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FILE NO: 55430.000044

December 23, 2005

#### By Hand Delivery

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

Re: New York Independent Transmission System Operator, Inc., <u>Corrected Ninth</u>
Biannual Compliance Report on Demand Response Programs and the Addition of
New Generation in Docket No. ER01-3001-013

Dear Ms. Salas:

On December 16, 2005 (by letter dated December 15, 2005), the New York Independent Transmission System Operator, Inc. ("NYISO") submitted its Ninth Biannual Compliance Report on Demand Response Programs and the Addition of New Generation. It has come to the NYISO's attention that a reference in that report to a forecasted New York City locational installed capacity requirement of 82% (as opposed to the actual current requirement of 80%) was incorrect and has caused confusion and concern among a number of market participants. The NYISO has also discovered certain miscellaneous errors in the report, including, among other things, an incorrect reference in the title, and an error in the Notice that was attached thereto. The NYISO is therefore hereby submitting a corrected Ninth Biannual Compliance Report that addresses these issues.

A clean corrected version of the entire filing (Attachment I) and the redlined pages (Attachment II) requiring correction are attached.

Respectfully submitted,

Ted J. Murphy

Counsel for

New York Independent System Operator, Inc.

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

Unofficial FERC-Generated PDF of 20051230-0097 Received by FERC OSEC 12/23/2005 in Docket#: ER01-3001-014

# ATTACHMENT I (Corrected Ninth Biannual Compliance Report)



December 15, 2005

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

New York Independent System Operator, Inc.

Ninth Biannual Compliance Report on Demand Response Programs and the Addition of New Generation in Docket No. ER01-3001-00

Dear Ms. Salas:

Pursuant to Ordering Paragraph "(B)" of the October 25, 2001 Order in this proceeding (the "Initial Order"), Ordering Paragraph "(C)" of the July 19, 2002 Order in this proceeding (the "July 19, 2002 Order"), paragraph 5 of the September 3, 2002 letter order in this proceeding (the "September 3, 2002 Order"), and paragraph 7 of the October 24, 2003 Order in this Proceeding (the "October 24, 2003 Order), the New York Independent System Operator, Inc. ("NYISO") hereby submits this report.

The report addresses, as of December 1, 2005: (i) the NYISO's existing demand response programs, the status of real-time demand response mechanisms, and the effects of demand response programs on wholesale prices; and (ii) the status of new generation resources in the New York Control Area ("NYCA").<sup>5</sup> This submittal represents the NYISO's ninth biannual report in compliance with the Initial Order and the subsequent orders listed above.

The report on new generation is included in the body of this filing letter while the report on demand response is included as an Attachment.

#### I. List of Documents Submitted

The NYISO submits the following documents:

- 1. This filing letter;
- 2. A report entitled "NYISO 2005 Demand Response Programs" ("Attachment I");
- 3. A form of Federal Register Notice ("Attachment II").

New York Independent System Operator, Inc., 97 FERC ¶ 61, 095 (2001).

New York Independent System Operator, Inc., 100 FERC ¶ 61, 081 (2002).

New York Independent System Operator, Inc., 100 FERC ¶ 61,243 (2002).

<sup>&</sup>lt;sup>4</sup> New York Independent System Operator, Inc., 105 FERC ¶ 61,115 (2003).

<sup>5</sup> Capitalized terms not otherwise defined herein shall have the meaning set forth in Article 2 of the NYISO's Market Administration and Control Area Services Tariff.

#### 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 Elaine Robinson, Director of Regulatory Affairs New York Independent System Operator, Inc. 3890 Carman Road Schenectady, NY 12303 Tel: (518) 356-7530 Fax: (518) 356-4702 rfernandez@nviso.com

Fax: (518) 356-4702 rfernandez@nyiso.com mlampi@nyiso.com erobinson@nyiso.com

#### III. Service

The NYISO will electronically serve a copy of this filing on the official representative of each of its customers, on each participant in its stakeholder committees, on the New York Public Service Commission, and, by mail, on the electric utility regulatory agencies of New Jersey and Pennsylvania. The NYISO respectfully requests a waiver of the requirement of Rule 2010 so that it may use electronic service methods. The NYISO's use of such methods has been convenient for both the NYISO and for the recipients of the service. Copies of this filing are being served on all parties designated on the official service list for this proceeding maintained by the Secretary of the Commission.

### IV. Compliance Report

#### A. Status of NYISO Demand Response Programs for 2005

The NYISO continues to offer three demand response programs: the Emergency Demand Response Program ("EDRP"), Installed Capacity Special Case Resources (ICAP/SCR) and the Day-Ahead Demand Response Program ("DADRP").

All three demand response programs are administered under the NYISO's Market Administration and Control Area Services Tariff ("Services Tariff"). The EDRP provides for payments to Curtailment Service Providers that voluntarily reduce their Loads at the NYISO's request to reduce peak demands in the NYCA during an Emergency condition. The DADRP

Under the EDRP, qualified demand resources are paid for reducing their energy consumption when the NYISO declares that an operating reserves deficiency or major emergency exists. There is no obligation to respond to the NYISO's declaration. Participation in the program occurs through "Curtailment Services Providers," which are paid the higher of \$500/MWh or the real-time LBMP for verified load reductions.

allows Demand Side Resources that are qualified to participate in the competitive Energy markets to bid Load reductions into the Day-Ahead Energy Markets as if such reductions are a competing supply resource. Special Case Resources include interruptible loads and qualifying distributed "behind the meter" generators through which some Demand Reduction Providers achieve the Load reductions that are made available to the NYISO. Special Case Resources may also qualify to provide Installed Capacity ("ICAP") in the NYISO's Unforced Capacity markets pursuant to the ICAP provisions of the Services Tariff.

The semi-annual reporting information regarding these demand response programs is provided in Attachment I to this filing. Attachment I includes, for the EDRP/SCR program, a discussion of (i) participation; (ii) the impact of strike prices now used in the ICAP/SCR program; (iii) program and performance; and (iv) estimated reliability benefits. Attachment I also includes a similar discussion of the DADRP program including a participation and bidding summary and an estimation of market benefits. Finally, Attachment I contains a summary table of market benefits from the demand response programs and a discussion of the potential need to increase the floor price in the DADRP program.

#### B. Status of Addition of New Generation Resources

Similar to prior report formats, the NYISO's report on the status and progress of developing new generation resources in New York in this filing includes two tables of data discussed in more detail below. The NYISO attached to its previous report a presentation version of "ISO Power Trends," which was released by the NYISO in May of this year and is the fifth in a series of its annual assessments of energy issues facing New York. The full text of this report is also posted on homepage of the NYISO's web site – www.nyiso.com.

### 1. Forecasted Load and Capacity Data

Table I, below, presents the most recent forecasted load and capacity data for New York State as a whole, and for the New York City and Long Island Load Zones, for the 2006 Summer

The DADRP permits demand resources to submit demand reduction bids in the DAM. These bids are treated the same as suppliers' bids and can set the market clearing price.

Under the ICAP/SCR, retail electricity customers are paid for making their load reduction capability available over a specified contract period. Thus, ICAP/SCR participants are paid in advance for agreeing in advance to curtail usage during times when the grid could be jeopardized. Unlike EDRP participants, ICAP/SCR participants are subject to penalties if they fail to curtail on the NYISO's request.

The NYISO's December 1, 2004 compliance filing in this docket included a description of transmission projects related to generation interconnections. This information is not updated as it provides no information on new generation additions that is incremental to the information provided in Table 2 concerning new generation additions themselves.

Locational Requirements (99% of 5,320 MW Peak)

5,267

Available Generation & SCRs

5,432

Projected Surplus (available generation in excess of locational requirement)

165

The 296 MW current capacity surplus for New York City will be augmented by the expected installations of the NYPA Polletti Expansion and the SCS Astoria project. Each will add 500 MW to New York City generation, resulting in a projected NYC surplus of 1296 MW for Summer 2006.

