

BEFORE THE  
STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

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In the Matter of  
  
Consolidated Edison Company of New York, Inc.

Case 09-E-0428

August 2009

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Prepared Exhibits of:

Nicola Jones  
Utility Engineer 2  
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Nicola Jones

Exhibit\_\_\_\_ (NJ-1)

List of Staff Information Requests

Staff Request

Exhibit Pages

5

1

6

2-3

7

4-5

8

6-7

Company Name: Con Edison  
Case Description: 2009 Electric Rate Filing  
Case: 09-E-0428

Response to DPS Interrogatories – Set DPS3  
Date of Response: 08/18/2009  
Responding Witness:

Question No. :5R

Subject: Customer Average Interruption Duration Index (CAIDI) - What was the U.S. electric utility industry average for CAIDI in 2008?

Response:

We are informed by PA Consulting Group that its System Reliability, Restoration, and Response (SR3) Benchmarking and Best Practices 2009 Survey reports that the average CAIDI (excluding major events) for investor owned utilities is 1.9 hours for the calendar year 2008.

Company Name: Con Edison  
Case Description: 2009 Electric Rate Filing  
Case: 09-E-0428

Response to DPS Interrogatories – Set DPS3  
Date of Response: 06/01/2009  
Responding Witness: Infrastructure Investment Panel

Question No. :6

Subject: Reliability Performance Mechanism - Major Outage - For each network with fewer than 25,000 customers, provide in an Excel spreadsheet the: a. Name of the network. b. 2009 estimated peak load. c. Total number of customers. d. Number of known customers with back-up generators having a MW capability that exceeds the customer's peak load. e. Number of known customers with back-up generators having a MW capability that is less than the customer's peak load. f. Total MWs available from known customer back-up generators.

Response:

Please see the attached excel file.

Response to DPS Interrogatories-Set DPS3 -Question #6  
Networks with fewer than 25,000 customers

BORO	AREA STATION	NETWORK/LOAD AREA	2009 Estimated Peak Load (MW)	Total # of Customers (Metered Customers)	# Customers MW capability exceeds customer's peak load	# Customers MW capability less than customer's peak load	Total MWs available from known customer back-up generators
M	BRUCKNER	RANDALL'S ISLAND (NEW)	31	9	0	4	18.6
M	W. 65TH ST NO. 2	ROCKEFELLER CENTER	97	717	4	9	21.0
M	E. 63RD ST NO. 2	TURTLE BAY	145	822	7	18	48.0
M	ASTOR	HERALD SQ	110	1,033	0	7	8.6
M	SEAPORT NO. 1	CORTLANDT	51	1,872	1	5	5.3
M	E. 63RD ST NO. 1	HUNTER	84	2,259	0	7	4.0
M	SEAPORT NO. 1	BOWLING GREEN	140	2,403	4	15	54.4
M	W. 50TH ST	TIMES SQ	167	2,546	2	22	27.7
M	E. 36TH ST	GREELEY SQ	66	3,033	1	2	6.2
M	MURRAY HILL	EMPIRE	70	3,393	0	4	1.5
M	SEAPORT NO. 2	FULTON	135	3,835	5	14	33.2
M	TRADE CENTER NO. 1	BATTERY PARK CITY	69	4,645	4	3	25.6
M	E. 40TH ST NO. 1	GRAND CENTRAL	222	4,786	1	24	18.9
M	LEONARD ST NO. 2	PARK PLACE	90	4,859	1	4	9.8
M	MURRAY HILL	FASHION	68	6,052	0	0	0.0
M	W. 65TH ST NO. 1	PLAZA	186	6,287	1	22	22.9
M	LEONARD ST NO. 2	CANAL	107	7,915	2	5	28.8
M	W. 50TH ST	HUDSON	53	8,100	1	6	12.6
M	E. 63RD ST NO. 2	ROOSEVELT	86	8,235	2	3	6.2
M	CHERRY ST	CITY HALL	181	8,711	6	11	38.8
M	E. 40TH ST NO. 2	BEEKMAN	143	9,073	1	8	17.6
M	W. 42ND ST NO. 1	PENNSYLVANIA	256	9,483	4	14	23.2
M	LEONARD ST NO. 1	GREENWICH	63	10,429	0	0	0.0
M	E. 63RD ST NO. 1	SUTTON	160	10,472	0	20	15.3
M	W. 42ND ST NO. 2	COLUMBUS CIRCLE	148	19,773	1	10	19.5
M	E. 36TH ST	KIPS BAY	122	20,876	1	5	2.6
M	W. 65TH ST NO. 2	LINCOLN SQ	159	20,961	2	19	26.9

Company Name: Con Edison  
Case Description: 2009 Electric Rate Filing  
Case: 09-E-0428

Response to DPS Interrogatories – Set DPS3  
Date of Response: 06/01/2009  
Responding Witness: Infrastructure Investment Panel

Question No. :7

Subject: Reliability Performance Mechanism - Major Outage - For each network with 25,000 or more customers, provide in an Excel spreadsheet the: a. Name of the network. b. 2009 estimated peak load. c. Total number of customers. d. Number of known customers with back-up generators having a MW capability that exceeds the customer's peak load. e. Number of known customers with back-up generators having a MW capability that is less than the customer's peak load. f. Total MWs available from known customer back-up generators.

Response:

See attached excel file.

Response to DPS Interrogatories- Set DPS3 - Question #7  
Networks with more than 25,000 customers

NETWORK/LOAD AREA	2009 Estimated Peak Load (MW)	Total # of Customers (Metered Customers)	# Customers		Total MWs available from known customer back-up generators
			MW capability exceeds customer's peak load	# Customers MW capability less than customer's peak load	
CHELSEA	229	26,428	1	9	37.3
BRIGHTON BEACH	107	26,904	2	12	10.8
MADISON SQ	266	30,091	5	18	45.0
PROSPECT PARK	60	31,053	1	2	5.7
RIVERDALE	106	34,756	1	16	8.4
TRIBORO	122	35,587	2	5	7.1
SHERIDAN SQ	177	38,270	2	8	27.5
CENTRAL BRONX	127	42,183	1	4	13.9
LENOX HILL	260	44,122	5	12	34.8
BOROUGH HALL	292	51,371	19	41	95.1
HARLEM	193	57,333	0	14	20.9
WEST BRONX	211	60,644	1	8	13.3
SHEEPSHEAD BAY	178	61,816	2	8	5.7
COOPER SQUARE	248	65,691	3	9	16.1
WASHINGTON HEIGHTS	193	68,936	1	13	25.8
REGO PARK	250	69,879	4	14	10.7
JACKSON HEIGHTS	190	70,702	5	7	10.0
CENTRAL PARK	235	77,383	0	3	3.5
YORKVILLE	314	78,745	1	8	27.1
CROWN HEIGHTS	198	81,409	0	24	18.0
NORTHEAST BRONX	100	81,856	4	14	14.3
RIDGEWOOD	193	86,113	3	14	7.6
SOUTHEAST BRONX	218	87,010	4	7	7.4
BAY RIDGE	232	90,316	5	20	41.3
WILLIAMSBURG	224	91,454	3	9	7.1
MASPETH	270	106,043	4	11	9.6
LONG ISLAND CITY	416	109,803	7	26	23.1
FORDHAM	258	111,660	2	10	8.9
PARK SLOPE	211	114,217	0	9	3.0
RICHMOND HILL	326	118,777	4	18	12.5
FLUSHING	389	119,473	3	38	13.0
OCEAN PARKWAY	176	125,968	2	13	3.7
FLATBUSH	268	128,970	7	15	10.8
JAMAICA	456	144,568	11	42	40.4

Company Name: Con Edison  
Case Description: 2009 Electric Rate Filing  
Case: 09-E-0428

Response to DPS Interrogatories – Set DPS3  
Date of Response: 06/01/2009  
Responding Witness: Infrastructure Investment Panel

Question No. :8

Subject: Reliability Performance Mechanism - Major Outage - Regarding the following sentence found on page 253, line 7 to 10 of the Infrastructure Investment Panel testimony: “The Company identified a total of 8 outages in networks from 1998 to 2007 that would have exceeded the 10% threshold for 3 or more hours.” 1. For each of the eight outages identified, provide in an Excel spreadsheet the: a. Name of the network affected. b. Date and time of when the outage began. c. Date and time of when the outage ended. d. Total number of customers in the network at the time of the outage. e. Total number of customers that experienced an outage. f. Reason for the outage.

