

## **4. INSTALLED CAPACITY REQUIREMENTS APPLICABLE TO INSTALLED CAPACITY SUPPLIERS**

### **4.1 Overview**

Resources must follow certain procedures and provide pertinent information to the NYISO 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 Demonstrated Maximum Net Capability (DMNC) testing and maintenance schedule reporting.

After completing the procedures listed above, Resources that have qualified as Installed Capacity Suppliers must fulfill certain 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 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 4.4 through 4.13 are subject to sanctions, as provided in Section 5.12.12 of the NYISO Services Tariff.

Details regarding these sanctions may be found in Section 6.1 of this Manual.

Section 4.14 details the procedures for requesting, granting and applying Unforced Capacity Deliverability Rights (“UDRs”).

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 Manual.

### **4.2 DMNC Test Procedures (Section 5.12.8 NYISO Services Tariff)**

All Installed Capacity Suppliers must perform DMNC tests, or an equivalent, during each Capability Period in which they have supplied Unforced Capacity and in accordance with the procedures described below (unless exempt in accordance with the provisions of Section 4.4.3 of this Manual), and provide the NYISO with the required documentation of those tests. Alternatively, Installed Capacity Suppliers, with the exception of new Resources, may use historical production data for the immediately preceding like Capability Period, no more than 12 months old, in lieu of DMNC test data. A DMNC test result or historical production data

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constitute a valid DMNC value for purpose of establishing a generating Resource's Installed Capacity value.

Data must be submitted in an acceptable format or it will be rejected. The 30-day verification clock starts with a determination that the data has been deemed complete. Until the Unforced Capacity automation system goes live, the Installed Capacity Supplier will be notified if its submission has been deemed complete within five (5) business days of that submission. After automation system goes live, submissions that are deemed to be complete will be so indicated in the automation application within five (5) business days of original submissions. Within five (5) business days of an incomplete submission, the Market Monitoring Unit will contact the submitting Installed Capacity Supplier.

Upon determination that the information that has been provided is complete, the NYISO will verify the DMNC value for Installed Capacity Suppliers within 30 days of submission, if such submission has been deemed complete at least 45 days prior to the data submission deadline as noted below. Submissions deemed complete less than 45 days before the DMNC submission deadline will be processed within 45 days of such submission.

If the NYISO accepts the Installed Capacity Supplier's submission, the submitted DMNC value will be valid for the subsequent like Capability Period, and at the request of the Installed Capacity Supplier, will serve as the valid DMNC value for the balance of the current Capability Period.

If the NYISO disagrees with the submitted DMNC value, the Installed Capacity Supplier may:

- a) re-test if there is time within the current DMNC Test Period, or
- b) accept the NYISO determined DMNC 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 value is correct, the DMNC value submitted by the Installed Capacity Supplier will remain in place. If the audit reveals that the NYISO value is correct, the NYISO will replace the Installed Capacity Supplier's DMNC value with the DMNC value established through the audit and the Installed Capacity Supplier will be subject to penalties, if applicable.

An Installed Capacity Supplier offering to supply Unforced Capacity as a System Resource must submit DMNC test data, or historical production data, for each Generator that it seeks to aggregate. Final DMNC Test results must be transmitted to the NYISO no later than sixty (60) days following the end of the test period.

#### 4.2.1 DMNC Test Periods

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.- All generating Resources that are not SCRs must test using usual and customary industry practices not otherwise approved, with operating configurations and fuel mixes expected to be used during summer or winter peak Load conditions, as applicable. The results shall be adjusted to appropriate ambient conditions using the procedures noted in this Section 4.2 and more fully described in Attachment D

New Resources may qualify as Installed Capacity Suppliers at any time during a Capability Year based on the results of an appropriate demonstration test, production data, or Special Case Resource (SCR) commitment before participating as an Installed Capacity Supplier in the NYISO Installed Capacity market. New generating Resources must temperature-adjust the results of the appropriate demonstration test or production data, using the procedures noted in Attachment D to this Manual and must verify such performance during the applicable DMNC test period if the original test was performed prior to the applicable DMNC Test Period (“out-of-period”).

To qualify as Installed Capacity Suppliers in any Installed Capacity auction administered by the ISO, new Resources shall submit to the NYISO the results of an appropriate demonstration test, production data or SCR commitment prescribed by this Manual by 5:00 PM at least seven (7) calendar days before the administration of the relevant auction. For example, if the NYISO administers the auction on a Thursday, new Resources shall submit appropriate demonstration test, production data, or SCR commitment by 5:00 PM on the Thursday preceding the auction.

In addition to the submission of the results of an appropriate demonstration test or production data required by the previous paragraph, new generating Resources that want to participate in ~~NY~~NYISO-administered auctions shall submit to the NYISO a notification letter if they do not already have, and will require, a point ID to participate in the NYISO market. The notification letter 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 oblige 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 submit appropriate demonstration test or production data shortly before an auction. A Resource shall submit the notification letter to the NYISO by the first business day of the month in which it wishes to qualify as an Installed Capacity Supplier.

To qualify Installed Capacity for a Bilateral Transaction or for a self-supplying LSE, new Resources shall submit to the NYISO the results of an appropriate demonstration

test, production data or SCR commitment prescribed by this Manual by 5:00 PM at least seven (7) calendar days before the day LSEs must certify that they have procured sufficient Installed Capacity for the following Obligation Procurement Period (in this paragraph, the “Certification Day”). For example, if the Certification Day is a Thursday, new Resources shall submit appropriate demonstration test, production data or SCR commitment results by 5:00 PM on the Thursday preceding the Certification Day.

Existing Resources that have increased Capacity due to changes in their generating equipment may demonstrate the DMNC of the incremental Capacity for and within a Capability Period by following the procedures described above for new Generators.

The NYISO’s Market Monitoring Unit will verify the DMNC test data submitted by Suppliers against NYISO billing information and will notify the Supplier that the DMNC value as calculated from the test data is valid.

#### **4.2.2 Resource Specific Test Conditions**

[Need to add a section here for SCRs]

The Resources listed below must meet the applicable DMNC test conditions specified below and in Attachment D 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, net of station service Load necessary to deliver that power as described in Section 4.2.3.

#### **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 DMNC of the whole station.

#### **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.

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- (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 DMNC of the whole station.

**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 during the previous four (4) Winter Capability Periods.
- (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 during the previous four (4) Summer Capability Periods.

**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 during the previous four (4) Winter Capability Periods.
- (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 during the previous four (4) Summer Capability Periods.

**Intermittent Resources (Wind Farms and Solar Arrays)**

The DMNC value of Intermittent Resources will be the nameplate capacity of the units (usually aggregated in groups of small individual units) in each station, wind farm or solar array, net of any station service Load required for operation and delivery to the NYCA transmission power system.

### Special Case Resources

A Special Case Resource that supplies Load reductions solely through the use of a distributed generator must submit a demonstration test of the generator maximum net output for a one (1) hour period net of any auxiliary loads. ~~1-hour test~~

### Intermittent, Energy Limited, Capacity Limited, Other Stations

Valid DMNCs for other units are determined by the following:

- (a) The sustained maximum net output averaged over a four (4) consecutive hour period – unless otherwise approved.
- (b) For a multi-unit station, the DMNC is determined as a 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 DMNC of the whole station. Valid DMNCs for Intermittent Power Resources may also be determined by the Intermittent Power Resources' unit's nameplate rating provided, however, that the NYISO shall have the authority to review Intermittent Power Resources' production data.

#### **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 later 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*) shall be used to determine the station service Load in dispute.

