

## DRAFT ICAP Manual Revisions for Suppliers

For

~~February 14~~**January 27**, 2005 ICAP Working Group Meeting

### 4. Installed Capacity Requirements Applicable to Installed Capacity Suppliers

#### 4.1. Overview

Resources must follow certain procedures and provide pertinent information to the ISO 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 ISO 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 filing of monthly Installed Capacity certification forms; and bidding, scheduling, and notification responsibilities.

Certain Installed Capacity Suppliers must fulfill alternative or additional requirements provided by the ISO 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 address 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 ISO Services Tariff. Details regarding these sanctions may be found in Section 6.1 of this Manual.

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 ISO Services Tariff)

~~All~~**Potential** Installed Capacity Suppliers must perform DMNC tests each Capability Period in which they have committed 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 ISO with the required documentation of those tests. Alternatively, ~~potential~~ Installed Capacity Suppliers, with the exception of new Resources, may use historical production data during the DMNC Test Period for the immediately preceding like Capability Period, no more than 12 months old, in lieu of DMNC test data. The completeness, accuracy, and validity of the DMNC test data or historical production data sent to the NYISO is the responsibility of the Resource making such data submission.

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. ~~Interruptible Load Resources must provide evidence of a one (1) hour disconnection period less than one (1) year old.~~

Beginning with the Winter 2000-2001 Capability Period, final DMNC Test results (see Attachment D) must be transmitted to the ISO 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 ~~the three month period from June 1<sup>st</sup> through August~~ September 15<sup>31<sup>th</sup></sup> and for the Winter Capability Period is ~~the three month period from December~~ November 1<sup>st</sup> through the last day of February ~~April 15<sup>th</sup>~~. All generating Resources must perform a DMNC test for any Capability Period for which it has committed/sold/certified Unforced Capacity. No Generator can claim an Installed Capacity value greater than it has demonstrated by a qualified DMNC test or actual production run in accordance with this section and Attachment D. The verified Installed Capacity value for any Capability Period will be the greater of the DMNC test for that Capability Period or for the prior like Capability Period.

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 commitment. ~~[ISO needs to make appropriate Tariff changes to conform to this rule.]~~

All New generating Resources must test in their normal operating configuration and temperature-adjust the results of the appropriate demonstration test or production data, using the procedures noted in Attachment D to this Manual. The normal operating configuration is that configuration that the supplier is willing to operate at on a regular basis in response to its bidding.

To qualify as Installed Capacity Suppliers in any Installed Capacity auction administered by the ISO, new Resources shall submit to the ISO the results of an appropriate demonstration test, production data or Special Case Resource commitment prescribed by this Manual by 5:00 PM at least ~~threewo- (32)~~ business calendar days before the administration of the relevant auction ~~provided, however, that Resources shall submit such results by 5:00 PM~~ [we need to agree on an acceptable definition of business days or, as an alternative, the ISO will have to propose a full calendar week in order to assure timely and orderly processing of paperwork.] ~~on the Friday immediately preceding an auction when such auction is scheduled on a Monday. For example, if the ISO administers the auction on a Thursday, new Resources shall submit appropriate demonstration test, production data, or Special Case Resource commitment by 5:00 PM on the Tuesday preceding the auction. If the ISO administers an auction on Monday, new Resources shall submit such results by 5:00 PM on the Friday preceding the auction.~~

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In addition to ~~the submission of~~submitting the results of an appropriate demonstration test or production data required by the previous paragraph, new generating Resources that want to participate in ISO-administered auctions shall submit to the ISO a notification letter if they do not already have, and will require, a point ID to participate in the ISO 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 ISO may reasonably request. This letter does not oblige a Resource to qualify as an ICAP Supplier; it allows the ISO 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 ISO 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 ISO the results of an appropriate demonstration test, production data or Special Case Resource commitment prescribed by this Manual by 5:00 PM at least ~~two-three (32)~~ business 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") [~~same goes here as in prior comment on needed lead time - we need to agree on an acceptable definition of business days or, as an alternative, the ISO will have to propose a full calendar week in order to assure timely and orderly processing of paperwork.]~~ provided, however, that Resources shall submit the results of an appropriate demonstration test, production data or Special Case Resource commitment prescribed by this Manual by 5:00 PM on the Friday immediately preceding the Certification Day when such Certification Day is a Monday. For example, if the Certification Day is a Thursday, new Resources shall submit appropriate demonstration test, production data or Special Case Resource commitment results by 5:00 PM on the Tuesday preceding the Certification Day. If the Certification Day is a Monday, new Resources shall submit such results by 5:00 PM on the Friday 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 ISO shall inform each ~~potential~~ Installed Capacity Supplier ~~that is required to submit DMNC data~~ of its ISO-documented DMNC ~~ratings~~ for the Summer Capability Period in February, and for the Winter Capability Period in August. For Resources with out-of-period DMNC tests, the ISO shall inform the Installed Capacity Supplier 3 business days (or one calendar week) after receipt of an acceptable DMNC test or production data. (See also the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO website for the timeline: ([www.nyiso.com/markets/icapinfo.html](http://www.nyiso.com/markets/icapinfo.html)).

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

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 ISO using the appropriate form in Attachment D.

##### **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-electric Generating Stations**

Valid DMNCs for hydro units are determined by the following:

- (a) The sustained net output averaged over a four (4) consecutive hour period using average stream flow and/or storage conditions within machine discharge Capacity.
- (b) For a multi-unit hydro station, the DMNC is determined as a group and each hydro unit in such a station is assigned a rating by distributing the combined station DMNC among them.
- (c) The sum of the DMNC of individual units in a multi-unit hydro station cannot be greater than the DMNC of the whole station.