As Table 1 indicates, the NYISO currently anticipates that available internal NYCA supplies of 39,261 MW, which includes generation plus anticipated SCRs, will be 1029 MW in excess of the NYCA Minimum ICAP Requirement for the Summer 2006 Capability Period. Retirements (61 MW for Huntley 63 and 64 and 55 MW for NRG's Ilion unit) are expected to reduce NYCA available generation by 117 MW for Summer 2006, reducing the projected surplus to 539 MW.

The Reliability Rules also mandate minimum Locational ICAP requirements, under which a minimum level of ICAP must be electrically located within the New York City and Long Island load zones. For this report, the NYISO is forecasting that New York City's available capacity supplies plus SCRs will exceed the current In-city Locational ICAP requirement of 9,204 MW (80% of a total New York City peak of 11,505 MW) by 296 MW. Table 1 also indicates that Long Island is currently forecasted to have 165 MW of resources in excess of its current Summer 2005 Locational ICAP Requirement.<sup>11</sup>

#### 2. Table of NYPSC Article X Proceedings

For the Commission's information, Table 2, below, indicates the status of facilities with siting certificates issued by the New York Board on Electric Generation Siting and the Environment ("Siting Board") and the status of applications not yet certified. This table is an update of Table 2 from the previous (June 2005) filing. Since the previous filing, Table 2 shows that two previously authorized projects totaling 1,038 MW of capacity are now in-service, and two other projects totaling 1,000 MW of capacity are under construction. Also, the 540 MW Brookhaven Energy project has been cancelled, and therefore was removed from this updated table. The table shows the most recent estimates of in-service years for the NYPA Poletti and

The Locational Requirements percentages used here were approved by NYISO Operating Committee for the 2005 - 2006 Capability Year. They are subject to review and approval for each Capability Year. The statewide installed requirements study for the 2006 -2007 Capability Year currently under review by the New York State Reliability Council indicates that the locational capacity requirements for New York City and Long Island may need to increase for the 2006 - 2007 Capability Year.

SCS Astoria Energy Phase I projects. These projections of in-service dates are provided by the project developers. Based on all other publicly available information, the NYISO has no reason at this time to anticipate that the listed projects will not achieve their forecasted in-service years.

Table 2

Generation Projects S Top of the Queue	ubject to Article X					
Project Name	Owner/ Developer	Size (MW)	Connecting Utility	Date of NYISO Application	Status of Article X	Proposed In-Service
Bethlehem Energy Center	PSEG Power NY	750	NM-NG	04/27/98	Certified 2/28/02	In-Service
East River Repowering	Consolidated Edison of NY	288	CONED	08/10/99	Certified 8/30/01	In-Service
In-Service TOTAL	•	1.038				
Poletti	NYPA	500	CONED	04/30/99	Certified 10/2/02	2006
SCS Astoria Energy Phase I	SCS Energy LLC	500	CONED	11/16/99	Certified 11/21/01	2006
Under Construction TOTAL						
Bowline Point Unit 3	Mirant	750	CONED	10/13/99	Certified 3/25/02	
Spagnoli Road CC Unit	Keyspan Energy, Inc.	250	LIPA	05/17/99	Certified 05/08/03	
Wawayanda Energy Center	Calpine Eastern Corporation	540	NYPA	06/10/99	Certified 10/22/02	
Astoria Repowering Phase I	Reliant Energy	367 net	CONED	07/13/99	Certified 06/25/03	
Astoria Repowering Phase II	Reliant Energy	173 net	CONED	08/18/00	Certified 06/25/03	
SCS Astoria Energy Phase II	SCS Energy LLC	500	CONED	11/16/99	Certified 11/22/01	
Empire State Newsprint	Besicorp / Empire State	505	NM - NG	07/14/00	Certified 09/24/04	
Approved - TOTAL		3,085				
TransGas Energy LLC		1,100	CONED	10/05/01	Appl accepted 6/05/03	
Projects with Applications Pending - TOTAL						
GRAND TOTAL MW Pro	oposed Projects	6,223				
in service	under cons	truction		approved	application	n pending

#### 3. Status of Development of New Generation Resources

On April 20, 2005, the NYISO released ISO Power Trends 2005 ("Power Trends 2005"), which is the fifth in a series of annual "state-of-the-grid" reports. Full texts of Power Trends 2005 and a presentation version are available on the NYISO website.<sup>12</sup>

Power Trends 2005 provides the NYISO's conclusions and recommendations for enhancing system reliability and continuing the development of cost competitive wholesale electric markets in the future. The report recommended that the NYISO staff and New York stakeholders should use the recently adopted Comprehensive Reliability Planning Process and other market mechanisms to ensure the development of needed generation, transmission, and demand side resources when and, importantly, where appropriate. For example, while upstate New York's near-term supply of capacity appears to be sufficient, the NYISO continues to foresee the need for additional generation on an ongoing basis in response to a projected annual load growth rate of 1.39 % for New York City and Long Island.

The need to continue to develop markets that provide efficient and appropriate price signals to potential project developers was highlighted by a 2004 State of the Market Report – New York Electricity Markets presented by the NYISO's independent Market Advisor, Dr. David B. Patton at the May 25, 2005, meeting of the NYISO Management Committee. <sup>13</sup> Dr. Patton concluded that the markets in 2004 did not produce sufficient net revenues to support investments in new simple- or combined-cycle combustion turbines in either the New York City or the Capitol load zones.

The NYISO's second *Power Trends* recommendation was to commence immediately to site a significant level of new generation additions to meet New York capacity requirements in the 2008 to 2011 time frame and ensure that sufficient amounts of in-state generation resources remained available to meet New York State needs.

The third recommendation in *Power Trends 2005* repeated admonitions from the NYISO's prior annual reports that the New York State Legislature should promptly re-enact the lapsed Article X siting law. As reported in previous filings with the Commission, the expiration of Article X has been a principal impediment to efficiently and more quickly developing new resources. Without this law, New York lacks a clear and timely mechanism for securing the necessary permits and approvals that are required to build generating stations in New York.

See full text and presentation versions of *Power Trends 2005* on the NYISO website at: http://www.nyiso.com/public/newsroom/current\_issues/index.jsp

See full text of Dr. Patton's report in the Management Committee meeting materials on the NYISO website at: http://www.nyiso.com/public/committees/documents.jsp?com=mc&directory=2005-05-25

The NYISO noted in its fourth recommendation that new generating plants are being fueled primarily by natural gas, largely for environmental reasons and the advantages of lower initial capital costs. The NYISO recommended that the Northeast in particular, and the nation as a whole, must fashion an effective fuel diversification strategy to address this increased usage of natural gas and the inevitable strain that dwindling domestic reserves will place on price and availability.

The NYISO is pleased that *Power Trends 2005's* fifth and final recommendation, advocating passage of electric reliability legislation including mandatory reliability standards, has been realized with the recent passage of the Energy Policy Act of 2005.<sup>14</sup>

Respectfully submitted,

Mollie Lampi Assistant General Counsel NYISO

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

cc: Shelton Cannon

Anna Cochrane Michael Bardee Cheri Ganeles

Kathleen Nieman

<sup>&</sup>lt;sup>14</sup> Public Law 109-58, 119 Stat. 595 (August 8, 2005).

# **ATTACHMENT I**

# **NYISO 2005 Demand Response Programs**

#### I. Introduction

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). In addition, the NYISO offers the Day-Ahead Demand Response Program (DADRP), an economic program that permits interruptible load resources to schedule load reductions in the day-ahead energy market.

EDRP provides resources an opportunity to earn the greater of \$500/MWh or the prevailing LBMP for curtailments provided when the NYISO calls on them. There are no consequences for enrolled participants that fail to curtail. Resources participate in EDRP through Curtailment Service Providers (CSPs), who serve as the interface between the NYISO and participants.

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. Curtailments are called when reserve shortages are anticipated. Participants register either for EDRP or ICAP/SCR but not both. Resources participate in ICAP/SCR through Responsible Interface Parties (RIPs), who serve as the interface between the NYISO and participants.