#### 4.2.4 Required DMNC Generating Capability Test Data

An entity that wants to establish a DMNC rating for its Resources must report the test results for each of its Resources to the NYISO in accordance with. ~~The test reports include:~~

~~1. Kilowatt hour meter readings [should we add temperature readings as well?] from the tests to verify net output. Reproduced copies of actual log sheets are preferred where possible.~~

~~2. For internal combustion units, combustion turbine units, and combined cycle units, a curve of net capability vs. ambient and cooling systems temperatures, with the test result noted on the graph.~~

~~3. For steam units, test conditions as listed below (see also [Attachment D](#)):~~

~~Over pressure~~

~~Top feed water heater O/S.~~

### 4.3 Maintenance Scheduling Requirements (Section 5.12.3 NYISO Services Tariff)

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

1. Submit a confidential notification to the NYISO of proposed outage schedules for the next two (2) calendar years by September 1st 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 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*.
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

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following two (2) calendar years, no later than the first 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 refuses 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)Interruptible Load Resources~~**

**~~4.3.1 Interruptible Load Resources must comply with the following procedures.~~**

**~~4.3.11. — Notify the NYISO at least thirty days prior to the beginning of an Obligation Procurement Period of scheduled maintenance that would reduce their ability to interrupt during the upcoming Obligation Procurement Period.~~**

**~~4.3.22. — Notify the NYISO of any major equipment that is out of service and therefore cannot be interrupted because it is already off, and notify the NYISO when the equipment is coming back on.~~**

**~~4.3.33. — Provide the NYISO with a written commitment that any scheduled maintenance that would reduce their ability to interrupt without reducing Load will only be conducted from November 1st through March 31st of any calendar year.~~**

**~~4.3.4 Interruptible Load Resources that are Special Case Resources as defined in Section 4.12 of this Manual are not subject to the requirements of this Section 4.3.1.~~**

**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 Manual)**

Special Case Resources are not subject to maintenance scheduling requirements. However, a Special Case Resource must report a change of status that would affect its ability to provide Capacity to the NYISO.

#### **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 Manual, at the NERC-GADS website (<http://www.nerc.com/~gads/>) and in the NERC Data Reporting Instructions at <http://www.nerc.co/~filez/dri.html>. The completeness, accuracy, and validity of the performance data sent to the NYISO ~~is~~ 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*.

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 Manual. Such designation shall be made in writing to the NYISO at least ~~five-seven~~ (75) calendar days 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 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* as if they were a Seller.

##### **4.4.1 Generators**

By the 20<sup>th</sup> day of each month, Generators shall submit to the NYISO Generating Availability Data System (GADS) Data or data equivalent to GADS Data pertaining to the previous month. For example, Generators shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 2001. Generators shall submit GADS Data or data equivalent to GADS Data in accordance with ~~the 82-character fixed format provided in~~ Attachment K of this Manual.

##### **4.4.2 System Resources**

By the 20<sup>th</sup> day of each month, System Resources shall submit to the NYISO GADS Data or data equivalent to GADS Data pertaining to the previous month. For example,

System Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 2001. System Resources shall submit GADS Data or data equivalent to GADS Data in accordance with ~~the 82-character fixed format provided in~~ [Attachment K](#) of this Manual.

#### **4.4.3 Control Area System Resources**

By the 20<sup>th</sup> day of each month, Control Area System Resources or the purchasers of Unforced Capacity from those Resources shall submit to the NYISO CARL (Control Area Resource and Load) Data pertaining to the previous month. For example, Control Area System Resources shall submit by October 20, 2001 CARL Data pertaining to their operations during the month of September 2001.

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*.

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Forty-five (45) days prior to any Capability Period, Control Area System Resources shall submit forecasted CARL Data for items (1) through (8) above for each month of the following Capability Period. Control Area System Resources shall submit data for items (9) and (10) for each month within 20 days of 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 submitted by 25 days 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**

By the 20<sup>th</sup> day of each month, Energy/Capacity Limited Resources shall submit to the NYISO GADS Data or data equivalent to GADS Data pertaining to the previous month. For example, Energy/Capacity Limited Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 2001. Energy/Capacity Limited Resources shall submit GADS Data or data equivalent to GADS Data in accordance with ~~the 82-character fixed format provided in Attachment K~~ of this Manual.

**4.4.5 ~~(This Section intentionally left blank)Interruptible Load Resources~~**

~~4.4.5 Subject to Sections 4.4.7 of this Manual, Interruptible Load Resources shall submit documentation for each operation using the form provided in Attachment K.~~

~~4.4.6 By the 20<sup>th</sup> day of each month, Interruptible Load Resources shall submit to the NYISO data in the format shown in Attachment K for each interruption. For example, they shall submit by May 20, data corresponding to their operations during the month of April 2001.~~

**4.4.6 Intermittent Power Resources**

Intermittent Power Resources shall submit to the NYISO data pertaining to their net dependable Capacity, actual generation, maintenance hours, planned hours, periods hours, and other information as may be reasonably requested by the NYISO such as the

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location and name of the Intermittent Power Resource. Intermittent Power Resources shall submit production data pertaining to the previous month on the 20<sup>th</sup> day of each month and in accordance with ~~the 82-character fixed format provided in Attachment K~~ of this Manual. For example, Intermittent Power Resources shall submit data by May 20, 2001 data pertaining to their operations during the month of April 2001.

[Detailed instructions will be incorporated into Attachment K and Unforced Capacity calculation methodology will be incorporated into a new Section in Attachment J following previously discussed guidelines.]

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

Special Case Resources shall submit documentation to the NYISO, each time they are called upon to operate, ~~using in the form of the Special Case Resource Workbook posted on the ICAP Auctions/Products page of the NYISO website under the applicable capability Period~~ Figure 2 provided in Attachment K.

##### **4.4.7.1 Special Case Resources that are ~~Interruptible Load~~ Curtailable Load Resources**

Special Case Resources that were requested to reduce Load in any month shall submit performance data to the NYISO, ~~by the 20<sup>th</sup> day of the following~~ within 60 days of each called event, using the Special Case Resource Workbook as posted on the ICAP Auctions/Products page of the NYISO website under the applicable Capability Period ~~Period by the 20<sup>th</sup> day of the following month data in the format shown in Figure 2 of Attachment K~~ for each requested interruption. For example, Special Case Resources shall submit by ~~May 20~~ June 14, 2001, their data pertaining to the month of April 2001 if they were called upon to reduce Load ~~in on~~ April 15, 2001.

##### **4.4.7.2 Special Case Resources that are Generators**

Special Case Resources that are Generators, and were requested to operate in any month shall submit performance data to the NYISO, within 60 days of each called event, using the Special Case Resource Workbook as posted on the ICAP Auctions/Products page of the NYISO website under the applicable Capability Period ~~Period by the 20<sup>th</sup> day of the following month data in the format shown in Figure 2 of Attachment K~~ for each requested operation ~~ing period~~. For example, Special Case Resources that are Generators shall submit by ~~May 20~~ June 14, 2001, their data pertaining to the month of April 2001 if they were called upon to operate ~~in on~~ April 15, 2001.

#### **4.4.8 Municipally-Owned Generation**

By the 20<sup>th</sup> day of each month, municipally-owned generation shall submit to the NYISO data equivalent to GADS Data pertaining to the previous month. For example, municipally-owned generation shall submit by May 20, 2001 data equivalent to GADS Data pertaining to their operations during the month of April 2001. Municipally-owned

~~generation shall submit data in accordance with the form provided in Attachment K of this Manual, GADS, or Special Case Resource reporting, as appropriate.~~

#### **4.4.9 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 Manual, and (3) want to supply Unforced Capacity to the NYCA in the future.

By the tenth (10<sup>th</sup>) day of the month, preceding the month when a Resource wants to supply Unforced Capacity to the NYCA, the Resource shall submit to the NYISO the appropriate Operating Data pertaining to its operations over the previous 12 months, if it was in operation. A Resource that wants to continue to supply Unforced Capacity in the NYCA immediately thereafter shall submit, by the 20<sup>th</sup> day of each month, the appropriate Operating Data.

For example, a Resource that wants to supply Unforced Capacity during the month of July shall submit by June 10 Operating Data pertaining to the previous June to May, inclusively. Thereafter, the Resource shall submit Operating Data in accordance with Subsections 4.4.1 through 4.4.8 of this Manual, as applicable.

If an External Resource intends to request Import Rights in accordance Section 4.9, the Resource shall submit to the NYISO the results of an appropriate demonstration test (i. e. DMNC) and Operating Data pertaining to its operations at least over the previous 12 months, if it was in operation, and prescribed by this Manual by 5:00 PM at least seven (7) calendar days before such Import Rights are to be requested.

#### **4.4.10 Resources not in Operation for the past 12 months**

A Resource that was not in operation for the past 12 months and that wants to qualify as an Installed Capacity Supplier shall submit monthly Operating Data to the NYISO no later than one (1) month after that Resource commenced commercial operation, in accordance with Subsections 4.4.1 through 4.4.8 of this Manual, as applicable.

