

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Consolidated Edison Company of New York, Inc.
Case 08-E-0539
September 2008

Prepared Testimony of:

Reliability Performance Mechanism
Panel

Kin Eng
Utility Analyst 3
Office of Electric, Gas, and Water

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Office of Electric, Gas, and Water

New York State
Department of Public Service
90 Church St
New York, New York 10007

1 Q. Please state your name, employer, and business
2 address.

3 A. Kin Eng and Nicola Jones. We are employed by
4 the New York State Department of Public Service
5 (Department). Our business address is 90 Church
6 Street, New York, New York 10007.

7 Q Mr. Eng, what is your position at the
8 Department?

9 A. I am a Utility Analyst 3 assigned to the
10 Electric Distribution Systems Section in the
11 Office of Electric, Gas, and Water.

12 Q. Please describe your educational background.

13 A. I graduated from New York Technical College with
14 an Associate in Applied Science Degree in
15 Electrical Technology in 1986.

16 Q. Please describe your responsibilities with the
17 Department and professional experience.

18 A. I joined the Department in 1981. My
19 responsibilities include: monitoring utility
20 operations to determine if facilities are
21 operated and maintained in accordance with
22 appropriate codes and safe operating practices;
23 ensuring that utilities are adequately prepared
24 to respond to emergencies by reviewing

1 utilities' electric emergency plans and
2 attending annual emergency drills; and
3 monitoring utility operation and maintenance
4 activities to ensure acceptable electric service
5 reliability. I participated in many
6 investigations concerning electric utility
7 service disruptions, including the Westchester
8 Outages in January 2006, the Long Island City
9 Network outages in 2006, the Jodie Lane
10 fatality, the August 2003 Blackout, the
11 September 11th terrorist attack in 2001, and the
12 Washington Heights outages in 1999.

13 Q. Have you previously testified before the
14 Commission?

15 A. Yes. I testified in Case 04-E-0572 regarding
16 Consolidated Edison Company of New York, Inc.'s
17 (Con Edison or the Company) infrastructure
18 investment. I also testified in Case 07-E-0523,
19 Consolidated Edison Company of New York, Inc. -
20 Rates regarding Con Edison's infrastructure
21 investment, reliability performance mechanism,
22 and emergency management.

23 Q. Ms. Jones, what is your position at the
24 Department?

- 1 A. I am a Utility Engineer 2 assigned to the
2 Electric Distribution Systems Section in the
3 Office of Electric, Gas, and Water.
- 4 Q. Please describe your educational background and
5 professional experience.
- 6 A. I graduated from Rensselaer Polytechnic
7 Institute with a Bachelor of Science Degree in
8 Civil Engineering and a Bachelor of Science
9 Degree in Management in 2003. I joined the
10 Department in 2005. My responsibilities
11 include: monitoring electric utility safety and
12 reliability; investigating the causes and
13 response level of utilities after emergency
14 events; monitoring electric distribution
15 projects; and monitoring utility compliance with
16 electrical codes and with electric service and
17 safety standards.
- 18 Q. Ms. Jones, have you previously testified before
19 the Commission?
- 20 A. Yes. I testified in Case 07-E-0523,
21 Consolidated Edison Company of New York, Inc. -
22 Rates regarding Con Edison's infrastructure
23 investment and reliability performance
24 mechanism.

1 Q. What is the purpose of your testimony?

2 A. To discuss the reliability performance mechanism
3 presented in the pre-filed testimony of Con
4 Edison's Infrastructure Investment Panel.

5 Q. In your testimony, will you refer to, or
6 otherwise rely upon, any information produced
7 during the discovery phase of this proceeding?