DADRP provides retail customers with an opportunity to bid their load curtailment capability into the day-ahead spot market as energy 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. Prior to November 1, 2004, the bid price had to be \$50/MWh or higher. Currently the bid floor price is \$75/MWh. Bids are structured like those of generation resources. DADRP program participants may specify minimum and maximum run times and effectively submit a block of hours on an all or nothing basis. They are eligible for production cost guarantee payments to make up for any difference between the market price received and their block bid price across the day. Load scheduled in the Day-Ahead Market (DAM) is obligated to curtail the next day. Failure to curtail results in the imposition of a penalty for each such hour defined by the MW curtailment shortfall times the greater of the corresponding day-ahead or real-time market price.

#### II. Reliability Supporting Demand Management Programs

#### A. Participation

Retail customers enroll in NYISO reliability-supporting demand response programs through one of five entities:

• Aggregators recruit customers to participate as part of an aggregation of several customers.

- <u>Curtailment Program End-Use Customers</u> enroll directly with the NYISO to participate only in the EDRP program.
- <u>Direct Customers</u> register with the NYISO to participate in any of its markets including its demand response programs.
- LSEs are competitive providers of commodity service to retail customers.
- TOs are the state's investor-owned utilities and state authorities.

All entities participating in the EDRP program are considered Curtailment Service Providers (CSPs); those participating in the ICAP/SCR program are considered Responsible Interface Parties (RIPs). As of August 31, 2005 (the date customarily used for reporting participation statistics) a total of 35 CSPs and RIPs offer programs that deliver the NYISO's EDRP and ICAP/SCR programs to retail customers. Participating CSPs and RIPs include:

- 8 transmission owners
- 7 load serving entities unaffiliated with transmission owners
- 16 aggregators
- 4 EDRP/SCR direct customers

Non-Transmission Owner providers currently sponsor 57.2 percent of the total EDRP/SCR registered megawatts, up slightly from the 55.3% registered in 2004.

### Aggregation of ICAP/SCR Resources

As noted in the December 1, 2004 filing, registration for ICAP/SCR resources can be tracked by both individual participant end-use customer and by RIP-created aggregations of multiple end-use customers. Table 1 indicates that there are a total of 59 RIP-created aggregations containing a total of 1638 end-use customers and accounting for 588.3 MW of the total 1095.1 MW of registered ICAP/SCR. A total of 149 (144+5) individual resources account for 506.8 MW.

Table 1: Detail of 2005 ICAP/SCR Program Participation Level by Resource Type

		ICAP			ICAP UnSold			
Resource Type	# SCRs	# Participants	Sold MW	#SCRs	# Participants	Subscribed MW		
Individual Resources	144	144	495	5	5	11.8		
Aggregated Resources	59	1638	588.3	0	0	0.0		
Total	203	1782	1983.3	5	5	11.8		

The right-hand section of Table 1 provides information for unsold ICAP/SCR resources. In cases where an ICAP/SCR participant offers load reduction to an auction but it is not taken, that load is automatically enrolled in the EDRP program until the next auction or until the participant completes a bilateral transaction with an LSE.

#### **EDRP and ICAP/SCR Program Participation**

At the end of August 2005, the reliability programs had a total of 2,744 participants enrolled providing a total of 1673 MW of curtailable load, an increase of 7.1% over 2004's MW registration. There were 957 resources in EDRP<sup>16</sup> and 1787 participants in ICAP/SCR. ICAP/SCR represents 65% of both the total reliability program enrollments and registered MW. The average registered curtailable load for ICAP/SCR participants was 613 kW, almost identical to that for EDRP (604 kW).

Table 2: Program Participation Summary by Curtailment Service Provider Type

		EDRP (1)			ICAP UnSold <sup>(2)</sup>			ICAP <sup>(3)</sup>			DADRP 10		
Agent Type	# CSP	# Part.	MW	#RIP	# Part.	MW	#RIP	# Part.	MW	# DRP	#Part.	MW	
Aggregator	3	5	19.5	2	2	2.6	11	1591	523 8	0	0	0.0	
Curtailment Program End-Use Customer	0	0	0.0	6	0	0.0	2	3	144.0	0	0	0.0	
Direct Customer	0	0	0.0	0	0	0.0	1	2	2.6	0	0	0.0	
LSE	1	1	0.3	2	2	8.7	6	148	255.9	1 4	4	32.5	
Transmission Owner	7	951	557.9		1	0.5	3	49	157.5	114	14	353 4	
Total	- 11	957	577.8	5	5	11.3	23	1782	1083.8		18	385.9	

Note 1 The sum of EDRP and ICAP UnSold = Total EDRP

Note 2 Participants in the ICAP program with UnSold departy are considered as EDRP resources in the month(s) that capacity is unsold. MW recreases reductions registered in the ICAP program, but not sold

Note 3 MW represent reduction MW sold in the ICAP program.

Note 4 Total MNSO perhopation is not necessarily the sum of all programs due to the rules that state that persoperate are allowed to participate in a reliability program (EDRP or ICAP) and economic (DADRP)

Table 2 shows program participation by CSP / RIP type.

Aggregators provide only about 0.5% of participants and 3.4% of load reduction to EDRP, which is dominated in both categories (over 97%) by enrollments through TOs. Conversely, ICAP/SCR enrollments are dominated by Aggregators, which provide 89% of participating customers and 48% of the load. LSEs are virtually inactive in the EDRP market but provide 8% of participants and 24% of load to ICAP/SCR.

A participant is defined as a single customer enrolled in a program individually or as part of an aggregated resource.

Resources in the ICAP program with unsold capacity are considered as EDRP resources in the month(s) that capacity is not sold.

Table 3: 2005 Program Participation by Zone

	EDRP (1)		ICAP L	ICAP UnSold (2)		<b>V</b> P <sup>(3)</sup>	DADRP (4)	
Zone	#	MW	#	MW	#	MW	#	MW
A	25	34.8	0	0.0	133	333.1	4	138.0
В	11	6.4	1	0.3	31	67.0	0	0.0
С	85	29.3	0	0.0	46	86.7	2	37.4
D	13	105.0	0	0.0	5	85.1	1	100.0
E	49	50.8	0	0.0	21	16.9	1	10.0
F	43	43.8	1	8.4	21	61.9	7	84.0
G	24	34.4	1	2.0	3	2.4	0	0.0
H	9	6.8	0	0.0	1	0.7	0	0.0
	19	7.5	0	0.0	18	12.2	1	2.0
	116	132.1	2	1.1	1358	300.4	1	2.5
К	563	126.8	0	0.0	145	117.4	1	12.0
Total	957	577.6	5	11.8	1782	1083.8	18	385.9

- Note 1. The sum of EDRP and ICAP UnSold = Total EDRP
- Note 2. Participants in the ICAP program with UnSold capacity are considered as EDRP resources in the month(s) that capacity is unsold. MW represent reductions registered in the ICAP program, but not sold.
- Note 3. MW represent reduction MW sold in the ICAP program
- Note 4 Total NYISO participation is not necessarily the sum of all programs due to the rules that state that participants are allowed to participate in a reliability program (EDRP or ICAP) and economic (DADRP).

Table 3 shows program participation detail by NYISO zone. Zones J and K, New York City and Long Island, respectively, have the majority (71%) of participants in the EDRP program, representing 45% of the total MW enrolled. For the ICAP/SCR program, Zones J and K constitute an even greater percentage (84%) of statewide participation, but account for only 38% of the total enrolled MW. Zones A through E as a group are characterized by greater load per participant, providing 19% of participants in EDRP and 39% of total enrolled MW and 13% of the participants in ICAP/SCR which provide 54% of the total program MW. Although statistics on customer class are not recorded, participants in Zones A-E are more heavily weighted by industrial customers, while those downstate in Zones J and K are primarily commercial.

#### **Migration Summary**

Table 4 provides a summary of how enrollment changed from 2004 to 2005 and the average subscribed MW per participant for each year. Overall, participation and the number of MWs enrolled decreased in the EDRP program. However, 2005 ICAP/SCR program participation increased by 86% over 2004, proportionally greater than the 11% increase in subscribed MW. All but EDRP were characterized by a decline in the average subscribed MW per participant.