Response:

See attached response.



B-Ticket	Boro	Year	Customers Interrupted (Adjusted)	Customers Interrupted (ECS)	Network	Network Cust.	Major Event Test	Date Time From	Date Time To	Reason
LIC Event	Queens	2006	25000	25044	LIC	114927	Major Event	7/17/06 0:00	7/26/06 0:00	
ME02009079	Manhattan	2002	38200	38200	Sheridan Square	38500	Major Event	7/20/02 12:45	7/20/02 20:08	
			10400	10400	Greenwich	10430	Major Event	7/20/02 12:45	7/20/02 20:08	
			7500	7500	Canal	7560	Major Event	7/20/02 12:45	7/20/02 20:08	East River Transformer failure
			3900	3900	Battery Park	4170	Major Event	7/20/02 12:45	7/20/02 20:08	
			3500	3500	Park Place	3960	Major Event	7/20/02 12:45	7/20/02 20:08	
	Manhattan	1999	69576	69576	Washington Heights	69576	Major Event	7/6/08 20:11	7/7/08 17:05	NW shutdown
B-Ticket not available	Manhattan	1998	58	4	Rockefeller	245	Major Event	2/18/98 1554hrs	2/18/98 2153	Street mains & services
M1999006848	Manhattan	1999	556	325	City Hall	4030	Major Event	6/8/1999 1053	6/9/1999 0430 hrs	Secondary Burnout
B-Ticket not available	Manhattan	1998	29	4	Rockefeller	245	Major Event	2/18/98 16:00	2/18/98 21:53	Street mains & services
ME00012230	Manhattan	2000	29	10	Rockefeller	245	Major Event	2/5/00 1154hrs	2/5/00 1830hrs	Service Burnout
ME01012068	Manhattan	2001	29	2	Rockefeller	245	Major Event	7/17/01 0836hrs	7/17/01 1450hrs	Secondary Burnout

Nicola Jones

Exhibit\_\_\_\_ (NJ-2)

Electric Service Reliability Performance Mechanism

<u>Section</u>	<u>Exhibit Pages</u>
Operation of Mechanism	1
Summary of Mechanism	2-4
Exclusions	4-5
Reporting	5-7
Threshold Standards	7-10
Major Outages	10-12
Remote Monitoring System	12-13
Restoration	13-14
Program Standards	14-26

**Electric Service Reliability Performance Mechanism**Operation of Mechanism

This electric service Reliability Performance Mechanism ("reliability mechanism") will go into effect for Con Edison on January 1, 2010 and will remain in effect until reset by the Commission. The measurement periods for the reliability mechanism metrics are stated in the description of each metric below.

This reliability mechanism establishes eight performance metrics:

- (a) threshold standards, consisting of system-wide performance targets;
- (b) a major outage metric;
- (c) a Remote Monitoring System metric;
- (d) a restoration performance metric;
- (e) a program standard for repairs to damaged poles;
- (f) a program standard for the removal of temporary shunts;
- (g) a program standard for the repair of "no current" street lights, and traffic signals; and
- (h) a program standard for the replacement of over duty circuit breakers.

All revenue adjustments related to this reliability mechanism will come from shareholder funds and will be deferred for the benefit of ratepayers.

## Summary of Mechanism

	Requirement for Revenue Adjustment	Revenue Adjustment Exposure (millions)
<b>Threshold Standards</b>		
Network Outage Duration	Con Ed Performance > 4.90	\$5.0
CAIDI <sup>1</sup> (radial)	Con Ed Performance > 1.97	\$5.0
Network Outages per 1000 customers	Con Ed Performance > 2.50	\$4.0
Summer Open Automatics (network)	Con Ed Performance > 510	\$1.0
SAIFI <sup>2</sup> (radial)	Con Ed Performance > 0.470	\$5.0
<b>Major Outages</b>		
Network	The interruption of service to 15 percent or more of the customers in any network for a period of three hours or more.	\$5.0 to \$15.0/event
Radial	One event that results in the sustained interruption of service to 70,000 customers for three hours or more.	\$10.0/event
Maximum Exposure		\$30.0
<b>Remote Monitoring System Reporting</b>		
Network	Failure by the Company to achieve 90 percent reporting rate for the Remote Monitoring System in each network during the last month of each quarter.	\$10.0/network

<sup>1</sup> CAIDI – Customer Average Interruption Duration Index. The average interruption duration time (customers-hours interrupted) for those customers that experience an interruption during the year.

<sup>2</sup> SAIFI – System Average Interruption Frequency Index. It is the average number of times that a customer is interrupted per 1,000 customers served during the year.

	Maximum Exposure		\$50.0																
Restoration																			
	Radial	Restoration of service that does not meet the following target. <div><table><tr><th colspan="2">Overhead Events</th></tr><tr><th>Emergency Level</th><th>Restoration Targets</th></tr><tr><td>1-Upgraded</td><td>1 Day</td></tr><tr><td>2-Serious</td><td>2 Days</td></tr><tr><td>3A-Serious</td><td>3 Days</td></tr><tr><td>3B-Full Scale (Tropical storm)</td><td>4 Days</td></tr><tr><td>3B-Full Scale (Hurricane Category 1-2)</td><td>7 Days</td></tr><tr><td>3B-Full Scale (Hurricane Category 3-5)</td><td>≤ 3 weeks</td></tr></table></div>	Overhead Events		Emergency Level	Restoration Targets	1-Upgraded	1 Day	2-Serious	2 Days	3A-Serious	3 Days	3B-Full Scale (Tropical storm)	4 Days	3B-Full Scale (Hurricane Category 1-2)	7 Days	3B-Full Scale (Hurricane Category 3-5)	≤ 3 weeks	\$0.0 (trial basis)
Overhead Events																			
Emergency Level	Restoration Targets																		
1-Upgraded	1 Day																		
2-Serious	2 Days																		
3A-Serious	3 Days																		
3B-Full Scale (Tropical storm)	4 Days																		
3B-Full Scale (Hurricane Category 1-2)	7 Days																		
3B-Full Scale (Hurricane Category 3-5)	≤ 3 weeks																		
Program Standards																			
	Pole Repair																		
		For all "Damaged Poles" and "Double Damaged Poles" poles that come into existence on or after 1/1/10, repairs not made within 30 days from the date the Company became aware of the "Damaged Pole" or "Double Damaged Pole" for at least 90% of these new "Damaged Poles" and "Double Damaged Poles".	\$3.0																
	Shunt Removal																		
		For all shunts that come into existence on or after 1/1/10, permanent repairs not made for at least 90% of these new cases within 90 days during the winter months, which are defined for purposes of this metric as January, February, March, April, November, and December, and at least 90% of these cases within 60	Winter: \$1.5																
			Summer: \$1.5																

		days during the remaining six months, May through October that is defined as the summer months.	
No Current Street Lights and Traffic Signals			
		For all no currents that come into existence on or after 1/1/10, permanent repairs not made for at least 90% of these new cases within 90 days during the winter months, which are defined for purposes of this metric as January, February, March, April, November, and December, and at least 80% of these new cases within 45 days during the remaining six months, May through October that is defined as the summer months.	Winter: \$1.5
			Summer: \$1.5
Over-Duty Circuit Breakers			
	Per Breaker	If Con Edison does not replace at least 60 over-duty circuit breakers during the calendar year.	\$0.1
	Maximum Exposure		\$3.0
Total Revenue Adjustment Exposure: \$112			

