the requirements set forth in Section 5.12.1.10 of the NYISO *Services Tariff*, otherwise they may be subject to the penalty in Section 5.12.12.2 of the NYISO *Services Tariff*.

In addition, External Installed Capacity must fulfill the following requirements to demonstrate deliverability, as applicable based on the Control Area where the External Installed Capacity Supplier is electrically located. If the NYISO does not receive from the Installed Capacity Supplier documentation that conforms to all requirements or is unable to verify the documentation, then the Installed Capacity Supplier may incur penalties, including those under MST section 5.14.2.1. In order to be eligible to sell capacity for a particular month, External Installed Capacity Suppliers must provide proof of deliverability, in accordance with the following requirements based on the Control Area in which the External Installed Capacity Supplier is electrically located.

i) Installed Capacity Suppliers with capacity import obligations into NYCA from PJM for the month of May 2018 and beyond must provide verifiable documentation confirming firm transmission service for each day of the calendar month of the obligation, for the ICAP equivalent of the capacity import obligation, and containing the information specified in this Section. The

Installed Capacity Supplier must provide the firm transmission documentation dated and received by the NYISO on the date of and by the deadline shown in the ICAP Event Calendar (i.e., the date the ICAP Spot Market Auction results are posted on the NYISO's web site.) Documentation must be sent via email to and received at icap_info@nyiso.com, along with the name(s) of the External generator(s) and MIS transaction number(s) for awarded capacity import obligations by the specified deadline. If the NYISO does not receive from the Installed Capacity Supplier documentation that conforms to all requirements by the deadline or is unable to verify the documentation, then the Installed Capacity Supplier may incur penalties, including those under MST section 5.14.2.1. The firm transmission documentation must contain all of the following information:

(a) Installed Capacity Supplier Name
(b) PJM OASIS Transaction Assignment Reference number
(c) Start Date and Time of Firm Transmission Service
(d) Stop Date and Time of Firm Transmission Service
(e) Firm Transmission Service Source Location
(f) Firm Transmission Service Sink Location
(g) Firm Transmission Service Path Name
(h) MW of Firm Transmission Service Secured

ii) Installed Capacity Suppliers seeking to obtain a capacity import obligation into the NYCA from IESO must provide written and verifiable documentation of IESO's decision regarding the External Installed Capacity Supplier's Capacity Export Request for each Obligation Procurement Period before such External Installed Capacity Supplier may secure a capacity import obligation in the NYISO Installed Capacity market. The Installed Capacity Equivalent of such a capacity import obligation must be less than or equal to the IESO-approved MW amount of the Capacity Export Request for each Obligation Procurement Period. The External Installed Capacity Supplier must provide documentation sufficiently in advance of the applicable auction in order to afford the NYISO adequate time to review this information before the auction is run.

iii) Installed Capacity Suppliers seeking to obtain capacity import obligations into the NYCA from ISO-NE must provide verifiable documentation confirming either of the following:

(a) That the External Installed Capacity Supplier has obtained an approved Export De-List bid in the ISO-NE Forward Capacity Market for a MW amount greater than or equal to the Installed Capacity Equivalent of the capacity import obligation it may seek to obtain during the Obligation Procurement Period; or

(b) That the External Installed Capacity Supplier's Resource is electrically located in an ISO-NE Capacity Zone, excluding resources that are located in a Capacity Zone modeled in ISO-NE for the specific period as:

(i) an export-constrained Capacity Zone;

(ii) an import-constrained Capacity Zone that is separated from the NYCA capacity zone into which the External Installed Capacity Supplier is seeking to obtain a capacity import obligation by one or more import-constrained or export-constrained Capacity Zones; or

(iii) the Rest-of-Pool Capacity Zone, unless it is adjacent to the NYCA capacity zone into which the External Installed Capacity Supplier is seeking to obtain a capacity import obligation.

The External Installed Capacity Supplier must provide documentation confirming either of the above circumstances sufficiently in advance of the applicable auction in order to afford the NYISO adequate time to review this information before the auction is run. Further, the net of the MW amount of the Resource's Capacity Supply Obligation ("CSO") to ISO-NE subtracted from its Capacity Network Resource Capability ("CNRC") must be greater than or equal to the Installed Capacity Equivalent of the capacity import obligation it may seek to obtain in the Obligation Procurement Period.

4.9.4. Charges Associated with External Unforced Capacity Deficiencies

In accordance with the *NYISO Services Tariff*, if an entity fails to deliver part or all of the Energy associated with External Unforced Capacity it sold in the NYCA (see section 4.9.3) it will be deemed retroactively deficient for such failure. External Installed Capacity Suppliers unable to deliver such Energy to the NYCA border will be assessed the deficiency charge for Unforced Capacity associated with such failure and will be deemed to have been deficient from the last time the External Installed Capacity Supplier "demonstrated" delivery of its Installed Capacity Equivalent ("ICE"), or any part thereof, until it next delivers its ICE or the end of the term for which it certified Unforced Capacity, whichever occurs first, subject to the limitation that any prior lack of demonstrated delivery will not precede the beginning of the period for which the Unforced Capacity was certified.

To the extent an External Installed Capacity Supplier fails to fulfill the requirements for responding to a NYISO Supplemental Resource Evaluation ("SRE") set forth in Section 5.12.1.10 of the *NYISO Services Tariff*, the External Installed Capacity Supplier shall be subject to a deficiency charge calculated in accordance

with the formula set forth in Section 5.12.12.2 of the *NYISO Services Tariff*. External System Resources and Control Area System Resources are required to comply with Section 5.12.1.10 of the *NYISO Services Tariff*.

An External Installed Capacity Supplier will not be subject to the penalty in Section 5.12.12.2 of the *NYISO Services Tariff* if it does not deliver in response to an SRE for a reason that is outside the External Installed Capacity Supplier's control. Examples of reasons that may lie outside the control of the External Installed Capacity Supplier, and thus exempt the External Installed Capacity Supplier from the penalty, include, but are not limited to:

i) A Resource's start-up time is not sufficient to bring the Resource online for the entire time the Energy needs to be scheduled pursuant to the SRE notification.
   (1) However, if the External Resource associated with the transaction is able to operate to partially comply with the SRE request, then the External Installed Capacity Supplier is expected to respond and fulfill the requirements set forth in Section 5.12.1.10 of the *NYISO Services Tariff* consistent with its Resource's capabilities.

ii) An External Resource's operation may aggravate a transmission limitation in the External Control Area causing the import transaction to be curtailed for that reason.
   (1) Failure to secure the necessary transmission service in the neighboring Control Area, including failure to agree to pay congestion costs, will not be excused.

The NYISO will evaluate each case of non-delivery during an SRE request to determine whether the reason was beyond the control of the External Installed Capacity Supplier. The NYISO will also evaluate on a case-by-case basis whether an External Installed Capacity Supplier is eligible for cost recovery due to demonstrated losses incurred in responding to the Supplemental Resource Evaluation. Further detail on cost recovery is available in Section 4.1.8 of the *NYISO Services Tariff.*

4.9.5. Exports - External Sales of NYCA Installed Capacity

Qualified NYCA Installed Capacity Resources that have sold Unforced Capacity to serve LSE obligations in External Control Areas must provide MIS transaction numbers for these exports to the NYISO by the deadline shown in the ICAP Event Calendar (i.e., in the month prior to ICAP export). The NYISO will verify this data with the applicable External Control Area.

Additionally, in order for a Generator located in an Import Constrained Locality to be eligible to export capacity to an External Control Area, the Market Participant for the Generator must provide notice to be received by the NYISO by the deadline in the ICAP Event Calendar, via electronic mail to: ICAP_info@nyiso.com. This notice must contain the following information:

- Name of the Generator
- PTID of the Generator
- Month and year of the export
- The MW amount of ICAP to be exported
- Control Area receiving Export

Capacity from a Generator will not be eligible to be exported if the NYISO does not receive the notice on or before the deadline in the ICAP Event Calendar or if the notice does not contain all required information.

4.9.6. Maximum Allowances for Installed Capacity Provided by Resources Outside the NYCA (Excluding Resources Using UDRs and EDRs)

The maximum Installed Capacity Equivalent of capacity that may be allocated for a NYCA interface is set forth in Attachment B of this *ICAP Manual* and may be reduced in accordance with this *ICAP Manual* Section 4.9.2. These tables will be updated annually based on ISO reliability studies. See Attachment E for a list of Grandfathered contracts. With the exception of UDRs and EDRs, Import Rights will be permitted on a first-come, first-serve basis in accordance with this *ICAP Manual* Section 4.9.2.

The amount set forth in the tables immediately above for PJM includes 1080 MW of PJM Import Rights which are subject to reservation in accordance with *NYISO Services Tariff* Section 5.12.2 in amounts up to those listed in the *NYISO OATT* Attachment L, Section 18.3, Table 3 (Existing Transmission Capacity for Native Load ETCNL), and includes 1110 MW of External CRIS Rights at the Chateauguay Interface and 38 MW of Grandfathered capacity in the PJM Control Area (as set forth in Attachment E of this *ICAP Manual*).

Unforced Capacity Deliverability Rights (UDRs) awarded, not subject to the above limits or first-come, first-serve Import Rights, are:

Unforced Capacity Deliverability Rights	
Cross Sound Cable (CSC) – New England to Long Island, Zone K	330 MW
Neptune Cable – PJM to Long Island, Zone K	660 MW
Linden VFT – PJM to New York City, Zone J	315 MW

Hudson Transmission Project – PJM to New York City, Zone J	660 MW[1]

External-to-ROS Capacity Deliverability Rights (EDRs) awarded, not subject to the above limits or first-come, first-serve Import Rights, are:

External-to-ROS Deliverability Rights	
Cedars – HQ to Rest-of-state (ROS), Zone D	80 MW

The tables in this Section 4.9.6 do not alter any obligation set forth in this *ICAP Manual.*

4.10. Procedures for Holders of External Capacity Resource Interconnection Service (CRIS) Rights

Obligations of entities holding or seeking to obtain External CRIS Rights are set forth in Sections 25.7.11, 25.9.3, and 25.9.6 of the *NYISO OATT* Attachment S, and Section 5.12.2 of the *NYISO Services Tariff*. An External CRIS Right constitutes a commitment by the requesting entity to supply capacity through a certified bilateral contract and/or Auction capacity. Entities awarded External CRIS Rights are referred to as External CRIS Rights Holders in this *ICAP Manual*.

4.10.1. Specification of Contract and/or Non-Contract Commitment for External CRIS Rights Converted from Grandfathered Import Rights over the Quebec (via Chateauguay) Interface

Entities who have requested to convert Grandfathered Quebec (via Chateauguay) Interface Rights and been awarded External CRIS Rights in accordance with Section 25.7.11.1.4.1 of the *NYISO OATT* Attachment S must provide to the NYISO information specifying the amount of megawatts of Contract and Non-Contract Commitment associated with the awarded External CRIS Right. Specification of the amount of megawatts of Contract and Non-Contract Commitment must be received by the NYISO by the deadline set forth on the ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). Each request must contain the following information:

1. The identity of the External CRIS Right Holder making the request;

[1] CRIS Rights for the HTP scheduled line expired 4/30/2020

2. The megawatt amount of Contract Commitment, in accordance with Section 25.7.11.1.1 of *NYISO OATT* Attachment S;
3. The megawatt amount of Non-Contract Commitment, in accordance with Section 25.7.11.1.2 of *NYISO OATT* Attachment S;
4. For Contract Commitment or bilateral portion of a Non-Contract Commitment, submission of executed bilateral contract, proof that the External CRIS Rights Holder has ownership or contract control of External Resources to fulfill its bilateral supply contract throughout the Award Period.

The NYISO will respond to requests received for megawatt amounts of Contract and Non-Contract Commitment associated with conversion of Grandfathered Quebec (via Chateauguay) Interface Rights according to the schedule in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). The NYISO will notify the requesting party if its request has been accepted or rejected, with reasons for rejection, if such is the case. A rejection may be based on any of the following:

- Incomplete or inadequate information:
- Requests for megawatt amounts of Contract and Non-Contract Commitment inconsistent with Section 25.7.11.1.1 and/or 25.7.11.1.2;
- If the requesting entity identifies a Contract Commitment or bilateral agreement within a Non-Contract Agreement, late receipt of supporting documentation of bilateral agreements;
- Unqualified External Installed Capacity Resources.

4.10.2. New Awards of External CRIS Rights

Entities who have been awarded External CRIS Rights through a Class Year Deliverability Study in accordance with Section 25.7.11.1.4.2 of the *NYISO OATT* Attachment S must provide to the NYISO information specifying the amount of megawatts of Contract and Non-Contract Commitment associated with the awarded External CRIS Right. New External CRIS Rights will take effect at the start of a Capability Period. Requests for specifying the amount of megawatts of Contract and Non-Contract Commitment must be received by the NYISO according to the ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). Each request must contain the following information:

1. The identity of the External CRIS Right Holder making the request;

2. The megawatt amount of Contract Commitment, in accordance with Section 25.7.11.1.1 of *NYISO OATT* Attachment S;
3. The megawatt amount of Non-Contract Commitment, in accordance with Section 25.7.11.1.2 of *NYISO OATT* Attachment S;
4. For Contract Commitment or bilateral portion of a Non-Contract Commitment, submission of executed bilateral contract, proof that the External CRIS Rights Holder has ownership or contract control of External Resources to fulfill its bilateral supply contract throughout the Award Period.

The NYISO will respond to requests received for megawatt amounts of Contract and Non-Contract Commitment for new awards of External CRIS Rights according to the schedule in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). The NYISO will notify the requesting party if its request has been accepted or rejected, with reasons for rejection, if such is the case. A rejection may be based on any of the following:

- Incomplete or inadequate information:
- Requests for megawatt amounts of Contract and Non-Contract Commitment inconsistent with Section 25.7.11.1.1 and/or 25.7.11.1.2;
- If the requesting entity identifies a Contract Commitment or bilateral agreement within a Non-Contract Agreement, late receipt of supporting documentation of bilateral agreements;
- Unqualified External Installed Capacity Resources.

4.10.3. Renewal of External CRIS Rights

Requirements concerning the renewal of External CRIS Rights are specified in Section 25.9.3 of the *NYISO OATT* Attachment S. Renewals of existing External CRIS Rights will take effect at the start of a Capability Period. On renewal of an existing External CRIS Right, the Supply Failure count is set to zero. Requests for renewal of External CRIS Rights must be received by the NYISO according to the timing specified in Section 25.9.3.2 of the *NYISO OATT* Attachment S. Each request must contain the following information:

1. The identity of the External CRIS Right Holder making the request;
2. The External CRIS Right Number being renewed;
3. The megawatt amount of the External CRIS Right to be renewed;

4. E-mail address of the requesting party to which the NYISO can respond.
5. For Contract Commitment or bilateral portion of a Non-Contract Commitment, submission of executed bilateral contract, proof that the External CRIS Rights Holder has ownership or contract control of External Resources to fulfill its bilateral supply contract throughout the Award Period.

4.10.4. Transfer of External CRIS Rights

Requests for transfer of External CRIS Rights must be received by the NYISO no later than the deadline in the ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do), but in any event no later than the deadline identified in Section 25.9.6 of the *NYISO OATT* Attachment S. Each request must contain the following information:

1. The identity of the External CRIS Right Holder making the request (Transferor);
2. The identity of the NYISO Customer to whom the External CRIS Right is being transferred (Transferee);
3. The External CRIS Right Number from which the transfer is made;
4. Confirmation that the External CRIS Rights are located at the same Interface;
5. The megawatt amount of Contract and/or Non-Contract Commitment External CRIS Right to be transferred, consistent with the provisions of Section 25.7.11.1 of the *NYISO OATT* Attachment S governing the number of MW committed in the Summer and Winter Capability Periods);
6. The Auction Month in which the first offer of External CRIS will be submitted by Transferee;
7. E-mail address of the requesting party to which the NYISO can respond.

In addition, the NYISO must receive from the Transferee of the External CRIS Right information on the type(s) (Contract or Non-Contract Commitment) of External CRIS Right requested in accordance with Section 25.9.6 of the *NYISO OATT* Attachment S. If requesting all or some portion of the External CRIS Right as a Contract Commitment or bilateral agreement within a Non-Contract Commitment, the NYISO must receive from the Transferee an executed bilateral contract, and proof that the holder of External CRIS Rights has ownership or contract control of External Resources to fulfill its bilateral supply contract throughout the Award Period. All External CRIS Rights transfers shall take effect on the first month of the Capability Period subsequent to the date of approval by the NYISO.

Upon receipt of a request for transfer and supporting documentation from the Transferee, the NYISO will notify the requesting party within thirty (30) business days if its request has been accepted or rejected, with reasons for rejection, if such is the case. A rejection may be based on the criteria specified in the *NYISO OATT* Attachment S and for additional reasons such as, but not limited to, the following:

- Incomplete or inadequate information:
- Megawatt amount of transfer greater than existing External CRIS Right;
- If Transferee identifies a Contract Commitment or bilateral agreement within a Non-Contract Agreement, late receipt of supporting documentation of bilateral agreements; or
- Unqualified External Installed Capacity Resources.

When an External CRIS Right is transferred in full or in part to a Transferee, the Transferee does not have to elect the same megawatt amounts of Contract and Non-Contract as elected by the Transferor as part of the existing External CRIS Right. All other terms of the External CRIS Right transfer to the Transferee, including the effective end date.

When an External CRIS Right is transferred in full or in part, the Transferee starts with zero Supply Failures for that External CRIS Right. The Transferor will retain its Supply Failure count and if all or any portion of the External CRIS Right is transferred back to the Transferor at any point in time, the recipient's Supply Failure count will be the same number it was when the recipient transferred the External CRIS Rights.

An External CRIS Right Holder that has sold some or all of the MW associated with the External CRIS Right in future months cannot transfer an amount of External CRIS MW in excess of the unsold amount.

Offers by the Transferor for Auction months subsequent to the transfer date will not count towards satisfying the Transferee's must-offer requirement (as defined in Section 25.7.11.1.2 of the *NYISO OATT* Attachment S).

4.10.5. External CRIS Bilateral Contract Supporting Documentation

The NYISO must receive from holders of External CRIS Rights that have specified an amount of MW of Contract Commitment or Non-Contract Commitment via one or more bilateral agreements, supporting documents on or before the date prior to the Monthly Auction set forth on the ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do).

4.10.6. Non-Contract Commitment Must-offer Requirement

Installed Capacity Suppliers holding megawatt amounts of Non-Contract Commitment that are not associated with bilateral agreements are subject to a must-offer requirement as defined in Section 25.7.11.1.2 of the *NYISO OATT* Attachment S. If offers of megawatt amounts of Non-Contract Commitment are submitted in multiple auctions for the same auction month (including amounts offered in prior months for the then-current auction month), the ICAP equivalent of megawatts required to be offered in that month's ICAP Spot Market Auction will be calculated according to the following rule (with "Strip" meaning the Capability Period Auction):

MW ICAP Spot Market Auction offer requirement = MW External CRIS commitment –

{MW Strip offers + max[0, MW Monthly Auction offers - (MW Strip offers - MW Strip awards)]}

Where:

MW ICAP Spot Auction offer requirement = the amount of MWs required to be offered into the Spot Auction for a particular month;
MW External CRIS commitment = the amount of Non-Contract CRIS MW minus any Non-Contract CRIS MW used to supply bilateral agreements
MW Strip offers = the ICAP Equivalent of MW offered from this Non-Contract Commitment in the Strip Auction (same MW amount offered for each month)
MW Monthly Auction offers = the cumulative ICAP Equivalent of MW offered from this Non-Contract Commitment in Monthly Auctions
MW Strip awards = the ICAP Equivalent of MW sold from this Non-Contract Commitment in the Strip Auction (same MW amount awarded for each month)

As an example, assume a 300 MW Non-Contract Commitment CRIS Right not associated with bilateral agreements. If 100 MW is offered in the Capability Period Auction (of which 60 MW clears), 110 MW is offered in that month's Monthly Auction , the ICAP Spot Market Auction offer requirement would be 130 MW (300 MW commitment - {100 MW Strip offer + [110 MW Monthly Auction offer - (100 MW Strip offer - 60 MW Strip award)]}).

4.10.7. Non-Contract Commitment Offer Cap

Installed Capacity Suppliers holding megawatt amounts of Non-Contract Commitment that are not associated with bilateral agreements are subject to an offer cap in any auction in which part of that commitment is offered. Section 5.12.2.4 of the *NYISO Services Tariff* describes the offer cap.

Section 5.12.2.4.1 of the *NYISO Services Tariff* sets forth the formula for the ISO to compute the internal cap component of the offer cap. The inputs for the internal cap component will depend on the particular auction to which the cap is applied:

- For the Capability Period Auction, and the first Monthly Auction of a Capability Period, the internal cap component will be calculated as 1.1 times the projected clearing price based on the quantity of megawatts identified in data in the NYISO's then-current Load and Capacity Data Report (Gold Book);
- For all ICAP Spot Market Auctions, the internal cap component will be calculated as 1.1 times the projected clearing price for each ICAP Spot Market Auction determined based on the applicable ICAP Demand Curve and the total quantity of Unforced Capacity from all Installed Capacity Suppliers in the NYCA, determined at the certification deadline, for the month associated with the applicable ICAP Spot Market Auction.
- For all Monthly Auctions except the first in a Capability Period, the internal cap component will equal the internal cap component determined for the previous month's ICAP Spot Market Auction (e.g., the internal cap component for the July Monthly Auction would equal the internal cap component computed for the June Spot Market Auction).

The NYISO will post the data used to determine the internal cap component for the Capability Period Auction and the first Monthly Auction of a Capability Period according to the schedule in the ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do).

The internal cap component for all other ICAP auctions will be determined each month after the certification deadline.

Section 5.12.2.4.2 of the *NYISO Services Tariff* defines the External cap component of the offer cap. For External CRIS Rights sourced from PJM, the NYISO will use the most recent annual reconfiguration auction price for the PJM RTO Locational Deliverability Area (LDA) that contains the NYISO Capability Period, as posted on the PJM website at http://www.pjm.com/markets-and-operations/rpm.aspx (or if such web address is no longer applicable, such other location at which PJM makes the information available). For External CRIS Rights sourced from ISO-NE, the NYISO will use the most recent annual reconfiguration auction price for the Rest-of-Pool that contains the NYISO Capability Period, as posted on the ISO-NE website at http://www.iso-ne.com/isoexpress/web/reports/auctions/-/tree/forward-capacity-mkt (or if such web address is no longer applicable, such other location at which ISO-NE makes the information available). For External CRIS Rights sourced from a Control Area in Canada, the NYISO will use the higher of

the auction prices from PJM and ISO-NE as identified in accordance with this paragraph. In accordance with Section 5.12.2.4.2 of the *NYISO Services Tariff*, the NYISO will factor in transmission reservation costs associated with providing Installed Capacity. Firm transmission charges imposed in the External market that are required to supply energy are not included in the External cap component.

Installed Capacity Suppliers submitting offers in Monthly Auctions for future months (e.g., submitting offers for June through August in the June Monthly Auction) will be subject to the currently-effective offer cap, which shall be the higher of the internal offer cap and the external offer cap, calculated for the auction month in which the offers are submitted (e.g., the offer cap for the June Monthly Auction would apply in the June Monthly Auction to offers for July and August).

4.10.8. Failure to Meet External CRIS Rights Commitment

External CRIS Rights Holders are subject to offer requirements specified in Section 25.7.11 of the *NYISO OATT* Attachment S. Entities that fail to certify or fail to offer the full amount of Contract or Non-Contract CRIS MW incur a Supply Failure of the terms of the External CRIS Rights award. For each instance of a Supply Failure, Section 25.7.11 of the *NYISO OATT* Attachment S imposes a deficiency charge on the Rights Holder that incurred the Supply Failure.

4.10.9. Termination of External CRIS Rights

When the Supply Failure threshold identified in Section 25.7.11 of the *NYISO OATT* Attachment S is exceeded, that External CRIS Right (both Contract and Non-Contract MWs) will be terminated.

An External CRIS Rights Holder whose Right has been terminated due to exceeding the number of allowable Supply Failures and who has sold Capacity in future Capability Period or Monthly Auctions retains the obligation to supply that Capacity.

Termination of an External CRIS Right will trigger a recalculation of deliverability headroom and resulting monthly Import Right limits using the shift factors determined in the most recent Import Rights Deliverability Study and removing the amount of megawatts of the terminated External CRIS Right that remains unsold for the remainder of the Capability Period.

4.11. System Resources

A System Resource is defined as a portfolio of Unforced Capacity provided by Resources located in a single ISO-defined Locality, the remainder of the NYCA, or any single External Control Area, that is owned by or under the control of a single entity, which is not the operator of the Control Area where such Resources are located, and that is made available, in whole or in part, to the NYISO. System Resources may

be External or Internal to the NYCA. Please refer to Section 4.4.3 and Attachment J, Section 3.4, for information regarding Resources operated by the operator of the Control Area in which the Resources are located.

The System Resource must be in a Control Area that either (a) will not recall or curtail transactions from the Resource to satisfy its own Control Area Load, or (b) will afford the NYCA Load the same curtailment priority that it affords its own Control Area Load.

4.11.1. Permissible System Resources

For the purposes of aggregating System Resources, there are eight defined areas in which Installed Capacity Suppliers may reside. These are:

8. New York City
9. Long Island
10. G-J Locality
11. All other NYCA Load Zones

and the neighboring Control Areas operated by:

12. PJM
13. ISO-NE
14. Quebec
15. Ontario

A single entity may aggregate its Resources located in Load Zones G, H, and I into a portfolio for purposes of entering into System Resource Installed Capacity transactions for the G-J Locality. Within the other seven areas a single entity may aggregate its Generators into a portfolio for the purposes of entering into System Resource Installed Capacity transactions, so long as all the Generators included in the portfolio reside within the same area. Any entity that wishes to make System Resource sales must provide the required DMNC test data to the NYISO for each Generator in its portfolio, unless that entity can re-dispatch Resources under its control located within an External Control Area to maintain a pre-determined interchange schedule between that Control Area and the NYCA. The Unforced Capacity associated with an External Grandfathered Right may not be aggregated with other Resources as a System Resource.

For example, an owner may operate Generators in PJM and the Long Island Zone. The Generators in PJM may be aggregated or the Generators in the Long Island Zone may be aggregated. Generators in PJM and the Long Island Zone may not be combined with each other.

4.11.2. External System Resources

The NYISO requires the following information for each Resource aggregated as an External System Resource. The entity aggregating the Resources is responsible for the NYISO's receipt of the information.

- Name and location of Generators included in the portfolio.
- Documentation that satisfies the General Requirements for DMNC determination specified in Section 4.2 of this *ICAP Manual*.
- Documentation that satisfies the Maintenance Scheduling Requirements specified in Section 4.3 of this *ICAP Manual*.
- Documentation that satisfies the Operating Data information submission requirements specified in Section 4.4 of this *ICAP Manual*.
- Expected return date from full or partial outages.
- Certification that Unforced Capacity supplied to the NYCA has not been supplied elsewhere.

4.11.3. Control Area System Resources

Control Area System Resources or the purchasers of Unforced Capacity from those Resources shall not be required to conduct DMNC tests and submit DMNC test results to the NYISO. Instead, the NYISO shall calculate a net projected capacity (the "Net Projected Capacity") for each Control Area System Resource based on (1) monthly forecast data submitted by the Control Area System Resource pursuant to this Section (the "Forecast Data"), and (2) the formula set forth below. To calculate the amount of UCAP each Control Area System Resource may supply to the NYCA, the NYISO shall use the formulae provided in Attachment J of this *ICAP Manual*, which adjusts the Net Projected Capacity on the basis of CARL Data submitted monthly by the Control Area System Resource pursuant to Section 4.4.3 of this *ICAP Manual*.

To qualify as ICAP Suppliers, Control Area System Resources or the purchasers of Unforced Capacity from those Resources shall provide Forecast Data in a form acceptable to the NYISO on or before the date and time specified and in compliance with the requirements set forth in Section 4.2 of this *ICAP Manual*, which are otherwise applicable to the NYISO's receipt of DMNC test results by Generators.