Table 4: Program Enrollment Changes 2004 to 2005

	2004		2005			enge From o 2005	Subscribed MW per Participant		
	Count	MW	Count	MW	Participent Count	Subscribed MW	2004	2005	Percent Change
EDRP	1097	570.7	957	577.6	-13%	1%	0.52	0.60	16%
ICAP UnSold	29	5.3	5	11.8	-83%	123%	0.18	2.36	1191%
ICAP	933	980.8	1782	1083.3	91%	10%	1.05	0.61	-42%
DADRP	17	376.9	18	385 9	6%	2%	22.17	21 44	-3%

Figures 1 and 2 track registration and MW in EDRP and SCR over the period 2001-2005. As noted previously, ICAP/SCR registration of individual participants was initiated in 2004; prior to that period, the registered participants shown in Figure 1 for ICAP/SCR are based on aggregations of individual participants. In addition, for 2001 and 2002, program registration was non-exclusive, i.e., a participant could register for both EDRP and ICAP/SCR. Beginning in 2003 the programs were made exclusive.

Figure 2 shows that, since making EDRP and ICAP/SCR exclusive, the general trend has been for EDRP registration and MW to decrease and ICAP/SCR registration and MW to increase, as would be expected given the more lucrative nature of the ICAP/SCR program.

Demand Response Programs 2001 - 2005
Individual Participants
ICAP participants aggregated 2001 - 2003. Disaggregation of ICAP resources began in 2004

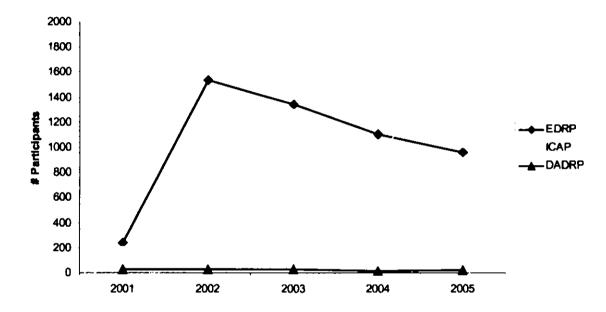


Figure 1: Demand Response Program Resource Registration History

#### Demand Response Programs 2001 - 2005 Subscribed MW

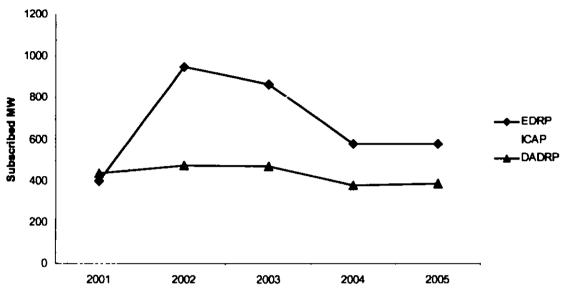


Figure 2: Demand Response Program MW Registration History

2005 saw a dramatic increase in the number of smaller SCR customers registering with Aggregators. This has most likely been one factor in explaining demand response performance during the July 27 EDRP/SCR event as analyzed below.

#### B. Analysis of ICAP/SCR Strike Prices

Beginning in 2003, participants in the ICAP/SCR program were required upon enrollment to indicate a curtailment strike price, between 0-\$500/MWh, which would be used by the NYISO to determine which resources to call on for curtailments in the case where all resources in a given Zone or Zones were not needed to restore system security to its equilibrium state.

To characterize how participants responded to this requirement, strike price curves were developed for all resources for 2005. The curves map out the percentage of MW at a given strike price. Figure 3 illustrates the strike price curves for 2003 to 2005, covering the period of time that the provision has been in place. The steeper slope for the strike price curve overall indicates that strike prices are clustered close to the bid ceiling of \$500/MWh. It is evident that participants have, over time, increased the number of higher strike prices, presumably due to the lack of events where partial Zonal load reduction calls have been initiated.

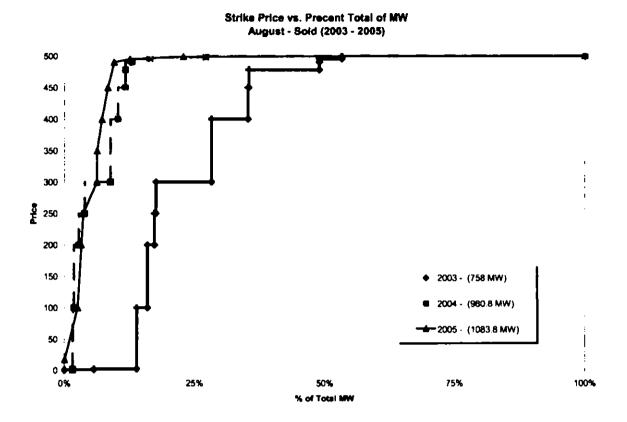


Figure 3: 2003 - 2005 ICAP/SCR Curtailment Bid Curves

### C. Emergency Demand Response Program/ICAP Special Case Resources 2005 Event Performance

The EDRP and ICAP/SCR programs were activated once in 2005, on July 27 between 2 pm and 6 pm. On the previous day, the NYISO recorded its peak demand to date of 32,075 MW between 4 and 5 pm. On July 27, high temperatures receded upstate but were still extreme in the lower Hudson Valley. Con Edison's demand hit a record peak of 13,059 MW at 5 pm on July 27<sup>17</sup>. During the afternoon of July 27 it was apparent that the record downstate demand was resulting in low voltages in the lower Hudson Valley, reducing transfers over the Sprain Brook – Dunwoodie South interface. NYISO Operations activated both the ICAP/SCR and EDRP programs for NYISO Zones G thru K. Table 5 shows the registered MW load reduction available from these Zones during that period.

Per Consolidated Edison Co. news release at http://www.coned.com/newsroom/news/pr20050727\_2.asp

Table 5: Registered EDRP / SCR MW by Zone, July 2005

Registered EDRP/SCR MW by Zone, July 2005								
Zone	Total	EDRP	SCR					
G	38.8	34.4	4.4					
Н	7.5	6.8	0.7					
1	17.5	7.5	10.0					
J	395.3	131.8	263.4					
K	244.3	138.9	105.5					
	703.4	319.4	384.0					

Subsequent to the July 27 event, RIPs and CSPs processed meter data for participants and submitted actual performance data to the NYISO for settlement purposes. Tables 6 thru 8 present performance on a Zonal basis using both the ICAP/SCR and EDRP methods of determining load reduction performance.

Table 6 contains performance figures based on the ICAP/SCR reporting rules contained in Appendix J of the NYISO ICAP Manual. Performance is determined by comparing the actual hourly interval metered energy with the Average Peak Monthly Demand:

$$RED_MWgn = APMDgm - METER_MWgn$$

where:

- RED\_MWgn is the Installed Capacity Equivalent performance that Resource g supplies during hour n of an SCR event;
- APMDgm is the Average of Peak Monthly Demands for Resource g applicable to month m, using data submitted in its Special Case Resource Certification, and
- METER\_MWgn is the metered hourly integrated energy for Resource g in hour n of an SCR event.

Table 6: SCR MW Performance Based on ICAP Measures

SCR Per	formance	(MW) B	ased on	APMD 8	CMD -	July 27, 2005
Zone	HB14	HB15	HB16	HB17	average	% of registered
G	2.6	3.3	4.1	4.2	3.6	80.8%
Н	1.5	1.5	1.5	1.7	1.6	223.1%
I	11.5	11.1	11.5	11.1	11.3	112.7%
J	104.9	149.2	156.7	161.1	143.0	54.3%
K	15.1	92.9	92.5	94.9	73.8	70.0%
	135.7	258.1	266.3	272.9	233.2	60.7%

Performance using this measure compares actual reduction with the reduction capability sold as ICAP by the SCR.

In general, performance measured in this way during the July 27 event was lower on a percentage basis when compared with events in previous years. This appears to be due to:

• some RIPs not reporting enough resources to cover their ICAP obligation, and

 more generally, metered loads reported above the Contracted Minimum Demand for that resource.

The NYISO continues to analyze performance and its potential implications for future programmatic improvements.