### Exclusions

The following exclusions will be applicable to operating performance under this reliability mechanism.

- (a) Any outages resulting from a major storm, as defined in 16 NYCRR Part 97 (for at least 10% of the customers interrupted within an operating area or customers out of service for at least 24 hours), except as otherwise noted; this includes secondary network interruptions that occur in an operating area during winter snow/ice events that meet the 16 NYCRR Part 97 definition (10%/24 hour rule).

- (b) Heat-related outages are not a major storm.  
However, the Company may petition the Commission for an exemption for an outage if the Company can prove that such outage, whether heat-related or not, was beyond the Company's control, taking into account all facts and circumstances.
- (c) Any incident resulting from a strike or a catastrophic event beyond the control of the Company, including but not limited to plane crash, water main break, or natural disasters (e.g., hurricanes, floods, earthquakes).
- (d) Any incident where problems beyond the Company's control involving generation or the bulk transmission system is the key factor in the outage, including, but not limited to, NYISO mandated load shedding. This criterion is not intended to exclude incidents that occur as a result of unsatisfactory performance by the Company.

### Reporting

The Company will prepare an annual report(s) on its performance under this reliability mechanism. The annual report(s) will be filed by March 31st of each Rate Year with the Director of the Office of Electric, Gas, and

Water. Copies of the annual report(s) will be simultaneously provided to the New York City Department of Transportation ("NYCDOT") Deputy Commissioner of Traffic Operations, the NYCDOT Director of Street Lighting, the Westchester County First Deputy Commissioner of Public Works, and the President of the Utility Workers Union of America, Local 1-2.

The reports will state the:

- (a) company's annual system-wide performance under the Threshold Standards and identify whether a revenue adjustment is applicable and, if so, the amount of the revenue adjustment;
- (b) company's performance under the Major Outage metric and identify whether a revenue adjustment is applicable and, if so, the amount of the revenue adjustment;
- (c) company's performance under the Remote Monitoring System metric and identify whether a revenue adjustment is applicable and, if so, the amount of the revenue adjustment;
- (d) company's performance under the Restoration metric;
- (e) company's performance under the Program Standards applicable during the period and identify whether a revenue adjustment is applicable and, if so, the amount of the revenue adjustment; and
- (f) basis and provide adequate support for all exclusions.



Within 45 days of any event that meets the Major Outage criteria, the Company will file an interim report on the event, containing, among other things, information pertinent to determining whether a revenue adjustment for the event is applicable. Any requests for exclusion must be made in the interim report.

### Threshold Standards

In Cases 90-E-1119, 95-E-0165, 96-E-0979, and 02-E-1240, the Commission adopted standards establishing minimum performance for frequency and duration of service interruption for network and radial systems. Under these standards, the frequency of service interruptions is measured by the System Average Interruption Frequency Index ("SAIFI"), and the duration of service interruptions is measured by the Customer Average Interruption Duration Index ("CAIDI").

The System-Wide Performance Targets used for purposes of the Threshold Standards metric are as set forth below. The measurement periods for the Threshold Standards are successive 12-month periods ending December 31 of each year. During each annual measurement period, Con Edison's year-end SAIFI, or frequency, index for its entire radial system will be measured against the respective SAIFI System-Wide Performance Targets. During each annual measurement period, Con Edison's year-end weighted average CAIDI, or duration, index for its entire network system and its entire radial system will be measured against the respective CAIDI System-Wide Performance Targets.

The network duration target will be a temporary replacement for network CAIDI. The measurement period for network duration are successive 12-month periods ending December 31 of each year. During each annual measurement period, Con Edison's year-end duration for its entire network system will be measured against the respective duration target.

The network interruption and summer feeder open-auto targets will be a temporary replacement for network frequency. The measurement period for network interruption are successive 12-month periods ending December 31 of each year. During each annual measurement period, Con Edison's year-end number of interruptions for its entire network system will be measured against the respective interruption target. The measurement period for summer feeder open-auto includes the months of June, July, and August of each year. During each annual measurement period, Con Edison's summer-end feeder open-auto rate for its network system will be measured against the respective feeder open-auto target.

The Company's annual performance in maintaining reliability must meet or be better than the SAIFI and CAIDI System-Wide Performance, Network Duration, Network Interruption, and Summer Feeder Open-Auto Targets. A total of \$20 million is at risk for performance not meeting those targets.

**(a) Radial - CAIDI**

A total of \$5 million per year is at risk for customer interruption duration performance, as follows:

	Threshold Target (hours)	Revenue Adjustment (millions)
Radial duration	1.97	\$5

**(b) Network Outage Duration**

A total of \$5 million per year is at risk for network outage duration performance, as follows:

	Threshold Target (hours)	Revenue Adjustment (millions)
Network outage duration	4.90	\$5

**(c) Radial - SAIFI**

A total of \$5 million per year is at risk for customer interruption frequency performance, as follows:

	Threshold Target	Revenue Adjustment (millions)
Radial frequency	0.470	\$ 5

**(c) Network Outage**

A total of \$4 million per year is at risk for network outage performance, as follows:

	Threshold Target	Revenue Adjustment (millions)
Network Outages per 1000 customers	2.5	\$ 4

**(d) Summer Feeder Open-Auto Target**

A total of \$1 million per year is at risk for customer interruption frequency performance, as follows:

	Threshold Target	Revenue Adjustment (millions)
Summer Network Feeder Open-Auto	510	\$ 1

Major Outages

For purposes of this metric, a "major outage" event in a network system is defined as the interruption of service to 15 percent or more of the customers in any network for a

period of three hours or more. If the Company creates any new second contingency networks during the Electric Rate Plan, those networks will be covered by this metric. A radial system interruption event is defined as one event that results in the sustained interruption of service to 70,000 customers for three hours or more.

Any single occurrence that results in multiple network or radial system interruption events will result in only one revenue adjustment being assessed. An example is the loss of an area substation that shuts down two or more networks or a combination of network and radial system load.

This single occurrence exception will not apply if each Major Outage that takes place during any single occurrence results from separate and distinct causes. For example, if there are two network shutdowns during a single heat wave, and each network shutdown results from failures on that particular network that were not beyond the Company's control, the single occurrence exception would not apply and two network shutdowns will be considered to have occurred.

In addition, Con Edison shall not be subject to a revenue adjustment when the 15 percent threshold is met due to an outage that is confined to one building within a network. The Company can petition the Commission for exemption on a case-by-case basis, of outages affecting more than one building that are, nevertheless, small scale and do not warrant classification as a Major Outage.

