December 19, 2005

The Honorable Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: AD06-2-000; Comments by the New York Independent System Operator, Inc. on Demand Response and Time-Based Rate Issues

Dear Ms. Salas:

Pursuant to the Commission's *Notice of Proposed Voluntary Survey and Technical Conference*, issued November 3, 2005, the New York Independent System Operator, Inc. (NYISO) hereby provides comments on several demand response and time-based rate issues raised or identified in the Energy Policy Act of 2005, section 1252 (e)(3).

I. List of Documents Submitted

The NYISO submits the following documents:

1. This filing letter; and
2. A report entitled "NYISO Comments on Several Demand Response and Time-Based Rate Issues Identified in the Energy Policy Act of 2005" ("Attachment I").

II. Copies of Correspondence

Copies of correspondence concerning this filing should be served on:

Robert E. Fernandez, General Counsel and Secretary
Mollie Lampi, Assistant General Counsel
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The NYISO has electronically provided a copy of this filing to all parties who have executed Service Agreements under the NYISO's Open-Access Transmission Tariff or its Market Administration and Control Area Services Tariff, and to the electric utility regulatory agencies in New York, New Jersey, and Pennsylvania.

Respectfully submitted,

Mollie Lampi
Assistant General Counsel
New York Independent System Operator, Inc.

New York Independent System Operator, Inc.
3890 Carman Rd.
Schenectady, New York 12303

cc: Shelton Cannon
Anna Cochrane
Michael Bardee
Cheri Ganeles
Kathleen Nieman

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person that has executed a Service Agreement under the NYISO's Open Access Transmission Tariff or Market Administration and Control Area Services Tariff, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010 (20001).

Dated at Albany, N.Y. this 19th day of December, 2005.

/s/

John Cutting
Senior Analyst
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ATTACHMENT I

NYISO Comments on Several Demand Response and Time-Based Rate Issues Identified in the Energy Policy Act of 2005

A. Advanced metering and communications systems

2. Are advanced meters necessary to implement demand response and time-based rate programs? Can sufficient demand response be fostered from non-communicating, non-hourly meters?

In the NYISO's demand response programs, accurate hourly interval metering data is required to validate performance.

For the NYISO's Emergency Demand Response Program (EDRP) and ICAP Special Case Resource (SCR) program, Curtailment Service Providers (CSPs) and Responsible Interface Parties (RIPs), those entities acting as the business interface between the NYISO and end-use customers, must use certified Meter Service Providers (MSP) or Transmission Owners to install and Meter Data Service Providers (MDSP) to read revenue-grade interval meters. The New York State Public Service Commission defines the qualification and performance requirements for MSPs and MDSPs. Installation of any devices directly connected to the revenue meter, such as totalizers, must be performed by certified MSPs. Non-revenue-grade meters meeting a 2% accuracy requirement may be installed by CSPs as long as they are certified by a Professional Engineer as meeting American National Standards Institute (ANSI) C12 standards and are periodically tested and calibrated in accordance with the standards applicable to MSPs. CSPs must use a certified MDSP to read such meters. Transmission Owner or MDSP certification is required to read the revenue grade meter on load.

In the NYISO Day-Ahead Demand Response Program (DADRP), Demand Response Providers (DRPs) are required to provide hourly interval metering data to validate performance. Demand Side Resources participating in the DADRP must have an integrated hourly metering device, installed to capture the facility's net load, certified by a Meter Service Provider (MSP) that provides integrated hourly kWh values for market settlement purposes. DADRP participants must also contract with a Meter Data Service Provider (MDSP) for collection of DADRP data.

When submitting DADRP performance data to the NYISO, DSPs who are not MDSPs must identify to the NYISO the contact information for MDSP organization they are using to collect DADRP load data. The NYISO will periodically verify the load data submitted by the DSP with the MDSP.

When a Demand Side Resource registers for participation in the program, an hourly interval meter shall be installed to meter the entire facility or for totalized load at each Demand Side Resource. An hourly interval meter is required for each participating load.

The NYISO does not require real-time communication of load response information to the NYISO. In the EDRP and ICAP SCR programs, data must be submitted to the NYISO within 45 days after an event occurrence; standard spreadsheet formats are used to submit meter data. As these programs were being developed in 2001, it was felt that a real-time communications requirement would impose additional costs on program participants, delay program introduction,

and substantially reduce program participation. Program participation to date (see response to question C1 below) does not contradict that assumption.

Future program changes may permit CSPs to communicate near-real-time data via standard communications protocol to the NYISO using existing internet-based metering systems. The NYISO's philosophy is that communication of demand response data should occur between the NYISO and the RIPs/CSPs; direct communications between the NYISO and demand response resources would require a much more significant NYISO support infrastructure.