Forecast Data shall cover the period for which Control Area System Resources or purchasers of Unforced Capacity from those Resources want to supply Unforced Capacity to the NYCA. For example, Control Area System Resources that wish to participate in the 2001-2002 Winter Capability Period Auction shall provide to the NYISO Forecast Data for each of the six (6) months of the 2001-2002 Winter Capability Period on or before the specified date and time. Forecast Data for a Control Area System Resource providing Installed Capacity from Control Area c shall include the following information for each month m

for which that Control Area System Resource (or purchaser of Capacity from such resource) wishes to provide Installed Capacity:

1. Total forecasted maximum generating Capacity in the Control Area c during month m (without any adjustments for External firm Capacity purchases, or sales, outages and maintenance) (CAPcm);
2. External forecasted firm Capacity purchases by Control Area c, other than purchases from Resources in the NYCA during month m (EPcm);
3. The forecasted amount of load management (i.e., interruptible load) in Control Area c during month m (LMcm);
4. Forecasted peak Load for Control Area c during month m, including system losses (PLcm);
5. Forecasted external firm Capacity sales by Control Area c during month m, other than firm Capacity sales to the NYCA (EScm);
6. Forecasted losses, up to the border of the NYCA that would be incurred on transactions corresponding to sales of Unforced Capacity by that Control Area System Resource outside the Control Area (LScm);
7. The amount of generating capacity that is forecasted to be unavailable in Control Area c due to planned maintenance during month m (PMcm); and
8. Planning reserve requirements during month m for the Control Area c corresponding to reserve requirements necessary for this Control Area c to meet NERC Resource Adequacy and applicable reliability council criteria, taking into account all sales of Capacity from this Control Area c (PRcm).

In cases in which any of the above data items is forecasted to vary from hour to hour within a month, the forecasted monthly value submitted for that data item should be the forecasted value of that data item during the peak load hour for that month for Control Area c.

To calculate the Net Projected Capacity of each Control Area System Resource for a specific month, the NYISO shall use the following formula: NPCcm = CAPcm + EPcm + LMcm – PLcm – EScm – LScm – PMcm – PRcm.

Net Projected Capacity shall be used to determine the amount of Unforced Capacity a Control Area System Resource can provide using the equations in Section 3.4 of Attachment J to this *ICAP Manual*.

4.12. Special Case Resources (Sections 5.12.11, 5.12.12, and 5.14.2 NYISO Services Tariff)

SCRs are Demand Side Resources whose Load is capable of being interrupted at the direction of the NYISO, and/or Demand Side Resources that have a Local Generator, which is not visible to the NYISO's Market Information System and is rated 100 kW or higher, that can be operated to reduce Load from the NYS Transmission System and/or the distribution system at the direction of the NYISO. Small customer aggregations may also qualify as SCRs. The Unforced Capacity of a SCR corresponds to its pledged amount of Load reduction as adjusted by historical performance factors (i.e., test and event performance) and as increased by the Transmission District loss factor, as calculated in accordance with Section 4.12.2.1 to this *ICAP Manual*.

A Demand Side Resource may not curtail Critical Electric System Infrastructure Load (as that term is defined in Section 2.3 of the Market Services Tariff) in response to a NYISO-initiated demand response event or test. Demand Side Resources participating in an ISO-administered Demand Response program, including the SCR program, however, may operate a Local Generator to shift the Demand Side Resource's Load off the Grid. Examples of Critical Electric System Infrastructure Load are located at the following link: https://www.nyiso.com/documents/20142/1398619/NYISO-Critical-Electric-System-Infrastructure-Load-Examples-Posting.pdf/7cf5acc9-4be8-1ea1-5426-46cd759fa65b

See Market Administration and Control Area Services Tariff Sections 2.3 and 2.4 for further information.

4.12.1. Claiming of Unforced Capacity and RIPs

The Unforced Capacity of a SCR except a New SCR in a Mitigated Capacity Zone (see Section 4.12.2 below) may be freely sold in Bilateral Transactions. However, such Unforced Capacity may not be claimed by an LSE towards satisfaction of its own LSE Unforced Capacity Obligation or be offered into an auction administered by the NYISO unless the SCR has enrolled with a RIP and been accepted by the NYISO. RIPs are Market Participants that are bound by the NYISO's tariffs and ISO Procedures, including the notification and other requirements applicable to RIPs under this Section 4.12. RIPs shall be responsible for all forms of communication to and from the NYISO for purposes of Minimum Payment Nomination, notification, dispatch, validation, billing and verification of SCRs and the Unforced Capacity associated with SCRs.

4.12.2. General Requirements

RIPs must comply with the rules applicable to SCRs set forth in the *NYISO Services Tariff* and ISO Procedures, including the obligation to meet the qualifications and comply with the procedures described below.

A RIP must enroll a SCR with the NYISO in accordance with the schedule specified in the ICAP Event Calendar and DRIS Event Calendar, which can be found at the following location on the NYISO Website:

http://icap.nyiso.com/ucap/public/evt_calendar_display.do

In order to enroll SCRs, a RIP must use the Demand Response Information System (DRIS) to import the specified enrollment file.

Prior to enrolling any SCRs, a RIP must register with the NYISO as an ICAP Supplier. The RIP must request enrollment for each SCR in DRIS, obtain a resource identification number for each SCR it enrolls, and subsequently the NYISO must approve the request, before a SCR's enrollment becomes effective and the Unforced Capacity from the SCR can be claimed by an LSE towards its LSE Unforced Capacity Obligation or offered in an auction administered by the NYISO.

Upon the initial enrollment of a SCR, or at any time when an enrollment change is made, the RIP must include as part of the enrollment file uploaded to the DRIS the SCR Aggregation ID to which the SCR is assigned. A RIP may request, in the DRIS, new SCR Aggregation IDs in a specific Load Zone, during the New Aggregation ID Request Period in the ICAP Event Calendar and DRIS Event Calendar. Any request for a new SCR Aggregation ID must be approved by the NYISO.

Interval meters are required of all SCRs, unless the SCRs are part of a small customer aggregation. Such metering must satisfy all requirements of the Metering, Verification, Billing and Settlement Section of the *NYISO Emergency Demand Response Program Manual*, available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides Single metering of multiple end-use customers on primary, secondary, or tie-line feeders is prohibited.

The Unforced Capacity of SCRs may only be offered in auctions administered by the NYISO or be claimed by an LSE towards its LSE Unforced Capacity Obligation in whole increments of 100 kW in a Load Zone (e.g., 590 kW of Unforced Capacity would be truncated to 500 kW). However, SCRs may be aggregated into an SCR Aggregation to satisfy this requirement, provided that each such SCR Aggregation is identified as a single block of Unforced Capacity. SCR Aggregations of this type may be used to meet the 100 kW block requirement.

Enrolling SCRs with multiple account numbers located at a single service address

The method of enrollment for SCRs with multiple Transmission Owner or electric service provider account numbers located at a single end-use location (service address) is dependent on the metering configuration and account information of each Demand Side Resource.

Where a single end-use location (service address) has more than one Demand Side Resource with both (i) a unique Transmission Owner or electric service provider account number and (ii) an interval meter, each such Demand Side Resource must be enrolled as a separate SCR.

A single Transmission Owner or electric service provider account number may not be separated into multiple SCRs.

More than one Demand Side Resource located at a single end-use location (service address) may enroll as a single SCR only when:(i) the end-use location is associated with a single legal entity, (ii) each individual Demand Side Resource has a unique Transmission Owner or electric service provider account number, (iii) the individual Demand Side Resources do not have individual interval meters, and (iv) the end-use location does have an interval meter that aggregates all of the associated individual Demand Side Resource Transmission Owner or electric service provider account numbers located at the service address.

Examples:

- A single multi-unit building with multiple account numbers:

  Multiple Demand Side Resources (units) that wish to be a SCR must aggregate to form a single SCR where (i) the Demand Side Resources (units) are associated with a single legal entity, and (ii) the Demand Side Resources (units) do not have individual interval meters but the building does have an interval meter that aggregates all the associated individual Transmission Owner or electric service provider account numbers at the service address.

  Multiple Demand Side Resources (units) that wish to be a SCR may not aggregate to form a single SCR where (i) the Demand Side Resources (units) are associated with a single legal entity, and (ii) the Demand Side Resources (units) each have individual interval meters.

  Multiple Demand Side Resources (units) that wish to be a SCR may not enroll as a single SCR where (i) each Demand Side Resource (unit) at the single end-use location is separately owned, regardless of the end-use location's type of metering because, although there is one end-use location, each unique account number is associated with a separate legal entity.

- A commercial retail chain with multiple end-use locations and account numbers:

  Each individual end-use location that wishes to be a SCR must be enrolled separately as a single SCR using its unique Transmission Owner or electric service provider account number because, despite common ownership, the stores are not at a single end-use location.

  (*The examples above are provided only to demonstrate potential application of enrollment requirements. The examples do not limit application of the requirements discussed above.*)

All unique Transmission Owner or electric service provider account numbers aggregated into a single SCR must be provided to the NYISO using the "Enrolling Multiple Account Numbers" form located on the NYISO website at:

https://www.nyiso.com/demand-response RIPs are required to submit the form each time the enrollment of such SCRs is requested in DRIS. The NYISO must receive the completed form via electronic mail (at SCR_Registration@nyiso.com) by the SCR enrollment deadline as specified in the ICAP and DRIS Event Calendar.

Assignment of Performance Factors

The NYISO will assign performance factors as follows:

For a RIP enrolled in the SCR program in the Prior Equivalent Capability Period, the RIP performance factor for the current Capability Period shall be computed by the NYISO in accordance with Section 4.12.2.1.3 of this *ICAP Manual.*

For a RIP that did not participate in the SCR program in the Prior Equivalent Capability Period the RIP shall be assigned the SCR program performance factor for the current Capability Period as computed by the NYISO in accordance with Section 4.12.2.1.4 of this *ICAP Manual*.

For an individual SCR that was not enrolled in the SCR program in either the Prior Equivalent Capability Period or the Capability Period preceding the Prior Equivalent Capability Period, the SCR shall be assigned the performance factor of the RIP that enrolls the SCR in the current Capability Period.

The NYISO shall compute a separate SCR Aggregation performance factor, in accordance with Section 4.12.2.1.5 of this *ICAP Manual,* that recognizes over-performance by one SCR to compensate for under-performance by another SCR in the same SCR Aggregation in the same hour. The minimum hourly performance of an individual SCR shall be zero (0). SCRs may be transferred from one SCR Aggregation to another SCR Aggregation within a RIP's portfolio during the Aggregation Management period as specified in the ICAP Event Calendar and DRIS Event Calendar. Following the Aggregation Management period, the NYISO shall recalculate the SCR Aggregation performance factor for each SCR Aggregation.

Small Customer Aggregations

The NYISO will also allow participation by aggregations of small customers using alternative metering and performance measurement subject to the procedures and limitations set forth in the *NYISO Emergency Demand Response Program Manual* (available from the NYISO Web site at the following URL: https://www.nyiso.com/manuals-tech-bulletins-user-guides, except that the total of all such aggregations

for SCRs shall not exceed 100 MW. Each small customer aggregation will be reviewed by the NYISO staff and the Installed Capacity Working Group, and must be approved by at least four of the Chairs and Vice-Chairs of the Management Committee and the Business Issues Committee and the Chairs of the Installed Capacity Working Group and Price Responsive Load Working Group. The RIP shall report the performance of each small customer aggregation (each aggregation separate from any other aggregation and separate from resources not in the aggregation) directly into the DRIS, using an import file formatted as specified in the *NYISO DRIS User's Guide*. The RIP shall provide additional documentation to verify performance as requested by the NYISO.

SCRs with Local Generators

SCRs that participate with a Local Generator must enroll as either response type B or response type G resources, as defined in the *NYISO DRIS User's Guide*, as required by the metering configuration of the SCR and the Local Generator. By enrolling a SCR that participates with a Local Generator, the RIP is certifying to the NYISO, on behalf of itself and the SCR, that the SCR has obtained all necessary regulatory approvals for the Local Generator to operate for the purposes of reducing the Load being supplied from the NYS Transmission System and/or distribution system during all NYISO initiated performance tests and events.

SCRs that use Local Generators that are operating to fully serve their Load do not qualify for participation in the SCR program. A Local Generator that is normally operating to partially serve its Load may participate in the program with any additional generation that is available to operate at the direction of the NYISO in order to reduce the remaining Load being supplied from the NYS Transmission System and/or distribution system. In no instance shall a Local Generator participate in the SCR program at a level that exceeds the SCR's applicable ACL baseline that was used for enrollment in the program.

A SCR that supplies Load reductions solely through the use of a Local Generator and that elects to measure such Load reductions by metering the output of such Local Generator in accordance with Section 4.12.2.1 of this *ICAP Manual* shall report to the NYISO performance test and event data, as specified in Section 4.12.4.8 of this ICAP Manual. A SCR that supplies Load reductions solely through the use of a Local Generator and that elects to measure such Load reductions by metering the output of such Local Generator in accordance with Section 4.12.2.1 of this *ICAP Manual* must only report the amount of generation that reduces Load from the NYS Transmission System and/or distribution system during an event or test as the performance of the SCR.

SCR Response Type for enrollment in DRIS

A RIP must identify a "Response Type" for each SCR it enrolls in DRIS based upon: (i) how the SCR will reduce its Load during a NYISO initiated performance test or event; and (ii) the meter configuration of the SCR's facility. Each SCR must be enrolled as: Response Type C (Curtailment), Response Type G (Generation), or Response Type B (Both).

A SCR must enroll as Response Type C when it reduces the Load supplied by the NYS Transmission System and/or distribution system during a NYISO initiated performance test or event only by curtailing the facility's Load, and submits the entire facility's net meter data as evidence of Load reduction (as specified in Section 5.1.2 of the NYISO's Emergency Demand Response Program ("EDRP") Manual).

A SCR must enroll as Response Type G when it reduces the Load supplied by the NYS Transmission System and/or distribution system during a NYISO initiated performance test or event only by using a Local Generator, and submits the Local Generator's meter data (not entire facility's net meter data) as evidence of Load reduction (as specified in Section 5.1.2 of the NYISO's EDRP Manual).

A SCR must enroll as Response Type B when:

(i) it uses both a Local Generator and curtailment of the facility's Load to reduce the Load supplied by the NYS Transmission System and/or distribution system during a NYISO initiated performance test or event, and submits

(a) the entire facility's net meter data, or

(b) the net of entire facility's Load meter data and Local Generator's meter data as evidence of Load reduction;

or

(ii) it uses only a Local Generator to reduce the Load supplied by the NYS Transmission System and/or distribution system during a NYISO initiated performance test or event, and submits

(a) the entire facility's net meter data, or

(b) the net of entire facility's Load meter data and Local Generator's meter data as evidence of Load reduction.

A SCR enrolled as Response Type G may not change its enrollment to either Response Type B or Response Type C within a single Capability Period. A SCR enrolled with either a Response Type B or a Response Type C may not change its enrollment to Response Type G within a single Capability Period.

4.12.2.1. Determination of ICAP, Performance Factors, UCAP, and Installed Capacity Equivalent of UCAP Sold

A RIP provides the load reduction capability associated with its SCRs as part of a SCR Aggregation. This section describes the procedures used for (1) translating the load reduction capability of a SCR to the ICAP value for the SCR, (2) calculating performance factors for a SCR, SCR Aggregation, RIP, and for the SCR program, (3) determining the UCAP value of the SCR Aggregation to which a SCR is assigned, and (4) determining the Installed Capacity Equivalent of UCAP sold of the SCR.

4.12.2.1.1. SCR ICAP

The ICAP of an individual SCR shall be computed as the applicable enrollment ACL minus the committed maximum demand multiplied by one plus the applicable transmission loss factor. The applicable transmission loss factor is determined, by the NYISO, according to the voltage service level of the SCR reported by the RIP on the SCR enrollment file imported into the DRIS for the Capability Period. The ICAP of an individual SCR is not dependent on the response type enrolled.

The precise formulation is as follows:

$$ICAP_{gm} = \left(ACL_{gm} - CMD_{gm}\right) * (1 + TLF_{gv})$$

Where:

$ICAP_{gm}$ = the Installed Capacity that Resource *g* is qualified to provide in month *m*;

ACL_{gm} = the applicable enrollment ACL, for Resource *g* applicable to month *m*, using data reported in the enrollment file uploaded to DRIS;

CMD_{gm} = the committed maximum demand for Resource *g* applicable to month *m*, using data reported in the enrollment file uploaded to DRIS;

TLF_{gv} = the applicable transmission loss factor for Resource g, expressed in decimal form (i.e., a loss factor of 8% is equal to .08) at voltage level v. The applicable transmission loss factor shall be the loss factor reflected in the relevant TO's then current retail electric rates approved by the PSC and stored in the DRIS for deliveries of Energy at voltage level v by the relevant TO the Resource g.

4.12.2.1.2. SCR Performance Factors

The SCR performance factor for the current Capability Period shall be computed as the performance of the SCR in mandatory events and required tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*, in which the SCR was required to reduce load from the Prior Equivalent Capability Period and the Capability Period immediately preceding the Prior Equivalent Capability Period. This individual SCR performance

factor shall be the result of the average of the SCR's adjusted hourly performance factors for each of the SCR's best four consecutive hours in all of its mandatory events and required one-hour tests , in accordance with Section 4.12.4.5 of this *ICAP Manual*. Each adjusted hourly performance factor is the lesser of the raw performance factor or one.

If the SCR was not enrolled in any Capability Period required to calculate the performance factor for the current Capability Period, the SCR shall be assigned the performance factor of the RIP.

Performance Factor for a SCR with Load Curtailment

When the SCR is enrolled with a response type of B or C, as defined in the *NYISO DRIS User's Guide*, the raw hourly performance factor is computed as the hourly capacity reduction of the SCR divided by the applicable ACL of the SCR less the committed maximum demand of the SCR. The minimum hourly raw performance factor of a SCR shall be zero. The hourly capacity reduction is equal to the applicable ACL of the SCR minus the metered Load for the event or test hour. The minimum hourly capacity reduction for an individual SCR shall be zero.

The precise formulation is as follows:

$$SCR\ PF_{BCg} = \frac{\sum_{h \in NLRH_{gbe}} \min\left(\frac{\max(ACL_{gh} - ML_{gh}, 0)}{ACL_{gh} - CMD_{gh}}, 1\right)}{NLRH_{gbe}}$$

Where:

SCR PF_{BCg}= the performance factor of the Resource *g* with a response type B or C for the current Capability Period;

ACL_{gh} = the enrollment Net ACL or the Verified ACL, for Resource *g* applicable to hour *h* from the applicable Capability Period, using data reported in the DRIS;

ML_{gh} = the metered Load for Resource *g* for hour *h* from the applicable Capability Period, using data reported in the performance data file uploaded to DRIS;

CMD_{gh} = the committed maximum demand for Resource *g* applicable to hour *h* from the applicable Capability Period, using data reported by the RIP in the enrollment file uploaded to DRIS;

$NLRH_{gbe}$ = the number of hours from the applicable Capability Period, up to four per mandatory event plus any hour in which Resource *g* was required to demonstrate load reduction as part of one or more performance tests called by the NYISO where, in accordance with Section 4.12.4.5 of this ICAP Manual, the SCR may elect to demonstrate its maximum enrolled megawatt value by relying on its load reduction in a mandatory event hour in lieu of participation in the first performance test;

b = the Capability Period immediately preceding the Prior Equivalent Capability Period in which Resource *g* was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this ICAP Manual, or the time at which Resource *g* began to serve as a SCR available to reduce load;

e = the most recent Prior Equivalent Capability Period in which Resource *g* was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this ICAP Manual.

Performance Factor for a SCR enrolled with output from a Local Generator

When the SCR is enrolled with a response type of G, as defined in the *NYISO DRIS User's Guide*, the raw hourly performance factor is computed as the hourly capacity reduction of the SCR for the event or test hour divided by the applicable ACL of the SCR less the committed maximum demand of the SCR. The minimum hourly raw performance factor of a SCR shall be zero. The hourly capacity reduction is equal to the metered generator output for the event or test hour. The minimum hourly capacity reduction for an individual SCR shall be zero.

The precise formulation is as follows:

$$SCR\ PF_{Gg} = \frac{\sum_{h \in NLRH_{gbe}} \min\left(\frac{\max(ML_{gh}, 0)}{ACL_{gh} - CMD_{gh}}, 1\right)}{NLRH_{gbe}}$$

Where:

$SCR\ PF_{Gg}$ = the performance factor of the Resource *g* with a response type G for the current Capability Period;

ACL_{gh} = the enrollment Net ACL or the Verified ACL, for Resource *g* applicable to hour *h* from the applicable Capability Period; using data reported in the DRIS;

ML_{gh} = the metered output of the Local Generator, less any output from the generator used to support the load of the SCR in accordance with Section 4.12.2 of this *ICAP Manual* subheading "SCRs with Local Generators", for Resource *g* for hour *h* from the applicable Capability Period, using data reported in the performance data file uploaded to DRIS;

CMD_{gh} = the committed maximum demand for Resource *g* applicable to hour *h* from the applicable Capability Period, using data reported by the RIP in the enrollment file uploaded to DRIS;

$NLRH_{gbe}$ = the number of hours in which Resource *g* was required to reduce load during the applicable Capability Period, up to four per mandatory event plus any hour in which Resource *g* was required to demonstrate load reduction as part of one or more performance tests called by the NYISO, where, in accordance with Section 4.12.4.5 of this ICAP Manual, the SCR may elect to demonstrate its maximum enrolled megawatt value by relying on its load reduction in a mandatory event hour in lieu of participation in the first performance test;

b = the Capability Period immediately preceding the Prior Equivalent Capability Period in which Resource *g* was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this ICAP Manual;

e = the Prior Equivalent Capability Period in which Resource *g* was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this ICAP Manual.

4.12.2.1.3. RIP Performance Factor

The RIP performance factor for the current Capability Period shall be computed as the sum of the proportional declared value of all SCRs that were enrolled by the RIP in the Prior Equivalent Capability Period divided by the sum of the maximum declared value of all SCRs that were enrolled by the RIP in the Prior Equivalent Capability Period. The proportional declared value of an individual SCR is computed as the maximum declared value of the SCR from the Prior Equivalent Capability Period multiplied by the raw performance factor, calculated in accordance with Section 4.12.2.1.2 of this *ICAP Manual*, of the SCR for the current Capability Period. The maximum declared value of an individual SCR shall be set to the greatest declared value from the SCR enrollment in the Prior Equivalent Capability Period.

When more than one RIP has enrolled a SCR in the Prior Equivalent Capability Period, the SCR's performance will be included in the RIP performance factor of the RIP that last enrolled the SCR in the Prior Equivalent Capability Period.

The precise formulation is as follows:

$$RIP\ PF_r = \frac{ProportionalDV_{RIPSCR_g}}{MaxDV_{RIPSCR_g}}$$

Where:

RIP PF_r= the performance factor of the RIP *r* for the current Capability Period;

$ProportionalDV_{RIPSCRg}$= the sum of the maximum declared value of each Resource *g* enrolled by the RIP in the Prior Equivalent Capability Period multiplied by the corresponding raw performance factor that is not capped at 1.0 of the Resource *g* for the current Capability Period;

$MaxDV_{RIPSCRg}$ = the sum of the greatest declared value of each Resource *g* from its enrollment by the RIP in the Prior Equivalent Capability Period;

4.12.2.1.4. SCR Program Performance Factor

The SCR program performance factor for the current Capability Period shall be computed as the sum of the proportional declared value of all SCRs that were enrolled in the Prior Equivalent Capability Period divided by the sum of the maximum declared value of all SCRs that were enrolled in the Prior Equivalent Capability Period. The proportional declared value of an individual SCR is computed as the maximum declared value of the SCR from the Prior Equivalent Capability Period multiplied by the raw performance factor, calculated in accordance with Section 4.12.2.1.2 of this ICAP Manual, of the SCR for the current Capability Period. The maximum declared value of an individual SCR shall be set to the greatest declared value from the SCR enrollment in the Prior Equivalent Capability Period.

The precise formulation is as follows:

$$ICAP/_{SCR\ PROG\ PF} = \frac{ProportionalDV_{ALLSCR_g}}{MaxDV_{ALLSCR_g}}$$

Where:

ICAP/SCR PROG PF = the performance factor of the SCR program for the current Capability Period;

$ProportionalDV_{ALLSCRg}$ = the sum of the proportional declared values for each Resource *g* enrolled in the SCR program in the Prior Equivalent Capability Period;

$MaxDV_{ALLSCRg}$ = the sum of the maximum declared value for each Resource *g* enrolled in the SCR program in the Prior Equivalent Capability Period;

4.12.2.1.5. SCR Aggregation Performance Factor

The SCR Aggregation performance factor is calculated each month, after the close of Aggregation Management as specified in the ICAP Event Calendar and DRIS Event Calendar. The SCR Aggregation performance factor for the current Capability Period and auction month shall be determined using enrollment and hourly event and required test response data, in accordance with Section 4.12.4.5 of this *ICAP Manual*, from all SCRs assigned to the SCR Aggregation from the Prior Equivalent Capability Period and the Capability Period immediately preceding the Prior Equivalent Capability Period.

To compute the hourly raw performance of the SCR Aggregation for each hour that the SCRs assigned to the SCR Aggregation were required to reduce load in a mandatory event and required one-hour tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*, from the Prior Equivalent Capability Period and the Capability Period immediately preceding the Prior Equivalent Capability Period, the hourly raw performance of the SCR Aggregation shall be the sum of the capacity reduction value from all SCRs assigned to the SCR Aggregation for the month divided by the difference between the sum of the ACLs and the sum of the CMDs from all of the SCRs assigned to the SCR Aggregation for the month.

The adjusted SCR Aggregation performance factor for each hour is the lesser of the hourly raw performance factor or one. The SCR Aggregation performance factor for the month shall be the result of the sum of the hourly adjusted performance factors during the best four consecutive hours in each mandatory event and one-hour tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*, from the Prior Equivalent Capability Period and the Capability Period immediately preceding the Prior Equivalent Capability Period divided by the total number of hours in which the SCR Aggregation was required to reduce load for the mandatory events, up to a maximum of four consecutive hours per mandatory event, and required one-hour tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*, from the Prior Equivalent Capability Period and the Capability Period immediately preceding the Prior Equivalent Capability Period.

If a SCR assigned to the SCR Aggregation for the current Capability Period was not enrolled in any Capability Period required to calculate the performance factor for the current Capability Period and auction month, the SCR will not be included in the calculation of the SCR Aggregation performance factor.

The precise formulation is as follows:

$$SCR\ Aggregation\ PF_{am} = \frac{\sum_{h \in NLRHabe} \min\left(\frac{\sum_{g \in ah}\left(max(ACL_{BCgh} - ML_{BCgh}, 0) + max\left(ML_{Ggh}, 0\right)\right)}{\sum_{g \in ah}(ACL_{gh} - CMD_{gh})}, 1\right)}{NLRH_{abe}}$$

Where:

SCR Aggregation PF_{am} = the performance factor of the SCR Aggregation *a*, as determined for month *m*;

ACL_{BCgh} = the enrollment Net ACL or the Verified ACL, for the SCR *g* with response type B or response type C assigned to the SCR Aggregation *a*, using data reported in the DRIS l;

ML_{BCgh}= the metered Load for SCR *g* with response type B or response type C assigned to the SCR Aggregation *a* for hour *h*, using data reported in the performance data file uploaded to DRIS;

ML_{Ggh} = the metered output of the Local Generator, less any output from the generator used to support the load of the SCR in accordance with Section 4.12.2 of this *ICAP Manual* subheading "SCRs with Local Generators", for Resource *g* for hour *h* from the applicable Capability Period, using data reported in the performance data file uploaded to DRIS;

ACL_{gh} = the enrollment Net ACL or the Verified ACL, for the SCR *g* assigned to the SCR Aggregation *a*, using data reported in the DRIS;
CMD_{gh} = the committed maximum demand for Resource *g* applicable to hour *h* from the applicable Capability Period, using data reported by the RIP in the enrollment file uploaded to DRIS;

$NLRH_{abe}$ = the number of hours in which Resource *g* was required to reduce load during the applicable Capability Period, up to four per mandatory event plus any hour in which Resource *g* was required to demonstrate load reduction as part of one or more performance tests called by the NYISO, where, in accordance with Section 4.12.4.5 of this ICAP Manual, the SCR may elect to demonstrate its maximum enrolled megawatt value by relying on its load reduction in a mandatory event hour in lieu of participation in the first performance test;

b = the Capability Period immediately preceding the Prior Equivalent Capability Period in which the SCR was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*;

e = the most recent Prior Equivalent Capability Period in which the SCR was enrolled and was obligated to respond to mandatory events and required tests, in accordance with Section 4.12.4.5 of this *ICAP Manual*;

4.12.2.1.6. SCR Contribution to SCR Aggregation UCAP

For SCRs that have a SCR performance factor:

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the UCAP contribution of the SCR to the SCR Aggregation UCAP shall be computed as the calculated ICAP for the SCR multiplied by the SCR Aggregation performance factor and the Duration Adjustment Factor for SCRs.

