

INSTALLED CAPACITY MANUAL



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 rescheduling 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 of this Installed Capacity Manual and in the NERC-GADS Data Reporting Instructions at:

http://www.nerc.com/~gads/

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

4.4.2. System Resources

By the 20th day of each month, System Resources shall submit Operating Data 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 their Operating Data GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 2001. System Resources shall submit Operating Data 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 20th 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 20th day of each month, Energy Limited Resources shall submit to the ISO <u>Operating Data GADS Data</u> or data equivalent to GADS Data pertaining to the previous month. For example, Energy Limited Resources shall submit by May 20, 2001 <u>Operating Data GADS Data or data equivalent to GADS Data</u> pertaining to their operations during the month of April 2001. Energy Limited Resources shall submit <u>Operating Data GADS Data or data equivalent to GADS Data</u> in accordance with the <u>82-character</u>-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 20th 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 Operating Data data pertaining to the previous month byon the 20th 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.

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

Special Case Resources shall submit <u>Operating Data documentation</u> to the ISO, each time they are called upon to operate, in <u>accordance withthe form of Figure 2 provided in this</u> section and the <u>Operating Data reporting requirements</u> outlined 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 <u>later of the 20</u>th day of the following month, <u>or within 45</u> days of such event, <u>Operating Data data in the format shown in Figure 2 of in accordance with</u> Attachment K for each requested interruption. For example, Special Case Resources shall submit by <u>the later of May 20, 2001</u>, <u>or within 45days of such event</u>, 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 <u>later of the 20th</u> day of the following month, <u>or within 45 days of such event, Operating Data data in the format shown in Figure 2 ofin accordance with Attachment K for each requested operating period. For example, Special Case Resources that are Generators shall submit <u>their Operating Data</u> by May 20, 2001, <u>or within 45 days of each event</u>, their <u>Operating Data data</u> pertaining to the month of April 2001 if they were called upon to operate in April 2001.</u>

4.4.8.4.4.7. Municipally-Owned Generation

By the 20th day of each month, municipally-owned generation shall submit <u>Operating Data</u> to the ISO data equivalent to GADS Data pertaining to the previous month. For example, municipally-owned generation shall submit by May 20, 2001 <u>Operating Data data equivalent</u> to GADS Data pertaining to their operations during the month of April 2001. Municipally-owned generation shall submit <u>Operating Datadata</u> in accordance with the form provided in Attachment K of this Manual, <u>GADS</u>, or <u>Special Case Resource reporting</u>, 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 (10th) 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 20th 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 Equivalent Effective Forced Outage Rate on Demand (EFORde) 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 EFORde, 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

All Operating Data shall be reported in accordance with NERC practice and in accordance with Attachment K to this manual. For purposes of EFORd calculations, an equipment failure that involves equipment located on the electric network beyond the step-up transformer, and including such step-up transformer, will not be treated as a forced outage for purposes of calculating the amount of Unforced Capacity such Installed Capacity Suppliers are qualified to supply in the NYCA. 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.

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 rating as a reserve shutdownFor purposes of EFORd, all such outages will be treated as a D4. [Delete???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 EFORD rating as a maintenance outage. In the event that service resumes on the transmission system but the unit categorized as being on a reserve shutdown is not able to perform, the unit shall be charged with a forced outage from the time that the transmission outage ended until the time it resumes operations (the "post transmission outage period"); provided however, that if the unit had been scheduled to take a maintenance outage during the post transmission outage period, the unit shall be charged with a Forced Outage, as defined in Attachment J, until the scheduled start date of its maintenance outage, at which time it will be charged with a maintenance outage until the end of its scheduled maintenance period.]

4.7. Monthly Installed Capacity Supplier Certification Forms

Each Installed Capacity Supplier must submit the appropriate ISO certification form to the ISO 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 website: (www.nyiso.com/markets/icapinfo.html), 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 ISO 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.

4.8. Bidding, Scheduling, and Notification Requirements (Section 5.12.7 ISO 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, rounded down to the nearest whole MW. 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