#### **4.4.11 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~~~~on Demand (EFORD<sub>d</sub>)~~) for that unit as a maintenance outage with prior notification to the NYISO. If the

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Generator elects to bid the unit into the NYISO energy markets during such period, all such service hours and forced outage hours shall be included in the computation of the unit's EFOR<sub>d</sub>, but periods where the unit is not selected may be reported as Reserve Shutdown Hours, as defined in [Attachment J](#).

#### **4.5 Calculation of the Amount of Unforced Capacity each Resource may Supply to the NYCA (Section 5.12.6(a) NYISO Services Tariff)**

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 deratings. To evaluate this probability, the NYISO will use the Operating Data submitted by each Resource in accordance with Section 4.4 of this Manual, and the mathematical formulae included in [Attachment J](#) of this Manual. Such Unforced Capacity values will remain in effect for the entire Capability Period, except in cases when historical data corrections or revisions are necessary.

For each Capability Period, the NYISO will base the amount of Unforced Capacity a generating Resource is qualified to supply on the average EFOR<sub>d</sub> value of the six (6) most recent 12-month rolling average EFOR<sub>d</sub> values calculated ~~calculations~~ for that Resource covering the 12-month periods ending in February, March, April, May, June and July for the subsequent Winter Capability Period and the average of EFOR<sub>d</sub> calculations for that Resource covering the 12-month periods ending in August, September, October, November, December and January for the subsequent Summer Capability Period. (The detailed procedures for calculating the 12-month EFOR<sub>d</sub> values are described in Attachment J.) ~~Such the six (6) most recent 12-month rolling EFOR<sub>d</sub> calculations for that Resource. Such EFOR<sub>d</sub> value will remain in effect for the entire Capability Period, except in cases when historical GADS data corrections or revisions are submitted. The six (6) most recent 12-month rolling average EFOR<sub>d</sub> values shall be for the same interval used to determine the Minimum Installed Capacity Requirement to Minimum Unforced Capacity Requirement translation, as noted in Sections 2.5 and 2.6 of this Manual.~~

For Special Case Resources, Unforced Capacity values will be based on the seasonal performance factors of each individual Special Case Resource and in accordance with Section 4.12.7 of this Installed Capacity Manual.

Limited Control Run-of-River Resource values will have Unforced Capacity values based on seasonal performance factors calculated in accordance with Attachment J of the Installed Capacity Manual. Unforced Capacity from a Limited Control Run-of-River Resource for the summer capability period shall be based on NYISO GADS Data or data equivalent to GADS for the months of June, July and August during the immediately previous like Capability Period. Unforced Capacity from an Limited Control Run-of-River Resource for the winter capability

period shall be based on NYISO GADS Data or data equivalent to GADS Data for the months December, January, and February during the immediately previous like Capability Period.

Intermittent Resource Unforced Capacity values will have Unforced Capacity values ~~Values~~ based on seasonal performance factors calculated in accordance with Attachment J of the Installed Capacity Manual. Unforced Capacity from an Intermittent Power Resource for the summer capability period shall be based on the average production during the hours between 14:00 and 18:00 for the months of June, July and August during the immediately previous like Capability Period. Unforced Capacity from an Intermittent Power Resource for the winter capability period shall be the average production during the hours between 16:00 and 20:00 for the months December, January, and February during the immediately previous like Capability Period.

## **4.6 Operating Data Default Value and Exception for Certain Equipment Failures (Section 5.12.6(b) and (c) 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 Manual, the NYISO will deem a Resource to be completely forced out during each month for which this Resource has not submitted its Operating Data in accordance with Section 4.4 of this Manual. Pursuant to Section 5.12.12 of the *NYISO Services Tariff*, Resources that do not comply with Section 4.4 of this Manual also are subject to information submission requirements sanctions.

Resources who 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 Manual.

### **4.6.2 Exception for Certain Equipment Failures**

When a Generator, Special Case Resource, Energy/Capacity Limited Resource, System Resource, Intermittent Resource or Control Area System Resource is forced into an outage by an equipment failure that involves equipment located on the electric network



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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.

In reporting Operating Data (GADS data), a Generator, Energy/Capacity Limited Resource, or System Resource will 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 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 Resources to be found in Attachment K [not yet written].

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 Generator has not placed its unit on a maintenance outage, such interruption in availability shall be treated for purposes of calculating the unit's ~~EFORd~~EFORd rating as a maintenance outage (MO) in the case of a forced outage (U1, U2, U3) or as a maintenance derate (DS) in the case of a forced derating (D1, D2, D3) reserve shutdown.

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 Generator is on a maintenance outage, such interruption in availability shall be treated for purposes of calculating the unit's EFORa 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.



#### **4.7 Monthly Installed Capacity Supplier Certification Forms**

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 timeline that can be found by selecting the link provided: (<http://www.nyiso.com/public/products/icap/index.jsp>), demonstrating that the Unforced Capacity it is supplying is not already committed to meet the Minimum Installed Capacity Requirement of an External Control Area.

In addition, each Installed Capacity Supplier that has been de-rated (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 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.

In the case where 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 ~~NY~~NYISO-administered auctions.

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 (Section 5.12.7 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 in advance of any Day-Ahead bidding. Any declared or unavailable Energy/Capacity not previously scheduled 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 Manual.

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 and System Resources**

For every hour of any day for which Generators 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. See the *NYISO's Day-Ahead Scheduling Manual* and *Market Participants User Guide* for scheduling and bidding procedures.

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.

#### 4.8.2 **Energy Limited and Capacity Limited Resources**

~~Energy/Limited 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 conform to all of the requirements of Attachment M to this Manual. ~~for Energy Limited Resources, this 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 four (4) hours each day for a minimum of four (4) hours each day.~~ Energy/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. ~~An Energy Limited Resource must also provide the NYISO with information concerning that Energy Limited Resource's upper operating limit, designating its desired operating level. Once the Energy Limited Resource has provided four (4) hours of Energy equivalent to its Installed Capacity commitment, the NYISO will not call on it to provide additional Energy, absent an emergency. In the case of an emergency, the NYISO may request an Energy Limited Resource for assistance, recognizing that the Energy Limited Resource may not be capable of responding. See Attachment M for additional details on qualifying Energy/Capacity Limited Resources and bidding and scheduling procedures. [Tech Bulletins 75 and 76 will be folded into Attachment M.]~~

**4.8.3 ~~[This Section intentionally left blank]Interruptible Load Resources~~**

~~4.8.3 Interruptible Load Resources that are Installed Capacity Suppliers must supply the NYISO with Energy and/or Operating Reserve Bids in the Day-Ahead Market indicating the price at which they are willing to be interrupted. This applies only to Interruptible Loads that are not Special Case Resources.~~

**4.8.4 Existing Municipally-Owned Generation**

Existing municipally-owned generators that qualify as Installed Capacity Suppliers pursuant to Section 5.12.11(b) of the *NYISO Services Tariff* and Section 4.13 of this 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 Manual)**

Special Case Resources are not subject to daily bidding, scheduling, and notification requirements.

For every month in which a Special Case Resource supplies Unforced Capacity, the Responsible Interface Party (“RIP”), or its assignee, must offer to reduce Load equal to the Installed Capacity Equivalent of the amount of Unforced Capacity the Special Case Resource is supplying to the NYCA by submitting a Minimum Payment Nomination to the NYISO 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 Special Case Resources to perform, based on price and NYCA zone, ~~when faced with a Forecast Reserve Shortage~~ 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. Special Case Resource Minimum Payment Nomination submission procedures are detailed in Section 4.12.3.

A RIP, or its assignee, must notify the NYISO Planning and Operations departments of a change in status that would cause a Special Case Resource to not be able to provide the full amount of Load reduction associated with the Unforced Capacity it has supplied to the NYCA. See Sections 4.3.3 and 4.12.6 of this Manual.

**4.8.6 Intermittent Power Resources**

As set out in Section 5.12.11(d) of the *NYISO Services Tariff*, Intermittent Power Resources 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, Intermittent Power Resources shall comply with the notification requirement of Section 5.12.7 of the NYISO Services Tariff by notifying the NYISO of any outages.

## 4.9 External Resources

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 identified in section 4.9.2 below, External Installed Capacity Suppliers using Unforced Capacity Deliverability Rights (“UDRs”) must comply with the requirements and procedures identified in this section 4.9. Refer to section 4.14 of this Manual for additional Installed Capacity Supplier requirements and procedures associated with the use of UDRs.