The precise formulation is as follows:

$$UCAPContr_{gm}^{SCR} = ICAP_{gm}^{Q} * \ Aggregation\ PF_{am} * Duration\ Adjustment\ Factor_{m}^{SCR}$$

Where:

$UCAPContr^{SCR}_{gm}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m*, as part of the SCR Aggregation;

$ICAP^{Q}_{gm}$ = the Installed Capacity that Resource *g* is qualified to provide in month, calculated in accordance with Section 4.12.2.1.1 of this *ICAP Manual*;

Aggregation PF_{am} = the performance factor of the SCR Aggregation *a* as determined for month *m,* calculated in accordance with Section 4.12.2.1.5 of this *ICAP Manual;*

Duration Adjustment $Factor^{SCR}_{m}$ = the Duration Adjustment Factor for SCRs as determined for the Capability Year and month m, corresponding to the 4 hour Energy Duration Limitation in accordance with Section 4.1.1 of this *ICAP Manual*;

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the UCAP contribution of the SCR to the SCR Aggregation UCAP shall be computed as the calculated ICAP for the SCR multiplied by the SCR Aggregation performance factor and the Capacity Accreditation Factor (CAF) for SCRs.

The precise formulation is as follows:

$$UCAPContr_{gm}^{SCR} = ICAP_{gm}^{Q} * \ AggregationPF_{am} * CAF_{m}^{SCR}$$

Where:

$UCAPContr_{gm}^{SCR}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m*, as part of the SCR Aggregation;

$ICAP_{gm}^{Q}$ = the Installed Capacity that Resource *g* is qualified to provide in month *m,* calculated in accordance with Section 4.12.2.1.1 of this *ICAP Manual*;

$AggregationPF_{am}$ = the performance factor of the SCR Aggregation *a* as determined for month *m,* calculated in accordance with Section 4.12.2.1.5 of this *ICAP Manual;*

CAF_{m}^{SCR} = the applicable Capacity Accreditation Factor (CAF) for an Installed Capacity Supplier with a 4-hour Energy Duration Limitation as determined for the applicable Capability Year and month *m*, in accordance with Section 7.2 of this *ICAP Manual.*

For SCRs that have been assigned the performance factor of the RIP:

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the UCAP contribution of the SCR to the SCR Aggregation UCAP shall be computed as the calculated ICAP for the SCR multiplied by the performance factor of the RIP and the Duration Adjustment Factor for SCRs.

The precise formulation is as follows:

$$UCAPContr_{gm}^{RIP} = ICAP_{gm}^{Q} * RIP\ PF_{gm} * Duration\ Adjustment\ Factor_{m}^{RIP}$$

Where:

$UCAPContr^{RIP}_{gm}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m*, as part of the SCR Aggregation;

$ICAP^{Q}_{gm}$ = the Installed Capacity that Resource *g* is qualified to provide in month *m,* calculated in accordance with Section 4.12.2.1.1 of this *ICAP Manual*;

RIP PF_{gm} = the performance factor of the RIP *g* for month m, calculated in accordance with Section 4.12.2.1.3 or Section 4.12.2.1.4 of this *ICAP Manual,* as applicable;

Duration Adjustment $Factor^{RIP}_{m}$ = the Duration Adjustment Factor for SCRs as determined for the Capability Year and month m, corresponding to the 4 hour Energy Duration Limitation in accordance with Section 4.1.1 of this *ICAP Manual*.

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the Installed Capacity Equivalent (ICE) for a SCR, for the applicable auction month, shall equal the UCAP sales of the SCR for the auction month divided by the applicable performance factor (i.e. SCR Aggregation performance factor or performance factor for the RIP) and Capacity Accreditation Factor (CAF) for SCRs.

The precise formulation is as follows:

$$UCAPContr_{gm}^{RIP} = ICAP_{gm}^{Q} * RIP\ PF_{gm} * CAF_{m}^{SCR}$$

Where:

$UCAPContr_{gm}^{RIP}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m*, as part of the SCR Aggregation;

$ICAP_{gm}^{Q}$ = the Installed Capacity that Resource *g* is qualified to provide in month *m,* calculated in accordance with Section 4.12.2.1.1 of this *ICAP Manual*;

$RIP\ PF_{gm}$ = the performance factor of the RIP *g* for month m, calculated in accordance with Section 4.12.2.1.3 or Section 4.12.2.1.4 of this *ICAP Manual,* as applicable;

CAF_{m}^{SCR} = the applicable Capacity Accreditation Factor (CAF) for an Installed Capacity Supplier with a 4-hour Energy Duration Limitation as determined for the applicable Capability Year and month *m*, in accordance with Section 7.2 of this *ICAP Manual*.

4.12.2.1.7. SCR Aggregation UCAP

The SCR Aggregation UCAP, for the applicable auction month shall be computed as the sum of the UCAP contribution to the SCR Aggregation UCAP of each SCR in the SCR Aggregation using the SCR Aggregation performance factor plus the sum of the UCAP contribution to the SCR Aggregation UCAP of each SCR in the SCR Aggregation using the performance factor of the RIP.

The precise formulation is as follows:

$$UCAP_{am}^{Q} = \sum_{am}\left(UCAPContr_{gm}^{SCR}\right) + \sum_{am}\left(UCAPContr_{gm}^{RIP}\right)$$

Where:

$UCAP^{Q}_{am}$ = the Unforced Capacity of that SCR Aggregation *a* is qualified to provide in month *m*;

$UCAPContr^{SCR}_{gm}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m* using the SCR Aggregation performance factor, as calculated in accordance with Section 4.12.2.1.6 of this *ICAP Manual*;

$UCAPContr^{RIP}_{gm}$ = the Unforced Capacity that Resource *g* is qualified to provide in month *m* using the performance factor for the RIP, as calculated in accordance with Section 4.12.2.1.6 of this ICAP Manual;

4.12.2.1.8. SCR Installed Capacity Equivalent

For each Capability Period, prior to the Capability Period that begins May 1, 2024, the Installed Capacity Equivalent (ICE) for a SCR, for the applicable auction month, shall equal the UCAP sales of the SCR for the auction month divided by the applicable performance factor (i.e. SCR Aggregation performance factor or performance factor for the RIP) and Duration Adjustment Factor for SCRs.

For SCRs included in the SCR Aggregation performance factor, the Installed Capacity Equivalent is equal to:

$$ICE_{gm}^{SCR} = \frac{UCAPContr_{gm}^{SCR}}{AggregationPF_{am} * Duration\ Adjustment\ Factor_{m}^{SCR}}$$

Where:

ICE^{SCR}_{gm} = the Installed Capacity Equivalent that Resource *g* is obligated to deliver in month *m*, at the direction of the NYISO;

$UCAPContr^{\mathbf{SCR}}_{gm}$ = the Unforced Capacity sold by Resource *g* in month *m,* using the SCR Aggregation performance factor, as calculated in accordance with Section 4.12.2.1.6 of this *ICAP Manual*;

$AggregationPF_{am}$ = the performance factor of the SCR Aggregation *a*, as determined for month *m*;

$Duration\ Adjustment\ Factor^{SCR}_{m}$ = the Duration Adjustment Factor for SCRs as determined for the Capability Year and month m, corresponding to the 4 hour Energy Duration Limitation in accordance with Section 4.1.1 of this *ICAP Manual.*

For each Capability Period, starting with the Capability Period that begins May 1, 2024, the Installed Capacity Equivalent (ICE) for a SCR, for the applicable auction month, shall equal the UCAP sales of the SCR for the auction month divided by the applicable performance factor (i.e. SCR Aggregation performance factor or performance factor for the RIP) and Capacity Accreditation Factor (CAF) for SCRs.

For SCRs included in the SCR Aggregation performance factor, the Installed Capacity Equivalent is equal to:

$$ICE_{gm}^{SCR} = \frac{UCAPContr_{gm}^{SCR}}{AggregationPF_{am} * CAF_{m}^{SCR}}$$

Where:

ICE_{gm}^{SCR}= the Installed Capacity Equivalent that Resource g is obligated to deliver in month m, at the direction of the NYISO;

$UCAPContr_{gm}^{SCR}$= the Unforced Capacity sold by Resource g in month m, using the SCR Aggregation performance factor, as calculated in accordance with Section 4.12.2.1.6 of this *ICAP Manual*;

$AggregationPF_{am}$ = the performance factor of the SCR Aggregation a, as determined for month m;

CAF_{m}^{SCR}= the applicable Capacity Accreditation Factor (CAF) for an Installed Capacity Supplier with a 4-hour Energy Duration Limitation as determined for the applicable Capability Year and month m, in accordance with Section 7.2 of this *ICAP Manual*.

For SCRs assigned the performance factor for the RIP, the Installed Capacity Equivalent for each Capability Period, prior to the Capability Period that begins May 1, 2024, is equal to:

$$ICE_{gm}^{RIP} = \frac{UCAPContr_{gm}^{SCR}}{RIP\ PF_{gm} * Duration\ Adjustment\ Factor_{m}^{RIP}}$$

Where:

ICE^{RIP}_{gm} = the Installed Capacity Equivalent that Resource *g* is obligated to deliver in month *m*, at the direction of the NYISO;

$UCAPContr^{SCR}_{gm}$ = the Unforced Capacity sold by Resource *g* in month *m,* using the performance factor of the RIP, as calculated in accordance with Section 4.12.2.1.6 of this *ICAP Manual*;

RIP PF_{gm} = the performance factor of the RIP *g* for month *m*;

Duration Adjustment $Factor^{RIP}_{m}$ = the Duration Adjustment Factor for SCRs as determined for the Capability Year and month m, corresponding to the 4 hour Energy Duration Limitation in accordance with Section 4.1.1 of this *ICAP Manual*.

For SCRs assigned the performance factor for the RIP, the Installed Capacity Equivalent for each Capability Period, starting with the Capability Period that begins May 1, 2024, is equal to:

$$ICE^{RIP}_{gm} = \frac{UCAPContr^{SCR}_{gm}}{RIP\ PF_{gm} * CAF^{SCR}_{m}}$$

Where:

ICE^{RIP}_{gm} = the Installed Capacity Equivalent that Resource g is obligated to deliver in month *m*, at the direction of the NYISO;

$UCAPContr^{SCR}_{gm}$ = the Unforced Capacity sold by Resource g in month *m,* using the performance factor of the RIP, as calculated in accordance with Section 4.12.2.1.6 of this ICAP Manual;

$RIP\ PF_{gm}$ = the performance factor of the RIP g for month *m*;

CAF^{SCR}_{m}= the applicable Capacity Accreditation Factor (CAF) for an Installed Capacity Supplier with a 4-hour Energy Duration Limitation as determined for the applicable Capability Year and month *m*, in accordance with Section 7.2 of this *ICAP Manual*.

4.12.3. Minimum Payment Nomination Requirements

For each month in which a SCR supplies Unforced Capacity to the NYCA, the RIP must specify in the DRIS a Minimum Payment Nomination that will reflect the minimum guarantee price the SCR will be paid if

called upon to reduce Load equal to the Installed Capacity Equivalent of the amount of Unforced Capacity it has supplied.

A Minimum Payment Nomination is specified by the RIP, in the DRIS, for each SCR Aggregation and applies to all individual SCRs within that SCR Aggregation. A SCR's Minimum Payment Nomination cannot exceed $500/MWh. This Minimum Payment Nomination, or Energy curtailment payment designation, associated with a SCR's Unforced Capacity will not be entered in the Day-Ahead Market, but instead will serve as a strike price that the NYISO can use to prioritize which SCRs to call. Unlike a Generator or other Resource's Bid to supply Energy associated with Unforced Capacity, a SCR's Minimum Payment Nomination cannot be revised prior to Settlement in the Day-Ahead Market. A SCR's Minimum Payment Nomination is set for the entire month.

The Minimum Payment Nomination for a new SCR Aggregation ID must be specified by the RIP at the time of the SCR Aggregation ID request. The RIP may change the Minimum Payment Nomination for each auction month during the dates and times specified in the ICAP Event Calendar and DRIS Event Calendar for Strike Price Management.

SCR Minimum Payment Nominations will be used only when the NYISO Operations department determines the need to call on these SCRs in accordance with the NYISO Emergency Operations Manual. In the event the NYISO Operations department makes such a determination, the Minimum Payment Nominations placed for each SCR will allow the NYISO to call for Load reduction based on SCR zone location and price. As a result, the NYISO will be able to call less than the total pool of SCRs in the NYCA and in each NYCA zone.

As an example, the NYISO may determine that it needs a Demand Reduction response of 25 MW in Zone J. A total of 50 MW of SCRs located in Zone J is supplying Unforced Capacity. For this example, assume that each MW of SCR Capacity entered a different Minimum Payment Nomination, from $0/MWh to $500/MWh. In order to fulfill its need for 25 additional MW of reserves, the NYISO will call the 25 MW of SCRs in economic order based on their submitted Minimum Payment Nominations starting with the lowest values. See Section 4.12.7 for situations where multiple SCRs have placed the same top Minimum Payment Nomination called upon by the NYISO and the total MW offered at that price exceed the ISO's needs.

4.12.4. Performance Obligations

A SCR must be capable of making Energy available (*i.e.*, take action, in response to the NYISO direction, that causes a measurable and verifiable reduction of Load from the New York State Transmission System and/or distribution system during an event or test), for a minimum four (4) hour block (except where

environmental constraints that have been previously considered and approved by the NYISO require a shorter block), in amounts that correspond to the Installed Capacity Equivalent of the amount of Unforced Capacity it has been committed to supply for each month through the NYISO's Installed Capacity Market. The obligation to reduce Load shall commence at the top of the hour after the NYISO has provided the following notices:

a. on the day before the SCR's performance may be required, the NYISO shall provide twenty-one (21) hour notice to the RIP, so long as notification is provided by 3:00 PM ET. If notice is provided to the RIP after 3:00 PM ET on the day before the SCR's performance may be required, then the NYISO shall instead provide twenty-four (24) hours' notice;
b. following the advance notice described in (a) above, on the operating day the NYISO shall provide at least two (2) hours' notice to the RIP that the SCR's performance will be required. The SCR shall reduce its Load or transfer Load to a Local Generator (as appropriate) commencing at the top of the hour immediately after the two-hour notice period has expired. In the alternative, the NYISO may specify the hour at which the SCR shall commence performance of its obligation by reducing its Load or transferring Load to a Local Generator (as appropriate), so long as the start hour specified by the NYISO is at least two hours in the future.

There shall be no relief from penalties or other obligations for failure to perform if the RIP was an Installed Capacity Supplier in any month within a Capability Period.

When requested by the Transmission Owner, the NYISO may call SCRs to reduce Load in targeted sub-load pockets within Load Zone J for the Targeted Demand Response Program (TDRP) as specified in Section 6 of the NYISO's EDRP Manual. Response to TDRP events activated by the NYISO at the request of a Transmission Owner is voluntary. Response to a TDRP event will not be used to measure performance for either the SCR or the RIP.

4.12.4.1. Average Coincident Load

The ACL is the baseline Load used by the NYISO for measuring the amount of Load reduction that a SCR enrolled in the NYISO's SCR program can provide during a specific Capability Period. An ACL is calculated by the NYISO for each SCR, except those SCRs that are eligible to enroll with a Provisional ACL, in accordance with Section 5.12.11.1.1 of the *NYISO Services Tariff*. An increase to the ACL may be reported in accordance with Section 5.12.11.1.5 of the *NYISO Services Tariff* and Section 4.12.4.3.1 of this *ICAP Manual*.

A decrease to the ACL is required to be reported in accordance with Section 5.12.11.1.3 of the *NYISO Services Tariff* and Sections 4.3.3 and 4.12.4.3.2 of this ICAP Manual.

The NYISO will post to its website, and import into the DRIS, the top 40 NYCA peak Load hours for the Prior Equivalent Capability Period for each Load Zone ninety (90) days prior to the beginning of the Capability Period for which the ACL will be in effect. RIPs shall only report metered hourly Load consumed by the SCR that is supplied by the NYS Transmission System and/or the distribution system when uploading metered data into the DRIS for calculating or verifying an ACL. Any Load supported by generation produced from a Local Generator, other behind-the-meter generator, or other supply resource located behind the SCR's meter operating during the Capability Period SCR Peak Load Zone Hours, may not be added to the metered Load values submitted. In instances where the metered Load captures both the energy provided from the NYS Transmission System and/or distribution system with the energy provided by a Local Generator, other behind-the-meter generator, or other supply resource located behind the SCR's meter, the total amount of supply from behind-the-meter sources shall be netted out of the metered Load data submitted to the NYISO for calculating or verifying an ACL.

If a RIP attempts to change the value of any hour used in the ACL calculation in a subsequent enrollment during the same Capability Period, the SCR's enrollment record will be set to a Pending status in the DRIS and must be approved by the NYISO before the SCR can be enrolled with a revised ACL.

4.12.4.2. Provisional Average Coincident Load

A RIP may enroll a SCR with a Provisional ACL in accordance with Section 5.12.11.1.2 of the *NYISO Services Tariff*. The RIP must report the meter installation date on the enrollment upload to the DRIS for each SCR being enrolled with a Provisional ACL. The meter installation date of the SCR must remain the same for the entire period in which the SCR is enrolled with a Provisional ACL with the same RIP. The RIP must maintain records sufficient to demonstrate compliance with Section 5.1 of the NYISO's EDRP Manual and to confirm the meter installation date reported in DRIS.

A demand response resource enrolled in the Prior Equivalent Capability Period in the NYISO Emergency Demand Response Program (EDRP) is ineligible to enroll in the SCR program with a Provisional ACL when being enrolled with the same RIP.

Determining Eligibility to Enroll A SCR with A Provisional ACL

Beginning with the 2014 Summer Capability Period, a RIP may verify the eligibility of a SCR to enroll with a Provisional ACL during the time frame corresponding to the SCR enrollment period as specified in the ICAP Event Calendar and DRIS Event Calendar and using the Transmission Owner Account Number of

the SCR and the Provisional ACL Eligibility Import file through the DRIS. The Provisional ACL Eligibility Import will provide the RIP with one of the following results: (a) the SCR is eligible to enroll using a Provisional ACL and may be enrolled through the SCR enrollment process; (b) the SCR is ineligible to enroll using a Provisional ACL in accordance with Section 4.12.4.2.2 of this *ICAP Manual*.

All Provisional ACLs shall be subject to verification using the Verified ACL calculated in accordance with the verification process set forth in Section 5.12.11.1.2 of the *NYISO Services Tariff*. The RIP is responsible for uploading into the DRIS the interval billing meter data of the SCR for the Capability Period SCR Load Zone Peak Hours from the Capability Period in which the SCR was enrolled with a Provisional ACL, beginning with hours that fall between the meter installation date for the SCR enrolled with a Provisional ACL through the end of the Capability Period in which the SCR was enrolled with a Provisional ACL. Any Load supported by generation produced from a Local Generator, other behind-the-meter generator, or other supply source located behind the SCR's meter operating during the applicable Capability Period SCR Peak Load Zone Hours may not be included in the SCR's metered Load values reported for the verification of its Provisional ACL.

For a resource with a Provisional ACL, if twenty (20) or more Capability Period SCR Load Zone Peak Hours occur during the period between the meter installation date and the end of the Capability Period, the NYISO shall calculate a Verified ACL from the Provisional ACL verification data as the average of the SCR's highest twenty hourly loads taken from the relevant interval metered load dataset reported to the DRIS by the RIP.

For a resource with a Provisional ACL, if there are fewer than twenty (20) applicable Capability Period SCR Load Zone Peak Hours occurring during the period between the meter installation date and the end of the Capability Period the NYISO shall set the Verified ACL equal to the Provisional ACL from the SCR enrollment.

Failure by a RIP to report required interval data for the Provisional ACL verification process in accordance with Section 5.12.11.1.2 of the *NYISO Services Tariff* shall result in the Verified ACL being set to zero for the Capability Period in which the resource was enrolled with a Provisional ACL.

The Verified ACL will be used in the calculation of the SCR's performance factor, and all other associated performance factors (*i.e.*, RIP and SCR Aggregation performance factors), and where applicable, potential deficiency charges.

In accordance with Section 5.14.2.3.1 of the *NYISO Services Tariff* SCRs enrolled with a Provisional ACL shall be subject to potential deficiency charges as a result of overstating the Provisional ACL and shall be

subject to all other shortfalls and deficiency charges that may apply to the RIP under Section 5.14.2 as an Installed Capacity Supplier, including but not limited to those that may result from the invalid enrollment of the SCR, failure to timely report a Qualified Change of Status Condition, and the underperformance of the SCR in the RIP portfolio. When a single SCR's participation in the SCR program gives rise to more than one potential shortfall within the Capability Period, the NYISO shall assess to the RIP the greatest deficiency charge for the Capability Period for the single SCR. The greatest deficiency charge for the Capability Period shall be the greatest sum of the monthly deficiency charges calculated for the single SCR from among the specific shortfall types identified under Section 5.14.2.3 of the *NYISO Services Tariff* .

Pursuant to Section 5.12.12.2 of the *NYISO Services Tariff* SCRs enrolled with a Provisional ACL may also be subject to potential sanctions for failure to report the metered Load data required for verification of the Provisional ACL. The SCR may also be subject to a financial sanction for failure to timely report a Qualified Change of Status Condition, in addition to the corresponding shortfall penalty as provided in Section 5.14.2.3.3 of the *NYISO Services Tariff*.

4.12.4.2.1. Continued Use of a Provisional Average Coincident Load

A SCR enrolled with a Provisional ACL may be enrolled with a Provisional ACL in subsequent Capability Periods in accordance with Section 5.12.11.1.2 of the *NYISO Services Tariff*.

The Provisional ACL may be applicable to a new SCR for up to three (3) consecutive Capability Periods, when enrolled with the same RIP, beginning with the Capability Period in which the SCR is first enrolled with the RIP. If the SCR is enrolled by another RIP in a subsequent Capability Period and the SCR is still eligible to enroll with a Provisional ACL, the enrolling RIP is required to enter a meter installation date when enrolling the SCR.

A SCR enrolled with a Provisional ACL that reported metered Load data for twenty (20) or more of the Capability Period SCR Load Zone Peak Hours is not eligible to enroll with a Provisional ACL in the next equivalent Capability Period. When interval billing meter data from the Prior Equivalent Capability Period necessary to compute the ACL is available in the DRIS and a different RIP is enrolling the SCR in the next equivalent Capability Period the enrolling RIP may request that the NYISO use the existing interval billing meter data in accordance with Section 4.12.4.2.2 of this *ICAP Manual* for enrollment of the SCR. When no such interval billing meter data or insufficient data exists in the DRIS, the RIP enrolling the SCR in the next equivalent Capability Period is eligible to enroll the SCR with a Provisional ACL.

4.12.4.2.2. Request for SCR Meter Data: ACL Data Request Enrollment Procedures

Beginning with the 2014 Summer Capability Period, when a RIP does not have and cannot obtain the interval billing meter data from the Prior Equivalent Capability Period necessary to compute an ACL for enrollment of a SCR, the RIP may enroll the SCR using existing data in the DRIS, to the extent the necessary data is available in the DRIS, by requesting such data from the NYISO ("ACL data request enrollment"). The DRIS Provisional ACL Eligibility Import will indicate whether the ACL data necessary for enrollment of a SCR exists in the DRIS (refer to the *NYISO DRIS User's Guide* for details on this import).

Below is a summary of the process the RIP is required to take to enroll a SCR using existing data from the DRIS. A more detailed description of the ACL data request enrollment process is provided in the *NYISO DRIS User's Guide*.

- The request to use existing ACL data and the meter installation date of the SCR shall be included as part of the enrollment file upload to the DRIS upon the initial enrollment of the SCR by the RIP.
- An ACL data request enrollment that passes validations as part of the enrollment file upload to the DRIS shall be placed in a *Pending* enrollment request status, which will require further action by the RIP to be taken following the close of SCR enrollment and before the close of Aggregation Management as specified in the ICAP Event Calendar and DRIS Event Calendar.
- The RIP will be required to approve or decline the use of existing ACL data as specified in the *NYISO DRIS User's Guide*.
    - When a RIP approves, the RIP is required to enter additional enrollment values for the SCR prior to acceptance by the DRIS.
    - If the RIP declines, the SCR is not enrolled.
- All ACL data request enrollments that have not been acted on by the RIP (*i.e.*, approved or declined) by the close of Aggregation Management will be automatically declined or denied by the DRIS and the SCRs associated with the ACL data request enrollments will not be enrolled.
- A RIP that declines an ACL data request enrollment for a SCR, or an enrollment that is declined by the DRIS, may not subsequently enroll the SCR using RIP obtained interval billing meter data for the remainder of the Capability Period. The same RIP may make another request to use existing interval meter data from the DRIS during subsequent enrollment windows within the same Capability Period.

4.12.4.3. Changes to ACL

4.12.4.3.1. Increase to ACL: Incremental ACL

A RIP may increase the ACL of a SCR in accordance with Section 5.12.11.1.5 of the *NYISO Services Tariff* by reporting the qualifying increase, the Incremental ACL value, on the enrollment upload to the DRIS for the first month of enrollment with an Incremental ACL. The RIP may also report an increase to the declared value of a SCR that meets the criteria of a SCR Load Change Reporting Threshold as defined in Section 2.19 of the *NYISO Services Tariff*. The Incremental ACL must be reported for each subsequent month that the RIP reports a change to the SCR enrollment within the Capability Period. When the Incremental ACL crosses into the following Capability Period, the RIP must report the Incremental ACL value for the first month of enrollment within the following Capability Period and each subsequent month within that Capability Period that the RIP reports a change to the SCR enrollment within the Capability Period.

When a RIP enrolls a SCR using the ACL data request enrollment process set forth in Section 4.12.4.2.2 of this *ICAP Manual*, the RIP may report an Incremental ACL value for the SCR upon viewing and approving the use of existing ACL data.

All Incremental ACLs shall be subject to verification using the Verified ACL calculated in accordance with the verification process set forth in Section 5.12.11.1.5 of the *NYISO Services Tariff*. The RIP is responsible for uploading into the DRIS the required interval billing meter data of the SCR for each month's Monthly SCR Load Zone Peak Hours from the Capability Period in which the SCR was enrolled with an Incremental ACL. Such Monthly SCR Load Zone Peak Hours shall be posted to the NYISO website and imported into the DRIS during the time frame corresponding to the posting of the Capability Period SCR Load Zone Peak Hours in accordance with Section 5.12.11.1.1 of the *NYISO Services Tariff* and Section 4.12.4.1 of this *ICAP Manual*. Any Load supported by generation produced from a Local Generator, other behind-the-meter generator, or other supply source located behind the SCR's meter operating during the applicable Monthly SCR Load Zone Peak Hours may not be included in the SCR's metered Load values reported for the verification of its Incremental ACL.

Failure by a RIP to report required interval data for the Incremental ACL verification process in accordance with Section 5.12.11.1.5 of the *NYISO Services Tariff* shall result in the Verified ACL being set to zero for all months within the Capability Period in which the resource was enrolled with an Incremental ACL.

The Verified ACL will be used in the calculation of the SCR's performance factor, and all other associated performance factors (*i.e.*, RIP and SCR Aggregation performance factors), and where applicable, potential deficiency charges.