It should be noted that, as part of the discussions the NYISO has engaged in with market participants on demand response participation in ancillary services markets, demand response resources will be required to install real-time 2-way metering that accepts NYISO 6-second basepoint signals.

B. Existing demand response and time-based rate programs

1. Describe the type of programs being used and the benefits or detriments of each programmatic approach.

The NYISO offers two demand response programs to support reliability: the Emergency Demand Response Program (EDRP) and the Installed Capacity-Special Case Resource Program (ICAP-SCR).

The Emergency Demand Response Program (EDRP) provides resources an opportunity to earn the greater of $500/MWh or the prevailing LBMP for curtailments provided when the NYISO calls from them. There are no consequences for enrolled participants that fail to curtail.

The ICAP/SCR program allows customers that can meet certification requirements to offer unforced capacity (UCAP) to Load Serving Entities (LSEs). Special Case Resources can participate in the ICAP Market just like any other ICAP Resource. Resources are obligated to curtail when called upon to do so with two or more hour's notice, provided that they were notified the day ahead of the possibility of such a call. In addition, ICAP/SCR resources may be subject to testing to verify that they can fulfill their curtailment requirement. Failure to curtail could result in penalties administered under the ICAP program that can exceed the amount the participant received initially as an ICAP payment. Curtailments are called when reserve shortages are anticipated. Participants can register for EDRP or ICAP/SCR but not both programs.

The Day-Ahead Demand Response Program (DADRP) provides retail customers with an opportunity to bid their load curtailment capability into the day-ahead spot market as supply resources. Customers submit bids by 5:00 a.m. specifying the hours and amount of load curtailment they are offering for the next day, and the price at which they are willing to curtail. A bid floor price of $75/MWh is currently in effect. Bids are structured like those of generation resources, so DADRP program participants may specify minimum and maximum run times and effectively submit a block of hours on an all or nothing basis, which makes them eligible for production cost guarantee payments that make up for any difference between the market price

during that block of hours and their block bid price. Load schedule in the DAM is obligated to curtail the next day. Failure to comply results in the imposition of a penalty defined by the MW curtailment shortfall times the greater of the corresponding day-ahead or real-time market price.

2. How have these types of programs changed since the early 1990s?

The ICAP SCR program was included in original NYISO market design as implemented in 1999. The EDRP and DADRP programs were added to the NYISO markets in 2001. Major changes occurred in 2003 when EDRP and ICAP/SCR programs were made exclusive. These changes included:

- the ability for demand response resources to set price via scarcity pricing rules, and
- SCR submission of strike price for energy payment, used to select resources if less than 100% participation is needed in any zone.

Modifications were made to the DADRP program in 2003 to include a floor price on demand response offers; initially set at $50/MWh, raised to $75/MWh in Nov. 2004.

3. Have demand response and time-based rate programs increased or decreased in recent years?

See the response to question C1 below.

C. Annual resource contribution of demand response

1. Describe in general the extent of resource contribution by demand response for the geographic area you serve or represent.

Figure 1 presents the MW and number of customers registered in the NYISO's EDRP and ICAP/SCR programs from 2001 through December 2005.

