

# *Primer*



*March 2005*

## An introduction to the NYISO Automated ICAP Market

In order to ensure that New York State has adequate generating capacity available to meet electricity demands, the New York Independent System Operator (NYISO) administers an Installed Capacity (ICAP) Market pursuant to the ISO Services Tariff. This ICAP Market provides a means for Load Serving Entities (LSEs) to purchase their capacity obligations from suppliers<sup>1</sup> to address the peak demands of their respective service territories. This market is facilitated by the NYISO through a series of auctions where capacity suppliers offer their capacity, and LSEs bid to purchase the capacity. Approximately one-third of the state's capacity requirements are traded through the NYISO-administered capacity auctions, at an annual dollar volume of approximately \$750 million.

The NYISO routinely conducts three (3) types of capacity auctions: the Capability Period Auction, the Monthly Auction, and the monthly Spot Market Auction. These auctions provide LSEs with the opportunity to secure the required capacity and suppliers with the opportunity to offer their capacity in an open and competitive market environment. The product ultimately purchased in these auctions is Unforced Capacity, or UCAP, which is the net anticipated useable capacity when outages and other generator operating characteristics are considered.

Auctions are a major activity of the ICAP market in which Market Participants are engaged, however, there are many more.

- Transmission Owners supply load forecast information used to set the UCAP requirements of load-serving entities and load-shifting data to allow load-serving entities to procure the correct amount of UCAP as their customer base changes.
- Each Market Participant (i.e., LSE, supplier, marketer) that trades UCAP must disclose to the NYISO from whom UCAP was purchased and to whom UCAP was sold. These disclosures, called *certification*, provide the only mechanism for the NYISO to ensure that load-serving entities are procuring their requirements.
- Special Case Resources (SCRs) must be registered with the NYISO prior to participation in the ICAP market, providing specific information related to their ability to curtail load when called upon. SCRs are small resource, which are not otherwise visible to the NYISO, are playing an increasingly larger role in the market.
- Each month, suppliers must provide to the NYISO generator availability data used to determine a generator's available UCAP.
- Finally, each Market Participant is responsible to track its financial position as the months pass. Detailed billing summaries including auction activities, financial true-up information as a result of load-shifting and rebates are provided prior to entry into their consolidated invoice.

Additional information concerning NYISO capacity requirements and the Capacity Market is available in the NYISO Installed Capacity Manual located on the NYISO web site at:  
[http://www.nyiso.com/services/documents/manuals/pdf/planning\\_manuals/icap\\_mnl.pdf](http://www.nyiso.com/services/documents/manuals/pdf/planning_manuals/icap_mnl.pdf)

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<sup>1</sup> Capacity may also be acquired through bilateral transactions between buyers and sellers of capacity.

## **Background**

Since the start-up of the NYISO, the capacity auctions and all of the other capacity market-related activities have been conducted through a predominantly manual process that included the use of spreadsheets, email, and telephone calls. Although much of the process was computer based, this data-intensive process still required a considerable amount of manual intervention on the part of the MP and NYISO staff in the facilitation of the auction and the subsequent behind the scenes financial and other support processes. Being a predominantly manual process, it was also susceptible to the errors and inefficiencies inherent in such processes.

## **Introducing the NYISO Automated ICAP Market**

The NYISO Automated ICAP Market is a new, user-friendly, secure, web-enabled, electronic application that replaces the manual legacy market process. The Automated ICAP Market (AIM) includes features that support all of the traditional auction participation requirements with respect to submitting bids, offers, and relevant auction data. The AIM also supports the data management, retrieval, and general information requirements of participating in the ICAP market. Finally, the AIM operates the auction, and supports all of the NYISO internal administration functions required to administer the market.

Initially, the most visible change that users will notice is the web-enabled AIM interface. This interface utilizes web technology similar to that used in the NYISO Market Information System (MIS). From the AIM interface, auction participants will be able to enter, view and maintain bids and requisite market data via the web interface or, for higher volume users, via a batch submission process. The user will also use the AIM interface to view and /or retrieve auction results and other relevant market data. The AIM will incorporate many of the features of the NYISO Market Information System (MIS) interface including point of entry data validation, and around-the-clock secure and timely access to relevant market data. The user will also have access to a wealth of market, and user specific data such as market position, ICAP/UCAP calculations, and activity summaries readily available via the AIM.

## **Automated Market Administration**

Although the new AIM interface is the most user visible feature of AIM, it is really just the “tip of the iceberg” with respect to the full complement of enhanced market features. Within the NYISO, the AIM will interface directly with other NYISO systems via the NYISO Enterprise Interface Bus. From this state-of-the-art information access platform, market data is automatically connected to all relevant functions within the NYISO. The required certifications and credit evaluations will be executed automatically. The auction data and results will be readily available to the settlement process to ensure fast and accurate settlements right through to the consolidated invoice. Other functional areas within the NYISO such as Market Monitoring and Performance and Customer Relations will have direct, real-time access to market data to quickly assess issues and address auction participant questions. The end result is a fully integrated market process that validates and maintains the integrity of all data from start to finish, thus ensuring the integrity of the market.

## **Initial Deployment of AIM**

Many of the features described above will be included in the initial deployment of the AIM, however, some features will be provided in future releases. These future features include all activities surrounding SCRs (these activities will continue to be performed through spreadsheets), requesting and tracking external import rights, the validation of submitted generator availability data, and the calculation of statistics to determine generator UCAP values. In order to bring as much functionality as possible to the market in 2005, these future features have been placed on a list of features to be included at a later date. The NYISO is committed to bring these additional features to the ICAP market as soon as possible, recognizing the competing needs of MPs and the need to prioritize resources.

# NYISO Automated ICAP Market Primer