To avoid multiple revenue adjustments for the same operating performance problem or occurrence, interruptions and customer hours of interruption associated with Major Outage revenue adjustments will be excluded from the appropriate year-end system-wide performance calculations, except as noted.

The Company will be subject to a revenue adjustment based on the outage duration. Con Edison will be subject to a maximum revenue adjustment of \$30 million. After the \$30 million cap has been reached, the effect of the major outage will be included in the system-wide performance measurements. The revenue adjustment structure is as follows:

**(a) Network Major Outage**

Network Outage Duration	15% or More of Network Customers
3 to 6 hours	\$5 million
> 6 hours to 12 hours	\$10 million
> 12 hours	\$15 million

**(b) Radial Major Outage**

A revenue adjustment of \$10 million is at risk for each radial major outage.

Remote Monitoring System

The Company has operated its Remote Monitoring System (RMS) below a 95% reporting rate for individual network

transformers in many of its networks. This performance standard is to ensure that the company is held liable.

For each network, except upon the occurrence of extraordinary system conditions, the Company will have 90% of its Remote Monitoring System units reporting properly in each network. Failure by the Company to achieve the target level for the Remote Monitoring System will result in a revenue adjustment of \$10 million per network per measurement interval with an annual cap of \$50 million.

Where the Company can demonstrate that extraordinary circumstances prevented it from achieving the target level, those circumstances will be factored in measuring the Company's compliance with the above requirement. The determination of whether extraordinary circumstances exist will be made on a case-by-case basis and will be based on the particular facts and circumstances presented.

The Company will be required to submit on a quarterly basis, the RMS reporting rate per network that commenced June 30, 2008. This mechanism is an interim standard, with the intent of adopting a target level of 95% for each network when such a standard is found to be reasonable.

### Restoration

In order to advance the process of developing an optimal restoration mechanism, without placing an undue burden on the Company, this metric will be on a trial basis with the proviso that there will be no negative rate adjustment for failure to meet the standard. Under this metric, the Company is liable for restoration times for all

outage events affecting its radial systems. The restoration targets are measured from the end of the storm.

In the Company's past emergency plan, Upgraded to Full Scale emergency events had an estimated restoration time for overhead events. This format has been used to set the restoration targets.

<b>Overhead Events</b>	
<b>Emergency Level</b>	<b>Restoration Targets</b>
1-Upgraded	1 Day
2-Serious	2 Days
3A-Serious	3 Days
3B-Full Scale (Tropical storm)	4 Days
3B-Full Scale (Hurricane Category 1-2)	7 Days
3B-Full Scale (Hurricane Category 3-5)	≤ 3 weeks

The Company shall file a compliance report with the Commission within 30 days following any restoration period for which the restoration mechanism applies, detailing its performance relative to the restoration mechanism, and noting any exceptions that would apply.

### Program Standards

#### **a. Pole Repair**

##### *i) Definitions*

1. "Damaged Poles" are poles damaged by storm conditions, vehicle contact, or other



circumstances, and that support existing equipment with temporary external bracing while not posing an immediate threat to the safety of the public or the distribution system.

2. "Double Damaged Poles" are poles damaged by storm conditions, vehicle contact, or other circumstances, and that are not capable of supporting existing equipment. In each of these cases, a new pole is installed next to the damaged pole and is braced to the damaged pole to safely support the damaged pole until the Company transfers equipment to the new pole.

3. "Repair," for purposes of this program standard, means transferring Company facilities to a new pole, and removing or "topping" the "damaged" pole.

*ii) Performance Requirements*

The Company will strive to repair all "Damaged Poles" and "Double Damaged Poles" in a timely manner. For all "Damaged Poles" and "Double Damaged Poles" that are in existence as of December 31, 2009, Con Edison will make permanent repairs and is subject to the revenue adjustment as required by the prior reliability mechanism. For all "Damaged Poles" and "Double Damaged Poles" that come into existence on or after January 1, 2010, Con Edison will make

repairs within 30 days from the date the Company became aware of the "Damaged Pole" or "Double Damaged Pole" for at least 90% of these new "Damaged Poles" and "Double Damaged Poles". In the event the Company does not achieve the 90% within 30 days threshold for "Damaged Poles" and "Double Damaged Poles" that come into existence during of the 2010 calendar year, it will incur a revenue adjustment of \$3 million for such year.

Con Edison will make repairs to all "Damaged Poles" and "Double Damaged Poles" that come into existence on or after January 1, 2010 within six months of the dates the poles are damaged.

*iii) Storm Exclusion*

In an effort to permit the Company to utilize labor resources most effectively and facilitate the restoration of customers, the Company may utilize up to 60 days to make repairs on 90% of poles that become "Damaged Poles" and "Double Damaged Poles" during qualifying major storm events as defined in 16 NYCRR Part 97. Where the Company does not immediately make repairs on its poles, the Company shall ensure that each "Damaged Pole" and "Double Damaged Pole" is safe for public and vehicle access.

*iv) Extraordinary Circumstances Exception*

Where the Company can demonstrate that extraordinary circumstances prevent a repair within the 30-day, 60-day, or six month time frames, as appropriate, that non-repair

will not be considered in measuring the Company's compliance with these requirements. The determination of whether extraordinary circumstances exist will be made on a case-by-case basis and will be based on the particular facts and circumstances presented.

*v) Reporting*

The Company's annual report will: (i) report on "Damaged Poles" and "Double Damaged Poles" that come into existence from January 1 through December 31 of the prior year; (ii) provide the status of "Damaged Poles" and "Double Damaged Poles" that existed before January 1 of the prior year; (iii) identify the "Damaged Poles" and "Double Damaged Poles" that were not repaired; and (iv) describe the extraordinary circumstances, if any, that prevented the repairs from being made. For (i) and (ii), the report(s) will include, at a minimum, a listing of the damaged pole locations, the date the Company became aware of the problem at that location, and the date of the repair.

**b. Shunt Removal**

It is not the purpose of this metric to require Con Edison to eliminate the use of temporary shunts; to the contrary, temporary shunts may be needed to restore electric service pending permanent repairs. In cases where temporary shunts are used, the Company will strive to remove them and make permanent repairs in a timely manner.

It is Con Edison's responsibility to identify all shunts installed by the Company.

*i) Definitions*

1. "Temporary Shunts" are cables installed by the Company to temporarily maintain service continuity to a customer pending the permanent repair of a Company facility.
2. "Publicly Accessible Shunts" include street/sidewalk shunts and overhead to underground service shunts, including shunts to street lights, installed by the Company. Shunts installed within individual customer facilities, typically behind the customer's meter (called a "meter pan bridge") or inside the customer's end line box (called a "service bridge"), that are not accessible to the general public are not covered by this metric.
3. "Permanent Repair" means that the condition necessitating the shunt has been fully remediated and service has been restored by the Company to the customer's facility before the shunt is removed.