Any SCR enrolled with an Incremental ACL that was required to perform in a mandatory event hour or in the first performance test in the Capability Period in accordance with Section 4.12.4.5, may also be required to perform in the second performance test in the Capability Period in accordance with Section 5.12.11.1.5 of the *NYISO Services Tariff*. Subsequent to the first performance test in the Capability Period, the DRIS may be used by the RIP to identify SCRs required to perform in the second performance test, including SCRs enrolled with an Incremental ACL. The detailed process for identifying these SCRs is described in the *NYISO DRIS User's Guide*. When a SCR is required to demonstrate performance in either a mandatory event hour or in the first performance test, and then again in the second performance test in the Capability Period, performance from both test hours shall be considered in the calculation of the SCR's performance factor and all other associated performance factors (*i.e.*, RIP and SCR Aggregation performance factors), and where applicable, potential shortfalls and deficiency charges. Provided, however, that with respect to the first performance test, the SCR may, in accordance with Section 4.12.4.5 of this *ICAP Manual*, demonstrate its maximum enrolled megawatt value by relying on its load reduction in a mandatory event hour in lieu of participation in the first performance test.

In accordance with Section 5.14.2.3.2 of the *NYISO Services Tariff* SCRs enrolled with an Incremental ACL shall be subject to potential shortfalls and deficiency charges as a result of overstating the Incremental ACL and shall be subject to all other shortfalls and deficiency charges that may apply to the RIP under 5.14.2 as an Installed Capacity Supplier, including but not limited to those shortfalls that may result from the invalid enrollment of the SCR, failure to timely report a Qualified Change of Status Condition, and the underperformance of the SCR in the RIP portfolio. Where a single SCR's participation in the SCR program gives rise to more than one potential shortfall within the Capability Period , the NYISO shall assess to the RIP the greatest deficiency charge for the Capability Period for the single SCR. The greatest deficiency charge for the Capability Period shall be the greatest sum of the monthly deficiency charges calculated for the single SCR from among the specific shortfall types identified under Section 5.14.2.3 of the *NYISO Services Tariff* .

Pursuant to Section 5.12.12.2 of the *NYISO Services Tariff* SCRs enrolled with an Incremental ACL may also be subject to potential sanctions for failure to report the metered Load data required for verification of the Incremental ACL and failure to report the metered Load data when the SCR is required to perform in the second performance test in the Capability Period. The SCR may also be subject to a financial sanction

for failure to timely report a Qualified Change of Status Condition, in addition to the corresponding shortfall penalty as provided in Section 5.14.2.3.3 of the *NYISO Services Tariff*.

4.12.4.3.2. Decrease to ACL: SCR Change of Status

A RIP is required to report a decrease, to the ACL of a SCR, a SCR Change of Status, in accordance with Section 5.12.11.1.3.2 of the *NYISO Services Tariff* and Section 4.3.3.2 of this *ICAP Manual*.

When a RIP enrolls the SCR using the ACL data request enrollment process set forth in Section 4.12.4.2.2 of this *ICAP Manual*, the RIP must report, when applicable, a SCR Change of Status for the SCR upon viewing and approving the use of existing ACL data when such SCR Change of Status begins or is occurring on the effective date of the SCR enrollment.

Any SCR enrolled with a SCR Change of Status that was required to perform in a mandatory event hour or in the first performance test in the Capability Period in accordance with Section 4.12.4.5, may also be required to perform in the second performance test in the Capability Period in accordance with Section 5.12.11.1.3.2 of the *NYISO Services Tariff*. When a RIP reports a SCR Change of Status for a SCR after the close of enrollment for the last month of the Capability Period, the SCR will not be required to perform in the second performance test, and shall be evaluated for a potential shortfall for SCR Change of Status; no sanction shall be applied for failure to report performance for the second performance test. Subsequent to the first performance test in the Capability Period, the DRIS may be used by the RIP to identify SCRs required to perform in the second performance test, including SCRs with a SCR Change of Status. The detailed process of identifying these SCRs is described in the *NYISO DRIS User's Guide*. When a SCR is required to demonstrate performance in either a mandatory event hour or the first performance test, and then again in the second performance test in the Capability Period, performance from both test hours shall be considered in the calculation of the SCR's performance factor and all other associated performance factors (*i.e.*, RIP and SCR Aggregation performance factors), and where applicable, potential shortfall and deficiency charges except when the SCR Change of Status is reported after the close of enrollment for the last month of the Capability Period as described above. Provided, however, that with respect to the first performance test, the SCR may, in accordance with Section 4.12.4.5 of this *ICAP Manual*, demonstrate its maximum enrolled megawatt value by relying on its load reduction in a mandatory event hour in lieu of participation in the first performance test.

Changes to ACL due to a reported SCR Change of Status as required per Section 4.3.3.2 of this *ICAP Manual* are also subject to in-period verification using actual hourly interval billing meter data for the applicable Capability Period.

In accordance with Section 5.14.2.3.3 of the *NYISO Services Tariff* a RIP that has enrolled a SCR that experiences a SCR Change of Status shall be subject to potential deficiency charges as a result of failing to timely report the SCR Change of Status and shall be subject to all other shortfalls and deficiency charges that may apply to the RIP under Section 5.14.2 as an Installed Capacity Supplier, including but not limited to those that may result from the invalid enrollment of the SCR, overstating the SCR's Provisional ACL or Incremental ACL, and the underperformance of the SCR in the RIP portfolio. Where a single SCR's participation in the SCR program gives rise to more than one potential shortfall within the Capability Period , the NYISO shall assess to the RIP the greatest deficiency charge for the Capability Period for the single SCR. The greatest deficiency charge for the Capability Period shall be the greatest sum of the monthly deficiency charges calculated for the single SCR from among the specific shortfall types identified under Section 5.14.2.3 of the *NYISO Services Tariff*.

Pursuant to Section 5.12.12.2 of the *NYISO Services Tariff* SCRs experiencing a SCR Change of Status may also be subject to a potential sanction for failure to report the metered Load data when the SCR is required to perform in the second performance test in the Capability Period. The SCR may also be subject to a financial sanction for failure to timely report a Qualified Change of Status Condition, in addition to the corresponding shortfall penalty as provided in Section 5.14.2.3.3 of the *NYISO Services Tariff*.

4.12.4.4. Use of Generation by a SCR

Only a Local Generator available to respond to the NYISO direction and effect a real time load reduction may be enrolled as a SCR ("enrolled SCR generator"). When a Local Generator normally operates to serve its resource's Load, it may participate in the SCR program only to the extent that it can shift additional Load from the NYS Transmission System and/or distribution system onto the Local Generator at the direction of the NYISO.

In order for a RIP to enroll a SCR that uses an eligible Local Generator, any amount of generation that can reduce Load from the NYS Transmission System and/or distribution system at the direction of the NYISO that was produced by the Local Generator during the hour coincident with the NYCA or Locality peaks, upon which the Unforced Capacity Obligation of the LSE that serves that SCR is based, must be accounted for when the LSE's Unforced Capacity Obligation for the upcoming Capability Year is established. RIPs must provide this generator data annually to the NYISO on or before the date and time specified in the ICAP Event Calendar and DRIS Event Calendar so that the ISO can adjust upwards the LSE Unforced Capacity Obligation to prevent double-counting. If a RIPs fails to report this generator data for the NYCA or Locality peaks, the generation operating during the NYCA/Locality peak hours becomes ineligible to participate as SCR capacity in the upcoming Capability Year. This reporting requirement applies only when

the RIP is seeking to qualify generation produced by a Local Generator as Capacity to be enrolled in the SCR program. The RIP is not required to report to the NYISO the amount of generation from the eligible Local Generator that was running on the NYCA or Locality peaks that is normally operating to serve the resource's load because this amount of generation is not eligible to qualify as Capacity that can be enrolled in the SCR program.

The NYCA/Locality Peak Hour Load Generation Form is available on the NYISO Web site. The amount of generation produced by a Local Generator during the NYCA and Locality peak hours must be timely reported on the NYCA/Locality Peak Hour Load Generation Form in accordance with NYISO Procedures in order for the enrollment of the SCR to be valid. RIPs may enroll the available capacity from a SCR's qualifying generation up to the level of the SCR's Net ACL or Provisional ACL. The NYISO will notify the Transmission Owner in the Transmission District in which the SCR generator is located to report the amount of generation supplied during the NYCA/Locality peak hours that must be accounted for in the relevant customer's Load, the LSE's Load, the Transmission District's Load forecast, and the NYCA/Locality peak Load forecast for the applicable Capability Year.

4.12.4.5. Testing of SCRs

Each SCR is required by the NYISO to demonstrate its maximum enrolled megawatt value once in every Capability Period. The NYISO will accept as evidence of such demonstration the higher of its greatest load reduction either in a mandatory event hour or in a first performance test hour, provided such performance test did not exceed one clock hour on the date and at the time specified by the NYISO. In addition to demonstrating its maximum enrolled megawatt value once in every Capability Period as described above, a SCR enrolled with an Incremental ACL or a SCR Change of Status may also be required to perform in the second performance test in the Capability Period in accordance with Sections 5.12.11.1.5 and 5.12.11.1.3.2 of the *NYISO Services Tariff*. Further detail is provided in Sections 4.12.4.3.1 and 4.12.4.3.2 of this *ICAP Manual*.

The RIP shall be eligible for Energy payments for the one-hour performance test provided the NYISO receives from the RIP all required data and that the RIP complies with other performance test-related requirements in respect of the SCR. Two Capability Period performance tests shall be conducted within each Capability Period; the first performance test within the Capability Period will be conducted on the date and at the time designated by the NYISO between August 15 and September 7 for the Summer Capability Period, and between February 15 and March 7 for the Winter Capability Period; the second Capability Period performance test shall be conducted on the date and at the time designated by the NYISO, namely, in late September or October (Summer Capability Period) or late March or April (Winter Capability

Period). If there are no SCRs eligible or required to test in the second performance test, the NYISO may not conduct this second performance test.

During the Summer Capability Period, the NYISO shall conduct the performance test in hours that correspond to the time boundaries of the Capability Period SCR Load Zone Peak Hours. During the Winter Capability Period, the NYISO shall conduct the performance test in hours that include one (1) hour before and one (1) hour after the actual hours included in the Capability Period SCR Load Zone Peak Hours, for that Winter Capability Period, not to exceed the time boundaries of the Capability Period SCR Load Zone Peak Hours.

SCRs enrolled with and accepted by the NYISO on or before the date that is four business days prior to the date of the first performance test in the Capability Period (excluding the date of the first performance test) must demonstrate performance either in the first performance test or in a mandatory event hour. Such demonstration is required regardless of whether the unforced capacity from the SCR had been offered prior to the date of the first performance test. The approval date of a SCR's enrollment can be viewed as described in Section 8.1.1 of the *NYISO DRIS User's Guide.* Any SCR enrolled and accepted by the NYISO on or before the date that is four (4) business prior to the date of the first performance test (excluding the date of the performance test) may elect to forego participation in the first performance test and, instead, utilize its greatest load reduction in a mandatory event hour for the purpose of demonstrating its maximum enrolled megawatt value for the Capability Period. SCRs that perform in a mandatory event prior to the first performance test retain the option to participate in the first performance test in the Capability Period.

For example, if the first performance test was on a Friday on the 10th day of a month, SCRs enrolled with and accepted by the NYISO on or before the Monday prior to the 10th (i.e., accepted on the 6th) must demonstrate performance either in the first performance test or in a mandatory event hour

Each SCR that is enrolled at any point in a Capability Period and was not required to demonstrate performance in the first performance test in a Capability Period shall perform in the second performance test within the Capability Period on the date and at the time specified by the NYISO regardless of whether unforced capacity from the SCR had been offered prior to the date of this second performance test. Any performance demonstrated by the SCR in a mandatory event in the Capability Period cannot be used as evidence of performance for the second performance test.

The only exception to the requirement for a SCR to demonstrate its maximum enrolled megawatt value for the Capability Period, is for a SCR that was (i) registered with and accepted by the NYISO in the last month of a Capability Period for enrollment in the following Capability Period and (ii) was not registered by another RIP for any month during the same Capability Period, in which case the SCR would not need to

respond to a performance test in the month the registration was accepted but would need to demonstrate its maximum enrolled megawatt value during the following Capability Period for which the SCR is being enrolled.

If a RIP terminates the enrollment with the NYISO of a SCR prior to the date of a performance test (termed a Former Enrolled SCR), the RIP, at its election, may provide performance test data for the Former Enrolled SCR, if the Former Enrolled SCR performed in the performance test. If the Former Enrolled SCR is enrolled by a different RIP in the same Capability Period, the new RIP may provide performance test data for the SCR for the performance test the SCR is eligible to perform in based on the enrollment date with the new RIP.

If neither RIP reports performance test data nor mandatory event data, when applicable, for the SCR, a value of zero (0) will be attributed to the SCR's performance in the computation of the SCR's performance factor, SCR specific shortfalls and deficiency charges. If only one RIP reports performance test data or mandatory event data, when applicable, for the SCR, the greatest load reduction value determined for the SCR from that data will be used in all associated performance calculations; the load reduction value in the performance test shall be considered when evaluating the shortfall of RIP Portfolio Performance. If both RIPs provide performance test data or mandatory event data, when applicable, for the SCR, the greatest load reduction value determined for the SCR from the data provided by the RIP that enrolled the SCR last in the Capability Period will be used in all performance calculations; the load reduction value in the performance test reported for the SCR by each RIP that enrolled the SCR in the Capability Period shall be considered in evaluating the shortfall of RIP portfolio performance for each RIP.

4.12.4.6. Shortfall for RIP Portfolio Performance

In accordance with Section 5.14.2.3.4 of the *NYISO Services Tariff,* each RIP's portfolio of SCRs will have its performance evaluated on a Load Zone basis for purposes of determining whether a RIP was deficient in providing the UCAP it had sold and was obligated to provide during any month in the Capability Period. Each SCR's performance in all performance tests and events will be considered when determining RIP portfolio performance. This evaluation will be based on the Installed Capacity Equivalent of the greatest load reduction of the portfolio achieved by its SCRs on a Load Zone basis during a single hour in a performance test or event called by the NYISO during the Capability Period. The determination of the total load reduction for the first performance test hour shall only include the load reduction of SCRs that demonstrate and report performance during the first performance test. Mandatory event response used in lieu of a first performance test shall not be used in the determination of the total load reduction for the first performance test. The Installed Capacity Equivalent of the greatest load reduction during a single hour is then converted to the UCAP equivalent of the greatest performance during a single hour in the Load Zone

and compared to the UCAP sold for each month of the Capability Period. Within a Load Zone, if the UCAP equivalent of the greatest performance of the RIP's SCRs during a single hour is less than the total amount of UCAP sold by the RIP for a month in a Capability Period Auction or a Monthly Auction and certified prior to that month's ICAP Spot Market Auction, the UCAP sold in that month's ICAP Spot Market Auction, or the UCAP sold as a Bilateral Transaction and certified prior to that month's ICAP Spot Market Auction, the RIP did not meet its full commitment. A shortfall for the month shall be identified in UCAP terms, and the RIP will be subject to a deficiency charge, equal to one and one-half times the applicable Market-Clearing Prices of Unforced Capacity determined using the applicable ICAP Demand Curve for that ICAP Spot Market Auction times the amount of its shortfall for each month.

Within a Capability Period, for RIPs with SCRs that have reported a SCR Change of Status, in months where the SCR Change of Status is in effect, the performance of the SCR shall be based on the Net ACL. For RIPs with SCRs that have enrolled with an Incremental ACL, in months where the Incremental ACL is in effect, the performance of the SCR shall be based on the Verified ACL. For RIPs with SCRs that have enrolled with a Provisional ACL, in months where the Provisional ACL is in effect, the performance of the SCR shall be based on the Verified ACL. For all other SCRs enrolled by the RIP, the performance of the SCR shall be based on the enrolled ACL.

When a RIP is subject to multiple deficiency charges for the same SCR for the same Capability Period, the NYISO shall assess the RIP only the greatest deficiency charge related to such SCR. The NYISO shall apply the following procedure to the determination of the RIP portfolio performance when the RIP is subject to multiple deficiency charges for the same SCR for the same months within the Capability Period. When a SCR has previously been assessed a deficiency charge for an ineligible enrollment, a Provisional ACL enrollment, Incremental ACL enrollment, or SCR Change of Status enrollment, the SCR shall be removed from both the UCAP equivalent of the greatest performance during a single hour and the UCAP sales during the determination of the RIP portfolio performance for the applicable months within the Capability Period.

The performance of capacity resources registered with and accepted by the NYISO subsequent to the first performance test conducted between August 15 and September 7(Summer Capability Period) or conducted between February 15 and March 7 (Winter Capability Period) will only apply to month(s) in (x) which the added resources participated and (y) the Capability Period for which the SCR was tested, not every month in the Capability Period.

4.12.4.7. Reporting Partial Sales

A RIP that sells less than one hundred percent (100%) and more than zero percent (0%) of its total registered MW may identify the portion of each SCR that constitutes the sale. The RIP must import any such identification into the DRIS within five (5) business days following posting of the ICAP Spot Market Auction results on or before the date and time specified in the ICAP Event Calendar and DRIS Event Calendar. Nothing in the preceding sentence shall diminish a RIP's obligation to provide data regarding SCRs within a Mitigated Capacity Zone, including pursuant to *ICAP Manual* Section 5.15.2. SCRs identified by a RIP as not sold in the month of an event will not have their performance during event hours counted toward their performance factors. If a RIP does not provide the information within the specified period, each SCR of a RIP applicable to a sale (for example, at the PTID if the PTID is identified in the sale) will be considered as sold at its full registered MW value. UCAP values will be calculated for each SCR in accordance with Sections 4.12.2.1 of this *ICAP Manual*.

4.12.4.8. Reporting SCR Performance Data

Performance for each SCR shall be reported for all hours during all mandatory SCR events and any required one-hour performance tests in which the SCR was required to reduce load in a Capability Period. The RIP must upload the file into the DRIS, on or before 5:00:00 P.M. on the seventy-fifth (75th) day after each called event or test, on or before the date and time as specified in the ICAP Event Calendar and DRIS Event Calendar. For example, the NYISO must receive from the RIP SCRs performance data on or before 5:00:00 P.M. on June 29 pertaining to the month of April during which the SCR was called upon to reduce Load on April 15.

Each Capability Period, the NYISO will calculate performance factors for each SCR based on all of the following values from the Prior Equivalent Capability Period and the Capability Period preceding the Prior Equivalent Capability Period: (a) the best set of four (4) consecutive hours in each mandatory event of four hours or more, (b) all hours for mandatory events of less than four hours, and (c) all required one-hour performance test data. For SCRs called to perform in a mandatory event , the load reduction value used in performance factor calculations shall be selected as the higher of the greatest load reduction in any mandatory event hour or the load reduction demonstrated in the first performance test.

The RIP shall report the performances of each SCR individually directly into the DRIS using an import file formatted as specified in the *NYISO Demand Response Information System User's Guide* (available from the NYISO Web site at https://www.nyiso.com/documents/20142/3625950/DRIS_UG.pdf). The NYISO shall track each SCR's performance in accordance with the procedures contained in this Section 4.12. Performance measurements will be calculated in accordance with Sections 4.12.2.1 of this *ICAP Manual*.

If the RIP does not import performance data for any SCRs into the DRIS by 5:00:00 P.M. on the seventy-fifth (75th) day after the date of each event or test, the NYISO (a) will attribute zero performance to those Resources for purposes of satisfying the Resource's capacity obligation, determining energy payments, and calculating shortfalls and deficiency charges, and (b) may impose sanctions pursuant to the NYISO Services Tariff.

All hours, including those in excess of the hours used for performance measurement, including performance tests, will be used to determine Energy payments in accordance with Section 4.12.7, statistics for NYISO internal use, the computation of deficiency charges, and as the basis for various external reports, and for other purposes in accordance with the *NYISO Services Tariff*.

In the event that a SCR located at a retail customer was in operation (in the case of a Local Generator) or providing Load reduction (in the case of interruptible Load) in response to a SCR event or performance test, at the time of the NYCA system or Transmission District peak upon which the Minimum Unforced Capacity Requirement of the LSE serving that customer is based, the LSE's Minimum Unforced Capacity Requirement shall be increased by the amount of Load that was served or interrupted by the SCR.

4.12.4.9. Requesting a correction to SCR meter data

Each RIP must report accurate meter data for a SCR in accordance with Sections 5.12.5 and 5.12.11 of the NYISO Services Tariff and Sections 4.12.4.1, 4.12.4.2, 4.12.4.3 and 4.12.4.8 of this ICAP Manual. Meter data for each SCR must be reported on or before the date and time specified in the ICAP Event Calendar and DRIS Event Calendar. A RIP may not request correction of meter data (i) when it failed to report the required meter data by the deadline specified in the ICAP Event Calendar, (ii) when the meter data submitted was a placeholder for accurate information (*e.g.*, the RIP does not have accurate meter data at the submission deadline and submits a value of zero or some other value for all required data solely in order to meet the deadline), or (iii) to correct falsified data.

Under exceptional circumstances as set forth below, and subject to NYISO evaluation, the NYISO may accept certain corrected meter data related to the enrollment and performance of a SCR that was previously submitted to the NYISO. The NYISO will review requests to correct a SCR's meter data on a case-by-case basis, and is under no obligation to accept the meter data correction requested by the RIP. The NYISO will consider correcting the meter data identified below. No other meter data will be corrected.

- For a SCR enrolled with an ACL (but not with a Provisional ACL or an Incremental ACL): The NYISO will consider correcting the SCR's net meter data used for purposes of establishing the Net Average Coincident Load for:
    - the current Capability Period,

- the most recently closed Capability Period,
- the prior equivalent Capability Period of the current Capability Period, or
- the Capability Period immediately preceding the prior equivalent of the current Capability Period.

- For a SCR enrolled with either a Provisional ACL or an Incremental ACL: The NYISO will consider correcting SCR's net meter data used for purposes of establishing the SCR's Verified ACL for:
  - the most recently closed Capability Period,
  - the prior equivalent Capability Period of the current Capability Period, or
  - the Capability Period immediately preceding the prior equivalent of the current Capability Period.
- Performance data reported for any hours during a SCR event or any required performance test in which the SCR was required to reduce load. The NYISO will consider correcting such data only from:
  - the current Capability Period,
  - the most recently closed Capability Period,
  - the prior equivalent Capability Period of the current Capability Period, or
  - the Capability Period immediately preceding the prior equivalent of the current Capability Period.
- Peak monthly demand (PMD), only if it impacts the SCR performance factor for a current or upcoming Capability Period.
- CBL data reported for any hours during a SCR event or any required performance test in which the SCR was required to reduce load. The NYISO will, on a best efforts basis, process the received data such that Energy payments are reflected in the Final Bill Closeout period (see Sections 1.3 and 1.5 of the NYISO's Accounting and Billing Manual) for such event or performance test.

A RIP that requests a meter data correction is required to provide to the NYISO supporting documentation sufficient for NYISO to evaluate and validate the requested correction. Such information includes, but is not limited to:

- The SCR's hourly integrated meter Load data for each hour of the affected Capability Period(s) in Hour Beginning format;

- A letter from the SCR's Meter Authority (MA) that read the meter confirming the accuracy of the meter data submitted by the RIP;
- A letter from a member of the RIP's executive team with the following:
    - Detailed explanation of the root cause of the inaccurate meter data for the SCR including, but not limited to, how the data error was identified by the RIP;
    - Detailed explanation of the procedures and processes the RIP has put in place to help prevent the error from recurring in the future, if any, since the error was identified; and
    - A statement attesting the accuracy of the corrected meter data.

A RIP may not request correction of the same meter data more than one time. If the NYISO receives, validates, and accepts a RIP's corrected meter data, that data can no longer be changed.

4.12.4.10. Adjustments Affecting SCR Load Zone Peak Hours

Prior to the calculation of the applicable ACL, adjustments to the metered load of a SCR shall be made for: (a) Load reductions resulting from participation in a Transmission Owner's demand response program, (b) Load reductions resulting from participation in the NYISO Day Ahead Demand Response Program (DADRP), or, (c) participation in the NYISO Demand Side Ancillary Services Program (DSASP), during any of the Capability Period or Monthly SCR Load Zone Peak Hours for the applicable Capability Period. The adjustments shall be made, as described in each section below, to the corresponding metered load values of the SCRs as reported to the DRIS by the RIP at enrollment or when reporting Provisional ACL or Incremental ACL verification data.

Applicable adjustments to the metered load of a SCR, as described below, shall be made prior to the beginning of each Capability Period following the upload of the applicable Capability Period SCR Load Zone Peak Hours for that Capability Period and the Monthly SCR Load Zone Peak Hours for each month within that Capability Period, as specified on the DRIS and ICAP Event Calendars.

Applicable adjustments to the metered load for a SCR shall be incorporated into the applicable ACL calculation at the time of the successful import of enrollment or verification data by the RIP (refer to the *DRIS User's Guide* for details). If a modification is made to any adjusted metered load values reported by a Transmission Owner for a Transmission Owner demand response program or by the NYISO for one of NYISO's economic demand response programs, DADRP or DSASP, associated with a SCR, the applicable ACL shall be recalculated upon successful import of such changes.

Modifications may be made by the Transmission Owners and/or the NYISO to the reported adjustments when the verification data reporting period occurs for resources with a Provisional ACL or an Incremental

ACL. Modifications may also be made by the Transmission Owners and/or the NYISO to the reported adjustments during each monthly enrollment period, provided the SCR was not enrolled with a Provisional ACL or Incremental ACL and the resource has not already been enrolled in an auction month within the Capability Period.

It is the responsibility of the RIP to resolve any issues regarding adjustments for participation in a Transmission Owner's demand response program with the Transmission Owner's contacts prior to the close of each monthly enrollment period or verification data reporting period. Any issues with adjustments related to NYISO economic demand response program participation must be resolved prior to the close of each monthly enrollment period or verification data reporting period by contacting the NYISO Stakeholder Services. Adjustments to the ACL for any unresolved issues between a RIP and Transmission Owner or a RIP and the NYISO will not be permitted after the monthly enrollment period or verification data reporting period closes.

4.12.4.10.1. Adjustments for Transmission Owner's Demand Response Program Affecting SCR Load Zone Peak Hours

The authorized Transmission Owners that administer demand response programs shall import into the DRIS verified Load reductions that occurred during any of the Capability Period or Monthly SCR Load Zone Peak Hours used in the calculation of the applicable ACL for the Capability Period and/or used in the calculation of a Monthly ACL for SCRs reporting Incremental ACL verification data. The Transmission Owners shall report the Transmission Owner account number and verified Load reductions for each Capability Period or Monthly SCR Load Zone Peak Hour for each of the resources enrolled in its demand response program(s).

When the period for upload of verified Load reductions begins, Transmission Owners must provide contact information to the NYISO for the person(s) that the RIPs should contact to resolve any issues with adjustments for its demand response program data reported into the DRIS. The NYISO shall make this contact information available on the NYISO Web site at:

https://www.nyiso.com/demand-response

The NYISO shall use the Transmission Owner account number to identify the SCR for which a Transmission Owner adjustment will be made to one or more hours used in the calculation of the applicable ACL. If a SCR is enrolled in more than one Transmission Owner demand response program, or in the NYISO Day Ahead Demand Response Program, for which a Load reduction is reported for the same hour, the highest Demand Reduction reported by a Transmission Owner or verified Load reduction from a DADRP schedule, will be used to adjust that hour's metered load reported by the RIP.

4.12.4.10.2. Adjustments for NYISO Day Ahead Demand Response Program Affecting SCR Load Zone Peak Hours

The NYISO shall import into the DRIS, in accordance with Section 5.12.11.1.1 of the *NYISO Services Tariff*, verified Load reductions in response to a Day Ahead Demand Response Program ("DADRP") schedule that occurred during any of the Capability Period or Monthly SCR Load Zone Peak Hours used in the calculation of the applicable ACL for the Capability Period and/or used in the calculation of a Monthly ACL for SCRs reporting Incremental ACL verification data. If a SCR is also enrolled in one or more Transmission Owner demand response programs for which a Load reduction is reported for the same hour, the highest Load reduction occurring in either the DADRP or as reported by a Transmission Owner, will be used to adjust that hour's metered Load reported by the RIP.