In addition to being compensated for reduction capacity (ICAP), SCR resources are also paid for the actual energy reduction during a called event. Performance for purposes of determining energy payment is based upon the EDRP method of performance measurement, which calculates a Customer Baseline Load (CBL) from recent historical data to determine what energy consumption would have been if the participant had not reduced load. The CBL is determined as follows:

- Beginning with the weekday two days prior to the demand response event, look back ten
  weekdays and determine the five highest energy consumption days corresponding to the time
  period of the event. For example, if the demand response event occurs between noon and 4
  pm, the baseline consumption is determined by the five days with the highest energy
  consumption between noon and 4 p.m.
- Take the average of the five readings for each hour to determine the baseline for that hour. The difference between the hourly CBL and hourly interval meter readings serves as the measure of load reduction.

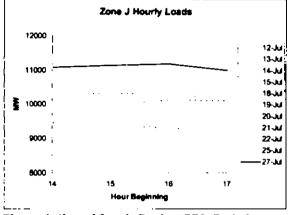
Energy	Reduction	(MWh/h	) via CB	L metho	d - SCR	only
Zone	HB14	HB15	HB16	HB17	average	% of registered
G	0.7	0.9	1.8	1.8	1.3	29.5%
Н	0.7	0.7	0.7	0.9	0.8	109.7%
1	11.2	10.8	11.0	10.5	10.9	108.8%
J	66.2	75.3	74.5	68.3	71.1	27.0%
K	10.9	12.0	12.0	11.6	11.6	11.0%
	89.8	99.8	100.0	93.1	95.7	24.9%

**Table 7: SCR Energy Reduction** 

Table 7 presents the energy reduction data for SCR resources only. Since the ICAP APMD values are determined for the prior like capability period and the CBL is determined from load data two weeks prior to the event, differences in performance can be expected. It is apparent that, using the CBL method, load reduction for SCR resources is considerably smaller than the corresponding figures using the ICAP/SCR method. There are several reasons for this difference:

- Some RIPs did not submit energy reduction data for a significant number of participants, and those submitted were only a subset of the data submitted for payment under ICAP rules and reported in Table 6.
- Since the CBL is a dynamic proxy for consumption, it is possible that individual participant load during the CBL period underestimates what would have been the energy consumption on an event day. This may indeed have been the case for some participants. A review of Zonal load for Zones J and K over the period most typically used for the CBL calculation indicates that, for Zone J, July 27 load exceeded the next highest day by roughly 4% (Figure 4), and in Zone K, July 27 was the 2<sup>nd</sup> highest load day when compared with CBL days (Figure 5).
- Individual participant consumption during the event may have been greater than anticipated.

The CBL method permits an optional weather-sensitive adjustment, wherein the CBL is adjusted either upward or downward to match the actual load consumption two hours prior to the actual event. The degree of adjustment is capped at between 80% and 120% of the original CBL value. Most participants did not select the weather-sensitive option and thus were not able to correct for increased weather-sensitive consumption on the day of the event.



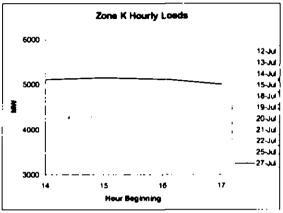


Figure 4: Zone J Loads During CBL Period

Figure 5: Zone K Loads During CBL Period

Table 8 reports the energy reduction for EDRP participants calculated using the CBL method. Since participation is mutually exclusive between EDRP and ICAP/SCR, the corresponding values of Tables 7 and 8 can be added to determine the total reported energy reduction during the event.

Energy Reduction (MWh/h) via CBL method - EDRP only										
Zone	HB14	HB15	HB16	HB17	average	% of registered				
G	8.4	11.3	14.2	15.5	12.3	35.9%				
Н	1.1	1.1	1.0	1.1	1.1	15.7%				
+	1.7	2.3	1.9	1.7	1.9	25.5%				
J	52.6	56.6	57.8	68.6	58.9	44.7%				
K	35.7	38.8	41.2	34.2	37.5	27.0%				
	99.5	110.2	116.2	121.0	111.7	35.0%				

**Table 8: EDRP Energy Reduction** 

### D. EDRP and ICAP/SCR Estimated Reliability Benefits

Quantifying the reliability benefits of Demand Response starts with a determination of the extent to which EDRP and ICAP/SCR curtailments improved the Loss of Load Probability (LOLP) for the Control Area as a whole. Improvement in LOLP, converted into a dollar value, quantifies the reliability benefit of these load reduction programs to customers. One approach for converting

improvement in LOLP into a dollar value, which has also been used in previous years' analysis, uses the value of unserved energy, calculated as:

Where

VUE = value of unserved energy (reliability benefits)

VOLL = value of lost load in \$/MWh based on economic impact of load loss

 $\Delta$ LOLP = change in LOLP due to the addition of EDRP and ICAP/SCR resources

EUE = expected unserved energy, i.e., expected load loss without EDRP and ICAP/SCR

The NYISO does not yet have values for the elements of this equation. However, the extent to which the three primary variables (value of lost load, expected unserved energy, and change in LOLP) interact can be seen if the VUE is assumed to be the energy reduction payouts to participants (for the July 27 event, roughly \$815,000). The approach yields a three-dimensional surface for a given payout level – any point above the surface represents a positive reliability benefit.

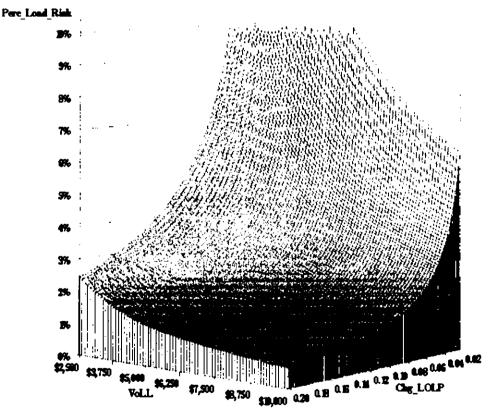


Figure 6: Surface Diagram Illustrating the Interaction of Primary Factors Affecting Reliability Benefits

The NYISO continues to explore opportunities to quantify these variables. One option may be to look at the August 2003 blackout (Table 9). This event provided valuable economic estimates of societal impact which, coupled with the estimated load not served during the blackout period, could provide a rough estimate of the value of lost load (VOLL).

Table 9: Independent Assessment of NY Blackout Costs, August 2003

** .		*			,	
Anderson Economic Group <sup>1</sup>	1980	375	33	429	2817	9390
ICF Consulting <sup>2</sup>					2220 - 3360	7400 - 11200
NYC Comptroller's Office <sup>3</sup>	800	250			1050	7000*

- "Northeast Blackout Likely to Reduce US Earnings by \$6.4 Billion", Anderson Economic Group, August 19, 2003.
   Total regional economic impact estimated at \$6.4B.
- "The Economic Cost of the Blackout", ICF Consulting. Estimated \$6.8-10.3B cost for entire affected area using 918,800 MWh lost energy consumption.
- 3. CBSNews.com report, August 20, 2003. Cost/MWh assumes half of lost energy consumption occurred in NYC.
- 4. Based on approximately 300,000 MWh in lost energy consumption in New York State on August 14-15, 2003.

#### III. Day-Ahead Demand Response Program

The DADRP program 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. Prior to November 1, 2004, the bid price had to be \$50/MWh or higher. As of November 1, 2004, the minimum floor price for DADRP has been set to \$75/MWh to address concerns regarding free-ridership, as well as to reduce Net Social Welfare losses. 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 scheduled in the DAM is obligated to curtail the next day. Failure to curtail 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.

#### A. DADRP Participation and Bidding Summary

Registration in DADRP remained virtually unchanged; 18 customers were registered in 2005, up from 17 at the close of 2004. Figures 7 and 8 show a comparison of scheduled DADRP bids by season since the program's inception. DADRP offers were scheduled a total of 464 hours during this reporting period, September 1, 2004 and August 31, 2005, roughly one-third the number of hours scheduled (1275) for the comparable period in 2003 and 2004. Scheduled offers resulted in 2,070 MWh of load reductions (Figure 7), and average hourly reduction of approximately 5 MW (Figure 8). The imposition of the \$50/MWH price floor in 2002 and increased to \$75 in November 2004 reduced overall the number of bids that were scheduled.