*ii) Performance Requirements*

The Company will not remove any shunt that will have the effect of leaving a streetlight or traffic signal without power, except for exigent safety reasons,<sup>3</sup> until the condition giving rise to the need for the shunt has been completely repaired. Further, it is Con Edison's responsibility to repair the conditions on its system that required the use of the temporary shunts. For all shunts that are in existence as of December 31, 2009, Con Edison will make permanent repairs as required by the prior reliability mechanism. For all shunts that come into existence on or after January 1, 2010, Con Edison will make permanent repairs for at least 90% of these new cases within 90 days during the winter months, which are defined for purposes of this metric as January, February, March, April, November, and December, and at least 90% of these cases within 60 days during the remaining six months, May through October. Failure to reach the 90% threshold will result in the follow revenue adjustments:

*Adjustment Level*

Winter Months \$1,500,000

May - October \$1,500,000

Con Edison will make permanent repairs in all cases in which temporary shunts are installed on or after January 1, 2010 within six months of the dates the shunts are installed.

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<sup>3</sup> In such situations, and as appropriate, the Company either will replace its temporary shunt or effect the permanent repair.

The 60-day, 90-day and six month periods for making permanent repairs may be tolled in the event that, and for the period corresponding to, a third party (such as the municipal customer) must perform service at the site prior to, and as a precondition to, Con Edison's completion of work. The Company will be responsible for providing notice to the third party that its work is a precondition to the Company's work and for demonstrating the applicability of the tolling period.

*iii) Extraordinary Circumstances Exception*

Where the Company can demonstrate that extraordinary circumstances prevented a shunt repair within the 60-day, 90-day, or six month time frames, as appropriate, that non-repair will not be considered in measuring the Company's compliance with the above requirements. The determination of whether extraordinary circumstances exist will be made on a case-by-case basis and will be based on the particular facts and circumstances presented (e.g., documentation demonstrating delays of more than 30 days in receiving street-opening permits from NYCDOT).

*iv) Reporting*

The Company's annual report will: (i) report on shunts installed from January 1 through December 31 of the prior year; (ii) provide the status of shunts installed before January 1 of the prior year; (iii) identify the shunt locations that were not permanently repaired within the 60-

day, 90-day, and six month periods described above; and (iv) describe the extraordinary circumstances, if any, that prevented the permanent repair of the shunts. For (i) and (ii), the report(s) will include, at a minimum, a listing of the shunt locations, the date the Company became aware of the problem at each such location, the date the shunt was installed, the date of the permanent repair, and the date the shunt was removed.

### **c. No Current Street Lights and Traffic Signals**

#### *i) Definitions*

1. A "no current" is a location where Con Edison's electric service supplying power to municipal street lights or traffic signals is not working due to a failure of Con Edison's service to the customer facility point, and the date that a "no current" comes into existence is the date of the "stop tag" notifying Con Edison of the "no current" condition.
2. "Permanent repair" means that service has been permanently restored by the Company to the customer's facility point.

#### *ii) Performance Requirements*

The Company will strive to make permanent repairs to all no currents (including both street lights and traffic signals) in a timely manner.

For all no currents that are in existence as of December 31, 2009, Con Edison will make permanent repairs as required by the prior reliability mechanism. An exception will be made in situations in which the Company can demonstrate that it could not complete its repair due to work required to be undertaken by third parties. For all no currents that come into existence on or after January 1, 2010, Con Edison will make permanent repairs for at least 90% of these new cases within 90 days during the winter months, which are defined for purposes of this metric as January, February, March, April, November, and December, and at least 80% of these new cases within 45 days during the remaining six months, May through October. The Company's maximum exposure each year under this metric will be \$3 million, as follows:

*Adjustment Level*

Winter Months \$1,500,000

May - October \$1,500,000

The Company will make permanent repairs to all no currents that come into existence on or after January 1, 2010 within six months of the dates they come into existence.

The 45-day, 90-day, and six month periods for making permanent repairs may be tolled in the event that, and for the period corresponding to, a third party (such as the



municipal customer) must perform service at the site prior to, and as a precondition to, Con Edison's completion of work. The Company will be responsible for providing notice to the third party that its work is a precondition to the Company's work and for demonstrating the applicability of the tolling period.

*iii) Extraordinary Circumstances Exception*

Where the Company can demonstrate that extraordinary circumstances prevented a "no current" from being permanently repaired within the 45-day, 90-day, or six month time frames, as appropriate, that non-repair will not be considered in measuring the Company's compliance with the above requirements. The determination of whether extraordinary circumstances exist will be made on a case-by-case basis and will be based on the particular facts and circumstances presented (e.g., documentation demonstrating delays of more than 30 days in receiving street opening permits from NYCDOT).

*iv) Reporting*

The Company's annual report will: (i) report on "no currents" that came into existence from January 1 through December 31 of the prior year; (ii) provide the status of "no currents" that existed before January 1 of the prior year; (iii) identify the "no current" locations that were not repaired within the 45-day, 90-day, and six month periods; and (iv) describe the extraordinary circumstances,

if any, that prevented the permanent repair of the "no currents." For (i) and (ii), the report(s) will include, at a minimum, a listing of the "no current" locations, the date the Company became aware of the problem at each location, and the date of the permanent repair at each location.

#### **d. Over-Duty Circuit Breakers**

Many of the Company's substations' circuit breakers are at or over their fault current capacity. This situation has precluded the parallel operation of specific types of distributed generation (DG) in certain areas of the system, and more specifically, has restricted the installation of primary grid-parallel synchronous on-site generators in areas served by these substations since these types of generators produce additional fault current, thus further straining the substations' circuit breakers. Elimination of over-duty circuit breakers and taking other reasonable steps necessary to enable the installation of synchronous generators is a priority because of the significant interest in the use of DG to address a variety of concerns.

##### *i) Performance Requirements*

For 13 kV and 27 kV over-duty circuit breakers, except upon the occurrence of extraordinary system conditions, the Company will replace a target of at least 60 over-duty circuit breakers during the calendar year (the "target level"). There will be revenue adjustment applicable for

the rate year. Failure by the Company to achieve the target levels for over-duty circuit breaker replacements will result in a \$100,000 per breaker revenue adjustment with a maximum revenue adjustment of \$3 million.

*ii) Selection and Prioritization of Replacements*

The Company will, to the extent practicable, seek to include over-duty circuit breaker replacements in situations where maximum fault currents are between 100 and 103% of the breaker rating. The Company will continue to have at least one meeting of all interested DG parties annually to review implementation of the effort and to address prioritization of where to replace over-duty circuit breakers. This annual meeting should be done in conjunction with efforts to improve communication with the DG community.

The prioritization process will consider such factors as circuit breaker duty ratings, predicted load growth, status of proposed/pending DG, combined heat and power, other similar projects, areas with critical human needs loads, and other reasonable criteria that the parties may identify.

*iii) Extraordinary Circumstances Exception*

Where the Company can demonstrate that extraordinary circumstances prevented it from achieving the target levels for the rate year, those circumstances will be factored in measuring the Company's compliance with the above

requirements. The determination of whether extraordinary circumstances exist will be made on a case-by-case basis and will be based on the particular facts and circumstances presented.

*iv) Reporting*

The Company's annual report will: (i) report on the number of over-duty breakers in existence from January 1 through December 31 of the prior year; (ii) provide the status the Company's efforts on replacing the over-duty breakers; (iii) identify all over-duty breakers that were replaced over the course of the prior year; and (iv) describe the extraordinary circumstances, if any, that prevented the Company from achieving the target level for replacements.

*v) Technology Research and Development and  
Demonstration Projects*

The Company will continue collaborative efforts and, where effective, acceleration of research activities on technologies that reduces the impact of fault current from synchronous generators. In cooperation with NYSERDA, the United States Department of Energy, and others, as appropriate, the Company should pursue research and/or demonstration projects using new fault-mitigation technologies during the Electric Rate Plan. This should be done based on approved funds under the rate case.