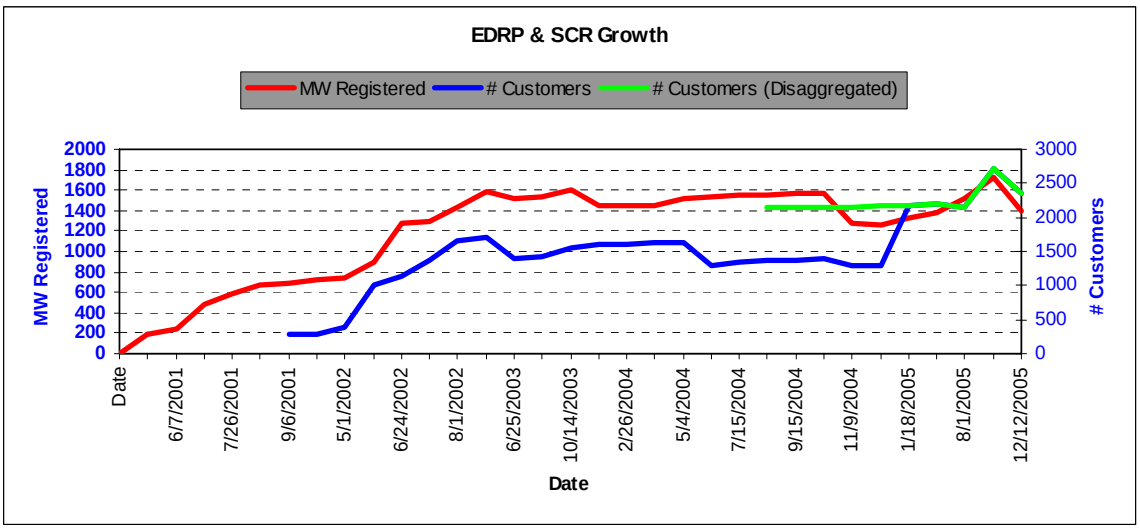

Figure 1 – Participation Growth in NYISO's EDRP and ICAP/SCR Programs

From May 2001 to December 2005, registration has grown from approximately 200 MW to 1400 MW; the number of end-use customers participating has increased from roughly 200 in March 2002 to 2300.

A snapshot of customer registration in December 2005 shows the diversity of demand response resources as spread across the NYISO's eleven Zones:

Table 1 – EDRP and ICAP/SCR Registrations as of December 2005

	EDRP				ICAP/SCR		
Zone	#	Load	Gen	Zone	#	Load	Gen
A	27	32.3	12.6	A	103	284.3	0.0
B	11	4.9	1.5	B	37	38.6	1.0
C	83	13.1	15.7	C	33	83.5	0.2
D	12	100.8	3.4	D	4	84.7	0.0
E	48	22.9	27.5	E	14	10.8	0.0
F	43	34.5	9.3	F	22	55.2	0.0
G	24	16.4	18.0	G	3	2.3	0.0
H	9	1.8	5.0	H	1	0.7	0.0
I	26	4.4	3.5	I	6	4.0	0.0
J	118	87.8	33.6	J	1064	207.1	27.2
K	573	49.4	78.1	K	99	20.6	1.6
Total	974	368.1	208.2	Total	1386	791.9	30.1
			576.4				822.0

Since the summer of 2001, the NYISO has activated these programs a total of eleven times: 4 times each in 2001 and 2002, twice in 2003 (during the August blackout restoration) and once in 2005. Six of these events were called statewide; the remaining events were called in eastern and southeastern Zones (F-K) in various combinations.

2. Identify and describe the best available sources of information on the annual resource contribution made by demand response, by region.

Since June 2002, the NYISO has submitted semi-annual evaluation reports of its demand response programs to FERC under docket no. ER01-3001. Specific information on the demand response events can be found in these evaluation reports. Detailed program requirements can be found on the NYISO's website at
http://www.nyiso.com/public/products/demand_response/index.jsp

3. What problems exist in measuring resource contribution? Should the measurement be on the basis of enrollment or on actual quantities used?

Hourly interval metering of load is straightforward and is described in the response to question A2 above. To estimate what load would have been absent the load reduction event, the NYISO has developed two approaches, one used in the EDRP program and the second used in ICAP/SCR program. The method used in the EDRP program is based on the five highest out of the last ten days consumption during the time period when an event occurs, and is used to calculate the energy reduction provided by resources. The method used in the ICAP/SCR program to determine baseline consumption takes the average of the integrated hourly peak

demands in 4 of the 6 months of the applicable capability period. For the summer capability period, monthly peaks from June through September are used; for the winter period, monthly peaks from December through March are used. The difference between these baseline measures and the actual hourly interval meter readings represent load reduction performance measures for each program.

Any baseline method is subject to error; some of the more common problems seen are:

- For the ICAP/SCR baseline, participants with monthly peaks outside the typical window when events are called may have a higher baseline compared with their actual consumption during the event window.
- Both methods are inaccurate if a participant is highly weather-sensitive (i.e., consumption is greater on extreme weather days) and an event occurs on such an extreme day. The EDRP baseline allows a weather-sensitive option that allows the baseline to move upward or downward based on consumption just prior to an event.
- Registration numbers are not an accurate measure of actual performance during an event. In the NYISO's experience, the actual load reduction achieved via meter data submissions has been as low as 25% of that registered, although typically the actual performance is 85% or better for mandatory performance.

D. Potential for demand response as a quantifiable, reliable resource for regional planning purposes.

2. What is the current role of demand response resources in meeting regional resource adequacy requirements and ancillary services?

The New York State Reliability Council (NYSRC) performs an annual study to determine the installed capacity requirements for the New York Control Area. The latest study can be found at http://www.nysrc.org/pdf/Doucments/12-10-04IRMstudy.pdf
As noted on p. 29 of the above-referenced document:

> *For this year's study the NYISO has recommended that SCRs be modeled as a 975 MW EOP step, discounted to 897 MW in July and August (and further discounted in other months proportionally to the monthly peak load). EDRP are modeled as a 269 MW EOP step with a limit of five calls per month. This EOP is discounted based on actual experience from the forecast registered amount of 599 MW.*

3. Explain the risks of relying on demand response for resource adequacy. Do the risks differ depending on the type of demand response?