8 A. Yes, we will refer to, and have relied upon,
9 several responses to Staff Information Requests
10 (IR).

11 Q. What is the Company's position on the
12 reliability performance mechanism (RPM)?

13 A. Con Edison requested that a separate proceeding
14 be commenced by the Commission to address
15 certain aspects of the RPM. This request is
16 based on the Company's position that the
17 frequency and duration reliability target levels
18 currently in place should be adjusted to take
19 into account recent upgrades to its outage
20 management system. The Company states that it
21 is subject to revenue adjustments as a result of
22 its efforts to improve the accuracy of its
23 outage numbers. In addition, the Company finds
24 that due to its high level of system

1 reliability, Con Edison is exposed to revenue
2 adjustments based on low target levels.

3 Q. Did the Company indicate its position on other
4 aspects of the current RPM such as the major
5 outage metric?

6 A. The Company stated no objections to the other
7 components of the RPM that includes the major
8 outage metric, the remote monitoring system
9 metric, the restoration metric, and the special
10 program standards.

11 Q. What does the Company propose?

12 A. In a continuation of Con Edison's proposal in
13 Case 07-E-0523, the Company recommends that new
14 targets for frequency and duration of
15 interruptions be set based on recent historical
16 data. It claims that frequency and duration
17 targets should take into consideration the
18 natural variability of equipment failures and
19 external events, such as weather, by setting
20 threshold levels two standard deviation above
21 and below the mean. Furthermore, the Company is
22 opposed to increased revenue adjustments that it
23 claims deplete Company resources which could
24 otherwise be available to address system needs.

1 Q. What is Staff's position regarding the RPM?

2 A. The Commission stated in Opinion No. 95-7,
3 Opinion and Order Adopting Principles to Guide
4 the Transition to Competition, issued June 7,
5 1995 ,Appendix C, page 1 of 2, Principal 6 that
6 it has a preference for performance-based
7 regulation wherever a monopoly remains. So long
8 as the Company's delivery service remains a
9 monopoly, there needs to be clearly defined
10 consequences for failing to provide good
11 customer service. RPMs provide earnings
12 consequences to such utilities, and
13 consequently, their shareholders, for the
14 quality of service provided to customers. Such
15 potential revenue consequences are separate and
16 unrelated to the funds used to address system
17 needs. Presently, RPMs that link earnings
18 directly to a utility's performance on specific
19 measures of electric service reliability are in
20 effect for all of the major electric utilities
21 except New York State Electric and Gas
22 Corporation. Furthermore, the Company's
23 performance has clearly improved after the
24 institution of the RPM. This is particularly

1 evident in the special projects section of the
2 RPM. Prior to the institution of the measures
3 addressing areas such as "no-light
4 streetlights", the Company failed to make the
5 necessary repairs in a timely manner.

6 Q. Does the Panel agree with the Company's
7 position?

8 A. No. We believe that the institution of a new
9 outage management system does not in and of
10 itself justify completely altering the existing
11 frequency and duration targets. It is our
12 position that the new Outage Management Systems
13 (OMS) overestimates the customer outage
14 information. The significant benefits of OMS
15 are that outage information is gathered,
16 organized, and analyzed faster and that these
17 systems identify possible reasons for the
18 outage. Based on the variables used to make
19 this assessment, an estimated area of impact is
20 determined, but one needs to keep in mind that
21 this is an estimate. The important component in
22 determining the final affected customer counts
23 includes the input from field personnel and the
24 follow-up of dispatchers and engineers. The

1 level of importance of this key human
2 intervention has not changed over the years and
3 is the critical path in determining the correct
4 customer counts and duration.

5 Q. Please continue.

6 A. Our intention is not to expose Con Edison, to
7 revenue adjustments, as a direct result of
8 improved data accuracy. Staff recognizes that
9 issues with the current outage data do exist but
10 we also recognize that the initiation of a new
11 OMS does not always cause outage statistics to
12 change, and where it does, it may not be the
13 only reason. The factual analysis required to
14 unequivocally prove the Company's position has
15 not been provided to Staff. Furthermore, the
16 Company has not provided in its testimony any
17 data to support its position.

18 Q. What is the panel's position regarding Con
19 Edison's statement that RPM targets are set too
20 low due to the Company's high reliability
21 rating?