### 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. To qualify as External Installed Capacity Suppliers such entities must provide the following information to the NYISO in a timely manner:

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 Control Area Loads, 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 Manual;
4. Submission of Operating Data for the prior twelve months in accordance with Sections 4.4 and 4.4.9, and [Attachment K](#) of this Manual;

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5. Documentation which satisfies the Maintenance Scheduling Requirements in Section 4.3 of this Manual; and
6. Expected return dates from full or partial outages.

With the exception of item four (4), this information must be provided to the NYISO at least two (2) business days prior to the business day the External Installed Capacity Import Rights (“Import Rights”) are requested, two (2) business days prior to an NYISO administered Installed Capacity auction in which the External Installed Capacity Supplier wishes to offer Unforced Capacity, and at such additional times as required by the NYISO and this Manual (e.g., annual DMNC test results). The information required by item four (4) must be submitted in accordance with the timing requirements found in 4.4.9 of this Manual (by the tenth (10<sup>th</sup>) day of the month preceding the month in which the prospective External Installed Capacity Supplier wishes to supply Unforced Capacity to the NYCA).

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

#### **4.9.2 Allocation of Import Rights**

The NYISO establishes the maximum amount of Unforced Capacity that can be provided to the NYCA by Resources located in each neighboring Control Area according to the procedures contained in Section 2.7 of this Manual. Once this amount has been determined for each neighboring Control Area, the allocation among NYISO customers of Import Rights to External Unforced Capacity supply is done according to the following procedures.

#### **Grandfathered External Installed Capacity Rights**

Details concerning Grandfathered Rights are provided in [Attachment E](#) to this Manual.

#### **Other Allocations**

After accounting for Grandfathered External Installed Capacity rights, the NYISO will allocate the remaining rights for External Unforced Capacity supply on a first-come, first serve basis. Import Rights may ultimately only be used by LSEs located within the NYCA, but any NYISO Customer may submit a request along with all required supporting documents seeking External Installed Capacity rights.

#### **Request**

Requests for Import Rights for one or more months within a Capability Period may be sent to the NYISO during the following time period. A request sheet is available at: ([http://www.nyiso.com/public/webdocs/products/icap/auctions/Winter-2005-2006/forms/icap\\_import\\_rights\\_fax\\_form.pdf](http://www.nyiso.com/public/webdocs/products/icap/auctions/Winter-2005-2006/forms/icap_import_rights_fax_form.pdf)) or participants may use their own request sheet.

**Business Issues Committee – 03/08/06**

**Agenda Item 6**

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- Beginning at 8:00 AM ET  
For Summer Capability Period: on the first business day following the publication of the total number of import rights made available by the NYISO (on or about February 15)  
For Winter Capability Period: on the first business day not more than thirty (30) days prior to a Capability Period (strip) Auction, and
- Ending at 5:00 PM ET four (4) business days prior to a Capability Period Strip Auction.

On or about February 15 the NYISO shall post the final quantity of Import Rights available for request for the following Capability Year. The quantity of rights that will be available at that time prior to the Summer and the Winter Capability Period (strip) Auctions shall be 100 % of the Import Rights available, as posted by the NYISO.

If Import Rights are not fully subscribed after the Capability Period (strip) Auction has concluded, the NYISO will open another period of first-come, first-serve allocations prior to each Monthly Auction for the month or months in which Import Rights remain and the NYISO will post the available Import Rights after each subsequent auction.

For each month within a Capability Period, requests for Import Rights may be sent to the NYISO during the following time period:

- Beginning at 8:00 AM ET on the business day following the day the NYISO posts the results of each Capability Period (Strip) or Monthly Auction.
- Ending at 5:00 PM ET four (4) business days prior to the next Monthly Auction.

**Contents of Request**

Each request must contain the following information:

1. The identity of the NYISO Customer making the request;
2. The identity of the External Installed Capacity Supplier;
3. The name and location of the Resource;
4. The Control Area in which the Resource for which the Installed Capacity Supplier seeks rights is located;
5. The MW amount requested, equal to the Installed Capacity Equivalent of the Unforced Capacity sale to the NYCA from the Resource designated in (4) above. For example, a request for 100 MW of Import Rights from a Resource with a 10% EFORD will support a UCAP sale of 90 MW;

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6. The time period, in blocks of whole months, for which the rights are requested;
7. E-mail address of the requesting party to which a response will be made.

The information listed above must be provided as a “Request for External Installed Capacity Import Rights” to the ISO’s Manager of Auxiliary Market Operations via facsimile to the following number: 518-356-6208.

If the NYISO determines that the information provided in the request is incomplete or inadequate, the NYISO will immediately notify the requesting party. 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.

**Priority**

Only complete requests submitted within the time periods specified above will be evaluated by the NYISO. The date and time stamp provided by the FAX machine will determine the priority for the evaluation of requests. If a request is resubmitted for any reason, the latest time stamp will determine its priority. 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.

**Supporting Documents**

In addition, the requestor must submit documentation of the bilateral agreements for which External Capacity Import Rights are being requested, with pricing redacted, between a qualified External Installed Capacity Supplier or a marketer with a contract with a qualified External Installed Capacity Supplier and:

- (a) a LSE within the NYCA; or,
- (b) a marketer that is not an affiliate of the External Installed Capacity Supplier.

The supporting documentation of bilateral agreements must be received by 5:00 PM ET of the business day following the day in which the requests for Import Rights are submitted to the NYISO.

If the NYISO determines that the information provided as supporting documentation is incomplete or inadequate, the NYISO will immediately notify the requesting party. The submission of incomplete or inadequate information does not alter the time frame in which such documents are due. For example, a requestor that has submitted incomplete or inadequate supporting documentation has until 5:00 PM ET of the business day following the day in which the requests for Import Rights are submitted to the NYISO to provide adequate and complete supporting documentation.

### **Response from the NYISO**

Upon receipt of supporting documentation of a bilateral transaction, the NYISO will respond by 5:00 PM ET of the second business day following the day in which the requests for Import Rights are submitted to the NYISO.

The NYISO will notify the requesting party if its request has been accepted or rejected, with reasons for rejection, if such be the case, within the time period specified above, following receipt of a complete request and supporting documentation. If accepted, the NYISO will provide a confirmation number. A rejection may be based on any of the following:

Incomplete or inadequate information;

Fully subscribed External Installed Capacity rights;

Late submission of supporting documentation of bilateral agreements;

Unqualified External Installed Capacity Suppliers; or,

The MW amount provided in the supporting documentation is less than the MW amount included in the Import Rights request.

If a request is rejected, the allocation of ICAP Import Rights proceeds using the assigned priorities as if that request had never been submitted.

### **Tally of Import Rights**

The NYISO will maintain a tally of the available Import Rights for each month within a Capability Year and will post these figures on the NYISO web site (<http://www.nyiso.com/public/products/icap/index.jsp>).

### **Obligations of Recipients of Import Rights**

If at any time, the NYISO has allocated all of the Import Rights that are available to permit the import of Installed Capacity from one or more control areas for one or more months, the NYISO will promptly issue an announcement to all Market Participants, alerting them to this fact. Recipients of these Import Rights will have until 12:00 PM ET two business days following the issuance by the NYISO of this announcement or until 5:00 PM ET on the last business day that precedes the beginning of the Capability Period (strip) auction by at least 15 days, if that is later, either to decide to keep these Import Rights, or to return these Import Rights to the NYISO. The NYISO may exhaust its supply of Import Rights for different Control Areas and different months at different times, so this deadline may differ from Control Area to Control Area within a month, and it may vary from month to month for a given Control Area.

Entities that had requested those Import Rights of the ISO, but which elect to return them to the NYISO prior to this deadline, will be under no further obligation associated



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with those Import Rights. Likewise, if the NYISO never makes such an announcement pertaining to Import Rights to import Installed Capacity from a given Control Area for a given month (because the NYISO never allocated all of the Import Rights that were available to permit the import of Installed Capacity from those Control Areas in those months), then the recipients of those Import Rights will be under no obligation to use those Import Rights to support the import of Installed Capacity to a New York LSE, nor will they be required to offer Installed Capacity into any NYISO-administered auctions. The NYISO will notify all Market Participants when Import Rights have been made available due to Import Rights that have been returned back to the NYISO from previously awarded Import Rights recipients. Any Import Rights that are returned to the NYISO shall be available for allocation to market participants or for use to support the purchase of Installed Capacity in NYISO-administered auctions, using the same procedures that are used for other Import Rights, as described elsewhere in this Manual.