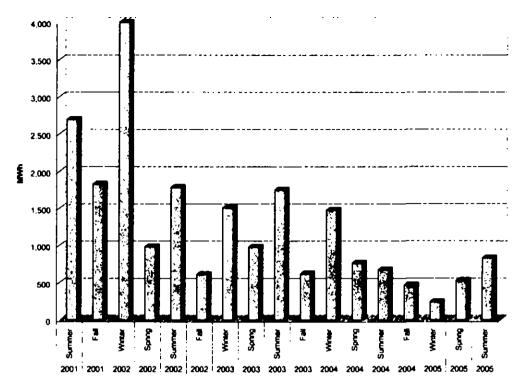


Figure 7: Total MWh Scheduled in DADRP, 2001-2005, by Season and Year

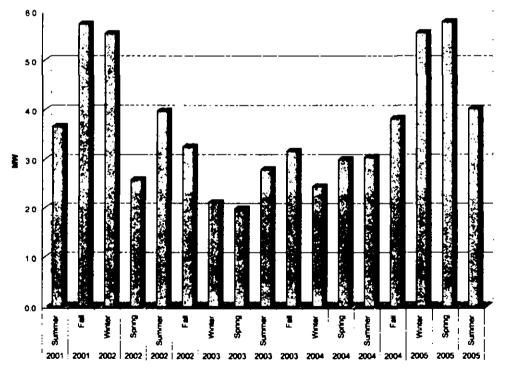


Figure 8: Average Scheduled Hourly DADRP Offer (MW) by Season and Year

Figure 9 shows the distribution of scheduled DADRP offers by hour over the past four years. A declining trend is evident in these accepted offers. The decline from 2003 to 2004 was attributed to the introduction of the \$50/MWh floor price; a similar argument can be made for the 2004-2005 decline, given the floor price was raised to \$75/MWh on November 1, 2004. As is discussed in the next section, the decline in accepted DADRP offers is not by itself an indication

of lack of participant interest or inherent program defect, but likely the proper response given the interaction of the increased floor price and the clearing point on the supply curve.

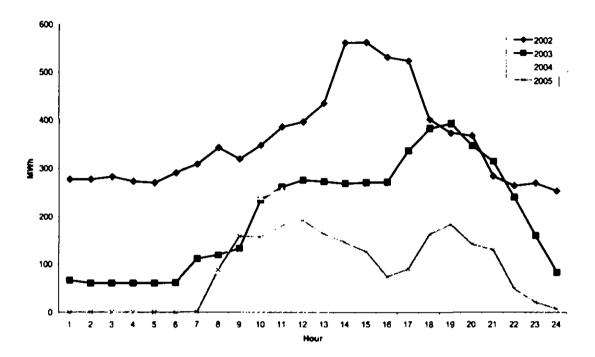


Figure 9: Total Scheduled DADRP Offers (MWh) By Hour and Program Year (9/1 - 8/31)

#### B. DADRP Estimated Market Benefits Summary

Scheduled DADRP curtailments impact the NYISO market in three distinct ways. First, when DADRP curtailments displace higher priced generation resources, the corresponding DAM clearing price drops, thereby reducing the cost of purchases made by LSEs through fixed price and price cap load bids. The amount of those bill savings depends on how steep the supply curve was at that time. The steeper the supply curve, the larger the reduction in prices when demand is reduced. Such reductions in DAM LBMPs will also cause the expected future market outlook of price volatility to be reduced. The expectation of reduced price volatility may place downward pressure on bilateral transactions between LSEs and suppliers. Hedge cost savings and bill savings are both transfer payments. Money that formerly was paid by LSEs on their retail customers' behalf to generators is now in effect transferred back to LSEs and eventually to their customers as avoided costs.

From a social welfare perspective, as defined by economists, these transfers are not defined as benefits, just neutral transfers among market participants with no specific weight or merit. However, such transfers are important to consumers, since they amount to reduced costs for the electricity purchased by consumers, and all other things equal, they are therefore desirable.

Economists define a third flow of benefits that results when customers respond to actual market costs rather than usage prices based on average costs. Such changes in usage of electricity reduce deadweight social losses, which are defined as the utilization of resources in other than the

socially optimal manner. DADRP induces customers paying average prices for electricity to adjust their usage to contemporary, actual supply costs, thereby reducing deadweight losses and improving social welfare. This third flow of benefits from DADRP is the improvement in net social welfare that is realized when DADRP bids from participants on flat-rate tariffs are scheduled.

Figure 10 illustrates the various components of the net social welfare calculation. In the case of DADRP, the estimated LBMP is the day-ahead price without demand response offers considered, the actual LBMP is the day-ahead price as influenced by the accepted demand response offers, and the strike price is the DADRP offer price. Payments to DADRP program participants are given by the area b+c. Deadweight losses are given by the area a+b. Net social welfare is determined by calculating the difference between the deadweight losses and payments to suppliers, or (a+b) - (b+c) = a-c. Net social welfare will be positive when area a is greater than area c.

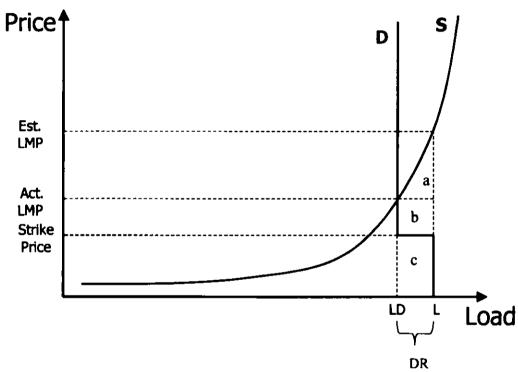


Figure 10: Illustrating Components of Net Social Welfare Calculation

Market price impacts for the summer months (June, July and August) of 2005 were estimated using the methods and protocols developed previously. Supply flexibilities were developed for two aggregate regions: Western NY and Hudson River/Capital Region, and two NYISO zones: New York City and Long Island. Supply flexibilities, defined as the percentage change in LBMP resulting from a one percent change in the load served, characterize the nature (slope) of the resource supply curve. The greater the price flexibility, the greater the reduction in the calculated DAM LBMP due to the scheduling of a DADRP curtailment offer. High supply flexibilities over a narrow range of load levels are indicative of a pronounced "hockey-stick"

This analysis is confined to the summer months to accommodate a comparison of 2005 results with prior year's analyses that included only these months.

Western NY superzone consists of NYISO zones A – E, while the Hudson River/Capital Region superzone is comprised of NYISO zones F – 1.

shaped supply curve. In the market impact analyses, the supply flexibilities are used to construct a statistical representation of the bid curve during hours that DADRP bids are scheduled, so that the level of price that would have been achieved in the DAM and RTM, had these curtailments not been scheduled and delivered, can be estimated, as well as the corresponding bill savings. In addition, the supply flexibility is used in the derivation of the net social welfare results.

Table 10: DAM Price Flexibilities (Summer)

	2001	2002	2003	2004	2005*
West	9.4	4.2	1.4	1.8	0.8
Hudson/Capital	5.1 / 11.8	3.9 / 5.0	1.9	1.6	2.8
New York City	9.4	3.6	3.5	0.7	4.0
Long Island	5.1	6.5	1.2	0.6	5.5

<sup>\* 2005</sup> represents estimates with a continuous functional form, whereas previous years a discrete spline function was used. Such a change in functional form makes comparisons to previous years challenging. Between 2001 and 2004, the table contains the average supply flexibility in the uppermost piece of the spline. In 2005, the average value represents the supply flexibility over the entire estimated supply curve, not a specific segement of it. Thus, the 2005 estimates reported herein represent the maximum.