4.12.4.10.3. Adjustments for NYISO Demand Side Ancillary Services Program Affecting SCR Load Zone Peak Hours

The NYISO shall import into the DRIS the DSASP Baseline MW, in accordance with Section 5.12.11.1.1 of the *NYISO Services Tariff*, for verified Load reduction of a SCR in the Demand Side Ancillary Services Program ("DSASP") during any of the Capability Period or Monthly SCR Load Zone Peak Hours used in the calculation of the applicable ACL for the Capability Period and/or used in the calculation of a Monthly ACL for SCRs reporting Incremental ACL verification data. If a RIP also reports the Load of the SCR for the same hour, the Load of the SCR to be used in the calculation of the applicable ACL will be the higher of the DSASP Baseline MW or the Load reported by the RIP. If a SCR is also enrolled in one or more Transmission Owner demand response programs for which a Load reduction is reported for the same hour, the highest Load reduction reported by a Transmission Owner will be added to the Load of the SCR reported by the RIP and the Load of the SCR to be used in the calculation of the applicable ACL will be the higher of the DSASP Baseline MW or the sum of the Load reported by the RIP and the highest Transmission Owner Load reduction

4.12.5. NYISO Notification Procedures

The NYISO will provide twenty-one (21) hour-ahead notification if notification is provided by 3:00 PM ET, or twenty-four (24) hour notice otherwise, and two (2) hour notice, as required by this *ICAP Manual* (and described in Section 4.12.4, above), to the RIP. The former notification will be provided after 11:00 A.M. day-ahead, when the Day-Ahead Market closes. The NYISO commits not to use the day-ahead notification of potential need to operate indiscriminately but rather only when the Day-Ahead Market indicates potential serious shortages of supply for the next day in accordance with the Emergency Operations Manual. The day-ahead notice may occur on a weekend day or a holiday, as needed.

The NYISO shall provide notice no less than two (2) hours ahead of required operation or interruption, in the manner described in Section 4.12.4, above. Requested hours of operation within the two hour notification window and/or beyond the maximum 4 hours obligation will be considered voluntary for purposes of performance measurement. Notifications will normally be specified from, and to, specific clock hours, on-the-hour. Performance calculations and energy payments will normally be calculated for energy reductions for whole clock hours; i.e. from 13:00 to 14:00, 14:00 to 15:00, etc. In cases where events are initiated other than on-the-hour, energy payments will be computed for partial hours but performance calculations will only be calculated for whole hours.

RIPs shall contact their SCRs through whatever communication protocols are agreed to between the SCRs and the RIPs. Communication from the RIP to the SCR is the responsibility of the RIP. Such communication is subject to review by the NYISO. Any misrepresentation of the NYISO program in such notifications is subject to sanction by the NYISO, up to and including disqualification as a RIP.

RIPs claiming SCR Unforced Capacity shall provide the NYISO with their phone and Internet contact information that allows for notification by the NYISO at any time. RIPs shall confirm receipt of both instances of notification (day-ahead and two (2) hour) within 1 hour. Such confirmation must be received in accordance with the instructions in the notification and must confirm the relay of proper notification by the RIPs to their SCR clients, where applicable.

4.12.6. Additional RIP Requirements

In addition to other requirements under this *ICAP Manual*, a RIP claiming Unforced Capacity from a SCR for sale into a NYISO-administered auction or for its own requirements (in the case of a RIP that is an LSE) shall fulfill the following obligations:

- Obtain authorization from each SCR to allow the RIP to act on behalf of the SCR during each Capability Period or for the term of the agreement. The authorization must specify that the RIP has authority to sell the SCR's Unforced Capacity, act as the organization of record for all financial transactions, and shall be signed and dated by an authorized representative of the SCR. Upon request, the RIP shall provide such authorization to the NYISO promptly and, if a date is specified by the NYISO in the request, such information must be received by the NYISO on or before the date. The authorization provided must clearly indicate the Transmission Owner account number of the SCR.
- The RIP must enroll the SCR with the facility's exact service address as listed on the electric utility bill it receives from the Transmission Owner or the electric service provider.

- Perform all auction functions in the NYISO's ICAP software program as required, and make certifications to the NYISO each month as provided in Section 4.7.
- Document reductions in Load with interval billing meter readings on customer Load (or with readings on the Local Generator(s) in the case of a SCR whose performance is calculated under Section 4.12.1 of this *ICAP Manual*) for the period following the NYISO notice under Section 4.12.4. See the Emergency Demand Response Program Manual for metering requirements.
- The RIP (including a Transmission Owner that is a RIP) shall retain all interval meter readings upon which it bases its certification of compliance, for a period of three (3) years.
- Upon request, the RIP is required to provide to the NYISO the documentation described below for each SCR it enrolls no later than the date specified in the request. Failure of the RIP to timely submit the requested documentation may lead to the termination of the SCR's enrollment beginning with the next auction month and continuing until the NYISO has received the requested data and verified the accuracy of the resource's enrollment data.
    - Most recent electric utility bill for the Transmission Owner account number associated with the enrolled SCR. The utility bill must clearly indicate the Transmission Owner or electric service provider, Transmission Owner or electric service provider account number and the service address of the enrolled SCR. The electric utility bill must have been issued within two months of the calendar month in which the NYISO requested the documentation.
    - Documentation from the SCR's Transmission Owner or electric service provider evidencing the Load Zone and voltage service level of the enrolled SCR. This documentation can be the SCR's electric utility bill if the bill indicates the Load Zone and voltage service level for the resource.
    - Documentation demonstrating the load reduction plan for the SCR. A load reduction plan is the sequence of steps that the SCR intends to follow, and the Load reduction (in kW) expected to be achieved by each step, when called upon to reduce its Load being supplied from the NYS Transmission and/or distribution system, during a NYISO initiated event or performance test. A SCR's declared value for the auction month for which the NYISO requested the documentation must not exceed the sum of kW Load reductions expected from each step of the SCR's load reduction plan.

      A sample load reduction plan is available on the NYISO website at:

https://www.nyiso.com/documents/20142/3664627/Sample-Load-Reduction-Plan.pdf

- If the enrolled SCR participates with a Local Generator, documentation evidencing the Local Generator's nameplate capacity. Acceptable documentation includes the Local Generator's specification sheet as provided by the manufacturer.

4.12.7. SCR Demand Response Payments

Each time a SCR is called to perform in an event or test, the NYISO shall pay the Resource's RIP an Energy payment, provided the NYISO receives in the DRIS the required data for the SCR performance and demand response energy payments in the required format, no later than 5:00:00 P.M. on the seventy-fifth (75th) day following the date of each event or test, on the date set forth on the ICAP Event Calendar and DRIS Event Calendar. Payment for SCR Load reductions are conditioned upon verification of performance for the time period requested by the NYISO. If a SCR participates in either the DADRP or DSASP and concurrently participates as a SCR, the energy payment to the RIP will be adjusted if the resource was committed in the Day-Ahead Market to perform in either the DADRP or DSASP at the same time as the SCR activation. The Customer Base Load (CBL) calculation and methodology are specified in the *NYISO Emergency Demand Response Manual* (available from the NYISO Web site at https://www.nyiso.com/manuals-tech-bulletins-user-guides).

The RIP must use and adhere to the upload file format to report required data the NYISO will use to compute performance and energy payment calculations. The format of and specifications for the file are outlined in the *NYISO DRIS User's Guide*.

The Energy payment shall be computed for the amount of Load reduction occurring during the event measured in terms of the Energy supplied during each clock hour of its performance. If the NYISO requests performance by SCRs for more than four (4) hours, the RIP for each responding SCR shall be paid for the duration of its verified performance in the event in accordance with this *ICAP Manual*, starting with the hour specified by the NYISO as the starting time of the activation, or, in the event that the NYISO specified that the Demand Reduction begin as soon as possible, starting with the whole clock-hour in which the SCR began its response. Payment for participation in events and tests shall be computed in accordance with *NYISO Services Tariff* Section 5.12.11.1 pursuant to ISO Procedures. Payment for SCR Load reductions are conditioned upon verification of performance for the time period requested by the NYISO.

If the NYISO requests performance by SCRs in an event for four (4) hours or less, each SCR that provided a verified load reduction for the duration of the event shall be paid as if it had been activated for

four (4) hours. Each SCR that reduces demand shall receive a payment consistent with the scarcity pricing rules, in accordance with this Section 4.12.7, for the duration of the NYISO request or for four (4) hours, whichever is greater, starting with the hour specified by the NYISO as the starting time of the event, or, if the NYISO specified that the Demand Reduction begin as soon as possible, starting with the hour that the SCR began to perform. Except in the case of a test, each SCR shall be paid the zonal Real- Time LBMP per MWh of Load reduced for the four-hour minimum payment period. Payment for SCR Load reductions is conditioned upon verification of performance for the time period requested by the NYISO.

In the event that a SCR's Minimum Payment Nomination total for the number of hours of performance requested by the NYISO or four (4) hours, whichever is greater, in accordance with this *ICAP Manual* exceeds the LBMP revenue that RIP receives for the SCR for the corresponding number of hours, that SCR will be eligible for a Bid Production Cost Guarantee to make up the difference.

When more than one SCR has submitted the highest Minimum Payment Nomination selected by the NYISO to perform during an event, the NYISO will specify the number of megawatts of the amount of SCRs that must perform during that event such that all such resources are selected in the same zone provided that single source resources shall be taken without being called upon for partial performance.

To continue the example listed in Section 4.12.3, each SCR that was called to perform in Zone J would be paid the greater of its Minimum Payment Nomination or the applicable LBMP per MW per hour of requested performance following verification of performance of Demand Reduction. When at least one (1) MW of SCR Capacity is needed to satisfy the total reserve requirement, the Minimum Payment Nominations submitted by these Resources may be considered when determining the LBMP.

If the Demand Side Resource is a SCR, has fewer than five (5) CBL days for a NYISO initiated event or performance test and the RIP wishes to receive energy payments, the RIP must contact NYISO Stakeholder Services, ***at least five (5) business days prior to the deadline for importing event or test performance data into DRIS***.

For event performance data received from a RIP at least ten (10) business days prior to the date of the initial settlement invoice for the month in which the event occurred (Initial Event Data Submission Date), the NYISO will, on a best efforts basis, process the received event performance data such that Energy payments for the event are reflected in the initial settlement invoice. Event data received after the Initial Event Data Submission Date referenced above shall be processed for the true-up or final invoice.

4.12.8. NYISO Verification

The NYISO retains the right to audit any records kept by the RIP, the Transmission Owner, and the SCR that are used to support the RIP's certification of compliance with the procedures set forth in this Section 4.12. The RIP shall be obligated to ensure the SCR complies and fully cooperates with any NYISO audit. Before auditing a SCR, the NYISO will first request information from the RIP that registered the SCR for the period(s) in question, and give the RIP an opportunity to provide information on behalf of the SCR.

4.13. Existing Municipally-Owned Generation

A municipal utility that owns generation in excess of its Minimum Installed Capacity Requirement, net of any Capacity provided by the New York Power Authority, may qualify to supply the excess Capacity as Unforced Capacity under the following conditions.

The municipal utility must:

- Provide the NYISO with the physical operating parameters of its generation capability;
- Operate the generation at the ISO's request; and
- Ensure that the Energy provided by the generation is deliverable to the New York State Power System. Only generation that was in service or under construction as of December 31, 1999 may qualify for the exemption from the bidding, scheduling, and notification requirements.

4.14. Unforced Capacity Deliverability Rights (UDRs) and External-to-Rest of State (ROS) Deliverability Rights (EDRs)

UDRs and EDRs are rights, as measured in megawatts, that are associated with certain new incremental transmission projects that provide a transmission interface to the NYCA or, in the case of EDRs, increase transfer capability over an existing transmission interface. External UDRs are associated with controllable interfaces between a NYCA and an External Control Area. Local UDRs are associated with controllable interfaces between a non-constrained region in the NYCA and a NYCA Locality. UDRs, when combined with Unforced Capacity either by contract or ownership, and which is deliverable to the NYCA interface with the UDR transmission facility, allows such Unforced Capacity to be treated as if it were located in the NYCA. This Unforced Capacity thereby contributes to an LSE's Locational Minimum Installed Capacity Requirement. To the extent the NYCA interface is with an External Control Area the Unforced Capacity associated with UDRs must be deliverable to the Interconnection Point.

EDRs are associated with incremental transfer capability on a new or existing Scheduled Line over an External Interface, with a terminus in Rest of State. EDRs that have obtained CRIS pursuant to Attachment S of the OATT, when combined with qualified Unforced Capacity which is located in an External Control

Area either by contract or ownership, and which is deliverable to the NYCA Interface with Rest of State over which it created the incremental transfer capability, allows such Unforced Capacity to be offered into the ISO-Administered Market.

A holder of UDRs and/or EDRs may transfer them to another entity.

4.14.1. Determination and Assignment of Unforced Capacity Deliverability Rights and External-to-ROS Deliverability Rights

The amount of UDRs and EDRs assigned by the NYISO to a new incremental transmission facility, and any future adjustments there to, will be based on the transmission capability, reliability, availability of the facility, and appropriate NYSRC reliability studies. Projects seeking UDRs or EDRs must meet the NYISO Deliverability Interconnection Standard, in accordance with the rules and procedures set forth in the *NYISO OATT* Attachment S. Projects predating Class Year 2007 that hold UDRs received CRIS pursuant to the *NYISO OATT* Attachment S.

4.14.2. Requesting, Granting, Duration and Adjustment of Unforced Capacity Deliverability Rights and External-to-ROS Deliverability Rights

An incremental transmission project will be awarded UDRs or EDRs after a formal request to the NYISO that includes the pertinent technical information needed to determine such award. The NYISO may request, and the requestor and/or the designated rightsholder shall provide, additional information as necessary. The NYISO will grant UDRs or EDRs to the requestor, or designated rights holder, quantified as the Installed Capacity Equivalent of the Unforced Capacity to be delivered to the Interconnection Point in MW, throughout its project life. The amount of UDRs or EDRs awarded to a particular project may be adjusted periodically by the NYISO. Adjustments to such an award will reflect changes in physical characteristics and availability of the associated project.

The formal request may be made any time after submittal of the studies required to support the NYISO's Interconnection process, or if the NYISO is conducting those studies, after the NYISO has completed the studies. If a formal request is received by the NYISO from a rights holder for a facility after August 1, the request for UDRs or EDRs will not be granted for the upcoming Capability Year, and the NYSRC will consider the UDRs or EDRs associated with the new facility as emergency support capability in the reliability studies conducted for the upcoming Capability Year. The holder may use timely requested UDRs or EDRs awarded for the upcoming Capability Year, as described in Section 4.14.3.

The formal request for UDRs must include the following information.

- Interconnection points (i.e., bus names and voltage levels)

- Expected in-service date
- External Control area of interconnection, if applicable
- Internal Locality(ies) of interconnection
- Normal summer/winter ratings in MW of facility, and design temperatures
- Limiting element(s)
- Average expected outage rate, and average expected repair time
- Rights holder of record at the time of the request
- The formal request must be provided to:

  New York Independent System Operator, Inc.

  Vice President, System and Resource Planning

  10 Krey Blvd.

  Rensselaer, NY 12144

The formal request for EDRs must include the following information.

- Interconnection points (i.e., bus names and voltage levels)
- Expected in-service date
- External Control area of interconnection
- Internal Zone within ROS of interconnection
- Normal summer/winter ratings in MW of facility, and design temperatures
- Line losses
- Average expected outage rate, and average expected repair time
- Rights holder of record at the time of the request
- The formal request must be provided to:

  New York Independent System Operator, Inc.

  Vice President, System and Resource Planning

  10 Krey Blvd.

  Rensselaer, NY 12144

4.14.3. Use of External Unforced Capacity Deliverability Rights and External-to-ROS Deliverability Rights

In order to use External UDRs or EDRs, an Installed Capacity Supplier must have a contract to match the number of UDRs or EDRs with Installed Capacity associated with an identifiable qualified physical Resource with a registered NYISO PTID.

When an entity combines External UDRs with acceptable Installed Capacity/Unforced Capacity, the resulting product, when supplied to an LSE will be treated as Unforced Capacity located in the NYCA Locality and will qualify as Locational Unforced Capacity, provided that the energy is deliverable to the NYCA interface with the UDR transmission facility. When an entity combines EDRs with acceptable Installed Capacity/Unforced Capacity, the resulting product, when supplied to an LSE, will be treated as Unforced Capacity located within the NYCA (but not a Locality), provided that energy is deliverable to the NYCA interface over which the EDR creates increased transfer capability.

Annually, by written notice received by the NYISO prior to August 1 or such later date as agreed to by the NYSRC, the holder of External UDRs or EDRs may return to the NYCA a quantity of the External UDRs or EDRs, up to the maximum amount awarded under Section 4.14.2, to be used in the NYSRC and NYISO reliability studies that determine the NYCA Installed Reserve Margin and the Locational Minimum Installed Capacity Requirements, respectively, for the next Capability Year. This capability will be considered emergency support capability in these reliability studies to benefit all LSEs when determining the NYCA Installed Reserve Margin and the Locational Minimum Installed Capacity Requirements.

For example, assume a transmission project is awarded 300 MW of External UDRs from ISO-NE to Long Island. Further, assume that the holder of these External UDRs is able to contract for an amount of UCAP that requires 200 MW of UDRs. By written notice received by the NYISO prior to August 1, the holder of these External UDRs may return up to 100 MW of the External UDRs for use in the reliability studies for the next Capability Year.

Each year, the entire quantity of External UDRs and EDRs awarded a transmission project under Section 4.14.2 will be available to the holder to make the determination described above.

Installed Capacity Suppliers holding rights to UDRs from an External Control Area with a dissimilar capability year shall have an opportunity to elect that the ISO determine Locational Minimum Installed Capacity Requirements without the quantity of megawatts associated with that right for the first month of a Capability Year, and as Unforced Capacity for the remaining months provided (a) such election is made prior to the first time Capacity for the corresponding quantity of megawatts held by the Installed Capacity Supplier making the election is certified in a bilateral transaction or offered in one of the NYISO's auctions, and (b) an election for all or part of the quantity of megawatts of rights to UDRs held by the Installed

Capacity Supplier was not previously made. An election pursuant to this clause must be received by the NYISO no later than 5:00 PM on February 1 preceding the Capability Year. The notification shall include:

- Installed Capacity Supplier organization name;
- UDR facility name;
- Name of organization to which the NYISO granted the UDRs;
- Name of organization from which the Installed Capacity Supplier received the rights to the UDRs;
- The MW associated with the rights to the UDRs held by the Installed Capacity Supplier
- Citations to FERC orders or other regulatory approvals demonstrating the Installed Capacity Supplier's right to the UDRs, if any; and
- Contract demonstrating that the Installed Capacity Supplier has an arrangement to utilize the UDRs to import Capacity into the Locality for the month or consecutive months, consistent with the election (from which prices may be redacted).

External Installed Capacity Suppliers using External UDRs or EDRs must fulfill all External Installed Capacity Supplier requirements found in the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) and NYISO Procedures, except for the requirement to acquire Import Rights as described in section 4.9.2.

4.14.4. Use of Local Unforced Capacity Deliverability Rights

In order to use Local UDRs, an Installed Capacity Supplier must have a contract to match UDRs with Unforced Capacity associated with an identifiable physical Resource either located in the non-constrained region of the NYCA or able to deliver Unforced Capacity to the non-constrained region of the NYCA.

When an entity combines Local UDRs with Unforced Capacity, the resulting product, when supplied to an LSE in the appropriate NYCA Locality, will be treated as Unforced Capacity located in the NYCA Locality and will contribute to that LSE's Locational Minimum Unforced Capacity Requirement.

Annually, upon written notice received by the NYISO prior to August 1 or such later date as agreed to by the NYSRC, the holder of Local UDRs may return to the NYCA a quantity of the Local UDRs, up to the maximum amount awarded under Section 4.14.2, to be used as transmission capability in the NYSRC and NYISO reliability studies that determine the NYCA Installed Reserve Margin and the Locational Minimum Installed Capacity Requirements, respectively, for the next Capability Year. This transmission capability

will be considered free-flowing capability in these reliability studies to benefit all LSEs when determining the NYCA Installed Reserve Margin and the Locational Minimum Installed Capacity Requirements.

Each year, the entire quantity of Local UDRs awarded a transmission project under Section 4.14.2 will be available to the holder to make the determination described above.

Installed Capacity Suppliers using Local UDRs must fulfill all Installed Capacity Supplier requirements found in the *NYISO Services Tariff* and NYISO Procedures for the Unforced Capacity they seek to combine with UDRs.

4.14.5. Unforced Capacity Deliverability Rights and External-to-ROS Deliverability Rights offered in an Installed Capacity Auction

UDRs and EDRs may be offered in NYISO-administered Installed Capacity Auctions when previously combined with qualified Unforced Capacity. External Unforced Capacity combined with UDRs or EDRs and sold in an NYISO-administered Installed Capacity Auction will not require the allocation of External Installed Capacity Import Rights.

The information submission requirements for External Installed Capacity Suppliers enumerated in section 4.9.1 of this *ICAP Manual*, with the exception of Operating Data, must be received by the NYISO by the deadline as specified in the ICAP Event Calendar, and at such times as required by the NYISO and this *ICAP Manual* (e.g., DMNC test results). Operating Data must be received by the NYISO in accordance with the timing requirements found in Section 4.4.9 of this *ICAP Manual* [on or before the tenth (10th) day of the month preceding the month in which the prospective External Installed Capacity Supplier wishes to supply Unforced Capacity to the NYCA].

4.15. Behind-the-Meter Net Generation Resource

A BTM:NG Resource ("BTM:NG"), as defined in the NYISO's Services Tariff, is a facility within a defined electrical boundary comprised of a Generator and a Host Load located at a single point identifier (PTID), where the Generator routinely serves, and is assigned to, the Host Load and has excess generation capability after serving that Host Load. The Generator of the BTM:NG Resource must be electrically located in the NYCA, have a minimum nameplate rating of 2 MW and a minimum net injection to the NYS Transmission System or distribution system of 1 MW. The Host Load of the BTM:NG Resource must also have a minimum Average Coincident Host Load ("ACHL") of 1 MW.

A facility that otherwise meets these eligibility requirements, but either (i) is an Intermittent Power resource, (ii) whose Host Load consists only of Station Power, or (iii) has made an election not to participate in the ISO-administered markets as a BTM:NG Resource pursuant to Services Tariff Section

5.12.1.12, as described below, does not qualify to be a BTM:NG Resource. BTM:NG Resources cannot simultaneously participate as a BTM:NG Resource and in any ISO and/ or Transmission Owner administered demand response or generation buy-back programs.

A BTM:NG Resource can annually, by written notice received by the NYISO prior to August 1, elect not to participate in the NYISO Administered Markets as a BTM:NG Resource. Such election must be made only if the BTM:NG Resource intends to participate in the NYISO's markets as a different resource type (e.g., as a SCR or a front-of-the-meter Generator); a BTM:NG Resource seeking to withdraw from the NYISO's markets entirely shall follow the appropriate procedures as described in Services Tariff section 5.12.1.12. A resource that makes such an election cannot participate as a BTM:NG Resource for the entire Capability Year for which it made the election, but can, however, prior to August 1 of any subsequent Capability Year; provide all required information in order to seek to re-qualify as a BTM:NG Resource. Re-qualified BTM:NG Resources will only be permitted to begin participation at the start of a Capability Year. A Resource electing not to participate as a BTM:NG Resource must send its notification to participation@nyiso.com by the August 1 deadline. The notification should include the Market Participant's name, the Resource's PTID, and the resource type it seeks to become (e.g., SCR).

4.15.1. Adjusted Host Load

The Adjusted Host Load ("AHL") is the Load value used by the NYISO to calculate a BTM:NG Resource's Net-ICAP.

Pursuant to Services Tariff Section 5.12.6.1.2.2, a BTM:NG Resource's AHL is equal to the product of the ACHL (as described in Section 4.15.1.1 of this ICAP Manual) multiplied by one plus the Installed Reserve Margin applicable for that Capability Year. The NYISO will calculate each BTM:NG Resource's AHL on an annual basis. The AHL for an existing BTM:NG Resource is calculated prior to the start of the Summer Capability Period. The AHL for new BTM:NG Resources entering the market shall be calculated at the time of registration, and then annually as described for existing BTM:NG Resources.

A BTM:NG Resource that makes an election not to participate in the ISO-administered markets as a BTM:NG Resource pursuant to Services Tariff section 5.12.1.12, and seeks, in a subsequent Capability Year, to re-register as a BTM:NG Resource shall have its AHL calculated prior to the start of the Summer Capability Period in which returns as a BTM:NG Resource.

$$AHL = ACHL * (1 + IRM)$$

4.15.1.1. Average Coincident Host Load

Pursuant to Services Tariff section 5.12.6.1.2.1, the ISO shall compute each BTM:NG Resource's ACHL for each Capability Year using the peak proxy Load value adjusted by the weather normalization factor ("WNF") and regional Load growth factor ("RLGF").

The peak proxy Load value is the simple average of the top twenty (20) hourly Host Load values for a BTM:NG Resource taken from the BTM:NG Resource peak Load Hours.

The WNF and RLGF used in the calculation are those factors calculated pursuant to Section 2 of the NYISO's Load Forecasting Manual in relation to developing the NYCA Minimum ICAP Requirement. The NYISO will import into DRIS the applicable RLGF and WNF for each Capability Year.

ACHL = Peak Proxy Load Value * (1 + WNF) * (1 + RLGF)

If a BTM:NG Resource's ACHL is below 1 MW, the resource is not eligible to participate in the NYISO's markets as a BTM:NG Resource until its ACHL is calculated to be at least 1 MW (such calculation done annually prior to the start of the Capability Year).

4.15.1.2. BTM:NG Resource Peak Load Hours

The BTM:NG Resource peak Load hours for a Capability Year are the top forty (40) NYCA peak Load hours that occurred in the prior Summer Capability Period and the Winter Capability Period immediately prior to that. For instance, the 2017-18 Capability Year BTM:NG peak Load hours are the top forty (40) NYCA peak Load hours in the Summer 2016 Capability Period and Winter 2015-2016 Capability Period. The BTM:NG Resource peak Load hours identified by the NYISO are used to determine the peak proxy Load value of BTM:NG Resources. The NYISO will post the BTM:NG Resource peak Load hours on its website, and import them into the DRIS, at least ninety (90) days prior to the beginning of each Capability Year.

4.15.1.3. Peak Proxy Load Data

Each BTM:NG Resource must provide to the NYISO data sufficient to calculate its peak proxy Load value (i.e., data sufficient to determine the simple average of the Resource's top 20 hourly Host Loads coincident with the BTM:NG Resource peak Load hours). If a BTM:NG Resource does not have metered Host Load data for each of the BTM:NG Resource peak Load hours, the NYISO will calculate the Resource's peak proxy Load value as described in Revenue Metering Requirements Manual section 3.2 (i.e., based on "net" facility revenue meter and gross generation meter data).

If a BTM:NG Resource does not have telemetered data for each of the BTM:NG Resource peak Load hours it must submit, and the NYISO must receive, the data to determine the peak proxy Load value at least forty-five (45) days prior to the start of the Capability Year (or, for BTM:NG Resources performing their initial registration, at least forty-five (45) days prior to the first auction month in which the Resource intends to participate). BTM:NG Resources may submit the required data by completing the form "BTM:NG - Peak Proxy Load Data" posted on the NYISO website under https://www.nyiso.com/behind-the-meter and then sending to scr_registration@nyiso.com.

The peak proxy Load data submitted to the NYISO, must accurately reflect the Load consumed by the host facility and routinely served by the BTM:NG Resource.

The meters used to measure BTM:NG Resource peak proxy Load data must be accepted by a Meter Authority ("MA") (for the purposes of this Section 4.15 of the ICAP Manual, a "Meter Authority" is any entity that meets the requirements of Section 4.3 of the Revenue Metering Requirements Manual). The metering requirements for BTM:NG Resources are described in Section 3.2 of the NYISO's Revenue Metering Requirements Manual. It is the responsibility of the Market Participant to ensure the accuracy of the meter data submitted to the NYISO.

4.15.1.4. Forecasted Peak Proxy Load Data

A facility that meets the criteria to be, and has not previously been, a BTM:NG Resource, and that does not have the data to determine peak proxy Load value, must submit and the NYISO must receive, forecasted peak proxy Load data which shall be used to calculate an estimated ACHL. The BTM:NG Resource shall base its forecast on actual or calculated Host Load data, or if not available, billing data or other business data of the Host Load. It is the responsibility of the Market Participant to support both its lack of sufficient meter data and the values used in its forecast. Acceptable evidence of lack of sufficient metering includes the BTM:NG Resource's meter installation date (provided by the MA) of the BTM:NG Resource meter(s).

