

MEMORANDUM

To: David Lawrence, NYISO

From: Aaron Breidenbaugh, EnerNOC, Inc.

Re: Proposal for Registration of Sub metered Loads and Generation in Master-Metered Buildings

Date: April 9, 2010

As briefly discussed at the recent PRLWG and ICAP WG meetings, below for your consideration and the consideration of the NYISO stakeholders is a problem statement regarding the registration in demand response (DR) programs of loads in master-metered buildings (MMBs) and a proposed solution to address that problem.

The Opportunity

Recent studies have concluded that there are several hundred MW of load located in commercial buildings in New York City that do not presently participate in the NYISO or ConEdison (ConEd) demand response programs¹. Much of this load is located within large commercial office spaces that are master metered by ConEd.

Many of these commercial office space tenants have the ability to either curtail loads or to transfer load to an on-site generator in response to the types of situations called for in the NYISO and ConEd DR programs. As a class, these customers likely represent the single largest untapped source of commercial demand response capacity in the state.

Past studies have identified several barriers to the enrollment of load in MMBs, some of which are beyond the NYISO's ability to address. However, one major obstacle is within the NYISO purview and fortunately can be addressed with relative ease.

Problem Statement

Current NYISO registration procedures require Responsible Interface Parties (RIPs) to identify each customer by name and utility account number. RIPs also have the ability to submit a "meter number" to the NYISO, but to our knowledge, this field is not used by the NYISO.

¹ / e.g., Con Edison Callable Load Study, Summit Blue Consulting for Con Edison, May 15, 2008, Figure 5-12. ("Office Buildings" represent a combined untapped achievable demand response of over 350 MW. Current Zone J enrollment in the SCR program is ~400 MW.

By definition, each MMB has one or more revenue grade utility master meters that meter the combined tenant load, as well as the load of the building's common and maintenance space. Each of these meters has an associated utility account number.

Depending upon the space, each tenant may or may not have one or more separate meters that measure its load for purposes of allocation the overall building's electricity expense appropriately to the various tenants.

Under the current NYISO rules, only these master meters and their associated account numbers can be used to register customers in the NYISO DR programs and each account number can only be associated with a single registration. If multiple RIPs attempt to register two customers in the SCR program using the same utility account number, the one with the earlier contract between the RIP and customer will be rejected².

As a practical matter, this arrangement prevents two customers associated with two different RIPs to both participate in the NYISO programs, even if both can offer completely legitimate demand reductions. In cases where one of the customers is metered using the building's master utility meter, it also establishes a *de facto* exclusive "franchise" on all loads within that building. Since many tenants may be national accounts that have entered into exclusive arrangements with other RIPs, these customers will be effectively excluded from participation to the detriment of consumers and in contravention of both state policy and, we believe, the NYISO's currently-effective tariffs and manuals.

This situation constitutes a current and significant barrier to demand response in New York and should be addressed immediately. Below we propose a resolution, along with the assumptions that lead to it.

Principles

The following principles are assumed to apply to the proposed solution.

- 1) Tenants/RIPs in MMBs should have a comparable opportunity to participate in the NYISO's DR programs as those who are metered directly by a utility
- 2) Load reductions must not be double-counted
- 3) The NYISO cannot disclose to one RIP or customer any information regarding the participation or non-participation of another customer of RIP
- 4) The participation of one tenant/RIP should provide another RIP/tenant with a commercial advantage or disadvantage

² / NYISO rules have always permitted the use of non-utility, non-revenue grade meters to verify either load reduction, generator output, or both. These rules are well-founded and we propose no changes to them. Any meter used to verify either customer load reduction or generator output should still be required to meet the accuracy standards outlined in the NYISO manuals.

- 5) Tenants/RIPs should reap the rewards of their efforts, but should neither benefit from, nor be penalized for, the efforts of other tenants/RIPs

Proposed Solution

With the “ground rules” noted above, we conclude that the following modification should be made to Version 6.14 of the ICAP Manual.

Insert immediately after Section 4.12.2, Paragraph 6, Page 4-51 the text in **red**.

Interval meters are required of all Special Case Resources, unless the Special Case Resources are part of a Small Customer Aggregation. Such metering must satisfy all requirements of the Metering, Verification, Billing and Settlement Section of the *NYISO Emergency Demand Response Program Manual*, available from the NYISO Web site at http://www.nyiso.com/public/products/demand_response/edrp.jsp. The metering must also reflect the end-use nature of the Special Case Resource, i.e., single metering of multiple end-use customers on primary, secondary, or tie-line feeders is prohibited.

Participation of Special Case Resources that are located on the same circuit as a building or facility master meter is permitted, so long as the metering of each such Resource satisfies all requirements of the Metering, Verification, Billing and Settlement Section of the *NYISO Emergency Demand Response Program Manual*, and provided that the Load reductions (or metered generator outputs) attributable to these Resources are not double counted.

To ensure that double-counting does not occur, to the extent that the performance of a Resource is measured using the master building meter, such performance shall be reduced by the coincident performance of other Resources located on the same circuit as that meter.

A Special Case Resource that supplies Load reductions solely through the use of a distributed generator (whether or not operated in parallel with the NYCA) and that elects to measure such Load reductions by metering the output of such distributed generator in accordance with

We have reviewed both Attachment J of the ICAP Manual and Section 5 of the EDRP Manual and do not believe that any modification to either manual is necessary to permit the full participation of the tenants of MMBs. Nor do we believe that anything more than ministerial changes to the SCR Workbook will be required.

The principal effort required of the NYISO will relate to internal ISO Procedures that are not subject to Market Participant review or approval, principally the need to net out the

performance of non-associated tenant Resources from the performance measured by the master meter.

NYISO must also utilize a different unique identifier for each Resource when it is registered than the utility account in order to determine if there are conflicts. One possibility could be the Meter Number field, but ultimately this decision is best left to the NYISO. Following initial registration, each Resource is assigned a unique NYISO Resource ID. If the Meter Number is used, it should, going forward at least, be an objectively determinable value, such as the serial number of the submeter (or pulse accumulator in the case of a “shadow meter.”)

To the extent that a Resource leaves one RIP and is enrolled by another, and the Meter Number remains the same, that number can be used to tie the resource back to its unique NYISO Resource ID. To the extent that a new submeter or shadow meter is installed, the NYISO may need to inquire of the new RIP to ascertain whether the Resource is associated with a prior NYISO Resource ID. This is not a novel issue, since even under the current scheme customer Account Numbers can change from time to time.

Finally, we recommend that to aid in resolving these and other issues, it would be helpful to require that the “SCR Customer Name” field in the SCR Workbook be required to either be, or include (in the case of multiple sites,) the actual corporate name of the customer being enrolled. To aid in future audits, this name should match that used on the authorization form that each RIP is required to obtain pursuant to Section 4.12.7 of the ICAP Manual.