Entities that elect not to return those Import Rights by the deadline described above after such an announcement is made, or entities that are allocated Import Rights to import Installed Capacity from a Control Area for a given month after such an announcement has been issued for that Control Area and that month by the NYISO, shall be able to demonstrate to the NYISO no later than the deadline for monthly certification, as provided by the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO web site (<http://www.nyiso.com/public/products/icap/index.jsp>), that they have used those Import Rights to support the import of Installed Capacity from the relevant Control Area into New York to meet the LSE Unforced Capacity Obligation of an LSE serving load in the NYCA. If, by that time, a holder of such Import Rights has neither sold that Installed Capacity using those Import Rights in an NYISO-administered auction nor has entered into a bilateral agreement to supply Installed Capacity to a New York LSE using those Import Rights, the associated Installed Capacity will be offered for sale into the ICAP Spot Market Auction as price taker, i.e., at a price of \$0/MW, and the NYISO will not accept any other offers to sell Installed Capacity from other Suppliers located in the corresponding external Control Areas. The Supplier will be paid the market-clearing price determined in those auctions for the control area in which it is located for the Unforced Capacity in question.

**External Installed Capacity Sales in NYISO Administered Auction**

All purchasers of Unforced Capacity that is located in an External Control Area in an NYISO-administered auction shall receive the External Installed Capacity rights necessary in order to permit that Unforced Capacity to count towards the LSE Unforced Capacity Obligation; consequently, in order to ensure that there are sufficient external Installed Capacity rights available, the NYISO shall limit the number of MW of Unforced Capacity that can be purchased in any External Control Area in those auctions. In each Capability Period auction, the NYISO shall limit the number of MW of

Unforced Capacity that can be purchased in any External Control Area to the number of MW of Unforced Capacity that can be provided by Installed Capacity Suppliers located in that Control Area, as determined in Section 2.7 of this Manual, less all External Installed Capacity rights that have been requested for that External Control Area under the provisions of this section. In addition, the NYISO will permit entities that have been allocated Import Rights to offer Installed Capacity into the auctions it administers.

In the Capability Period Monthly Auctions held before and during the Capability Period, the NYISO shall limit the number of MW of Unforced Capacity that can be purchased in any External Control Area to the number of MW of Import Rights that the NYISO makes available for the Capability Period from that Control Area, less the number of MW of Unforced Capacity purchased in that External Control Area for that month in preceding Monthly Auctions and the Strip Auction, less all External Installed Capacity Rights that have been requested to support external Bilateral Transactions for that month.

The NYISO will reduce External Installed Capacity rights eligible to be traded in the Capability Period strip auction based on the allocations made according to the above procedures.

#### **4.9.3 Additional External Installed Capacity Supplier Requirements**

##### **Certification**

Entities that have received External Installed Capacity Import Rights or that are using UDRs to meet NYCA Locational Capacity Requirements must provide the following additional information, for each month that they intend to supply Unforced Capacity to the NYCA, to the NYISO on the date when Installed Capacity Supplier and LSE Certifications are due.

- Certification that Unforced Capacity being sold to the NYCA has not been sold elsewhere.
- The transaction number granted to the External Installed Capacity Import Rights holder for the External Installed Capacity associated with those rights.

See Section 4.7 of this 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.

##### **Deliverability**

External Installed Capacity Suppliers are required to demonstrate that the Energy associated with Unforced Capacity supplied to the NYCA is either deliverable to the NYCA border, or in the case of UDRs, to the NYCA interface with the UDR transmission facility. This demonstration occurs in two stages.

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Energy must be deliverable to the NYCA border or, when using UDRs, to the NYCA interface with the UDR transmission facility using the transmission service rules of the External Control Area. The following rules apply.

- (a) For External Installed Capacity associated with Import Rights,
  - (i) Secures External Installed Capacity Import Rights during the first-come, first-serve allocation period described above with a bilateral agreement; or
  - (ii) Sells External Unforced Capacity in an NYISO-administered Installed Capacity auction pursuant to the procedures identified in this Manual; **or**
- (b) For External Installed Capacity associated with UDRs,
  - (i) That the External Installed Capacity has a sufficient amount of UDRs either owned or under contract for the term of the transaction.

Deliverability of Energy associated with External Unforced Capacity is demonstrated as follows:

- (a) For External Installed Capacity associated with Import Rights, demonstrate the ability to deliver Energy to the NYCA border for the time the Energy may be scheduled in the DAM, included in the Hour Ahead Market (HAM), or pursuant to an SRE, as applicable. If the transmission interface between the NYCA and the adjacent Control Area is full, the External Installed Capacity Supplier is not required to "bump" the entity whose Energy has been committed on the line and the Energy associated with External Unforced Capacity from that External Installed Capacity Supplier is not required to be delivered to the NYCA border. If the transmission tie between the NYCA and the Control Area where the External Installed Capacity Supplier is located was full but the External Control Area curtails an amount that would reduce the Import below the External Installed Capacity commitment level, the External Installed Capacity Supplier will be required to respond to the NYISO request and use the transmission capability to provide Energy to the NYCA; or
- (b) For External Installed Capacity associated with UDRs, demonstrate delivery of such Energy to the NYCA interface with the UDR transmission facility for the time the Energy may be scheduled in the DAM, included in the HAM, or pursuant to an SRE, as applicable. If the NYCA interface with the UDR transmission facility is full, the External Installed Capacity Supplier is not required to "bump" the entity whose Energy has been committed on the line and the Energy associated with External Unforced Capacity from that External Installed Capacity Supplier is not required to be delivered to the NYCA interface with the UDR transmission facility. If the NYCA interface with the UDR transmission facility was full but the

External Control Area curtails an amount that would reduce the Import below the UDR transmission facility total transmission capability, the External Installed Capacity Supplier will be required to respond to the NYISO request and use the transmission capability to provide Energy to the NYCA.

#### **4.9.4 Charges Associated with External Unforced Capacity Deficiencies**

In accordance with the 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.

### **4.10 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.

#### **4.10.1 Permissible Aggregations**

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

1. New York City Zone
2. Long Island Zone

3. All other NYCA Zones

and the neighboring Control Areas operated by:

1. PJM
2. ISO-NE
3. Hydro Quebec
4. Ontario ~~IESO~~IESOIMO

Resources located in the Ontario ~~IESO~~IESOIMO Control Area may not qualify as Installed Capacity Suppliers, since this Control Area does not currently meet the ISO's recall or Curtailment requirements for Installed Capacity Suppliers.

Within the other six 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.

#### **4.10.2 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 supplying 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 Manual.
- Documentation that satisfies the Maintenance Scheduling Requirements specified in Section 4.3 of this Manual.
- Documentation that satisfies the Operating Data information submission requirements specified in Section 4.4 of this Manual.
- Expected return date from full or partial outages.

- Certification that Unforced Capacity supplied to the NYCA has not been supplied elsewhere.

#### **4.10.3 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 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 Manual.

To qualify as ICAP Suppliers, Control Area System Resources or the purchasers of Unforced Capacity from those Resources shall submit Forecast Data in a form acceptable to the NYISO and in compliance with the schedule and requirements set forth in Section 4.2 of this Manual, which are otherwise applicable to the submission of DMNC test results by Generators to the NYISO.

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 submit to the NYISO Forecast Data for each of the six (6) months of the 2001-2002 Winter Capability Period. Forecast Data submitted 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) ( $CAP_{cm}$ );
2. External forecasted firm Capacity purchases by Control Area  $c$ , other than purchases from Resources in the NYCA during month  $m$  ( $EP_{cm}$ );
3. The forecasted amount of load management (i.e., interruptible load) in Control Area  $c$  during month  $m$  ( $LM_{cm}$ );
4. Forecasted peak Load for Control Area  $c$  during month  $m$ , including system losses ( $PL_{cm}$ );

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5. Forecasted external firm Capacity sales by Control Area *c* during month *m*, other than firm Capacity sales to the NYCA (ES<sub>cm</sub>);
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 (LS<sub>cm</sub>);
7. The amount of generating capacity that is forecasted to be unavailable in Control Area *c* due to planned maintenance during month *m* (PM<sub>cm</sub>); 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* (PR<sub>cm</sub>).