Table 11: RTM Price Flexibilities (Summer)

_	2001	2002	2003	2004	2005*
West	6.4	6.7	3.4	2.3	7.8
Hudson/Capital	8.6 / 8.4	4.7 / 6.0	2.5	1.2	11.5
New York City	14.5	12.8	5.9	1.8	16.7
Long Island	10.4	5.2	6.0	2.1	37.9

<sup>\* 2005</sup> represents estimates with a continuous functional form, whereas previous years a discrete spline function was used. Such a change in functional form makes comparisons to previous years challenging. Between 2001 and 2004, the table contains the average supply flexibility in the uppermost piece of the spline. In 2005, the average value represents the supply flexibility over the entire estimated supply curve, not a specific segement of it. Thus, the 2005 estimates reported herein represent the maximum.

Table 12: Transfers and Net Social Welfare Components for DADRP, Jan 1 - Oct 1, 2005

					Transfer	Social Welfare Benefits			
7.one	Performance (MWh)	Program Payments (\$)	Average DAM LBMP (\$ MWh)	Average Price Reduction (\$ MWh)	Market Bill Savings (\$)	Hedge Contract Savings (\$)	Renefits to Payment Ratio	Reduction in Deadweight Loss (\$)*	Benefits to Payment Rutio
NYC.	0	\$0	NΛ	NΛ	NΛ	NΑ	N A	N A	N A
LI	0	50	NA	NA	NA	NA	N A	N A	NΛ
Western NY	714	\$62,632	\$86.20	\$0.12	\$17,982	\$33,088	0.82	\$47,193	0.75
<b>Hudson River</b>	1,356	\$109,745	\$83.08	\$0.21	\$91,807	\$122,278	1.95	\$34,883	0.32
Total	2,070	\$172,376	\$83,72	\$0.19	\$109,789	\$155,366	1.54	\$82,076	0.48

<sup>\*</sup> This represents gross benefits. Net Social Welfare can be calculated by subtracting program payments

As can be seen in Table 12, accepted DADRP offers were located in Western NY and Hudson River/Capital regions. The average LBMPs during scheduled DADRP load reduction periods were less than \$90/MWh. Program payments (corresponding to area b+c in Figure 9) are shown in the third column of Table 12. The reduction in deadweight losses are shown in the second column from the right in Table 12.

All three types of market effects estimated for the summer of 2005 are compared to those from 2001 through 2004 in Table 13. As can be seen in Table 13, DADRP scheduled bids resulted in a decrease in net social welfare (NSW) of \$90,300, comparable to that seen in 2003 (\$72,271).

Table 13: DADRP Market Effects (Summer)

	Scheduled							
	DADRP	Collateral	Reduction in	<b>Total Market</b>	Program	Change in		Impact
	MWHs	Savings	Hedge Cost	Effect	Payments	NSW	% Change	Ratio
2001	2,694	\$892,140	\$682,358	\$1,574,498	\$217,487	N/A	_	7.2
2002	1,468	\$236,745	\$202,349	\$439,094	\$110,216	N/A	72%	4.0
2003	1,752	\$45,773	\$161,558	\$207,331	\$121,144	-\$72,271	53%	1.7
2004	675	\$8,996	\$36,940	\$45,936	\$40,651	-\$27,408	78%	1.1
2005	2,070	\$109,789	\$155,366	\$265,155	\$172,376	-\$90,300	-477%	1.5

Scheduling DADRP bids at relatively low DAM prices, for example at the \$50/MWh or \$75/MWh bid floor price, generally corresponds to very low supply flexibility, a relatively flat supply curve, and a small deviation from the average price the customer pays. The change in NSW is based on that deviation, net of the payment the customer receives for curtailing, i.e., the DAM price. When the supply curve is very flat, the reduced deadweight loss can be less than the payment to the customers, i.e., the DAM price, resulting in a reduction in NSW.

Negative NSW contributions do not necessarily mean that DADRP is counterproductive. DADRP is intended to reduce price volatility. The lower market effects in 2005 reflect the relatively flat nature of the supply curve during the summer months. Low supply flexibilities mean that scheduled curtailments have a lower impact on the DAM LBMP. However, the ratio of market effects (the sum of transfer costs and NSW) to DADRP curtailment payments, referred to as the program impact ratio, in 2005 was 1.5, as can be seen in the rightmost column of Table 13. This measure indicates that, considering all quantifiable market impacts, the net result has been beneficial.

When prices are very high, \$500/MWH or more, as they were at times in 2000-2002, the incentives to shift load for DADRP participants are high. Moreover, these circumstances are coincident with very high supply flexibilities, upwards of 10 at times in 2001-2002, which result in relatively greater reductions in deadweight losses from DADRP induced curtailments, and positive NSW contributions. The challenge is to induce customers to join the program and monitor prices so that when they spike, DADRP bids will be forthcoming, scheduled, and deliver NSW improvements. One means of achieving this outcome is to raise the floor bid price of \$75/MWh, a topic that will be reviewed by the NYISO and stakeholders in the near future.

DADRP continues to provide opportunities for demand response resources to participate in NY's energy market increasing competition and stabilizing energy prices. Net social welfare can be expected to increase as NY's generation supply shrinks. Its future value also depends on a market perception that this program will remain in effect. FERC recently affirmed its future value by eliminating its sunset date.

## **Summary**

Table 14 (below) summarizes the overall payouts to and economic benefits obtained from the NYISO's demand response programs in 2005. Energy payments based on reported load reduction is shown in the top block (\$428,079 for EDRP and \$385,359 for SCR). Based on the value of unserved energy estimation approach, for 2% of load at risk with a \$7000 value of lost load and an increase in probability of loss of load of 0.1, program benefits roughly equal payouts to participants, as seen in the bottom section of Table 14.

For NYISO's DADRP, it is apparent that there are transfer benefits in excess of program payments for 2005, but the societal benefits of the program do not outweigh payments to participants. As noted in the earlier section, the NYISO and its stakeholders will in the near future consider increasing the bid floor price to bring societal benefits more in line with program payouts.

Table 14: Summary of NYISO Demand Response Program Benefits

		DADRP	EDRP	SCR
stics	Performance (MWh)	2,070	442	377
Event Statistics	Payments (\$)	\$172,376	\$428,079	<b>\$</b> 385,359
Ever	Average LBMP (\$/MWh)	\$83.72	<b>\$</b> 503.36	\$742.59
its	Average Price Reduction (\$/MWh)*	\$0.19	N/A	N/A
Вепе	Market Bill Savings (\$)	\$109,789	N/A	N/A
Transfer Benefits	Hedge Contract Savings (\$)	\$155,366	N/A	N/A
7.	Benefits to Payment Ratio	1.42	N/A	N/A
lts	Reduction in Deadweight Loss (\$)	\$82,076	N/A	N/A
Societal Benefits	Benefits to Payment Ratio	0.48	N/A	N/A
cietal	Reliability Benefits (\$)	N/A	\$438,274	\$373,284
Š	Benefits to Payment Ratio	N/A	1.02	0.97

Beyond the economic benefits provided by these programs, the NYISO must ensure that reliability program registrations, particularly mandatory response programs like ICAP/SCR, reflect expected performance during a reserve deficiency situation. Beginning with the December 2005 Price-Responsive Load Working Group meeting, the NYISO and its

stakeholders will be reviewing registration, testing and reporting rules for the ICAP/SCR program.

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**ATTACHMENT II** 

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.

Docket No. ER01-3001-013

#### **NOTICE OF FILING**

Take notice that on December 15, 2005, the New York Independent System Operator, Inc. ("NYISO") filed its Ninth Biannual Compliance Report on Demand Response Programs in the above-captioned proceeding.

The NYISO will electronically serve a copy of this filing on the official representative of each of its customers, on each participant in its stakeholder committees, on the New York Public Service Commission, and, by mail, on the electric utility regulatory agencies of New Jersey and Pennsylvania. Copies of this filing are being served on all parties designated on the official service list for this proceeding maintained by the Secretary of the Commission.