Use of behind-the-meter emergency generation in demand response programs is subject to the risk of changing environmental regulations at both the Federal and State levels. While the NYISO and its stakeholders agree that the use of such resources in economic programs provides no net benefit to consumers, emergency generators in many facilities are important additions to reliability-based programs.

Programs that solicit voluntary response offer some risk, but if these programs have substantial active participation and well-structured participation incentives (see response to F3 below), over time their contribution is quite predictable. As an example, the NYISO's EDRP program, where participation is voluntary, has shown over its 5-year existence to provide roughly 35-45% of registered load reduction during events.

In situations where participants have been repeatedly put on notice that they may be needed the next day, or when repeated events are called, there is a risk of dwindling performance with successive activations.

5. Can time-based rate programs or interruptible/curtailment rate programs be counted as capacity resources in regional plans?

In general, the decision to include or exclude time-based rate or interruptible/curtailable rate programs should be made consistent with the process used to determine installed reserve margin requirements. In New York, transmission owners sponsoring peak load reduction programs typically count the actual performance in these programs as subtracting from the peak load requirement for purchase by load serving entities in that transmission owner district. Termed load modifiers, these resources cannot be claimed as capacity resources in the ICAP market, since to do so would double-count their contribution to resource adequacy.

E. Equitable treatment of demand response resources in regional transmission planning and operations.

1. What is the status of including demand response within regional transmission planning and operations?

The NYISO's Comprehensive Reliability Planning Process (CRPP) recognizes the contribution that demand response can provide to the planning process. Details can be found in Attachment Y of the NYISO Open Access Transmission Tariff at https://www.nyiso.com/public/webdocs/documents/tariffs/oatt/att_y.pdf. Existing and planned demand response programs are factored into the annual reliability needs assessment. If the results of any assessment indicate a reliability need exists, both market based and regulated demand response options will be considered along with new transmission or generation options.

NYISO Operations has utilized both the EDRP and ICAP/SCR programs since their inception, and consider these to be integral parts of their Emergency Operating Procedures.

2. Have demand response resources been examined during the development of regional transmission plans, and to what extent?

The CRPP identified in the response to question E1 was developed in 2005. The NYISO is currently in the first cycle of reliability needs assessment studies and as such has not had occasion to work with any proposed demand response solutions.

4. In regional transmission operations, such as RTOs and ISOs, what demand response resources are currently available? Under what circumstances are these resources called upon and at what level (kWs/kWHs)?

See responses to questions in Section B and C above.

F. Regulatory barriers to improved customer participation in demand response, peak reduction, and critical period pricing programs.

3. What are the drivers and disincentives to customer interest in participating in demand response or critical period pricing programs?

Both reliability-based and economic demand response program participants in the NYISO's programs have identified a number of key drivers for participation:

- Load reduction events should be called with adequate notice. For reliability programs, this has translated into rules that require day-ahead advisories of the possible need for demand response, and 2-hour notice prior to activation. Day-ahead scheduling programs provide the same degree of notice as is provided to all other day-ahead market participants.
- To the extent possible, programs should avoid dramatic changes in the ratio of reliability-based advisories to activations. NYISO system conditions in 2005 resulting in an unusually high ratio of advisories to activations compared with historical performance. Significant discussions with stakeholders helped to educate the NYISO on the importance of following through with events, and participants have a better understanding of the operational issues influencing program activation.
- Compensation for performance should be commensurate with program risk. Program fees should be kept to a minimum where possible, and compensation rules should be straightforward.
- Payment for performance should occur within a reasonable time subsequent to an event, recognizing that meter data collection and analysis must be factored in.

6. Are there regulatory or other barriers to participation of third-party curtailment service providers in ISO/RTO demand response programs? Are current settlement and payment procedures adequate for participation by these third-party entities?

NYISO's reliability-based demand response programs (EDRP and ICAP/SCR) have always permitted participation by third-party curtailment service providers. NYISO's economic demand response program (DADRP) was modified to handle third-party curtailment service providers in July 2003. In 2005, aggregators were the primary sponsor of demand response resources in the ICAP/SCR program, sponsoring 526.4 MW or 48% of the total 1095.6 MW registered for ICAP/SCR. These CSPs/RIPs are treated comparably with other market participants within the existing NYISO settlements process.