22 A. As Staff has explained in previous rate cases,
23 the RPM targets are set at levels designed to
24 provide appropriate incentives so that there is

1 no degradation in service to customers. The
2 Company may request the opportunity to justify
3 the exclusion of events that it believes should
4 not impact its performance measurement since
5 they were not within its control. Performance
6 targets established in the past reflected the
7 Company's reliability data and should continue
8 to do so in the future. Opinion No. 95-7 states
9 the Commission's preference for performance-
10 based regulation wherever a monopoly remains.
11 Performance-based regulation cannot be
12 performance-based without taking into account
13 the Company's performance. If a company's
14 performance has deteriorated, the targets should
15 not be softened to reflect that poor historical
16 performance. To do so would defeat the purpose
17 of the RPM. Frequency and duration targets set
18 for other electric utilities are derived in the
19 same manner; by taking into account the
20 utility's reliability performance. Con Edison
21 should not receive special treatment.

22 Q. Does the Panel agree with the Company's proposal
23 regarding the use of recent historical data to
24 derive frequency and duration targets?

1 A. No. At this time, we do not believe that
2 setting the targets just to reflect recent
3 historical data, especially if this may
4 significantly increase the frequency targets for
5 networks. If there is merit to the Company's
6 statement that its new OMS results in increased
7 performance values as a result of improved data
8 accuracy, then the use of historical data would
9 not suffice since there is insufficient data
10 produced by the new OMS to set new target
11 values.

12 Q. What does the Panel recommend regarding
13 performance targets?

14 A. At this point, the data does not support a need
15 to change the performance targets for radial
16 frequency, radial duration, or network duration.
17 Regarding the network frequency target, Con
18 Edison's request to at least double the existing
19 target should be reviewed. However, the data
20 provided by the Company through IR DPS-585 is
21 not sufficient to complete an analysis to
22 determine the appropriate network frequency
23 target. Therefore, we propose a suspension of
24 the network frequency RPM. In the interim, we

1 propose to use the number of network
2 interruptions per year and the number of summer
3 feeder open-autos to ensure adequate network
4 performance. We will discuss this further in
5 our testimony when we address each specific
6 component of the RPM. We are not sponsoring IR
7 DPS-585 as an exhibit because it appears to
8 contain confidential customer information.

9 Q. What is Staff's opinion regarding the Company's
10 proposal associated with the use of two standard
11 deviations to set frequency and duration
12 targets?

13 A. The use of the two standard deviations does not
14 promote the Commission's policy that RPMs
15 encourage or improve reliability. Setting the
16 targets at two standard deviations could provide
17 the Company with far too much or too little
18 leeway. In addition, the use of five data
19 points is not nearly enough to set reasonable
20 standard deviations. The current thresholds are
21 designed to take into account a certain number
22 of outages per year and were set at levels
23 higher than the average performance values that
24 the Company falsely claims are only used.

1 Q. What are the Panel's overall thoughts regarding
2 the Company's responses?

3 A. We believe that while the Company has shown that
4 it has done some data analysis, further work
5 needs to be done to validate the Company's data.

6 Q. Has the Panel prepared an exhibit that
7 summarizes its proposed RPM?

8 A. Yes. Staff's pre-filed Exhibit ____ (RPMP-1) is
9 a document entitled "Electric Service
10 Reliability Performance Mechanism" which
11 summarizes our recommendations for the proposed
12 metrics, target levels, and potential negative
13 revenue adjustments for failure to meet the
14 targets.

15 Q. When would this RPM go into effect?

16 A. We propose that it goes into effect on January
17 1, 2009 and remain in effect until reset by the
18 Commission.

19 Q. Why has the panel proposed a January 1, 2009
20 effective date?

21 A. Staff believes that having the RPM in effect at
22 the beginning of the year is a logical approach
23 since majority of the components of the RPM are
24 measured on a yearly basis.