The NYISO states that it has electronically served a copy of this filing on the official representative of each of its customers, on each participant on its Market Participants committees, and on the New York State Public Service Commission. The NYISO has also served a copy of the filing by first-class mail on the electric utility regulatory agencies of New Jersey and Pennsylvania.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <a href="http://www.ferc.gov">http://www.ferc.gov</a>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at <a href="http://www.ferc.gov">http://www.ferc.gov</a>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email <a href="ferconlineSupport@fcrc.gov">FERCOnlineSupport@fcrc.gov</a>, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date:

Magalie R. Salas Secretary Unofficial FERC-Generated PDF of 20051230-0097 Received by FERC OSEC 12/23/2005 in Docket#: ER01-3001-014

ATTACHMENT II (Redlined pages)

on line and available for the NYCA and the two localities, New York City and Long Island for the 2006 Summer Capability Period is also provided.

The expected resource availabilities listed in Table 1 are provided by participants in the Installed Capacity ("ICAP") Subcommittee of the New York State Reliability Council ("NYSRC"). The information is included in the NYSRC's development of the Installed Reserve Margin ("IRM") for the 2005/2006 Capability Year. The IRM represents the amount of ICAP that the NYSRC will require the NYCA to have in place in the upcoming capability year in excess of forecasted peak demands. The IRM is currently set at 18%, which results in a Minimum ICAP Requirement of 118% of forecasted peak demand. The NYSRC sets the IRM on an annual basis pursuant to its responsibilities for establishing and enforcing Reliability Rules for the NYCA,

Table 1

NYCA & Localities Load and Capacity Outlook

For Summer 2006 (as of December 1, 2005)

<u>Statewide</u>	<u>MW</u>	MW	
Capacity Required (Load + Reserve)	38,232		
NYCA Available Generation	38,605		
Special Case Resources (SCRs) Total Resources	<u>656</u> 39,261		
Projected Surplus Above Summer 2006 Needs		<b>656</b> <u>1029</u>	1
New York City			
<del></del>	13,576		
Capacity Required (Load + Reserve)	15,516		
Locational Requirements (820% of 11,505 MW Peak)	9,434 <u>204</u>		1
Available Generation & SCRs	9,500		
Projected Surplus Above Summer 2006 Needs(available generation in excess of locational requirement)		<b>66</b> <u>296</u>	
Long Island			
Capacity Required (Load + Reserve)	6,278		
Locational Requirements (99.5% of 5,320 MW Peak)	5,2 <del>93</del> <u>67</u>		I
Available Generation & SCRs	5,432		
Projected Surplus Abeve Summer 2006 Needs(available generation in excess of locational requirement)		13 <u>965</u>	

The 66296 MW current capacity surplus for New York City will be augmented by the expected installations of the NYPA Polletti Expansion and the SCS Astoria project. Each will

add 500 MW to New York City generation, resulting in a projected <u>NYC</u> surplus of 1066296 MW for Summer 2006.

As Table 1 indicates, the NYISO currently anticipates that available internal NYCA supplies of 39,261 MW, which includes generation plus anticipated SCRs, will be 6561029 MW in excess of the NYCA Minimum ICAP Requirement for the Summer 2006 Capability Period. Retirements (61 MW for Huntley 63 and 64 and 55 MW for NRG's Ilion unit) are expected to reduce NYCA available generation by 117 MW for Summer 2006, reducing the projected surplus to 539 MW.

The Reliability Rules also mandate minimum Locational ICAP requirements, under which a minimum level of ICAP must be electrically located within the New York City and Long Island load zones. For this report, the NYISO is forecasting that New York City's available capacity supplies plus SCRs will exceed the <u>current In-city Locational ICAP</u> requirement of 9,434204 MW (802% of a total New York City peak of 11,505 MW) by 6296 MW. Table 1 also indicates that Long Island is currently forecasted to have 16539 MW of resources in excess of its <u>current Summer 2005 Locational ICAP Requirement.</u>

### 2. Table of NYPSC Article X Proceedings

For the Commission's information, Table 2, below, indicates the status of facilities with siting certificates issued by the New York Board on Electric Generation Siting and the Environment ("Siting Board") and the status of applications not yet certified. This table is an update of Table 2 from the previous (June 2005) filing. Since the previous filing, Table 2 shows that two previously authorized projects totaling 1,038 MW of capacity are now in-service, and two other projects totaling 1,000 MW of capacity are under construction. Also, the 540 MW Brookhaven Energy project has been cancelled, and therefore was removed from this updated table. The table shows the most recent estimates of in-service years for the NYPA Poletti and SCS Astoria Energy Phase I projects. These projections of in-service dates are provided by the project developers. Based on all other publicly available information, the NYISO has no reason at this time to anticipate that the listed projects will not achieve their forecasted in-service years.

Table 2

Generation Projects Subject to Article X Top of the Queue									
Owner/ Size Connecting NYISO Status of Article Project Name Developer (MW) Utility Application X									
Bethlehem Energy Center	PSEG Power NY	750	NM-NG	04/27/98	Certified 2/28/02	In-Service			
East River Repowering	Consolidated Edison of NY	288	CONED	08/10/99	Certified 8/30/01	In-Service			

The Locational Requirements percentages used here were approved by the NYISO Operating Committee for the 2005-2006 Capability Year. They are subject to review and approval for each Capability Year. The statewide installed requirements study for the 2006-2007 Capability Year currently under review by the New York State Reliability Council indicates that the locational capacity requirements for New York City and Long Island may need to increase for the 2006-2007 Capability Year.

Generation Projects S Top of the Queue	ubject to Article X							
In-Service TOTAL								
Poletti NYPA		500	CONE	D	04/30/99	Cer	tified 10/2/02	2006
SCS Astoria Energy Phase I SCS Energy LLC		500	CONE	D	11/16/99	Cer	tified 11/21/01	<del>2007</del> <u>2006</u>
Under Construction TOT	AL	1,000						
Bowline Point Unit 3 Mirant		750	CONE	D	10/13/99	Cer	tified 3/25/02	
Spagnoli Road CC Unit Keyspan Energy, Inc.		250	LIPA		05/17/99	Cen	tified 05/08/03	
Wawayanda Energy Calpine Eastern Corporation		540	NYPA	\	06/10/99	Certified 10/22/02		
Astoria Repowering Reliant Energy		367 net	CONE	D	07/13/99	Certified 06/25/03		
Astoria Repowering Phase II Reliant Energy		173 net	CONE	D	08/18/00	Cer	tified 06/25/03	
SCS Astoria Energy Phase II	SCS Energy LLC	500	CONE	D	11/16/99	Cen	tified 11/22/01	
Empire State Newsprint Besicorp / Empire State		505	NM - N	G	07/14/00	Cer	tified 09/24/04	
Approved - TOTAL	3,085							
TransGas Energy TransGas Energy, LLC		1,100	CONED		10/05/01	Appl accepted 6/05/03		
Projects with Application	1,100							
GRAND TOTAL MW Pro	6.223							
in service	truction			approved		application	pending	

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.

Docket No. ER01-3001-0913

#### **NOTICE OF FILING**

Take notice that on December 15, 2005, the New York Independent System Operator, Inc. ("NYISO") filed compliance tariff sheets in the above-captioned proceeding.

The NYISO has will electronically served a copy of this filing on the official representative of each of its customers, on each participant in its stakeholder committees, on the New York Public Service Commission, and, by mail, on the electric utility regulatory agencies of New Jersey and Pennsylvania. Copies of this filing are being served on to all parties designated on the official service list for in this proceeding maintained by the Secretary of the Commission, including the New York State Public Service Commission, and to the electric utility regulatory agencies in New Jersey and Pennsylvania.

Any person desiring to be heard or to protest this filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR §§ 385.211 and 385.214). All such motions or protests should be filed on or before the comment date. This filing is available for review at the Commission or may be viewed on the Commission's website at www.fere.gov, using the eLibrary (FERRIS) link. Enter the docket number excluding the last three digits in the docket number filed to access the document. For assistance, call (202) 502-8222 or TTY, (202) 208-1659. Protests and interventions may be filed electronically via the Internet in lieu of paper. See, 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e filing" link. The Commission strongly encourages electronic filings. Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at http://www.ferc.gov. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at http://www.ferc.gov, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service.

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please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date:

Magalie R. Salas Secretary