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:  $NPC_{cm} = CAP_{cm} + EP_{cm} + LM_{cm} - PL_{cm} - ES_{cm} - LS_{cm} - PM_{cm} - PR_{cm}$ .

Net Projected Capacity shall be used to determine the amount of Unforced Capacity a Control Area System Resource can provide using the equations in [Attachment J](#), Section 3.4.

**4.11 ~~[This Section intentionally left blank]Interruptible Load Resources~~**

~~4.11 The following procedures apply to Interruptible Load Resources, if any, that are metered by the NYISO.~~

~~4.12 These Resources must Bid into the Day-Ahead Market as price cap bid Load. These Resources will be scheduled based on their Bids and Day-Ahead prices.~~

~~4.13 In real-time, these Resources determine whether, and at what level, to purchase Energy or to interrupt through their Bids into the Hour-Ahead market.~~

~~4.14 If the Load chooses to purchase Energy, it will pay the LBMP for the difference between its scheduled Load and the Load for which it is purchasing.~~

~~4.15 These Resources must interrupt, if requested to do so by the NYISO.~~

**4.12 Special Case Resources**

Special Case Resources are Loads capable of being interrupted upon demand, and distributed generators, rated 100 kW or higher, that are not visible to the ISO's Market Information System. The Unforced Capacity of a Special Case Resource corresponds to its pledged amount of Load reduction as adjusted by historical performance factors and as increased by the Transmission District loss factor. The calculation of this amount shall be made in accordance with Section 3.3 of [Attachment J](#).

**4.12.1 Claiming of Unforced Capacity and RIPS**

The Unforced Capacity of a Special Case Resource 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 there is a [Responsible Interface Party \(RIP\)](#) with



respect to such Special Case Resource. ~~Responsible Interface Parties (RIPs)~~ are Market Participants that agree to be bound by the notification and other requirements applicable to RIPs under this Section 4.12. Responsible Interface Parties shall be responsible for all forms of communication to and from the NYISO for purposes of Minimum Payment Nomination, notification, dispatch, validation, and verification of Special Case Resources and the Unforced Capacity associated with Special Case Resources.

#### **4.12.2 General Requirements**

Every Special Case Resource must submit a Special Case Resource commitment in accordance with the SCR Workbook located on the NYISO website at <http://www.nyiso.com/public/products/icap/auctions.jsp>. The most recent version of the SCR Workbook is located on this web page under the applicable Capability Period. In addition, each Special Case Resource must ~~the form in Attachment K and~~ be accepted by the NYISO as an Installed Capacity Supplier before its Unforced Capacity may be claimed by an LSE towards its LSE Unforced Capacity Obligation or be offered in an auction administered by the NYISO. Every Special Case Resource must submit a Special Case Resource commitment to the NYISO in accordance with the schedule and requirements of Section 4.2. Special Case Resources must also submit a notification letter identifying the RIP that they authorize to transact on their behalf and must obtain an identification number from the NYISO.

Interval billing meters are required of all Special Case Resources. Such metering must conform to Section 6 of the Emergency Demand Response Program (EDRP) Manual.

A Special Case Resource that supplies Load reductions solely through the use of a distributed generator (whether or not operated in parallel with the NYCA) and that elects to measure such Load reductions by metering the output of such distributed generator under Section 3.3(b) of Attachment J, shall provide to the NYISO DMNC test data as part of its Special Case Resource commitment. All other Special Case Resources shall provide a Special Case Resource commitment, ~~in the form of Figure 1 of Attachment K.~~ A Special Case Resource that supplies Load reductions solely through the use of a distributed generator and that elects to measure such Load reductions by metering the output of such distributed generator under Section 3.3(b) of Attachment J: ~~(i)~~ must deduct from the output of such generator: (i) any auxiliary ~~Load~~ ~~Loadpower~~ consumed by the generator and supplied from an external source; and (ii) ~~any Load from~~ ~~may not~~ ~~serve~~ a load bank used in conjunction with ~~the output of the~~ generator when responding to NYISO dispatch under Section 4.12.3.

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

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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.

Special Case Resources must meet the qualifications and comply with the procedures described below. Responsible Interface Party (RIPs) claiming Unforced Capacity from Special Case Resources must comply with the requirements and procedures set forth below.

The Unforced Capacity of Special Case Resources may only be offered in auctions administered by the NYISO or be claimed by an LSE towards its LSE Unforced Capacity Obligation in even increments of 100 kW (e.g. 590 kW of Unforced Capacity would be rounded down to 500 kW). However, Special Case Resources may be aggregated to minimize the effect of this requirement, provided that each such aggregation is identified as a single block of Unforced Capacity. Aggregations of this type may only be used to meet the 100 kW block requirement but cannot be used to allow over-performance by one Special Case Resource to compensate for under-performance by another Special Case Resource. Individual performances of each Special Case Resource shall be reported individually using the Special Case Resource Workbook and be tracked in accordance with the procedures contained in this Section 4.12 and performance measurements will be calculated in accordance with Section 3.3 of Attachment J.

RIP performance will be based on the performance of its overall portfolio of Special Case Resources. An RIP will not be charged with a deficiency penalty if the total performance of its individual Special Case Resources meets or exceeds the total ~~commitment~~ capacity it is committed to supply ~~sold~~ from of all of its individual Special Case Resources. If the RIP's portfolio of Special Case Resources does not meet its commitment, the RIP will be subject to deficiency penalties as applicable to any Installed Capacity Resource. Calculations will be made in accordance with the RIP calculations defined in Section 3.3 of Attachment J.

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 Section 3.8 of the *NYISO Emergency Demand Response Program Manual*, except that the total of all such aggregations for Special Case Resources shall not exceed 100 MW.

#### **4.12.3 Minimum Payment Nomination Requirements**

For each month in which a Special Case Resource supplies Unforced Capacity to the NYCA, the RIP, or its assignee, must submit a Minimum Payment Nomination to the NYISO that will reflect the minimum guarantee price the Special Case Resource will be paid if called upon to reduce Load equal to the Installed Capacity Equivalent of the

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amount of Unforced Capacity it has supplied. There is no minimum Minimum Payment Nomination and a Special Case Resource's Minimum Payment Nomination cannot exceed \$500/MWh. This Minimum Payment Nomination, or Energy curtailment payment designation, associated with a Special Case Resource'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~~~~prioritized~~~~determine~~ which Special Case Resources to call, in the order of increasing strike prices, when a Forecast Reserve Shortage is identified. Unlike a Generator or other Resource's Bid to supply Energy associated with Unforced Capacity, a Special Case Resource's Minimum Payment Nomination cannot be revised prior to Settlement in the Day-Ahead Market. A Special Case Resource's Minimum Payment Nomination is set for the entire month.

Special Case Resource Minimum Payment Nominations to perform at a minimum payment for Load reduction must be submitted at the same time all Installed Capacity Suppliers are required to submit their monthly Installed Capacity Supplier certification forms. See Section 4.7 of this Manual. Special Case Resource Minimum Payment Nominations must be submitted to the NYISO using the SCR Workbook located on the NYISO website at <http://www.nyiso.com/public/products/icap/auctions.jsp>, on a separate form. Responsible Interface Parties must submit Minimum Payment Nominations for all qualified Special Case Resources, regardless of whether, at the time of the submission, a qualified Special Case Resource has committed to supply Unforced Capacity in the NYCA market during the upcoming month. Once submitted, a Special Case Resource's Minimum Payment Nomination will remain in effect for the life of the Special Case Resource unless superseded by a successive Minimum Payment Nomination.

Special Case Resource Minimum Payment Nominations will be entered in a separate database and used only when the NYISO Operations department determines the need to call on these Resources in accordance with the NYISO Emergency Operations Manual, response to a Forecast Reserve Shortage. In the event the NYISO Operations department makes such a determination, the Minimum Payment Nominations placed for each Special Case Resource will allow the NYISO to call for Load reduction based on Special Case Resource zone location and price. As a result, the NYISO will be able to call less than the total pool of Special Case Resources in the NYCA and in each NYCA zone.

