

Installed Capacity Manual

August 2017

3.3 Transmission District Minimum Unforced Capacity Requirements

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

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

Where:

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

UCR_{NYCA} = NYCA Minimum Unforced Capacity Requirement;

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

T = the set of all Transmission Districts in the NYCA

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

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

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

Every month, each LSE must procure sufficient Unforced Capacity to meet its monthly Minimum Unforced Capacity Requirement for the following Obligation Procurement

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

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

The precise formulation of the requirement is as follows:

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

where:

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

UCR_t = Minimum Unforced Capacity Requirement for Transmission District t;

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

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

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

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

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

and

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

where:

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

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

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

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

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

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

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

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

<http://www.nyiso.com/public/products/icap/index.jsp>.

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

in the case of UDRs, to the NYCA interface with the UDR transmission facility. This demonstration occurs in two stages.

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

Deliverability of Energy to the NYCA border 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.
- 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.