Nicola Jones

Exhibit\_\_\_\_ (NJ-3)

Con Edison's Historical CAIDI Performance

<u>Chart</u>	<u>Exhibit Pages</u>
Comparison of Service Reliability Indices	1
NYS Major Utilities' CAIDI Performance	2
Con Edison's Radial CAIDI Performance	3
Con Edison's Radial CAIDI Performance (Excluding 1999 and 2006)	4
NYS Major Utilities' SAIFI Performance	5
Con Edison's Radial SAIFI Performance	6
Con Edison's Radial SAIFI Performance (Excluding 2005 and 2006)	7

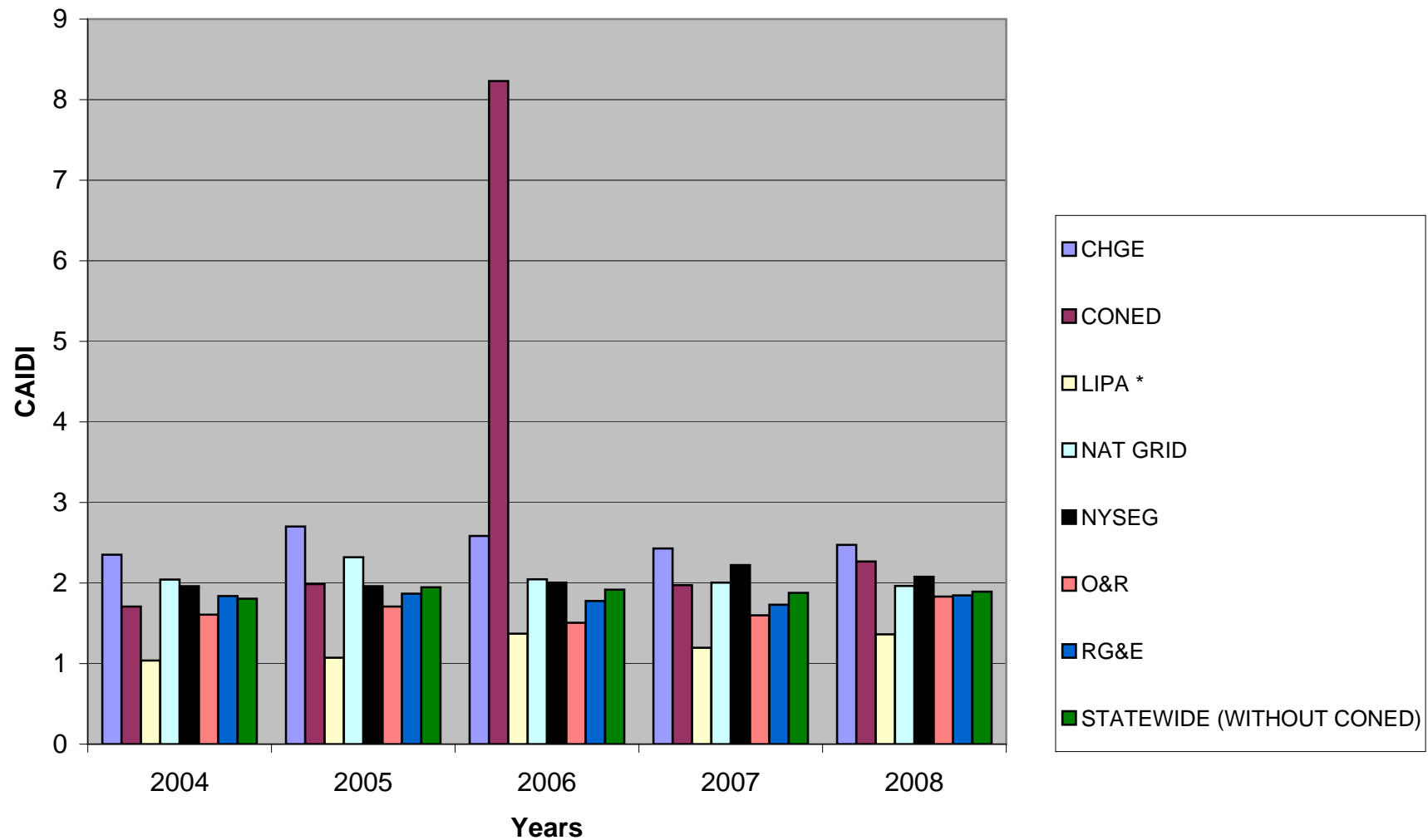
**COMPARISON OF SERVICE RELIABILITY INDICES  
(EXCLUDING MAJOR STORMS)**

	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>5 YR AVG</b>
<b>CHGE</b>						
FREQUENCY	1.36	1.44	1.59	1.42	1.27	1.42
DURATION	2.35	2.70	2.58	2.43	2.47	2.51
<b>CONED</b>						
FREQUENCY	0.11	0.14	0.16	0.16	0.13	0.14
DURATION	1.71	1.99	8.23	1.97	2.27	3.23
<b>LIPA *</b>						
FREQUENCY	0.83	0.85	0.75	0.90	0.77	0.82
DURATION	1.04	1.07	1.37	1.20	1.36	1.21
<b>NAT GRID</b>						
FREQUENCY	1.02	0.98	1.01	0.96	0.75	0.94
DURATION	2.04	2.32	2.05	2.01	1.96	2.08
<b>NYSEG</b>						
FREQUENCY	1.13	1.12	1.12	1.20	1.11	1.13
DURATION	1.96	1.96	2.01	2.22	2.08	2.05
<b>O&amp;R</b>						
FREQUENCY	1.30	1.36	1.23	1.03	1.19	1.22
DURATION	1.61	1.71	1.51	1.60	1.83	1.65
<b>RG&amp;E</b>						
FREQUENCY	0.86	0.79	0.79	0.83	0.78	0.81
DURATION	1.84	1.87	1.78	1.73	1.85	1.81
<b>STATEWIDE (WITHOUT CONED)</b>						
FREQUENCY	1.02	1.01	1.00	1.01	0.88	0.98
DURATION	1.81	1.95	1.92	1.88	1.89	1.89
<b>STATEWIDE (WITH CONED)</b>						
FREQUENCY	0.64	0.65	0.65	0.65	0.56	0.63
DURATION	1.80	1.95	2.57	1.89	1.93	2.03