If the Market Participant is required to submit forecasted peak proxy Load data, the NYISO must receive the forecasted peak proxy Load data at least forty-five (45) days prior to the start of the Capability Year (or, for BTM:NG Resources performing their initial registration, at least forty-five (45) days prior to the first auction month in which the Resource intends to participate). Peak proxy Load data must be submitted by completing the form "BTM:NG - Forecasted Peak Proxy Load Data" posted on the NYISO website under https://www.nyiso.com/behind-the-meter and then sending to scr_registration@nyiso.com

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The NYISO will review the information and reserves the right to approve, deny or otherwise modify, in consultation with the Market Participant, the forecasted peak proxy Load value. If, after reviewing the data provided by the BTM:NG Resource, the NYISO believes the data to be inaccurate it may seek verification of data from the Resource's MA. An estimated ACHL can only be applicable to a BTM:NG Resource until actual data to determine peak proxy Load value becomes available, but in any event no longer than three (3) consecutive Capability Years beginning with the Capability Year it is first an Installed Capacity Supplier.

4.15.1.5. Adjustments for the BTM:NG Resource's Station Power

The peak proxy Load data of a BTM:NG Resource may be adjusted, as described in the two situations addressed below, if the Station Power consumed by the Generator serving the BTM:NG Resource is separately metered from all other Load of the BTM:NG Resource pursuant to Services Tariff sections 2.19 and 5.12.6.1.1 and section 4.2.3 of this ICAP Manual:

- If the separately metered Station Power Load is also included in the hourly Host Load data submitted to the NYISO for the purposes of establishing the BTM:NG Resource's peak proxy Load value, and the BTM:NG Resource elects to perform a DMNC test, then the separately metered Station Power meter data will be subtracted from the hourly Host Load data used to calculate the peak proxy Load value;
- If the separately metered Station Power Load is not included in the hourly Host Load data submitted to the NYISO for the purposes of establishing the BTM:NG Resource's peak proxy Load value, and the BTM:NG Resource elects to perform a DMGC test, then the separately metered Station Power meter data will be added to the hourly Host Load data used to calculate the peak proxy Load value.

If a BTM:NG Resource's Station Power is not separately metered from all other Load of the Resource, the Station Power will be included in the hourly Host Load when determining the peak proxy Load value.

If the BTM:NG Resource's Station Power is reported to the NYISO in accordance with Section 6.4 of NYISO's Accounting and Billing Manual, the meter data for the Station Power reported by the MAs may be available in the NYISO's settlements system, and will be used to calculate the peak proxy Load value. Market Participants are solely responsible for ensuring that the correct meter data is used for its BTM:NG Resources. Market Participants are required to notify the NYISO at the earliest practicable time if there are meter data errors. The Market Participant should work with the relevant Meter Authority to resolve meter data inaccuracies.

If the BTM:NG Resource's Station Power is not provided to the NYISO's settlements system, but Station Power Load is separately metered and verifiable by the MA, the Market Participant may report the meter

data for the Station Power to the NYISO by completing the form "BTM:NG – Station Power Meter Data" posted on the NYISO website under https://www.nyiso.com/behind-the-meter and emailing the completed form to scr_registration@nyiso.com at least forty-five (45) days prior to the start of the Capability Year (or, for BTM:NG Resources performing their initial registration, at least forty-five (45) days prior to the first auction month in which the Resource intends to participate). If, after reviewing the data provided by the BTM:NG Resource, the NYISO believes the data to be inaccurate, it may seek verification of data from the Resource's MA. After verifying the Station Power Load data, the NYISO reserves the right to approve, or deny the data, based on the results of the NYISO's verification and after consulting with the Market Participant.

4.15.1.6. NYISO Verification

The NYISO will review all of the data used to calculate a BTM:NG Resource's AHL and may seek verification of the data from the BTM:NG Resource and/or the Resource's MA if the NYISO believes the data to be inaccurate. The documentation that may be requested from the Market Participant and/or the MA to validate data includes, but is not limited to, the electric utility bill of the BTM:NG Resource, one-line diagrams clearly indicating the meter configuration of the BTM:NG Resource, information about the Resource's participation in other retail or wholesale programs, and Meter Authority confirmation of the meter data submitted to the NYISO for the BTM:NG Resource. The Market Participant must provide the documentation to the NYISO within the deadline provided in the NYISO's request. The NYISO reserves the right to approve, deny, or modify the AHL data after reviewing all of the information submitted by the Market Participant and its MA, and after consulting with the Market Participant. Failure of the Market Participant to provide sufficient documentation will lead to the BTM:NG Resource being unable to participate as an ICAP Supplier until sufficient information is provided.

4.15.2. Net-ICAP Calculation for BTM:NG Resources

Net-ICAP is the Installed Capacity of a BTM:NG Resource that is qualified to participate in the NYISO's Capacity Market. A BTM:NG Resource's Net-ICAP consists of a generator component (i.e., its Adj. DMGC/DMNC) and a load component (i.e., its AHL). If the BTM:NG Resource's Load is greater than its Generation its Net-ICAP value shall be set to zero. Net-ICAP will be considered the equivalent of ICAP for BTM:NG Resources.

Net-ICAP is calculated as follows:

Net-ICAP = Adj. $DMGC_m$ – AHL

4.15.2.1. Adjusted DMGC

The Adjusted DMGC of a BTM:NG Resource shall be the least of: (i) its DMGC for the Capability Period as defined in section 4.2 of the ICAP Manual; (ii) its AHL plus its applicable Injection Limit; and (iii) its AHL plus the number of MW of CRIS it has obtained, as determined in accordance with OATT Section 25 (OATT Attachment S) and Section 5.12.6.1.1 of the Services Tariff.

Adjusted $DMGC_m$ is calculated as follows:

$$\text{Adj. DMGC}_m = \text{Min}(\text{DMGC}_m, \text{AHL}_m + \text{Injection Limit}, \text{AHL}_m + \text{CRIS}_{CP})$$

Where:

Adj. $DMGC_m$: the BTM:NG Resource's maximum generation available to the Capacity Market in month m;

$DMGC_m$: the maximum generation output of the Generator as measured by a DMGC or DMNC test, as applicable, for month m;

AHL_m: the Adjusted Host Load for the BTM:NG Resource for month m;

Injection Limit: the maximum number of MW that a BTM:NG Resource is permitted to inject into the grid;

$CRIS_{CP}$: the amount of Capacity Resource Interconnection Service the BTM:NG Resource has been awarded.

4.15.3. Net-UCAP Calculation

The amount of Unforced Capacity that each BTM:NG Resource is authorized to supply in the NYCA is its Net-UCAP. Net-UCAP is the lesser of (i) the ISO's calculation of the Adjusted DMGC for the Generator of the BTM:NG Resource multiplied by the product of the Resource's assigned Capacity Accreditation Factor and one minus its EFORd, and then decreased by its AHL multiplied by the NYCA Translation Factor as defined in section 2.5 of this ICAP Manual, and (ii) the Resource's Net-ICAP. If a BTM:NG Resource's Net-UCAP is less than zero, it will be set to zero by the NYISO. The BTM:NG Resource will remain qualified to participate as an ICAP Supplier, and can offer available Net-UCAP once it returns to a positive value.

Net-UCAP is calculated as follows:

$$\text{Net} - \text{UCAP} = \text{Max}\,(\text{Min}\,([\text{Gen. UCAP}] - [\text{Load UCAP}], \text{Net} - \text{ICAP}), 0)\text{-}$$

Where:

Gen. UCAP： the UCAP provided by the Generator of a BTM:NG Resource. It is calculated as follows;

$$\text{Gen. UCAP} = \text{Adj. DMGC}_{\text{m}} * (1 - \text{EFORd}) * CAF_m$$

Where:

Adj. DMGC_{m} = the BTM:NG Resource's maximum generation available to the Capacity Market in month m.

EFORd = the effective forced outage rate on demand

CAF_m = the BTM:NG Resource's assigned Capacity Accreditation Factor (CAF) for month *m*, in accordance with Section 7.2 of this *ICAP Manual*.

Load UCAP = the UCAP requirement needed to serve the Load of a BTM:NG Resource. It is calculated as follows:

$$\text{Load UCAP} = \text{AHL}_{\text{m}} * (1 - \text{NYCA TF}_{\text{CP}})$$

Where:

AHL_{m} = the Adjusted Host Load for Behind-the-Meter Net Generation for month m

NYCA TF_{CP} = the NYCA Translation factor for the Capability Period

5. NYISO Administered Installed Capacity Auctions

The NYISO will administer Installed Capacity auctions to accommodate Load Serving Entities (LSEs) and Installed Capacity Suppliers' efforts to enter into Unforced Capacity transactions and to allow LSEs to satisfy their respective LSE Unforced Capacity Obligations. In the various NYISO administered auctions, LSEs will have the opportunity to purchase the Unforced Capacity necessary to meet the LSE Unforced Capacity Obligations established by the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer), and to purchase or sell excess Unforced Capacity. Installed Capacity Suppliers will have the opportunity to sell Unforced Capacity.

New Special Case Resources are eligible to participate only in ICAP Spot Market Auctions.

Load Serving Entities and Installed Capacity Suppliers may also purchase or sell Unforced Capacity, other than Unforced Capacity of New Special Case Resources, through Bilateral Transactions. Load Serving Entities holding Unforced Capacity, which they want credited against their LSE Unforced Capacity Obligations, must certify such Unforced Capacity.

Participation in NYISO-administered auctions is restricted to NYISO Customers. Unforced Capacity supplied through the auction may only be used for the commercial interests of the purchaser. In addition, any Unforced Capacity purchased through a NYISO administered auction may not be resold for the purposes of meeting Installed Capacity requirements imposed by operators of External Control Areas.

The *NYISO Services Tariff* references are Sections 5.13 through 5.15. (The *NYISO Services Tariff* is available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer.) A summary of this Section 5 combined with Attachment H of this *ICAP Manual* is on file with FERC as an Attachment to the *NYISO Services Tariff* under the title "Installed Capacity Auction Description."

5.1. Overview of Auction Structure and Timing

The NYISO will conduct regularly scheduled Installed Capacity auctions before and during Capability Periods. See the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do) for the upcoming Capability Period schedule of auctions. The schedule is structured to ensure adequate time between the date that auction results from Monthly Auctions are posted and the date that LSEs are required to demonstrate the amount of Unforced Capacity that they have procured prior to the ICAP Spot Market Auction. Auctions shall be conducted prior to the start of each Capability Period and each month during a Capability Period.

The NYISO will post the results of Installed Capacity auctions according to the schedule in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). The ICAP Event Calendar will ensure that there are at least four (4) business days between the date that auction results from the Monthly Auction are posted and the date that LSEs are required to certify the quantity of Unforced Capacity that it has or has obtained for the upcoming Obligation Procurement Period, pursuant to Section 5.11.2 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer). LSEs attempting to credit against their LSE Unforced Capacity Obligations any Unforced Capacity that they hold in excess of their Minimum Unforced Capacity Requirement must certify such Unforced Capacity.

5.1.1. General Auction Requirements

The NYISO shall conduct regular auctions at the times specified in Section 5.13.1 of the *NYISO Services Tariff* and in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). Installed Capacity Suppliers, LSEs, and Installed Capacity Marketers that are Customers under the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) will be allowed to participate in Installed Capacity auctions, provided that they satisfy the creditworthiness requirements set forth in Section 2.4 of the *NYISO OATT*.

Offers to sell and Bids to purchase Unforced Capacity shall be made in $/kW for the time period appropriate to the auction. The NYISO shall impose no limits on Bids or offers in any auction, except to the extent required by any applicable capacity market mitigation measures in accordance with the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer), or in accordance with offer cap requirements applicable to External CRIS Rights Holders as specified in Section 5.12.2.4 of the *NYISO Services Tariff*, Section 25.7.11 of the *NYISO OATT* Attachment S, and Section 4.10.7 of this *ICAP Manual*.

Installed Capacity Suppliers that wish to participate in an NYISO-administered auction must certify to the NYISO in accordance with the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do), demonstrating that their Unforced Capacity has not been committed to a Bilateral Transaction.

Unforced Capacity from Resources electrically located within Zone J, New York City ("In-City") and the G-J Locality may be subject to FERC-approved capacity market mitigation measures. See *NYISO Services*

Tariff, Attachment H, Section 23.4.5 (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

5.2. Capability Period Auctions

A Capability Period Auction will be conducted no later than thirty (30) days prior to the start of each Capability Period in which Unforced Capacity will be purchased and sold for the entire duration of the Capability Period. The exact date of the Capability Period Auction shall be established in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do).

The Capability Period Auction will be conducted and solved simultaneously to purchase Unforced Capacity, which may be used by an LSE toward all components of its LSE Unforced Capacity Obligation for each Obligation Procurement Period. Participation shall consist of: (i) LSEs seeking to purchase Unforced Capacity; (ii) any other entity seeking to purchase Unforced Capacity; (iii) qualified Installed Capacity Suppliers (for Resources other than New Special Case Resources); and (iv) any entity that owns Unforced Capacity that is not (a) otherwise already committed and wishes to make that Unforced Capacity available or (b) attributable to New Special Case Resources.

Buyers that are awarded Unforced Capacity shall pay the applicable Market-Clearing Price of Unforced Capacity in the Capability Period Auction. Sellers that are selected to provide Unforced Capacity shall receive the applicable Market-Clearing Price of Unforced Capacity in the Capability Period Auction in accordance with *the NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

The results of the Capability Period Auction will be made available to Market Participants at the times specified in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do), which shall be prior to the start of the Monthly Auction held prior to the beginning of each Capability Period.

5.3. Monthly Auctions

Monthly Auctions will be held, during which Unforced Capacity may be purchased and sold for the forthcoming Obligation Procurement Period, and any other month or months remaining in the Capability Period, as specified in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do).

Each Monthly Auction will be conducted and solved simultaneously to purchase Unforced Capacity, which may be used by an LSE toward all components of its LSE Unforced Capacity Obligation for each Obligation Procurement Period. Participation shall consist of: (i) LSEs seeking to purchase Unforced Capacity; (ii) any other entity seeking to purchase Unforced Capacity; (iii) qualified Installed Capacity Suppliers (for Resources other than New Special Case Resources); and (iv) any other entity that owns Unforced Capacity that is not (a) otherwise already committed and wishes to make that Unforced Capacity available or (b) attributable to New Special Case Resources.

Buyers that are awarded Unforced Capacity shall pay the applicable Market-Clearing Price of Unforced Capacity in the Monthly Auction. Sellers that are selected to provide Unforced Capacity shall receive the applicable Market-Clearing Price of Unforced Capacity in the Monthly Auction in accordance with the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer).

The results of each Monthly Auction will be made available to Market Participants in accordance with the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do).

5.4. ICAP Spot Market Auction

The NYISO shall conduct an ICAP Spot Market Auction to purchase Unforced Capacity, which shall be used by an LSE toward all components of its LSE Unforced Capacity Obligation for each Obligation Procurement Period immediately preceding the start of each Obligation Procurement Period. The exact date of the ICAP Spot Market Auction shall be established in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). All LSEs shall participate in the ICAP Spot Market Auction as described herein. In the ICAP Spot Market Auction, the NYISO shall submit monthly Bids on behalf of all LSEs at a level per MW determined by the applicable ICAP Demand Curve established in accordance with Section 5.14.1.2 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) and Section 5.5 of this *ICAP Manual*. The ICAP Spot Market Auction will set the LSE Unforced Capacity Obligation for each NYCA LSE, which shall include both the LSE Unforced Capacity Requirements and any excess that LSE must purchase above that Requirement.

Prior to the ICAP Spot Market Auction, LSEs shall certify all Unforced Capacity acquired through Bilateral Transactions that will be counted toward their respective Minimum Unforced Capacity Requirement. Each entity that has previously committed to supply Unforced Capacity for the Obligation Procurement Period will also certify to the NYISO the amount of Unforced Capacity it is using to meet those

requirements. The NYISO shall receive offers from qualified Installed Capacity Suppliers for the ICAP Spot Market Auction for any amount of qualified Unforced Capacity that they have not previously certified. The NYISO shall also receive offers for the ICAP Spot Market Auction of Unforced Capacity from any LSE for any amount of qualified Unforced Capacity such LSE has in excess of its NYCA Minimum Unforced Capacity Requirement or Locational Minimum Unforced Capacity Requirement, as applicable.

The ICAP Spot Market Auction will be conducted and solved simultaneously for Unforced Capacity that shall be used by an LSE towards all components of its LSE Unforced Capacity Obligation for that Obligation Procurement Period using the applicable ICAP Demand Curves, as established in Section 5.5 of this *ICAP Manual*. LSEs that are awarded Unforced Capacity in the ICAP Spot Market Auction shall pay to the NYISO the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction. The NYISO shall pay Installed Capacity Suppliers that are selected to provide Unforced Capacity the applicable Market-Clearing Price determined in the ICAP Spot Market Auction in accordance with the *NYISO Services Tariff* (available from the NYISO Web site at https://www.nyiso.com/regulatory-viewer).

In accordance with Attachment H to the *NYISO Services Tariff* , for each Mitigated Capacity Zone, seasonally adjusted UCAP Offer Reference Levels will be applied to Installed Capacity in a Mitigated Capacity Zone that is subject to capacity market mitigation measures. An Installed Capacity Supplier in a Mitigated Capacity Zone that requests a unit-specific reference level must provide information on its Going-Forward Costs. If accepted, the NYISO will shape the adjusted UCAP Offer Reference level for that Resource *n* for the Summer and Winter months to which such Going-Forward Costs applies as follows:

$$SARP_n = \frac{AGFC_n}{6 \cdot \left(1 + R_n \cdot \frac{DCL - R}{DCL - 1}\right)}$$

and

$$WARP_n = SARP_n \cdot \frac{DCL - R}{DCL - 1},$$

Where:

$SARP_n$ is the adjusted UCAP Offer Reference Level during each month of the Summer Capability Period for Resource *n*;

$AGFC_n$ is the annual Going Forward Cost for Resource *n*;

R_n is the ratio of (1) the winter generating capacity of Resource *n* to (2) the summer generating capacity of Resource *n*;

DCL is the ratio of (1) the amount of Mitigated Capacity Zone ICAP at which the Demand Curve reaches a zero price to (2) the Mitigated Capacity Zone ICAP requirement;

R is the ratio of (1) the sum of the winter generating capacities of all Mitigated Capacity Zone to (2) the sum of the summer generating capacities of all Mitigated Capacity Zone ; and

$WARP_n$ is the adjusted UCAP Offer Reference Level during each month of the Winter Capability Period for Resource *n*.

5.5. Demand Curve and Adjustments

Separate ICAP Demand Curves are established to determine the locational component of LSE Unforced Capacity Obligations to for each Locality, and to determine the total LSE Unforced Capacity Obligations for all LSEs serving load in the NYCA. Installed Capacity Demand Curves are reviewed quadrennially pursuant to the process set forth in the *NYISO Services Tariff* and in accordance with Section 5.6, below.

Each ICAP Demand Curve is composed of three (3) straight-line[2] portions:

1. A horizontal line segment, consisting of all points for which the price of ICAP is equal to 1.5 times the estimated localized levelized cost per kW-month[3] to develop a new peaking plant[4] in each Locality or in the Rest-of-State region (for the NYCA ICAP Demand Curve), and for which the quantity of ICAP supplied is greater than or equal to zero but less than the quantity of ICAP supplied at the point where this segment intersects segment (2), which is described below.
2. A line segment with a negative slope, which is a portion of a line that passes through the following points:

[2] In the ICAP Market System, each ICAP Demand Curve is represented by a piece-wise linear function (step function). Each linear segment has a length of 0.1 MW and a price as calculated based on the slope of the Demand Curve.

[3] In translating each estimated localized levelized cost value from an annual value ($/kW-year) to a monthly value ($/kW-month), the NYISO will account for the applicable winter-to-summer ratio value (*i.e.*, the "WSR_z" variable in the equation below in this Section 5.5) and the percentage of capacity at the tariff prescribed level of excess conditions (*i.e.*, the "LOE_z" variable in the equation below in this Section 5.5) used in establishing each ICAP Demand Curve.

[4] A peaking unit is defined as the unit with technology that results in the lowest fixed costs and highest variable costs among all other units' technology that are economically viable. A peaking plant is defined as the number of units (whether one or more) that constitute the scale identified in the periodic review.

a. a point at which the amount of ICAP supplied is equal to the NYCA Minimum Installed Capacity Requirement (for the NYCA ICAP Demand Curve) or the Locational Minimum Installed Capacity Requirement (for each Locality), and the price of ICAP is equal to the monthly ICAP reference point price (as described below) for the NYCA or one of the Localities, as applicable; and

b. a point at which the amount of ICAP supplied is set at the zero crossing point, defined as the smallest quantity of Installed Capacity counting towards the NYCA Minimum Installed Capacity Requirement or a Locational Minimum Installed Capacity Requirement, as applicable, for which the price of ICAP is zero.

The line segment which comprises this portion of the ICAP Demand Curve consists of all points on this line for which the quantity of ICAP supplied is greater than or equal to the quantity of ICAP supplied at the point where this segment intersects segment (1), but less than or equal to the zero crossing point defined for the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, as applicable.

3. A horizontal line, consisting of all points for which the price of ICAP is zero, and for which the quantity of ICAP Supplied is greater than the zero crossing point defined for the NYCA Installed Capacity or the Locational Installed Capacity, as applicable.

The horizontal portions of the ICAP Demand Curves therefore define maximum and minimum prices for ICAP in the Localities (in the case of the Locality ICAP Demand Curves) and for ICAP to satisfy the NYCA Minimum Installed Capacity Requirement(in the case of the NYCA ICAP Demand Curve. The sloped portion of each ICAP Demand Curve permits the price of capacity to change as a function of the amount of Installed Capacity supplied, relative to each applicable minimum Installed Capacity requirement.

The NYCA Minimum Installed Capacity Requirement is determined by the NYISO after the New York State Reliability Council sets the NYCA Installed Reserve Margin and the NYISO determines the Locational Minimum Installed Capacity Requirement (see Section 2 of this *ICAP Manual* for further explanation). The monthly ICAP reference point price for the NYCA and each Locality is based on the Annual Reference Value for that location, which is the estimated cost for a peaking plant for the Rest-of-State region (in the case of the Annual Reference Value for the NYCA) or a Locality (in the case of the Annual Reference Value for a Locality) less an estimate of annual net revenue offsets from the sale of energy and ancillary services for the Rest-of-State region or a Locality, as appropriate. Since the Annual Reference Value is based on generator ratings using an average annual temperature (59 degrees Fahrenheit, per International Standards Organization (ISO) standards), each monthly ICAP reference point price calculation shall include

adjustments to take seasonal effects on the amount of UCAP that can be supplied, as well as the price of UCAP, into account.

Each monthly ICAP reference point price is set to the level that would permit a peaking unit to be paid an amount over the course of the year that is equal to the Annual Reference Value. The monthly reference point price for each ICAP Demand Curve shall be calculated as follows:

$$RP_z = \frac{ARV_z * AssmdCap_z}{6 * [SDMNC_z * \left(1 - \frac{LOE_z - 1}{ZCPR_z - 1}\right) + WDMNC_z * \left(1 - \frac{LOE_z - 1 + WSR_z - 1}{ZCPR_z - 1}\right)]}$$

Where:

RP_z = the monthly ICAP reference point price for location *z;*

ARV_z = the Annual Reference Value for location *z*;

$AssmdCap_z$ = the average degraded net plant capacity of the peaking plant for location *z*;

LOE_z = the ratio of level of excess (i.e., the applicable minimum ICAP requirement, plus the AssmdCap of the relevant peaking plant) to the applicable minimum ICAP requirement for location *z*;

$SDMNC_z$ = the Summer Capability Period DMNC assumed for the peaking plant at the temperature used to establish the ICAP Demand Curve for location *z*;

$WDMNC_z$ = the Winter Capability Period DMNC assumed for the peaking plant at the temperature used to establish the ICAP Demand Curve for location *z*;

WSR_z = the ratio of the amount of ICAP available in the ICAP Spot Market Auctions in the Winter Capability Period to the amount of ICAP available in the ICAP Spot Market Auctions for the Summer Capability Period for location *z* calculated in accordance with Section 5.14.1.2.2.3 of *NYISO Services Tariff* and rounded to 4 decimal places (with "location" meaning applicable to that ICAP Demand Curve); and

$ZCPR_z$ = the ratio of the zero crossing point to the applicable minimum ICAP requirement for location *z*. Maximum clearing prices, monthly ICAP reference point prices and zero crossing points for the ICAP Demand Curves for the first year of each four year period included in a periodic review are provided in Section 5.14.1.2 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer). ICAP Demand Curve parameters for years 2-4 of the four year period included in a periodic review will be made available once the respective annual updates are completed; provided, however,

that the zero crossing points for each ICAP Demand Curve for years 2-4 of the four year period will be the same as the respective zero crossing points for the first year of the four year period. The NYISO will post the ICAP Demand Curve values determined as a result of the annual update for each such Capability Year to the following URL, within Reference Documents section: http://www.nyiso.com/public/markets_operations/market_data/icap/index.jsp.

Quantities on each of these ICAP Demand Curves are stated in terms of amounts of ICAP supplied and prices are stated in terms of dollars per kW-month of ICAP supplied, but the metric actually used in the ICAP market is UCAP. Therefore, each of these ICAP Demand Curves must be translated into UCAP Demand Curves, so that quantities are stated in terms of UCAP supplied and prices are stated in terms of dollars per kW-month of UCAP supplied.

Prior to the Capability Year that begins May 1, 2024, the translation of the ICAP Demand Curves to UCAP Demand Curves will be performed as follows: Before the beginning of each Capability Period, the NYISO will calculate an ICAP-to-UCAP translation factor for each ICAP Demand Curve, equal to one minus the weighted average derating factors used to translate Installed Capacity to Unforced Capacity for that Capability Period associated with all resources electrically located in the NYCA (in the case of the ICAP Demand Curve for the NYCA) or in a Locality (in the case of the ICAP Demand Curve for that Locality). Each price on each ICAP Demand Curve shall then be converted into a price on the corresponding UCAP Demand Curve by dividing it by one minus the ICAP-to-UCAP translation factor calculated for that ICAP Demand Curve. Each quantity on each ICAP Demand Curve shall be converted into a quantity on the corresponding UCAP Demand Curve by multiplying it by one minus the ICAP-to-UCAP translation factor calculated for that ICAP Demand Curve.

Starting with the Capability Year that begins May 1, 2024, the translation of the ICAP Demand Curves to UCAP Demand Curves will be performed as follows: Before the beginning of each Capability Period, each quantity on each ICAP Demand Curve shall be converted into a quantity on the corresponding UCAP Demand Curve by multiplying it by a value equal to: (a) the total amount of Unforced Capacity that all resources electrically located in the NYCA (in the case of the ICAP Demand Curve for the NYCA) or in a Locality (in the case of the ICAP Demand Curve for that Locality) are qualified to provide during such Capability Period (as described in Section 4.5 of this ICAP Manual), divided by (b) the sum of the Installed Capacity values used to determine the Unforced Capacity of the applicable set of resources for such Capability Period. In addition, each price on each ICAP Demand Curve shall be converted into a price on the corresponding UCAP Demand Curve by dividing it by the product of: (a) the Capacity Accreditation Factor

of the peaking plant used to establish the applicable ICAP Demand Curve, and (b) one minus the applicable derating factor of such peaking plant.

The resulting Unforced Capacity Demand Curves can be found on the ICAP Market page of the public NYISO web site at https://www.nyiso.com/installed-capacity-market under the "ICAP Auctions" for the applicable Capability Period.

5.6. Demand Curve Adjustment Process

An independent periodic review of the ICAP Demand Curves will be performed every four (4) years in accordance with the *NYISO Services Tariff*.

5.6.1. Development and Issuance of Schedule

By mid-May (target May 15th) two years prior to the effective date of the ICAP Demand Curves for the first year included in the review, the NYISO will issue for stakeholder review and comment a draft schedule providing the completion dates of the major review activities. By May 30, a schedule will be finalized for the periodic review.

