National Grid Method for Estimating ICAP for ISO-NE Reporting

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OVERVIEW:

The Installed Capacity (ICAP) for each Supplier is calculated by the ISO-NE from information provided by the Wholesale and Retail Market Settlement group at National Grid. The reported ICAP is based on the aggregate of each Supplier's customers' contribution to the ISO-NE peak load during the preceding year. The individual customers' contributions (tags) are estimated annually. The daily Supplier requirements are then calculated by tracking customer enrollment changes and shifting load accordingly.

Customers' contributions to ICAP are estimated from either their actual peak hour use, if interval data are available, or load profiles.

A number of adjustments are made to the individual customer peak contributions so that the total is reconciled to National Grid's total demands (by Load Zone) at the time of the ISO-NE peak. For each customer, an ICAP tag is calculated from the individual customer peak hour use (actual or estimated) and the following adjustments:

1. Distribution line losses. These vary by voltage level.
2. Transmission line losses, including an allocation of ISO-NE high voltage transmission losses.
3. Unaccounted for energy and losses factor, to reconcile the estimates to National Grid's total demands (by Load Zone) at the time of the ISO-NE peak.

For the year beginning on June 1, 2020, the ICAP obligations were based on loads at the time of ISO-NE peak, which occurred on July 30, 2019 at the hour ending at 6:00 pm.

ICAP TAG CALCULATIONS:

For A Profiled Customer (Without Interval Data):

ICAP Tag = Peak kW * Usage Factor * Loss Factor * NLD Adjustment Factor

Where:

Peak kW = class average peak kW at the time of the ISO-NE peak

Usage Factor = (customers usage kWh / class average usage kWh) during the month of the ISO-NE peak

Loss Factor = Distribution Losses of 1.038 for large customers and 1.069 for other customers

1) In Massachusetts and New Hampshire, large customers refer to commercial and industrial customers (C&I) with demands in excess of 10 kW. In Rhode Island, large customers are C&I customers with demands in excess of 200 kW.

2) Customers with high voltage metering have a 0.99 factor applied.

NLD Adjustment Factor = Unaccounted for energy and losses factor. It is used to reconcile the estimates to National Grid's total demands by Load Zone at the time of the ISO-NE peak (i.e. target/actual).

For A Customer With Interval Data:

ICAP Tag = Peak kW * Loss Factor * NLD Adjustment Factor

Where:

Peak kW = customers actual peak kW at the time of the ISO-NE peak

Loss Factor = Distribution Losses of 1.038 for large customers and 1.069 for other customers

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2) Customers with high voltage metering have a 0.99 factor applied.

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FREQUENTLY ASKED ICAP QUESTIONS:

1. How are ICAP tags provided?

The following EDI transactions include the ICAP tags:

- 814 Enrollment Response
- 814 Change Distribution Company data
- 814 Customer Move Transaction
- 867 Historical Usage

2. Do ICAP tags change and how are the changes communicated?

ICAP tags change **once a year** based on the peak day and hour for each Load Zone.
The ICAP tags are sent to suppliers annually on May 15th, or the next business day if the 15th is a weekend or holiday, via the EDI 814 Change transaction.
The Power Year change occurs on June 1.

3. Does the ICAP tag carry forward when a customer moves?

No, the customer will be assigned the ICAP tag that is assigned to the new location until the new Power Year when the ICAP tags are recalculated.