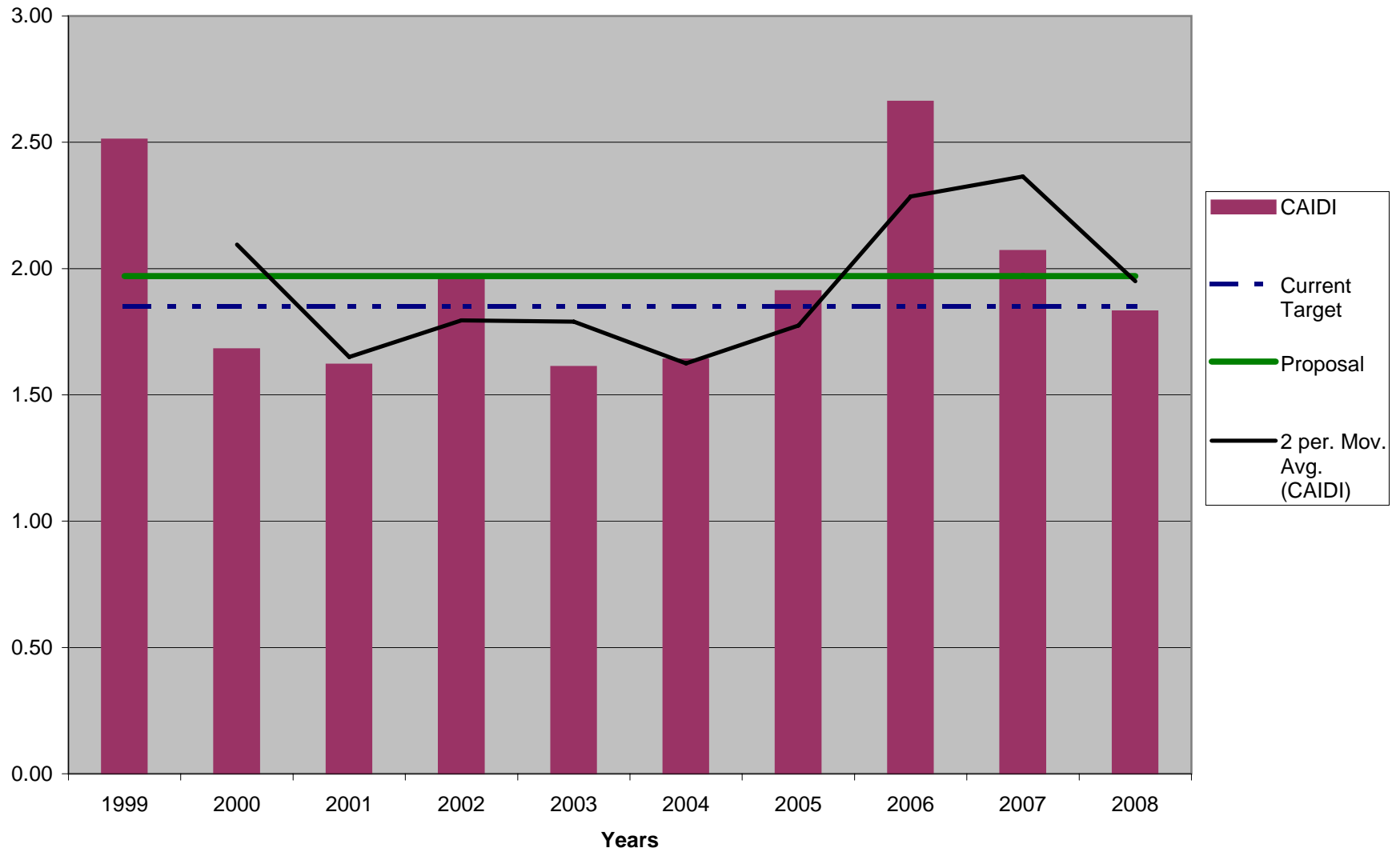
\* LIPA is not regulated by the NYS PSC.

\*\* For those indices that use Customers Served, Customers Served is the December value from the previous year.