5.6.2. Development of a Request for Proposal (RFP)

In accordance with the schedule developed in Section 5.6.1, the NYISO will issue to stakeholders and the NYISO Market Monitoring Unit for their review and comment a draft RFP to engage a consultant to perform the required analyses under the review. Prior to the issuance of the RFP, face to face reviews with NYISO staff, NYISO Market Monitoring Unit, and interested stakeholders will be conducted to allow input and discussion of all relevant issues and the development of appropriate methodologies to be followed for the review. To expedite and focus the process, the NYISO staff may provide a straw proposal for consideration.

These discussions will lead to a set of desired assumptions and acceptable methodologies to be guidance for bidder responses to the RFP.

5.6.3. Selection of Consultant

Upon finalization of the RFP, but no later than the date established in the approved schedule for the periodic review, the NYISO will issue the RFP to a selected list of potential bidders.

The RFP will provide potential bidders an opportunity to seek clarification of items included in the RFP through a "bidder's conference."

The NYISO will have sole responsibility for

- The development of a selection criteria to determine the winning bidder,
- The evaluation of the RFPs submitted, and
- The selection of the winning bidder.

The NYISO will award the contract to the winning bidder in accordance with the established schedule.

5.6.4. Development of Consultant Final Report

Prior to the winning consultant beginning work, meetings will be conducted to finalize the study assumptions and required sensitivity analysis. These meetings will include NYISO staff, NYISO Market Monitoring Unit, interested stakeholders and the consultant. In the event that agreement cannot be reached on the assumptions or sensitivities, NYISO staff in consultation with the NYISO Market Monitoring Unit, will make the final determination of the assumptions to be used and the sensitivity analyses to be included in the review.

Upon issuance of a draft report by the consultant, meeting(s) will be convened to allow review and comment of the data and assumptions used in the review and the preliminary conclusions drawn by the consultant. These meetings will include NYISO staff, NYISO Market Monitoring Unit, interested stakeholders and the consultant. The NYISO Market Monitoring Unit may propose adjustments to certain data or assumptions with input from NYISO staff and stakeholders. Comments made by NYISO staff, NYISO Market Monitoring Unit and interested stakeholders will be included in the consultant's final report. In addition, the consultant will include its rationale for inclusion or exclusion of these comments in the final results of their analysis.

The consultant will issue its final report in accordance with the established schedule.

5.6.5. Issuance of NYISO Recommendations

The NYISO will issue its draft and final recommendations in accordance with the established schedule. The contents of these recommendations will include among other items, the requirements specified in Section 5.14.1.2.2 of the *NYISO Services Tariff*.

5.6.6. NYISO Board Review

In accordance with the established schedule, stakeholders shall have an opportunity to provide the NYISO Board with supplemental analysis in writing for its consideration when acting on the proposed ICAP Demand Curves for the first year included in the review, as well as the methodologies and inputs to be used in conducting the annual updates to determine the ICAP Demand Curves for years 2-4 included in the

review. The NYISO Board shall review any information and analysis timely filed with it, and, upon notice to all parties, provide the opportunity for oral presentations on the issues that have been raised.

5.6.7. FERC Filing of ICAP Demand Curves

A filing to FERC of the NYISO Board-approved ICAP Demand Curve parameters will be made by November 30 in the year prior to commencement of the first Capability Period included in the review to establish the ICAP Demand Curves for the first Capability Year included in the review, as well as the methodologies and inputs to be used in conducting the annual updates to determine the ICAP Demand Curves for the remaining three Capability Years included in the review.

5.6.8. Annual Updates of the ICAP Demand Curves

In accordance Section 5.14.1.2.2 of the *NYISO Services Tariff*, the NYISO will conduct annual updates to determine the ICAP Demand Curves for years 2-4 included in the review. The NYISO will present results of the annual updates to Market Participants. After the annual update is completed, the NYISO will post the resulting ICAP Demand Curve values on or before November 30 of the year preceding the beginning of the Capability Year for which the updated ICAP Demand Curves will apply. The results of the annual updates and resulting ICAP Demand Curves can be accessed within the "Reference Documents" section through the following link: http://www.nyiso.com/public/markets_operations/market_data/icap/index.jsp

5.7. Supplemental Supply Fee

Any LSE that has not met its share of the NYCA Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement after the completion of an ICAP Spot Market Auction shall be assessed a supplemental supply fee. The supplemental supply fee shall be the applicable Market-Clearing Price of Unforced Capacity as determined in the ICAP Spot Market Auction multiplied by the number of MW the deficient LSE needs to meet its share of the NYCA Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement.

The NYISO will attempt to use these supplemental supply fees to procure Unforced Capacity at a price less than or equal to the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction from Installed Capacity Suppliers that are capable of supplying Unforced Capacity including: 1) Installed Capacity Suppliers that were not qualified to supply Capacity prior to the ICAP Spot Market Auction (other than New Special Case Resources); 2) Installed Capacity Suppliers that offered Unforced Capacity at levels above the ICAP Spot Market Auction Market-Clearing Price; and 3) Installed Capacity Suppliers that did not offer Unforced Capacity in the ICAP Spot Market Auction. In the event that

different Installed Capacity Suppliers offer the same price, the NYISO will give preference to Installed Capacity Suppliers that were not qualified to supply Capacity prior to the ICAP Spot Market Auction (other than New Special Case Resources).

Offers from Installed Capacity Suppliers are subject to mitigation measures in accordance with Attachment H to the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) Installed Capacity Suppliers selected by the NYISO to provide Capacity after the ICAP Spot Market Auction will be paid a negotiated price. The NYISO will not pay an Installed Capacity Supplier more than the applicable Market- Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction per MW of Unforced Capacity, pro-rated to reflect the portion of the Capability Period for which the Installed Capacity Supplier provides Unforced Capacity.

5.8. ICAP Supplier Shortfalls and Deficiency Payments

In the event that an Installed Capacity Supplier sells more Unforced Capacity than it is qualified to sell in any specific month in the Capability Period or Monthly Auctions (such amounts including the amount of a New Special Case Resources), the Installed Capacity Supplier shall be deemed to have a shortfall for that month. To cover this shortfall, the Installed Capacity Supplier shall purchase sufficient Unforced Capacity in the relevant Monthly Auction or through Bilateral Transactions, and certify to the NYISO consistent with the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do) that it has covered such shortfall. If the Installed Capacity Supplier does not cover such shortfall or if it does not certify to the NYISO in a timely manner, the NYISO shall prospectively purchase Unforced Capacity on behalf of that Installed Capacity Supplier in the appropriate ICAP Spot Market Auction or, in the event (x) of shortages in that auction, or (y) the shortfall is due to the Installed Capacity Supplier selling Unforced Capacity from a New Special Case Resource in an auction other than a ICAP Spot Market Auction or through a Bilateral Transaction, and the shortfall is not computed by the NYISO until after the applicable ICAP Spot Market Auction, through post-ICAP Spot Market Auction Unforced Capacity purchases to cover the remaining shortfall.

External CRIS Rights Holders that fail to certify or offer the full amount of Contract or Non-Contract CRIS Rights megawatts are subject to a deficiency charge in accordance with Section 25.7.11 of the *NYISO OATT* Attachment S.

In the event that an External Installed Capacity Supplier fails to deliver to the NYCA the Energy associated with the Unforced Capacity it committed to the NYCA due to a failure to obtain appropriate transmission service or rights, the External Installed Capacity Supplier shall be deemed to have a shortfall

from the last time the External Installed Capacity Supplier "demonstrated" delivery of its Installed Capacity Equivalent ("ICE"), or any part thereof, until it next delivers its ICE or the end of the term for which it certified the applicable block of Unforced Capacity, whichever occurs first, subject to the limitation that any prior lack of demonstrated delivery will not precede the beginning of the period for which the Unforced Capacity was certified. An External Installed Capacity Supplier deemed to have a shortfall shall be required to pay to the NYISO a deficiency charge equal to one and one-half times the applicable Market-Clearing Price of Unforced Capacity as determined in the ICAP Spot Market Auction multiplied by the number of MW the Installed Capacity Supplier is deficient, pro-rated for the number of hours in the month that External Installed Capacity Supplier is deemed to have a shortfall (i.e., ((deficiency charge ÷ total number of hours in month of shortfall) * number of hours the shortfall lasted) * number of MW of shortfall).

The NYISO shall submit a Bid, calculated pursuant to Section 5.14.1 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer), in the appropriate ICAP Spot Market Auction on behalf of an Installed Capacity Supplier deemed to have a shortfall as if it were an LSE. Such Installed Capacity Supplier shall be required to pay to the NYISO the applicable Market-Clearing Price of Unforced Capacity established in that ICAP Spot Market Auction. In the event that the ICAP Spot Market Auction clears below the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, whichever is applicable to the Installed Capacity Supplier, the Installed Capacity Supplier shall be assessed the applicable Market-Clearing Price of Unforced Capacity as determined in the ICAP Spot Market Auction multiplied by the number of MW the Installed Capacity Supplier needs to meet its shortfall.

If an Installed Capacity Supplier is found, at any point during or after a Capability Period, to have had a shortfall for that Capability Period, e.g., when the amount of Unforced Capacity that it supplies is found to be less than the amount it was committed to supply, the Installed Capacity Supplier shall be retrospectively liable to pay the NYISO the applicable deficiency charge equal to one and one-half times the applicable Market-Clearing Price of Unforced Capacity as determined in the ICAP Spot Market Auction multiplied by the number of MW the Installed Capacity Supplier is deficient.

Any remaining monies collected by the NYISO pursuant to Sections 5.14.1 and 5.14.2 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) will be applied as specified in Section 5.14.3 of the *NYISO Services Tariff*.

5.9. Timing of Auctions

The NYISO will develop a Capability Period ICAP Event Calendar ***that to the extent practicable will*** ensure that:

1. A Capability Period Auction where Unforced Capacity shall be made available for purchase for the entire six-month Capability Period will be held at least thirty (30) days before the beginning of that Capability Period;
2. Pre-Capability Period Monthly Auctions where Unforced Capacity is made available for purchase for any or all Obligation Procurement Periods within the Capability Period will be held at least fifteen (15) days before the beginning of that Capability Period;
3. During a Capability Period, Monthly Auctions will be held at least fifteen (15) days before the beginning of each Obligation Procurement Period in which Unforced Capacity will be made available for any or all remaining Obligation Procurement Periods within that Capability Period; and
4. A monthly ICAP Spot Market Auction will be held at least two (2) business days before the beginning of each Obligation Procurement Period during which the NYISO will procure LSE Unforced Capacity Obligations on behalf of each LSE.

The above guidelines may be adjusted for weekends and holidays. The intent of the above will direct the NYISO towards fair compromises when developing or amending the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do)

5.10. Bids to Buy and Sell - General Requirements

Bids to purchase Unforced Capacity and offers to supply Unforced Capacity must be entered, and received by the NYISO, as separate Bids for each auction.

Bidders who wish to purchase Unforced Capacity and Offerors who wish to supply Unforced Capacity in any NYISO-administered auction may submit Bids to the NYISO only on the day of the auction, unless otherwise specified in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). If the NYISO does not receive Offerors offers to supply Unforced Capacity in an auction, the NYISO may cancel that auction. By contrast, if the NYISO receives at least one offer to sell in an auction from an Offeror, the NYISO will not cancel that auction, and will allow a Market-Clearing Price to be calculated in that auction, even if no Bidder submits a bid to buy in that auction.

All LSEs with Unforced Capacity in excess of their share of the NYCA Minimum Installed Capacity Requirement or their share of the Locational Minimum Installed Capacity Requirement, as applicable, may offer such Unforced Capacity into the ICAP Spot Market Auction on their own behalf.

5.11. Limitations on Offerors' Participation in Installed Capacity Auctions

Only Customers will be permitted to offer to sell Unforced Capacity in an auction. The amount of Unforced Capacity that can be offered for sale in the ICAP Spot Market Auction from a given Installed Capacity Supplier will not be permitted to exceed the amount that the Installed Capacity Supplier is qualified to supply in the NYCA.

When the NYISO reduces the amount of Unforced Capacity that an Installed Capacity Supplier may supply to the NYCA, the Installed Capacity Supplier shall procure any shortfall in Unforced Capacity resulting from the reduction through Bilateral Transactions or in any NYISO-administered auction, provided, however, such procurements shall not include New Special Case Resources.

The amount of Unforced Capacity that any given Offeror is permitted to offer for sale in the ICAP Spot Market Auction shall not exceed the Offeror's share of the amount of Unforced Capacity its Installed Capacity Suppliers are permitted to offer for sale, as calculated above, less any offers of Unforced Capacity that Offeror has offered for sale either through Bilateral Transactions or through sales to External Control Areas. To the extent that an LSE seeks to offer into the ICAP Spot Market Auction, such LSE is limited to offering only those amounts of Unforced Capacity that are in excess of its share of the NYCA Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement, as applicable.

Installed Capacity Suppliers that wish to participate in the ICAP Spot Market Auction must certify to the NYISO by the date posted in the detailed ICAP Event Calendar that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do). The certification shall demonstrate: (i) that they own, have contracted to purchase, or have been designated as the agent for the share of each Resource that they claim when making offers to supply Unforced Capacity; and (ii) that the Unforced Capacity they offer has not been committed or sold to provide Unforced Capacity in the New York market or an External Control Area. Any offer to sell that would cause the total amount of Unforced Capacity offered by that Offeror from that Resource to exceed the amount of Unforced Capacity it is permitted to offer from that Resource will be rejected in its entirety.

If an Installed Capacity Supplier (or a portion of the Unforced Capacity attributable to an Installed Capacity Supplier) is selected in the auction to provide Unforced Capacity, that Resource (or portion

thereof) cannot provide Installed Capacity to any other Control Area, and shall be required to adhere to the requirements for Installed Capacity Suppliers set forth in the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) and in this *ICAP Manual*. Entities wishing to purchase Unforced Capacity that will count toward Minimum Installed Capacity Requirements in other Control Areas will not be able to purchase such Unforced Capacity in an NYISO-administered auction.

5.12. Limitations on Bidders' Participation in Installed Capacity Auctions

As part of its evaluation of each Bidder's creditworthiness, the NYISO may establish credit limits for each Bidder. The NYISO will reject Bids from Bidders if acceptance of that bid could cause the total amount owed by that Bidder as a result of the auction to exceed that Bidder's credit limit. The credit criteria used by the NYISO are contained in Article 8 of the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer).

5.13. Required Information in Bids to Buy

In the Capability Period and Monthly Auction, each Bidder may submit multiple Bids. Each bid to purchase Unforced Capacity submitted by a Bidder must include the following information:

1. The total amount of Unforced Capacity it wishes to purchase in association with that Bid, in increments of 100 kW;
2. The maximum price the Bidder is willing to pay for the Unforced Capacity it is offering to purchase in its Bid, in $/kW per month;
3. The auction to which the Bid applies;
4. Whether the Unforced Capacity must be associated with Installed Capacity Suppliers located in a specific Locality, and if so, which Locality; and
5. Whether the Installed Capacity Suppliers associated with the Unforced Capacity can be located in a Control Area outside the NYCA or outside any specific Locality within the NYCA.

In the ICAP Spot Market Auction, the NYISO will enter Bids on behalf of all LSEs. Prior to the ICAP Spot Market Auction, LSEs will certify the amount of Unforced Capacity that they have obtained for the upcoming Obligation Procurement Period. After LSE certification, the NYISO will enter Bids into the ICAP Spot Market Auction in accordance with the applicable Demand Curve for each Locality and the NYCA. In order to participate in the Installed Capacity market, each LSE must sign the NYISO Unforced Capacity Purchase Agreement that is found in Attachment F to this *ICAP Manual*.

5.14. Required Information in Offers to Sell

In the Capability Period Auction, the Monthly Auction, and the ICAP Spot Market Auction, each Offeror may submit multiple offers. Each offer to sell Unforced Capacity submitted by an Offeror must include (except where noted) to the following information:

1. The amount of Unforced Capacity it offers to sell in increments of 100 kW;
2. The minimum price it is willing to accept for the Unforced Capacity it is offering to sell in its offer, in $/kW per month;
3. The auction to which the offer applies;
4. The name (PTID) of the Installed Capacity Supplier providing the Unforced Capacity offered for sale (this provision is not a requirement of Offers submitted for the Capability Period and Monthly Auctions by Installed Capacity Suppliers offering Unforced Capacity from Resources located within the NYCA);
5. Whether that Installed Capacity Supplier is located in a Locality, and if so, which Locality; and
6. Whether that Installed Capacity Supplier is located in a Control Area outside the NYCA, and if so, which Control Area.

5.15. Selection of Bids and Offers; Determination of Market-Clearing Prices

5.15.1. Capability Period and Monthly Auctions

In the Capability Period and Monthly Auctions, the NYISO will determine which Bids to purchase and which offers to sell Unforced Capacity are selected by maximizing the sum of the Bids submitted by winning bidders minus the offers submitted by winning offerors subject to the following constraints: (1) the amount of Unforced Capacity in each Locality for which offers were accepted must be sufficient to satisfy all accepted Bids that specified that Unforced Capacity must be located in that Locality. (Unforced Capacity combined with UDRs will be treated as Unforced Capacity in the relevant Locality.); and (2) the amount of Unforced Capacity in each Control Area outside the NYCA for which offers were accepted cannot exceed the limitation placed on the Unforced Capacity that can be procured from that Control Area.

If, prior to a Capability Period Auction or Monthly Auction, the sum of Grandfathered External Installed Capacity rights, External CRIS Rights, and External Installed Capacity Import Rights granted at an interface with an External Control Area is equal to the interface limit as defined in Section 4.9.6 of this *ICAP Manual* (i.e., the interface is full),only offers using Grandfathered External Installed Capacity rights or External Installed Capacity Import Rights and offers associated with External CRIS will be accepted.

All, part, or none of a Bid to purchase or an offer to sell Unforced Capacity may be selected in any Capability Period or Monthly Auction. As a result, if a Bidder offers in a Bid to purchase a given amount of Unforced Capacity at a given price, it may be awarded that amount of Unforced Capacity, or it may be awarded any amount lower than the amount it offered to purchase (including zero MW).

Neither Bidders nor Offerors will be permitted to submit Bids or offers that specify that either all or none of a Bid or offer can be selected. Bids to purchase or offers to sell Unforced Capacity in a given Capability Period or Monthly Auction cannot be made contingent on the outcome of another auction; e.g., an Offeror will not be permitted to offer Unforced Capacity within one month's auction contingent upon its sale of Unforced Capacity in another month's auction.

In cases in which multiple Bidders Bid to pay the same price for Unforced Capacity in a given location (or group of locations, if there is no price difference between those locations) in the same Capability Period or Monthly Auction, and some but not all of those Bids can be selected, the amount of Unforced Capacity awarded to each of those Bidders in association with each of those Bids shall be proportional to the amount of Unforced Capacity that Bidder Bid to purchase in that location (or group of locations, if there is no price difference between those locations) at that price. Likewise, in cases in which multiple Offerors offer to sell Unforced Capacity in a given location (or group of locations, if there is no price difference between those locations) for the same price in the same Capability Period or Monthly Auction, and some but not all of those offers can be selected, the amount of Unforced Capacity selected from each of those Offerors in association with each of those offers shall be proportional to the amount of Unforced Capacity that the Offeror offered to sell in that location (or group of locations, if there is no price difference between those locations) at that price.

As a result of each Capability Period or Monthly Auction, the following Market-Clearing Prices for Unforced Capacity will be determined:

1. Prices for Unforced Capacity located in each Locality.
2. Prices for Unforced Capacity located in each Control Area outside the NYCA.
3. Price for Unforced Capacity located in the portion of the NYCA that is not located in a capacity-constrained Locality.

Market-Clearing Prices per MW of Unforced Capacity will be calculated for each Locality, for the NYCA, and for each External Control Area.

1. The Market-Clearing Price for a Locality will be the price at which one could have satisfied an incremental increase in demand in the auction for Capacity that had to be located in the Locality.
2. The Market-Clearing Price for the NYCA will be the price at which one could have satisfied an incremental increase in demand in the auction for Capacity that could have been located anywhere in the NYCA.
3. The Market-Clearing Price for an External Control Area will be the price at which one could have satisfied an incremental increase in demand in the auction for Capacity that could have been located in the NYCA.

The objective function that the NYISO will use in the Capability Period and Monthly Auctions, which was described in the previous section, will be to select the offers of Unforced Capacity with the lowest offer prices, insofar as doing so would not cause violations on the total amount of Unforced Capacity that can be purchased from an External Control Area (or group of Areas), pursuant to Section 4.9.3. But the need to honor these locational constraints may require the NYISO to accept some offers, which specify relatively high offer prices for Unforced Capacity while not accepting other offers with lower offer prices, because purchasing the lower-priced Unforced Capacity would violate locational constraints. In such cases, locational constraints will be binding and Market-Clearing Prices of Unforced Capacity may differ from location to location. If no locational constraints are binding (i.e., if the limitations on the total amount of Unforced Capacity that can be sold from any given Control Area did not force the NYISO to select more expensive offers of Unforced Capacity in the auction than it would have selected in the absence of those locational constraints), then the Market-Clearing Price of Unforced Capacity will be the same at every location.

When locational constraints do not bind, the Market-Clearing Price of Unforced Capacity in a given Capability Period or Monthly Auction will be the marginal resource price, which may be a bid or offer ("Marginal Offer Price") for additional Unforced Capacity in such Monthly Auction or Capability Period Auction, as applicable. This procedure for calculating Market-Clearing Prices is analogous to the procedure that will be used to calculate LBMP prices in the Energy market (which are based on the marginal bid or offer of supplying an increment of Load at a location). Illustrations of these procedures for calculating prices appear in Attachment H of this *ICAP Manual*.

In order to determine the Marginal Offer Price of providing Unforced Capacity in the Capability Period and Monthly Auction, the NYISO will calculate the change in the amount of Unforced Capacity that would have been bought and sold by each Bidder and Offeror if there had been — in addition to the Bids and

offers that were already part of the auction — an additional demand for a very small amount of Unforced Capacity. The presence of this additional demand would have had one of two effects. Either it would have increased the amount of Unforced Capacity purchased from the marginal Offeror (which is the Offeror whose offer price is lowest among those entities that offered Unforced Capacity into that auction, but did not sell all of that Unforced Capacity in that auction), so that the amount of Unforced Capacity purchased from that Offeror would have been slightly above the amount that was actually purchased in that auction. Alternatively, it would have decreased the amount of Unforced Capacity purchased by the marginal Bidder (which is the Bidder whose bid price is lowest among those entities that purchased Unforced Capacity in that auction), so that the amount of Unforced Capacity purchased by that Bidder would have been slightly below the amount that was actually purchased in that auction (with the leftover Unforced Capacity used to meet the small additional demand). The algorithm that the NYISO uses to conduct the Capability Period or Monthly Auction will choose whichever of these mechanisms satisfies the additional demand at the lowest cost. That cost (expressed in terms of $/kW per time period applicable to the auction) will determine the Marginal Offer Price of providing Unforced Capacity in that auction.

When a locational constraint is binding, the Market-Clearing Price of Unforced Capacity at the location in either the Capability Period or Monthly Auction, as applicable, will be the Marginal Offer Price of providing Unforced Capacity at the location of the locational constraint.

First, the locational constraints will be divided into two groups. A Locality constraint is binding if the NYISO selects offers of Unforced Capacity located in a certain Locality while not selecting lower-priced offers of Unforced Capacity from outside that Locality. The only instance in which the NYISO will not select such offers is in order to avoid violating locational constraints specified by Bidders that state that a Bid is only valid for Unforced Capacity located in a given Locality, or that can be used to satisfy a Locational requirement. An External Control Area constraint is binding if the NYISO does not select offers of Unforced Capacity located in a particular External Control Area (or group of Areas), while selecting offers with higher offer prices from Installed Capacity Suppliers located in the NYCA or in other External Control Areas, to avoid violating the limits on the total amount of Unforced Capacity that can be sold from a given External Control Area (or group of Areas), pursuant to Section 4.9.3 of this *ICAP Manual*. When the only unawarded offers for Unforced Capacity at an External Control Area interface are associated with External Capacity Resource Interconnection Service (CRIS) Rights offers by an Installed Capacity Supplier whose Unforced Capacity obligation has been met, such offers (i.e., the Unforced Capacity in excess of the External CRIS Right obligation) will not be considered in determining the Market-Clearing Price at the External Interface, and the External Control Area constraint is not deemed to be binding for purposes of settling the Market-Clearing Price of Unforced Capacity.

The Market-Clearing Price in a Locality or External Control Area is determined as follows:

- If a Locality constraint is binding in a Capability Period or Monthly Auction, the Market-Clearing Price of Unforced Capacity located in that Locality will be the Marginal Offer Price of providing additional Unforced Capacity in that Locality in that auction.
- If an External Control Area constraint is binding for a particular Control Area (or group of Areas) in a Capability Period or Monthly Auction, then the Market- Clearing Price of Unforced Capacity located in that External Control Area (or group of Areas) will be the Marginal Offer Price of providing additional Unforced Capacity from that particular External Control Area (or group of Areas).
- The Market-Clearing Price in a Capability Period or Monthly Auction for Unforced Capacity located in Rest of State (which includes (1) Unforced Capacity located in the NYCA, but not in any other Locality; (2) Unforced Capacity located in a Locality, if that Locality constraint is not binding; and (3) Unforced Capacity located in an External Control Area, if no External Control Area constraint affecting that External Control Area (or group of Areas) is binding) will be the Marginal Offer Price of providing additional Unforced Capacity located anywhere other than a Locality for which a Locality constraint is binding or an External Control Area(or group of Areas) for which an External Control Area constraint is binding.

The set of prices that result will ensure that when a Locality constraint is binding, the Market-Clearing Price for Unforced Capacity located in that Locality will be higher than the Market-Clearing Price for Unforced Capacity located in the portion of the NYCA that is not part of another Locality. It also ensures that when an External Control Area constraint is binding, the Market-Clearing Price for Unforced Capacity located in that External Control Area (or group of Areas) will be lower than the Market Clearing Price for Unforced Capacity located in the portion of the NYCA that is not part of another Locality.

The NYISO will identify Bids that are accepted as follows:

1. Bids for Unforced Capacity that must be located in a Locality and that are above the Market-Clearing Price for that Locality will be accepted in their entirety. Bids equal to the Market-Clearing Price will be accepted on a pro rata basis.
2. Bids for Unforced Capacity that could be located anywhere in the NYCA that are above the Market-Clearing Price for Rest of State will be accepted in their entirety. Bids equal to the Market-Clearing Price will be accepted on a pro rata basis.

3. Bids for Unforced Capacity that could be located anywhere in the NYCA or in one or more External Control Areas that were above the Market-Clearing Price for Rest of State will be accepted in their entirety. Bids equal to the Market-Clearing Price will be accepted on a pro rata basis.

The NYISO will identify offers that are accepted as follows:

1. Offers for Unforced Capacity in a Locality that were below the Market-Clearing Price for that Locality will be accepted in their entirety. Offers equal to the Market-Clearing Price will be accepted on a pro rata basis.

    a. Offers of Unforced Capacity that have an Offer Floor must be at or above the Offer Floor and can only be offered into the ICAP Spot Market Auction as set forth below in ICAP Manual Section 5.15.2.

2. Offers for Unforced Capacity in Rest of State that were below the Market-Clearing Price for Rest of State will be accepted in their entirety. Offers equal to the Market-Clearing Price will be accepted on a pro rata basis.
3. Offers for Unforced Capacity in an External Control Area that were below the Market-Clearing Price for that External Control Area will be accepted in their entirety. Bids equal to the Market-Clearing Price will be accepted on a pro rata basis.

Market-Clearing Prices will be calculated independently for the Capability Period Auction and for each Monthly Auction, and separately for each Capacity area. As a result, the Market-Clearing Price for Unforced Capacity at a given location may vary within the same auction, or among different monthly auctions conducted at the same time.

5.15.2. ICAP Spot Market Auction

In the ICAP Spot Market Auction, the NYISO will construct a supply curve for the total Unforced Capacity in the NYCA for which the NYISO receives offers, which includes all Capacity that LSEs or Installed Capacity Suppliers had designated for use to meet their respective LSE Unforced Capacity Obligations through self-supply, as well as all other Capacity offered into the ICAP Spot Market Auction. In cases in which the total amount of Capacity in a given External Control Area, or the combination of all External Control Areas, would exceed limits on the amount of Capacity that can be awarded from these areas, the NYISO shall eliminate the highest offers (or parts of those offers) in the affected External Control Areas from this supply curve until those limits are no longer exceeded.