(d) See Attachment D for further details.

##### **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.
- (b) 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.

(c) See Attachment D for further details.

#### **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.

(d) See Attachment D for further details.

#### **Intermittent, Energy 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.
- (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 ISO shall have the authority to review Intermittent Power Resources' production data.

(d) See Attachment D for further details.

#### **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 ISO 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 ISO Expedited Dispute Resolution Procedures (as set forth in Section 5.16 of the ISO 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 complete and report the test results for each of its Resources by sending the appropriate form provided in Attachment D to the ISO. **The test reports include:**

- ~~1. Kilowatt-hour meter readings 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 ISO 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 ISO 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 ISO will provide the Resource with alternative acceptable times for the rescheduled maintenance.

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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 ISO, the ISO will invoke mandatory re-scheduling using the procedures prescribed in the ISO 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 ISO with its proposed outage schedule for the current Capability Year and the 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 ISO'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. Interruptible Load Resources**

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

- ~~1. Notify the ISO 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.~~
- ~~1. Notify the ISO of any major equipment that is out of service and therefore cannot be interrupted because it is already off, and notify the ISO when the equipment is coming back on.~~
- ~~2. Provide the ISO 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.~~

~~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.~~

#### **4.3.2-4.3.1. External System Resources**

The ISO 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.

**4.3.3.4.3.2. 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 ISO.

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

Installed Capacity Suppliers shall submit Operating Data to the ISO every month in accordance with the following subsections. Further details are included in Attachment K, at the the NERC-GADS website (<http://www.nerc.com/~gads/>) and in their Data Reporting Instructions at <http://www.nerc.com/~filez/dri.html>. The completeness, accuracy, and validity of the performance data sent to the NYISO is 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 ISO 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 ISO at least five (5) calendar days before the date by which any of the relevant obligations or requirements must be fulfilled.

If no designation is made to the ISO, 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 ISO 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 ISO 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 ISO 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 ISO CARL 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*.

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 Resources**

By the 20<sup>th</sup> day of each month, Energy Limited Resources shall submit to the ISO GADS Data or data equivalent to GADS Data pertaining to the previous month. For example, Energy 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 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. Interruptible Load Resources~~

~~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.~~

~~By the 20<sup>th</sup> day of each month, Interruptible Load Resources shall submit to the ISO 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.~~

#### ~~4.4.6-4.4.5.~~ **Intermittent Power Resources**

Intermittent Power Resources shall submit to the ISO 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 ISO such as the location and name of the Intermittent Power Resource. Intermittent Power Resources shall submit 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 by May 20, 2001 data pertaining to their operations during the month of April 2001. ~~fre~~for

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

Special Case Resources shall submit documentation to the ISO, each time they are called upon to operate, in the form of Figure 2 provided in Attachment K.

**4.4.7.1 Special Case Resources that are Interruptible Load Resources**

Special Case Resources that were requested to reduce Load in any month shall submit to the ISO by the 20<sup>th</sup> day of the following month [or within 45 days of such event] 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, 2001, [otor E+ 45days] their data pertaining to the month of April 2001 if they were called upon to reduce Load in April 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 to the ISO by the 20<sup>th</sup> day of the following month [or within 45 days of such event] data in the format shown in Figure 2 of Attachment K for each requested operating period. For example, Special Case Resources that are Generators shall submit by May 20, 2001 [or E + 45 days]; their data pertaining to the month of April 2001 if they were called upon to operate in April 2001.

**4.4.8.4.4.7. Municipally-Owned Generation**

By the 20<sup>th</sup> day of each month, municipally-owned generation shall submit to the ISO 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.

**4.4.9.4.4.8. 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 ISO 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.

#### **4.4.10-4.4.9. 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 ISO 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.

#### **4.4.11-4.4.10. 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 Effective Equivalent Forced Outage Rate on Demand (EFORD<sub>d</sub>) for that unit as a maintenance outage with prior notification to the NYISO. If the 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 ~~EFORD<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) ISO Services Tariff)**

The ISO will calculate the amount of Unforced Capacity that Resources are qualified to supply to the NYCA. The Unforced Capacity methodology estimates the probability that a Resource is available to serve Load, taking into account forced outages. To evaluate this probability, the ISO 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. For each Capability Period, the ISO will base the amount of Unforced Capacity a Resource is qualified to supply on the average EFORD value of the six (6) most recent 12-month rolling average EFORDs for that Resource. Such EFORD 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 EFORDs 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.

#### **4.6. Operating Data Default Value and Exception for Certain Equipment Failures (Section 5.12.6(b) and (c) ISO 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 ISO 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 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 ISO 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 ISO 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 ISO 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 Limited Resource, System Resource, or Control Area System Resource is forced into an outage by an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer, the NYISO shall not treat the outage as a forced outage for purposes of calculating the amount of Unforced Capacity such Installed Capacity Suppliers are qualified to supply in the NYCA. This exception is not limited to equipment failures that occur on the New York State electrical network and extends to equipment failures that occur on electrical networks operated by External Control Areas.

For purposes of EFORD, a Generator, Special Case Resource, Energy Limited Resource, System Resource, or Control Area System Resource will report a generator outage caused by an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer such outages as a forced outage, and the System Component Cause Code should be entered as 9300 and the Event Contribution Code should also be entered to designate the level at which the outage

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~~contributed to the outage.~~ See Attachment K for further details on how to report this information.-----

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 ~~EFOR~~ EFOR<sub>d</sub> rating as a 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 ~~EFOR~~ EFOR<sub>d</sub> 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.