As an example, the NYISO may determine that it needs a Demand Reduction response of 25 MWs in Zone J. A total of 50 MWs of Special Case Resources located in Zone J is supplying Unforced Capacity. For this example, assume that each MW of Special Case Resource Capacity entered a different Minimum Payment Nomination, from \$0/MWh to \$500/MWh. In order to fulfill its need for 25 additional MWs of reserves, the NYISO will call the 25 MWs of Special Case Resources in economic order based on their submitted Minimum Payment Nominations starting with the lowest values. See Section 4.12.8 for situations where multiple Special Case Resources have placed the same top

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Minimum Payment Nomination called upon by the NYISO and the total MWs offered at that price exceed the ISO's needs.

**4.12.4 Performance**

A Special Case Resource must make Energy available, for a minimum four (4) hour block (except where environmental constraints require a shorter block), in amounts that correspond to the Installed Capacity Equivalent of the amount of Unforced Capacity it supplies to the NYCA ~~as specified in Section 3.3 (c) of Attachment J,~~ by reducing Load or transferring Load to a distributed generator, ~~giving within~~ two (2) hours of a notice provided by the NYISO to the RIP, following a twenty-one (21) hour notice if notification is provided by 3:00 PM ET, or twenty-four (24) hour notice otherwise. If the Special Case Resource is unable to provide full output within two (2) hours due to operational constraints, the RIP may petition the NYISO for permission to provide maximum output from the Special Case Resource within a longer period. The ISO's permission will not be unreasonably withheld. In granting permission, the NYISO will calculate the appropriate de-rating factor for use in determining the amount of Unforced Capacity that such Special Case Resource can provide in the future.

The NYCA and all LSE minimum Installed Capacity requirements are based on each Transmission District's and each customer's coincident contribution to the NYCA prior year peak Load. Accordingly, the baseline for measuring the capacity that each Special Case Resource can provide is based on that customer's contribution to the NYCA prior year peak Load. The Installed Capacity value of any curtailable Load Special Case Resource is based on the difference between each Special Case Resource's contribution to the NYCA peak Load and the Load it reduces to during a Special Case Resource event in the case of curtailable Load Special Case Resources. Since each Special Case Resource customer's explicit contribution to the prior year peak Load is not readily available in every case, the average of the one-hour peak Loads during the noon to 8 PM time period during the four (4) middle months in each Capability Period is used to create a Special Case Resource APMD baseline. This methodology will become effective beginning with the Summer 2006 Capability Period and be applied beginning with the Summer 2007 Capability Period and beyond.

If a new resource has no interval billing meter data from the prior like Capability Period, its Installed Capacity value may be provisionally based on billing demand data. Such declarations will be subject to actual in-period verification using actual interval billing meter data for the applicable Capability Period and performance during an event or audit and subject to all the same deficiency payments and forward deratings as applied to all other SCRs.

In the case where a Special Case Resource is using a distributed generator for demand reduction, the Installed Capacity value of that Special Case Resource is based on the

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difference between that generator's contribution to reducing the NYCA peak Load in the prior like Capability Year and its production during a Special Case Resource event. For example, a back-up generator that was not operating during the prior year NYCA peak would qualify for full output value less associated auxiliary and load bank Load, if any. A co-generator, or any other generator that was operating during the prior NYCA peak, would get credit for the difference between that prior year production and its production during a Special Case Resource event unless the LSE, Transmission District and NYCA peak Load upon which Installed Capacity requirements were based had been grossed up to account for such prior year operation, in which case it could be treated as in the case of a the back-up generator that was not operating during the prior year NYCA peak at full production.

The SCR Workbook used to register, certify and report performance in accordance with these procedures, along with detailed instructions on its use, is located on the NYISO website at <http://www.nyiso.com/public/products/icap/auctions.jsp>.

Small customer aggregations as described in Section 4.12.2 of the Manual will use the CBL as defined the *NYISO Emergency Demand Response Program Manual* to establish their Installed Capacity baseline.

A Special Case Resource may be required by the NYISO to demonstrate its pledged Load reduction capability once in every Capability Period for a period not to exceed one clock hour if it has not otherwise already been called by the NYISO to reduce Load in such period. There will be no Energy payments for these one hour audits. Audits, if any, will be conducted only during DMNC Test Periods.

For purposes of determining deficiencies, Special Case Resources must demonstrate their pledged load reduction for a minimum of one hour each Capability Period. This demonstration must be during an actual called SCR event. If there are no such Special Case Resource events, one-hour audit results will apply. If a Special Case Resource does not meet its pledged Load reduction during an event, or if there is no event and the audit result is applied, the Special Case Resource is subject to derating for the next like Capability Period and the RIP is subject to deficiency penalties if the overall performance of all Special Case Resources in the RIP portfolio is less than that committed and certified in accordance with the applicable calculations in Section 3.3 of Attachment J. This methodology will become effective beginning with the Summer 2006 Capability Period and be applied beginning with the Summer 2007 Capability Period and beyond.

UCAP values will be calculated for each Special Case Resource in accordance with Section 3.3 (c) of Attachment J. Performance will be based on all reported hours during all called Special Case Resource events in a Capability Period and will apply to the next like Capability Period. If results are reported for any audits during a Capability Period, they will also count toward determining the UCAP value for each Special Case

Resource. For example, if there are no Special Case Resource events, audit results only will apply. If an audit is conducted in August and there are subsequent events, all event hours will apply plus the audit hour if audit data is submitted.

In the event that a Special Case Resource located at a retail customer was in operation (in the case of a distributed generator) or providing Load reduction (in the case of interruptible Load), at the time of the 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 Special Case Resource.

#### **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 Manual, to the RIP. The former notification will be provided after 11 am, 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~~less~~fewer~~ than two (2) hours ahead of required operation or interruption. 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 only be calculated for energy reductions for whole clock hours; i.e. from 13:00 to 14:00, 14:00 to 15:00, etc.

Responsible Interface Parties shall contact their Special Case Resources through whatever communication protocols are agreed to between the Special Case Resources and the RIPs. Communication from the RIP to the Special Case Resource 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 an RIP. If an RIP has any concern about the wording of its Special Case Resource notifications, the NYISO will review and approve it in advance.

Responsible Interface Parties claiming Special Case Resource Unforced Capacity shall provide the NYISO with their phone and Internet contact information that allows for notification by the NYISO at any time. Responsible Interface Parties shall confirm receipt of both instances of notification (day-ahead and two (2) hour) within 1 hour by



Internet or telephone reply to the NYISO. Such reply must confirm the relay of proper notification by the RIPs to their Special Case Resource clients, where applicable.

#### **4.12.6 Capacity Adjustment Procedures**

Seasonal performance factors will be calculated in accordance with Attachment J of this Manual. Existing Special Case Resources that have a performance record from the prior like Capability Period will have Unforced Capacity values based on this calculation. New Special Case Resources will be assigned a Unforced Capacity values based on the ratio of the sum of all Unforced Capacity values to the sum of all Installed Capacity values of all Special Case Resources in the associated RIP's portfolio of resources in accordance with calculations in Section 3.3 of Attachment J. This methodology will become effective beginning with the Summer 2006 Capability Period and will apply beginning with the Summer 2007 Capability Period and beyond.

A Special Case Resource that fails to respond to RIP notification by reaching pledged Load reduction capability or maximum pledged generator output within two (2) hours following notice from the NYISO to the RIP, or that fails to provide output for the period required by the NYISO or four (4) hours, whichever is less, will be considered forced out (for unperformed hours) for purposes of calculating the Unforced Capacity value of the Special Case Resource for future Obligation Procurement Periods. See [Attachment J](#) of this Manual for further explanation of a Special Case Resource's Unforced Capacity value.

A Special Case Resource that has successfully petitioned the NYISO for permission to reach pledged Load reduction or maximum output in more than two (2) hours will be considered forced out in the amount of Unforced Capacity not backed by Energy for the period starting two (2) hours following the notice from the NYISO to the RIP until the Special Case Resource attains pledged Load reduction or maximum output.

A Special Case Resource (SCR) that cannot operate for the full four (4) hours when called for by the ISO, due to environmental permit limits or otherwise, shall be considered forced out for the hours it is unable to operate or is operated at reduced output.