If prior to an ICAP Spot Market Auction the sum of Grandfathered External Installed Capacity rights, External CRIS Rights and External Installed Capacity Import Rights granted at an interface with an External Control Area is equal to the interface limit as defined in Section 4.9.6 of this *ICAP Manual* (i.e., the interface is full), only offers using Grandfathered External Installed Capacity rights, or External Installed Capacity Import Rights, and offers associated with External CRIS Rights will be accepted.

In the ICAP Spot Market Auction, the NYISO will also construct a supply curve for all Unforced Capacity offered for the NYCA, as well as for each Locality, which includes all Capacity that LSEs or Installed Capacity Suppliers had designated for use to meet their respective LSE Unforced Capacity Obligations through self-supply, as well as all other Capacity for the relevant Locality or NYCA offered into the ICAP Spot Market Auction. Capacity combined with EDRs or UDRs shall be treated as Capacity in the NYCA or in the case of UDRs, the relevant Locality.

In the ICAP Spot Market Auction, the Market-Clearing Price shall be determined for the NYCA, for each Locality, and for each External Control Area. The Market-Clearing Price for the NYCA will be the price at which the supply curve for the total Unforced Capacity intersects the applicable ICAP Demand Curve for the total Installed Capacity market, subject to applicable constraints. The Market-Clearing Price for a Locality will be the price at which the supply curve for that Locality intersects the Demand Curve for that Locality unless the Market- Clearing Price determined for Rest of State is higher in which case the Market-Clearing Price for that Locality will be set at the Market-Clearing Price for Rest of State.

The Market-Clearing Price for an External Control Area will be set to the Market- Clearing Price for the NYCA unless there were offers below the NYCA Market-Clearing Price from Installed Capacity Suppliers in External Control Areas that were not accepted. If a received offer in the ICAP Spot Market Auction was not accepted because it would cause the limit on the total amount of Capacity provided by Installed Capacity Suppliers located outside the NYCA to have been exceeded, the Market-Clearing Price for all External Control Areas shall be set to the price at which one could have obtained an incremental amount of Capacity from anywhere outside the NYCA unless there were offers below such Market-Clearing Price from Installed Capacity Suppliers in a given External Control Area that were not accepted. In that case, the Market-Clearing Price for that External Control Area would be set to the price at which one could have obtained an incremental amount of Capacity in that External Control Area. If the only unawarded offers for Unforced Capacity at that External Control Area interface are associated with External Capacity Resource Interconnection Service (CRIS) Rights offers by an Installed Capacity Supplier whose Unforced Capacity obligation has been met, such offers (i.e., the Unforced Capacity in excess of the External CRIS Right obligation) will not be considered in determining the Market-Clearing Price at that External interface.

No later than the fifth (5th) business day following the date that the NYISO posts the ICAP Spot Market Auction results, for all Special Case Resources in Zone J, each RIP shall submit, among other data required by the NYISO, (i) all individual registered Special Case Resources not offered, (ii) all individual registered Special Case Resources offered in part (denoted by a fractional value between 0 and 1; (iii) all individual registered Special Case Resources offered (in whole or part) but not sold, and if sold in part, the fractional value of the sale, (iv) all individual registered Special Case Resources included in bilateral capacity contracts, and if included in part, denoted by a fractional value between 0 and 1.

5.16. Billing and Settlements

The NYISO will pay each Offeror whose offer to sell Unforced Capacity is selected in an auction the Market-Clearing Price determined in that auction at the location of each of its Resources that have been selected to provide Unforced Capacity, for each 100 kW of Unforced Capacity that Resource has been selected to supply. Each Bidder for Unforced Capacity whose Bid to purchase is selected in an auction will pay the NYISO the Market-Clearing Price at the location specified in the Bid(s) that have been selected, for each 100 kW of Unforced Capacity that it purchased.

The capacity-weighted Market-Clearing price for all capacity purchased to satisfy accepted Bids that did not state that capacity used to meet those bids must be provided from Resources in a Locality shall be determined for each Auction as follows:

$$CP_a = \frac{ROSP_a \cdot \left(NYCASale_a - \sum_{l \in L} LocPurch_{l,a} \right) + \sum_{e \in E} \left(ECAP_{e,a} \cdot ECASale_{e,a} \right)}{\left(NYCASale_a - \sum_{l \in L} LocPurch_{l,a} \right) + \sum_{e \in E} ECASale_{e,a}},$$

Where:

CP_a is the capacity-weighted average Market-Clearing price charged to purchasers of capacity in Auction a as described above;

$ROSP_a$ is the Market-Clearing price in Auction a for Unforced Capacity provided by Resources in Rest of State;

$NYCASale_a$ is the amount of Unforced Capacity sold in Auction a from Resources within the NYCA, including Localities;

$LocPurch_{l,a}$ is the amount of Unforced Capacity purchased in Auction a by auction participants stating that the capacity purchased in association with their bid must be located in Locality l;

L is the set of Localities in the NYCA;

$ECAP_{e,a}$ is the Market-Clearing price in Auction *a* for Unforced Capacity provided by Resources in external Control Area *e*;
$ECASale_{e,a}$ is the amount of Unforced Capacity sold in Auction *a* from Resources in external Control Area *e*; and
E is the set of external Control Areas.

For all Installed Capacity auctions, entities selling Unforced Capacity will be paid:

1. The Market-Clearing Price for the Locality times the number of MW of offers they submitted that were accepted for Capacity in that Locality. (Capacity combined with UDRs will be treated as Capacity in the relevant Locality.)
2. The Market-Clearing Price for the NYCA times the number of MW of offers they submitted that were accepted.
3. The Market-Clearing Price for an External Control Area times the number of MW of offers they submitted that were accepted for Capacity in that External Control Area.

In the ICAP Spot Market Auction, the NYISO will charge entities purchasing Unforced Capacity the Market-Clearing Price as determined in Section 5.15 of this *ICAP Manual*.

Settlements for all Installed Capacity auctions will occur in the month following the month for which the Unforced Capacity was purchased. For example, Unforced Capacity purchased for the month of May will be billed and paid for in the month of June. The schedule for bills and payments for Unforced Capacity will follow the Energy Market schedule. A timetable for bills and payments for the Energy Market can be found on the NYISO Web site: (www.nyiso.com).

Unforced Capacity purchased in the six-month strip auction (the Capability Period Auction) will be settled on a monthly basis. The NYISO will issue bills for one-sixth of the applicable Market-Clearing Price for Unforced Capacity on the same schedule referenced above.

5.17. Allocation of Winning Bids

In the Capability Period and Monthly Auctions, each Bidder whose Bid to purchase Unforced Capacity is selected will be allocated a pro rata share of the Unforced Capacity purchased in the auction using the following procedure:

1. Bidders whose Bids specified that the Unforced Capacity must be associated with an Installed Capacity Supplier located in a Locality will be awarded such Unforced Capacity.

2. Any remaining purchasers of Unforced Capacity shall be allocated capacity provided by all remaining sellers of Unforced Capacity on a pro-rata basis.

5.18. Posting of Results

The NYISO will post the results of each auction within the time period specified in the NYISO Procedures. These results shall include:

1. The Market-Clearing Price for each Locality, each External Control Area, and the portion of the NYCA not included in any other Locality, in each NYISO-administered auction.
2. The total amount of Unforced Capacity associated with Installed Capacity Suppliers in each Locality, each External Control Area, and the portion of the NYCA that is not included in any other Locality that was sold in each NYISO-administered auction.
3. The total amount of Unforced Capacity purchased in each NYISO-administered auction, broken down by the constraints placed upon the location of that Unforced Capacity by the Bidders placing those Bids.

The NYISO shall publish all Bids and Offers made in each auction three months after the conclusion of that auction. The names of Offerors or Bidders will not be revealed publicly; however, the NYISO will post these data in a way that permits the identity of a given Offeror or Bidder to be tracked over time.

6. Sanctions

The NYISO may impose sanctions on Installed Capacity Suppliers, LSEs, and Transmission Owners for failing to comply with requirements set forth in the *NYISO Services Tariff* (available from the NYISO Web site at the following URL: https://www.nyiso.com/regulatory-viewer) and requirements enumerated in this *ICAP Manual*.

Sanctions may be assessed against Installed Capacity Suppliers for actions that fall into the following two categories:

- Failure to provide required information; and
- Failure to comply with bidding, scheduling and notification requirements, and procedures.

An LSE that fails to comply with the ISO's requirement to demonstrate ahead of an Obligation Procurement Period that it has procured sufficient Unforced Capacity to cover its Minimum Unforced Capacity Requirement is penalized through the procedures and financial consequences of the Deficiency Procurement Auction. Please refer to Section 5 of this *ICAP Manual* for details.

A Transmission Owner that fails to provide the information required by Section 5.11.3 of the *NYISO Service Tariff* in a timely fashion is subject to sanctions as described below in Section 6.2 of this *ICAP Manual*. The *NYISO Services Tariff* references are Sections 5.11.3, 5.12.1, 5.12.12, and 5.14.1.

6.1. Supplier Sanctions

Supplier sanctions are set forth in the NYISO Services Tariff.

6.2. Transmission Owner Sanctions

The *NYISO Load Forecasting Manual* (available from the NYISO Web site at the following URL: https://www.nyiso.com/manuals-tech-bulletins-user-guides), and the detailed timeline that can be found by selecting the link provided (http://icap.nyiso.com/ucap/public/evt_calendar_display.do), contain detailed descriptions of the types of information that Transmission Owners must provide to the NYISO, and deadlines for receipt of that information.

If a Transmission Owner fails to provide the required information, the following procedures will be followed:

- On the first day that the required information is late (unless that day falls on a weekend or official New York State holiday, in which case the notification shall be made on the next business day), the NYISO shall notify the Transmission Owner that the information is past due

and that the NYISO reserves the right to impose financial sanctions if the information is not provided by the end of the next day.

- Starting on the third day that the required information is late, the NYISO may impose a daily financial sanction up to $5000 per day.
- Starting on the tenth day that the required information is late, the NYISO may impose a daily financial sanction up to $10,000 per day.

6.3. Procedural Safeguards

If the NYISO staff becomes aware of potentially sanctionable activity by a Market Participant, it shall report the activity to NYISO's Dispute and Claims Committee ("DAC"). The DAC will evaluate the reported activity pursuant to its procedures and, if warranted, shall recommend an appropriate sanction. All DAC decisions shall be made in a reasonable and non-discriminatory manner.

If the DAC recommends a sanction, the NYISO shall send a "Notice of Recommended Sanction" to any Market Participant potentially subject to sanctions pursuant to the DAC procedures. The DAC shall afford Market Participants a reasonable opportunity to demonstrate that its activities are not sanctionable. Market Participants shall also have a reasonable opportunity to bring any mitigating circumstances to the DAC's attention and to explain why the DAC, in the event that it decides to recommend a sanction, should reduce the sanction's severity.

If a Market Participant accepts a sanction recommended by the DAC, the NYISO will automatically impose the sanction. If a Market Participant disagrees with a recommended sanction it may appeal the DAC's decision to the ISO's President and Chief Executive Officer ("CEO"), who must approve all contested sanctions. Market Participants may challenge any sanction approved by the CEO pursuant to the NYISO Dispute Resolution Procedures.

7. Annual Process to Establish Capacity Accreditation Resource Classes, Capacity Accreditation Factors, and Peak Load Windows

Starting with the Capability Year that begins on May 1, 2024, the ISO shall annually establish the Capacity Accreditation Resource Classes, Capacity Accreditation Factors, and Peak Load Windows in advance of the upcoming Capability Year in accordance with Section 7.1, Section 7.2, and Section 7.3, respectively, of this ICAP Manual.

7.1. Establishing Capacity Accreditation Resource Classes

Capacity Accreditation Resource Classes are defined sets of Resources and/or Aggregations with similar technologies and/or operating characteristics which are expected to have similar marginal reliability contributions toward meeting NYSRC resource adequacy requirements for the upcoming Capability Year. In establishing the Capacity Accreditation Resource Classes for the upcoming Capability Year, the NYISO will identify the Resources and/or Aggregations that are expected to participate in the Installed Capacity market in the upcoming Capability Year. Based on the identification of the Resources and/or Aggregations that are expected to participate in the Installed Capacity market in the upcoming Capability Year and initial assessments of expected marginal reliability contributions, the NYISO will post the preliminary list of Capacity Accreditation Resource Classes for the upcoming Capability Year by September 30th on the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation). After receiving stakeholder feedback on the preliminary list, the NYISO will post the final list of Capacity Accreditation Resource Classes for the upcoming Capability Year by November 30th on the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation).The preliminary and final lists of Capacity Accreditation Resource Classes will identify what combinations of participation models, Energy Duration Limitations, and resource characteristics would lead to the assignment of an Installed Capacity Supplier to each Capacity Accreditation Resource Class in accordance with Section 7.1.1 of this ICAP Manual.

7.1.1. Assignment of Installed Capacity Suppliers to Capacity Accreditation Resource Classes

The NYISO will assign each Installed Capacity Supplier to a specific Capacity Accreditation Resource Class based on the Installed Capacity Supplier's chosen participation model, elected Energy Duration Limitation, and resource characteristics. Resource characteristics including, but not limited to, technology, startup notification time, and fuel type may be used in assigning an Installed Capacity Supplier to the appropriate Capacity Accreditation Resource Class. Participation models define a Resource's participation

in the ICAP Market and may include[5]:

- Conventional Generator
- Control Area System Resource
- Energy Limited Resource (ELR)
- Capacity Limited Resource (CLR)
- Special Case Resource (SCR)
- Intermittent Power Resource (IPR)
- Behind-the-Meter Net Generation Resource (BTM:NG)
- Limited Control Run-of-River Hydro (LCRoR)
- Energy Storage Resource (ESR)
- Co-located Storage Resource (CSR)
- Distributed Energy Resource Aggregation (DER Aggregation)

Installed Capacity Suppliers utilizing the same participation model may be assigned to different Capacity Accreditation Resource Classes if the Suppliers have elected different Energy Duration Limitations or have different resource characteristics. For example, Suppliers participating in the ICAP Market through the Intermittent Power Resource participation model may be assigned to different Capacity Accreditation Resource Classes if the Suppliers depend on different fuel sources (*e.g.,* wind, solar, or landfill gas). Additionally, Suppliers participating in the ICAP Market through the Energy Storage Resource participation model may be assigned to different Capacity Accreditation Resource Classes if the Suppliers have elected different Energy Duration Limitations. Suppliers utilizing different participation models may also be assigned to the same Capacity Accreditation Resource Class if the Suppliers have elected the same Energy Duration Limitation or share the same resource characteristics. For example, Suppliers participating in the ICAP Market through the Energy Limited Resource or Energy Storage Resource participation model may be assigned the same Capacity Accreditation Resource Class if the Suppliers have elected the same Energy Duration Limitation (an Installed Capacity Supplier with an Energy Duration Limitation can request to change its elected Energy Duration Limitation for the upcoming Capability Year by August 1 of the preceding Capability Year, in accordance with Section 4.1.1 of this ICAP Manual). As noted in Section 7.1 of this *ICAP Manual*, the final list of Capacity Accreditation Resource Classes, posted to the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation), will identify the combinations of participation models, Energy Duration Limitations, and resource characteristics that will qualify an

[5] The participation models listed are included only as a reference. Participation models are subject to change over time

Installed Capacity Supplier to be assigned to each Capacity Accreditation Resource Class.

The NYISO shall provide each Installed Capacity Supplier with its assigned Capacity Accreditation Resource Class for the upcoming Capability Year prior to the deadline identified in the ICAP Event Calendar for Capacity Accreditation Resource Class assignments to be available in the ICAP Automated Market System. If an Installed Capacity Supplier believes it has been assigned to the incorrect Capacity Accreditation Resource Class for the upcoming Capability Year based on the combination of the Supplier's participation model, elected Energy Duration Limitation, and resource characteristics for the upcoming Capability Year, the Installed Capacity Supplier must notify the NYISO of the incorrect assignment prior to the deadline identified in the ICAP Event Calendar. If the Installed Capacity Supplier and the NYISO are unable to resolve the disputed Capacity Accreditation Resource Class assignment, the Installed Capacity Supplier may provide, and the NYISO shall use, a Capacity Accreditation Resource Class assignment for the Installed Capacity Supplier for the upcoming Capability Year. The Installed Capacity Supplier-provided Capacity Accreditation Resource Class assignment must be provided to the NYISO prior to the deadline identified in the ICAP Event Calendar. The Installed Capacity Supplier-provided Capacity Accreditation Resource Class must be one of the Capacity Accreditation Resource Classes posted to the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) for the upcoming Capability Year. The NYISO's Market Mitigation and Analysis department may perform an audit of the Installed Capacity Suppler-provided Capacity Accreditation Resource Class assignment. If the Market Mitigation and Analysis department determines that the Capacity Accreditation Resource Class assignment provided by the Installed Capacity Supplier is inaccurate, based on the applicable Capacity Accreditation Resource Class assignment criteria provided on the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) for the applicable Capability Year, then the Installed Capacity Supplier shall be subject to an ICAP shortfall penalty as described in Services Tariff Section 5.14.2 and section 5.8 of this ICAP Manual. Capacity Accreditation Resource Class assignments cannot be changed for the upcoming Capability Year at any point after the deadline identified in the ICAP Event Calendar for Capacity Accreditation Resource Class assignments to be considered final. The deadline identified in the ICAP Event Calendar for Capacity Accreditation Resource Class assignments to be considered final will be prior to the posting of the Capacity Accreditation Factors for the upcoming Capability Year. If an Installed Capacity Supplier enters the ICAP Market after the deadline identified in the ICAP Event Calendar for Capacity Accreditation Resource Class assignments to be considered final, the ISO will provide the Installed Capacity Supplier its assigned Capacity Accreditation Resource Class during the ICAP Market registration process for the applicable Capability Year.

7.2. Capacity Accreditation Factors

Capacity Accreditation Factors reflect the marginal reliability contribution of the representative unit of each Capacity Accreditation Resource Class toward meeting NYSRC resource adequacy requirements for the upcoming Capability Year. All Resources and/or Aggregations are assigned a Capacity Accreditation Resource Class and Capacity Accreditation Factors are applicable to all Resources and/or Aggregations within each Capacity Accreditation Resource Class. The Capacity Accreditation Factor of an Installed Capacity Supplier is utilized in the calculation of the amount of Unforced Capacity the Supplier may supply to the NYCA in accordance with Section 4.5 of this ICAP Manual.

The NYISO will annually determine the Capacity Accreditation Factors for the upcoming Capability Year for each Capacity Accreditation Resource Class in each applicable capacity zone in accordance with Section 7.2.1 of this *ICAP Manual*. The applicable capacity zones for each Capacity Accreditation Resource Class may include Rest of State, G-J Locality (excluding Load Zone J), NYC Locality, and Long Island Locality. If no Installed Capacity Supplier or projected Installed Capacity Supplier of a Capacity Accreditation Resource Class exists in or is projected to exist in a capacity zone in the upcoming Capability Year, a Capacity Accreditation Factor for that Capacity Accreditation Resource Class will not be calculated for that capacity zone. Capacity Accreditation Factors for the upcoming Capability Year will be posted on the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) by March 1st. The NYISO will assign to each Resource or Aggregation the applicable Capacity Accreditation Factor for the Resource's or Aggregation's assigned Capacity Accreditation Resource Class and capacity zone in which the Resource or Aggregation is qualified to supply Unforced Capacity to the NYCA.

The NYISO shall provide each Resource or Aggregation with its assigned Capacity Accreditation Factor for the upcoming Capability Year prior to the deadline identified in the ICAP Event Calendar for Capacity Accreditation Factor assignments to be available in the ICAP Automated Market System. If an Installed Capacity Supplier believes it has been assigned the incorrect Capacity Accreditation Factor based on its capacity zone and assigned Capacity Accreditation Resource Class for the upcoming Capability Year, the Installed Capacity Supplier must notify the NYISO of the incorrect assignment prior to the deadline identified in the ICAP Event Calendar. Capacity Accreditation Factor assignments cannot be changed for the upcoming Capability Year at any point after the deadline identified in the ICAP Event Calendar for Capacity Accreditation Factor assignments to be considered final. If an Installed Capacity Supplier enters the ICAP Market after the deadline identified in the ICAP Event Calendar for Capacity Accreditation Factor assignments to be considered final, the ISO will provide the Installed Capacity Supplier its assigned

Capacity Accreditation Factor during the ICAP Market registration process for the applicable Capability Year.

7.2.1. Determining Capacity Accreditation Factors

The NYISO will utilize the Locational Minimum Installed Capacity Requirement study model ("LCR model") that is used to calculate the Locational Minimum Installed Capacity Requirements for the upcoming Capability Year, as approved by the NYISO Operating Committee, as the starting model to annually calculate the Capacity Accreditation Factors for each Capacity Accreditation Resource Class. The ISO will calculate each Capacity Accreditation Factor for each Capacity Accreditation Resource Class using the Marginal Reliability Improvement (MRI) technique, as follows:

$$\boldsymbol{CAF_{ca} = \frac{LOLE_i - LOLE_{mca}}{LOLE_i - LOLE_{pa}}}$$

Where:

$\boldsymbol{CAF_{ca}}$ = the Capacity Accreditation Factor for the upcoming Capability Year for the capacity zone *a* of the evaluated Capacity Accreditation Resource Class c

$\boldsymbol{LOLE_i}$ = the starting loss of load expectation of the LCR model

$\boldsymbol{LOLE_{mca}}$ = the loss of load expectation of the LCR model with the addition of a 100 MW representative unit of the evaluated Capacity Accreditation Resource Class c to the modeling zone that corresponds to capacity zone *a*

$\boldsymbol{LOLE_{pa}}$ **=** the loss of load expectation of the LCR model with the addition of 100 MWs of perfect capacity to the modeling zone that corresponds to capacity zone *a*

Because adding the representative unit to the LCR model cannot produce a lower loss of load expectation than adding perfect capacity of the same size in the same location, the MRI technique will produce a value less than or equal to 100 percent. The NYISO will calculate each Capacity Accreditation Factor to the second decimal place (*e.g.*,90.99%).

The applicable modeling zone for each capacity zone is listed below.[6]

Capacity Zone	Applicable Modeling Zone
Rest of State	Zone F
G-J Locality (excluding Load Zone J)	Zone G
NYC Locality	Zone J
Long Island Locality	Zone K

[6] Because capacity zones are not explicitly modeled in the LCR model, an applicable modeling zone is required for each capacity zone. The choice of modeling zone is not expected to meaningfully impact the CAF of a CARC for the capacity zone.

The representative unit for Capacity Accreditation Resource Classes that are comprised of Installed Capacity Suppliers participating as Generators, Control Area System Resources, Energy Limited Resources, Capacity Limited Resources, Behind-the-Meter Net Generation Resources, Energy Storage Resources, or Distributed Energy Resources will be modeled with no forced outages.[7] The representative unit for Capacity Accreditation Resource Classes that are comprised of Installed Capacity Suppliers with the same Energy Duration Limitation, will be modeled with the corresponding Energy Duration Limitation and model type used to represent existing resources with Energy Duration Limitations in the LCR model. The representative unit for Capacity Accreditation Resource Classes that are comprised of Intermittent Power Resources or Limited Control Run-of-River Hydro will be modeled using weighted-average historic hourly production profiles of the existing Installed Capacity Suppliers of the Capacity Accreditation Resource Class in the capacity zone. The weighted-average production profiles will be produced from the same years of historic production as the years used to model the existing Intermittent Power Resources and Limited Control Run-of-River Hydro Resources in the LCR model. If there are no existing Installed Capacity Suppliers in the capacity zone of a Capacity Accreditation Resource Class comprised of Intermittent Power Resources or Limited Control Run-of-River Hydro, the NYISO will use a representative hourly production profile based on the production of existing units in other capacity zones or simulated units.

7.3. Peak Load Window Annual Review Process

Starting with the Capability Year that begins on May 1, 2024, the Peak Load Windows for the Summer and Winter Capability Periods will be determined through the following annual review processes in accordance with Section 5.12.14.3 of the *NYISO Services Tariff*.

7.3.1. Peak Load Window Annual Review Process

To determine the Peak Load Window for the upcoming Summer Capability Period, the ISO will calculate the percentage of total hourly loss of load expectation (LOLE) during the Summer Capability Period that occurs in each hour by utilizing the Locational Minimum Installed Capacity Requirement study model ("LCR model") used to calculate the Locational Minimum Installed Capacity Requirements for the upcoming Capability Year, as approved by the NYISO Operating Committee. If the Peak Load Window from the prior

[7] To complete these calculations, the representative unit for each Capacity Accreditation Resource Class is modeled as having full availability, consistent with its Energy Duration Limitations, i.e., perfect capacity. For a definition of forced outages, see Section 2 of Attachment J of this ICAP Manual.

Summer Capability Period captures at least 90% of the hourly LOLE occurring in the Summer Capability Period, the Peak Load Window from the prior Summer Capability Period will be maintained for the upcoming Summer Capability Period, subject to ISO review in accordance with Section 7.3.3. If the Peak Load Window from the prior Summer Capability Period does not capture at least 90% of the hourly LOLE during the Summer Capability Period, the ISO will establish a new Peak Load Window for the upcoming Summer Capability Period following the methodology in Section 7.3.2 of this *ICAP Manual.*

The Peak Load Window for the Winter Capability Period will be HB 16 through HB 21, subject to ISO review in accordance with Section 7.3.3, until updated winter modeling approaches and assumptions are incorporated into the LCR model. Once winter modeling approaches and assumptions are incorporated into the LCR model, the NYISO will, subject to stakeholder input, evaluate applying a similar process to the review of the Peak Load Window for the Summer Capability Period to determine the Peak Load Window for the Winter Capability Period.

The Peak Load Windows for the upcoming Capability Year will be posted to the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) by March 1 preceding the upcoming Capability Year. The ISO may shift the Peak Load Window for a given day as described in Section 4.1.1. of this *ICAP Manual*.

7.3.2. Establishing a New Peak Load Window for the Summer Capability Period

If the Peak Load Window from the prior Summer Capability Period does not capture at least 90% of the hourly LOLE occurring in the Summer Capability Period in the LCR model, the NYISO will determine a new Peak Load Window for the upcoming Summer Capability Period according to the following process. First, the ISO will evaluate the two consecutive hours with the highest percentage of hourly LOLE in the Summer Capability Period from the LCR model, described in Section 7.3.1 of this *ICAP Manual*. If the two consecutive hours with the highest percentage of hourly LOLE in the Summer Capability Period do not capture at least 90% of the total hourly LOLE occurring in the Summer Capability Period, the next hour with the highest percentage of hourly LOLE in the Summer Capability Period that is consecutive with the first two hours will be added to the evaluated window. Additional consecutive hours will be added until at least 90% of the total hourly LOLE in the Summer Capability Period is captured in the evaluated window. If the minimum number of consecutive hours that captures at least 90% of total hourly LOLE in the Summer Capability Period is an odd number, the next hour with the highest percentage of hourly LOLE in the Summer Capability Period that is consecutive with the evaluated window will be added, to produce an evaluated window comprising an even number of hours. The resulting evaluated window will be the new Peak Load

Window for the upcoming Summer Capability Period, subject to ISO review in accordance with Section 7.3.3.

7.3.3. ISO Review Process

The Peak Load Windows established by Section 7.3.1 and Section 7.3.2 of this *ICAP Manual* may be reviewed by the NYISO for consistency with the expected hours of reliability risk based on operating experience and/or expected grid conditions for the upcoming Capability Year. If the NYISO determines the Peak Load Window for the Summer and/or Winter Capability Period is inconsistent with the expected hours of reliability risk identified by the NYISO based on any of these factors, the NYISO may propose a new Peak Load Window(s) to be used for the Capability Period(s). The NYISO will advise the NYISO Business Committee and the NYISO Operating Committee it has determined a new Peak Load Window(s) must be set and will seek stakeholder input on such window(s) through its stakeholder processes, as time permits. A proposed new Peak Load window(s) must be approved by the NYISO Operating Committee and posted to the NYISO Capacity Accreditation web page (https://www.nyiso.com/accreditation) by March 1 preceding the upcoming Capability Year.