## New York State Major Utilities' CAIDI Performance

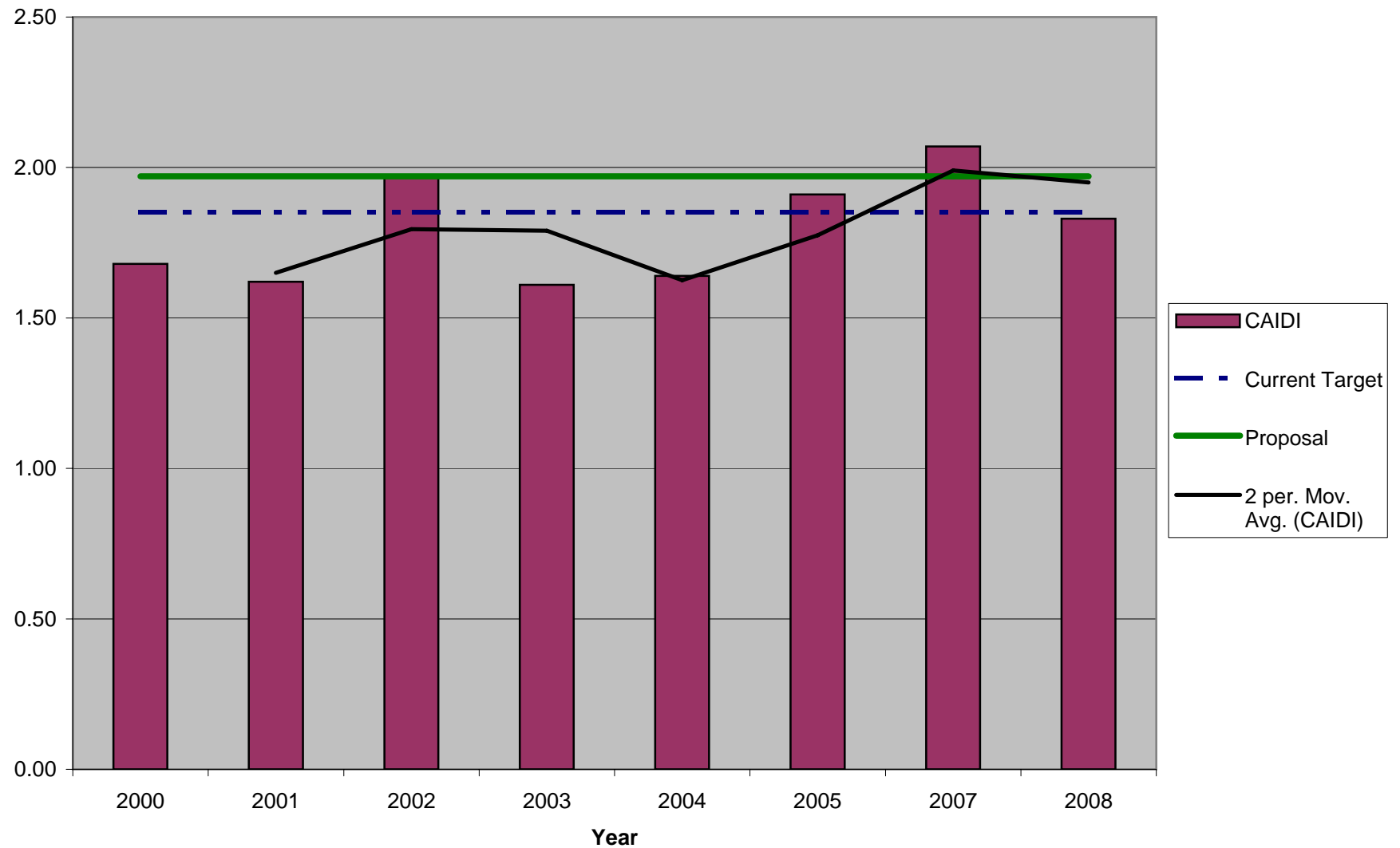


### Con Edison's Radial CAIDI Performance

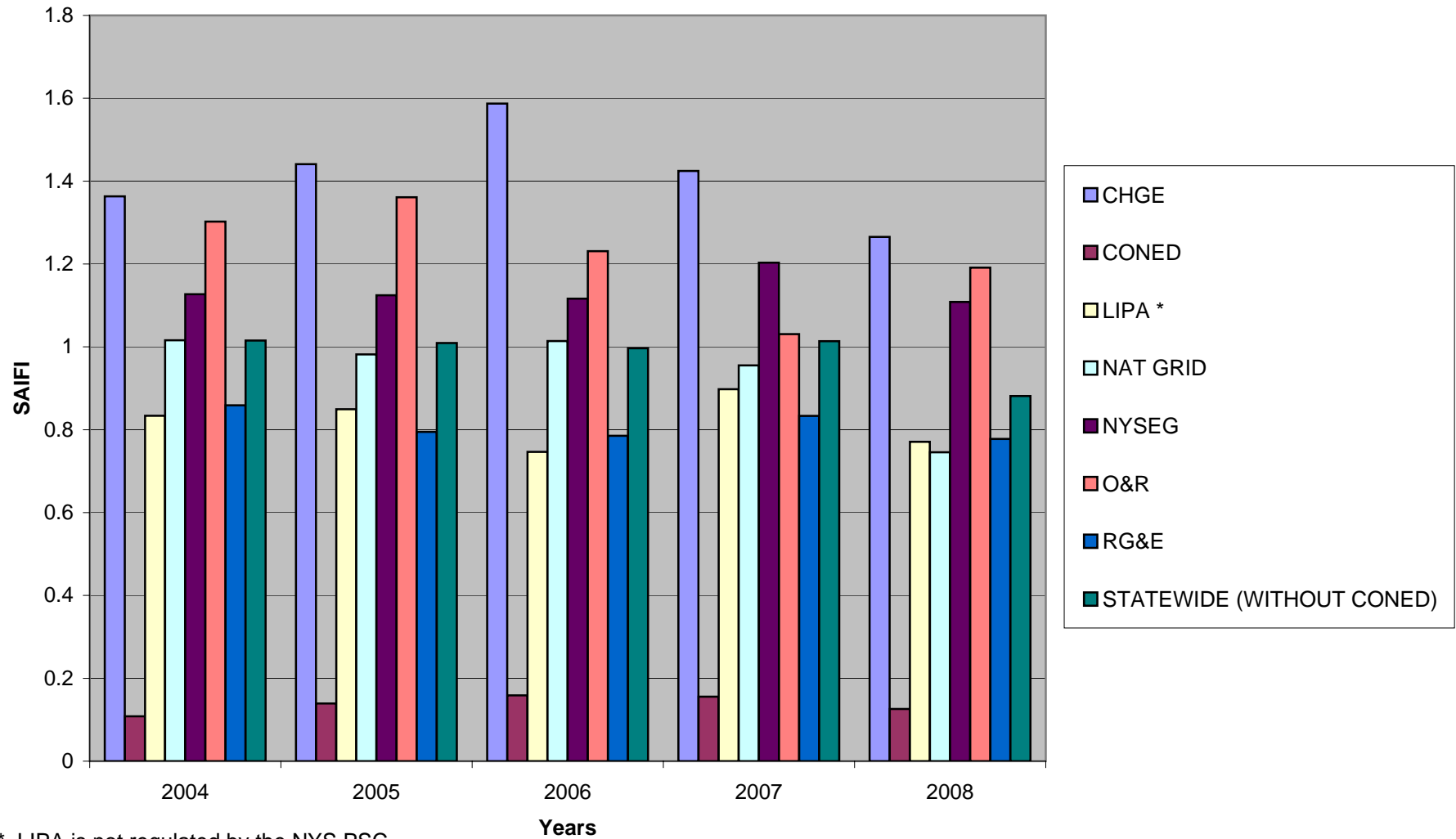




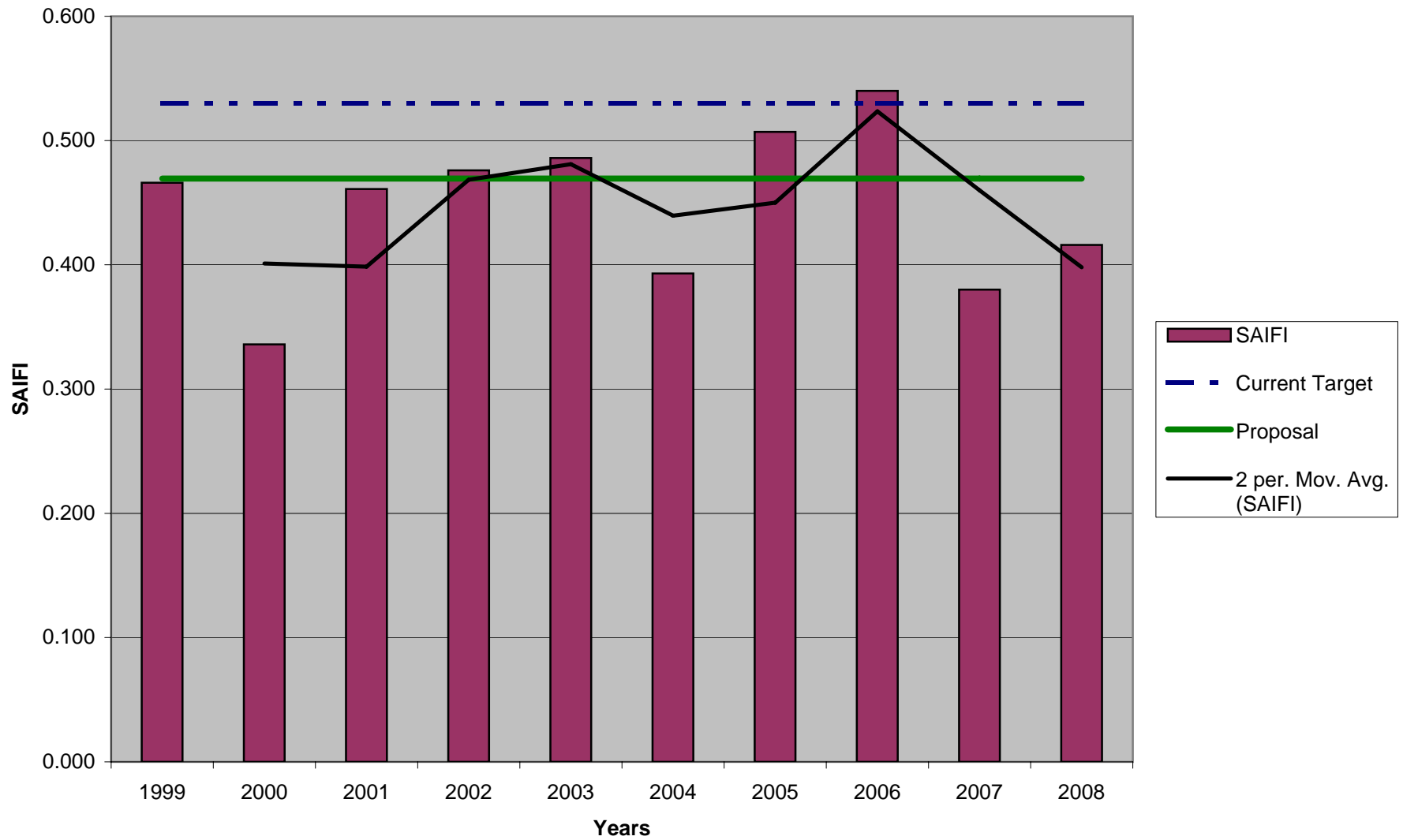
### Con Edison's Radial CAIDI Performance [Excluding 1999 and 2006]



## New York State Major Utilities' SAIFI Performance



### Con Edison's Radial SAIFI Performance



### Con Edison's Radial SAIFI Performance [Excluding 2005 and 2006]