#### **4.12.7 RIP Requirements**

In addition to other requirements under this Section 4.12, a RIP claiming Unforced Capacity from a Special Case Resource for sale into ~~a an~~ NYISO-administered auction or for its own requirements (in the case of a RIP, which is an LSE) shall fulfill the following obligations:

- Submit to the NYISO a letter from each SCR authorizing the RIP to act on behalf of the SCR during each Capability Period. The letter must specify that the RIP has authority to sell the SCR's Unforced Capacity, act as the organization of

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record for all financial transactions, and should be signed by an authorized representative of the SCR.

- ~~Give notice of the claiming of such Unforced Capacity on a one-time basis to the LSE supplying Energy to the retail customer on whose premises the Special Case Resource is located (if different from the RIP). [?]~~
- Notify the NYISO as provided in Section 4.3.3 whenever the Special Case Resource is unavailable to provide its pledged Load reduction.
- Report operating data to the NYISO ~~each month~~ as ~~required~~~~required~~~~required~~ provided in Section 4.4.7 using the ~~form~~ **SCR Workbook located on the NYISO website at <http://www.nyiso.com/public/products/icap/auctions.jsp>**
- ~~The NYISO shall provide copies of such data as to the appropriate to the Transmission Owner~~ **The NYISO shall provide copies of such data as to the appropriate to the Transmission Owner** ~~local distribution company provided in Figure 2 of Attachment K and provide copies of such form to the appropriate TO and the LSE in whose transmission districts supplying Energy to the retail customer on whose premises the Special Case Resource is located (if different from the RIP). [?]~~
- 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 distributed generator(s) in the case of a Special Case Resource whose performance is calculated under Section 3.3(b) of [Attachment J](#)) for the four (4) hour period following the two (2) hour NYISO notice under Section 4.12.4. **See Section 6 of the Emergency Demand Response Program Manual for metering requirements.** In the event that Energy made available from Special Case Resource Unforced Capacity is a small percentage of the total metered Load at the location of the Special Case Resource, such that it may not be clearly reflected by meter reads alone, the NYISO will also accept operations logs to augment metered output to ensure accurate verification.
- The RIP or the ~~Transmission Owner~~ ~~Local Distribution Company~~ ~~Transmission Owner~~, as ~~appropriate~~ **appropriate** shall retain all interval meter readings upon which it bases its certification of compliance, for a period of three (3) years.

#### **4.12.8 Special Case Resource Demand Response Payments**

~~Except in the case of an audit test, which may require performance for up to one hour in each Capability Period,~~ each time a Special Case Resource is called upon to perform, it will receive an Energy payment for the amount of Load reduction resulting from its performance, ~~measured in terms of the Energy supplied during each clock hour of its performance using the Energy calculation methodology specified in the EDRP Manual.~~ If the NYISO requests performance by Special Case Resources for more than four (4) hours, each Special Case Resource shall be paid for the duration of the event in accordance with this Section 4.12.8, 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 next whole clock-hour at**



which the hour that the Special Case Resource began its response. Each Special Case Resource shall be paid the zonal Real-Time LBMP per MWh of ~~Energy~~ ~~Energy~~ ~~demand~~ reduced for the duration of the event. Payment for Special Case Resource Load reductions are conditioned upon verification of performance for the time period requested by the NYISO.

If the NYISO requests performance by Special Case Resources for four (4) hours or less, each Special Case Resource shall be paid as if it had been activated for four (4) hours. Each Special Case Resource that reduces demand shall receive a payment consistent with the scarcity pricing rules, in accordance with this Section 4.12.8, for the duration of the NYISO request or for two (2) 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 Special Case Resource began to perform. Each Special Case Resource shall be paid the zonal Real-Time LBMP per MWh of ~~Load~~ ~~Load~~ ~~demand~~ reduced for the four-hour minimum payment period. Payment for Special Case Resource Load reductions is conditioned upon verification of performance for the time period requested by the NYISO.

Special Case Resource Minimum Payment Nominations would be eligible to participate in the LBMP price setting under the scarcity pricing rules, which permit Bids, or in this case Minimum Payment Nominations, to set prices if at least one (1) MW of Special Case Resource Capacity is needed to satisfy the total reserve requirement, following performance and verification. In the event that a Special Case Resource's Minimum Payment Nomination total for the number of hours of requested performance exceeds the LBMP revenue that Special Case Resource receives, that Special Case Resource will be eligible for a Bid Production Cost Guarantee to make up the difference.

When more than one Special Case Resource has submitted the highest Minimum Payment Nomination selected by the NYISO to perform during an event, the NYISO will specify the number of MWs of the amount of Special Case Resources 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 Special Case Resource 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 Special Case Resource Capacity is needed to satisfy the total reserve requirement, the Minimum Payment Nominations submitted by these Resources may be considered when determining the LBMP.

#### **4.12.9 NYISO Verification**

The NYISO retains the right to audit any records kept by the RIP, the Transmission Owner (~~Local Distribution Company~~), or the Special Case Resource that are used to support the RIP's certification of compliance with the procedures set forth in this Section 4.12.

#### **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**

Unforced Capacity Deliverability Right ("UDRs") are rights, as measured in MWs, associated with new incremental controllable transmission projects that provide a transmission interface to a NYCA Locality (i.e., an area of the NYCA in which a minimum amount of Installed Capacity must be maintained). External UDRs are associated with interfaces between a NYCA Locality and an External Control Area. Local UDRs are associated with interfaces between a non-constrained region in the NYCA and a NYCA Locality. When combined with Unforced Capacity which is located in an External Control Area or non-constrained NYCA region either by contract or ownership, and which is deliverable to the NYCA interface with the UDR transmission facility, UDRs allow such Unforced Capacity to be treated as if it were located in the NYCA Locality, thereby contributing 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.

A holder of UDRs may transfer them to another entity.

**4.14.1 Determination and Assignment of Unforced Capacity  
Deliverability Rights**

The amount of UDRs assigned by the NYISO to each new incremental transmission facility, and any future adjustments there to, will be based on the transmission capability, reliability, and availability of the facility, and appropriate NYSRC reliability studies.

**4.14.2 Requesting, Granting, Duration and Adjustment of Unforced  
Capacity Deliverability Rights**

An incremental transmission project will be awarded UDRs 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 MWs, throughout its project life. The amount of UDRs 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 anytime 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 will not be granted for the upcoming Capability Year, and the NYSRC will consider the UDRs 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 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:

NYISO

Director of System & Resource Planning

3890 Carman Rd.

Schenectady, NY 12303

#### **4.14.3 Use of External Unforced Capacity Deliverability Rights**

In order to use External UDRs, an Installed Capacity Supplier must have a contract to match the number of UDRs with Installed Capacity associated with an identifiable physical Resource.

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.

Annually, prior to August 1<sup>st</sup> or such later date as agreed to by the NYSRC, the holder of External UDRs may return to the NYCA a quantity of the External UDRs, up to the maximum amount awarded under Section 14.4.2, 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. 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 awarded a transmission project under Section 14.4.2 will be available to the holder to make the determination described above.

External Installed Capacity Suppliers using External UDRs must fulfill all External Installed Capacity Supplier requirements found in the *NYISO Services Tariff* 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

**NYISO INSTALLED CAPACITY MANUAL – Proposed changes as discussed at 2/17/2006 Installed Capacity WG Meeting and the 2/27 PRLWG Meeting.**

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, prior to August 1<sup>st</sup> 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 14.4.2, 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 Capacity 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 14.4.2 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 Services Tariff and NYISO Procedures for the Unforced Capacity they seek to combine with UDRs.

***4.14.5 Unforced Capacity Deliverability Rights offered in an Installed Capacity Auction***

UDRs may be offered in NYISO-administered Installed Capacity Auctions when previously combined with qualified Unforced Capacity. External Unforced Capacity combined with UDRs 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 Manual, with the exception of Operating Data, must be provided to the NYISO at least two (2) business days prior to an NYISO-administered Installed Capacity Auction in which the External Installed Capacity Supplier wishes to offer Unforced Capacity associated with UDRs, and at such times as required by the NYISO and this Manual (e.g., annual DMNC test results). Operating Data must be submitted in accordance with the timing requirements found in 4.4.9 of this Manual (by the tenth (10<sup>th</sup>) day of the month preceding the month in which the prospective External Installed Capacity Supplier wishes to supply Unforced Capacity to the NYCA).