- 1 Q. Does Staff recommend any change to the revenue
2 adjustment under the RPM?
- 3 A. No. Staff recommends a continuation of the same
4 level of revenue adjustment for the entire RPM
5 amounting to \$112 million per year.
- 6 Q. How is the RPM organized?
- 7 A. The RPM consists of four categories: overall
8 reliability, Remote Monitoring System,
9 restoration, and special projects. Each
10 category contains individual measures which are
11 used to monitor the Company's performance.
12 Measures within the overall reliability category
13 are based on the methodology used in Appendix E
14 of the rate plan approved by the Commission in
15 Opinion No. 00-14, Opinion and Order Adopting
16 Terms of Settlement, Subject to Modifications,
17 issued November 14, 2000.
- 18 Q. What measures are used in the overall
19 reliability category?
- 20 A. In the past, the overall reliability category
21 included the System Average Interruption
22 Frequency Index (SAIFI or frequency), Customer
23 Average Interruption Duration Index (CAIDI or
24 duration), and the major outage metric. These

1 applied to both the radial and network system.
2 For this rate case, however, we propose to
3 temporarily replace SAIFI for the network system
4 with an annual interruption and feeder open-auto
5 metric.

6 Q. What about the other metrics?

7 A. We continue to support the inclusion of network
8 duration, radial frequency, radial duration, and
9 the major outage metric.

10 Q. Why does the Panel propose a temporary
11 replacement of the frequency target for
12 networks?

13 A. We believe that the continued use of the SAIFI
14 targets has to be further reviewed over the
15 course of the rate year and possibly beyond to
16 determine the validity of Con Edison's proposal
17 that SAIFI targets should be at least doubled.
18 If this proposal to significantly change the
19 frequency metric has merit, it would be
20 inappropriate to continue gauging the utility
21 performance on incorrect data. If, there are
22 other reasons for modifying the frequency
23 metric, we believe it is necessary that this be

1 determined before accepting the Company's
2 proposed targets.

3 Q. Why was network interruption and summer feeder
4 open-auto determined to be an appropriate
5 temporary replacement for network frequency?

6 A. Both interruption and feeder open-auto are
7 values that are measurable, are items that have
8 been tracked by both the Commission and the
9 Company over an extended period of time, are not
10 known to be impacted by the new OMS system,
11 provide an indication of the performance and
12 health of the electric system, and have an
13 impact on customers.

14 Q. What network interruption rate is proposed?

15 A. An annual network interruption rate of 5,700
16 events.

17 Q. What target is the Panel proposing for the
18 summer feeder open-auto metric?

19 A. We propose a target of 650 summer feeder open-
20 autos per year.

21 Q. Why should the other duration and frequency
22 targets remain a part of the RPM?

23 A. In response to IRs and the Company's testimony,
24 sufficient reasoning and data was not provided

1 to justify the need to change the remaining
2 duration and frequency targets. The radial
3 frequency and duration counts have hardly been
4 impacted by the use of the new OMS system.
5 While although network duration shows a greater
6 change in values, this change is not of
7 significant magnitude, the cause of this change
8 is uncertain and could be due to actual
9 deterioration in Company performance. We found
10 no basis to change this value at this time.

11 Q. What network and radial targets do you propose
12 for frequency and duration?

13 A. The proposed frequency target is 0.500 for
14 radial. The duration targets are 3.35 for
15 network and 1.75 for radial. These targets have
16 not changed from the previous reliability
17 mechanism based on our assessment of past
18 performances, as shown in Exhibit__ (RPMP-2).

19 Q. Please explain your proposed major outage
20 mechanism.

21 A. The major outage mechanism contains both a
22 network and radial major outage. A network
23 major outage is the interruption of service to
24 10% or more of customers in any network for a

1 period of three hours or more. The radial major
2 outage is one event that results in the
3 interruption of service to 70,000 customers, or
4 more, for three hours or more.

5 Q. Why should the major outage mechanism remain in
6 effect?

7 A. The major outage mechanism captures outages on a
8 large scale that affects the radial and network
9 system. This mechanism provides accountability
10 for large scale outages that are fully under the
11 control of the Company.

12 Q. What is the revenue adjustment for the overall
13 reliability category and how does this compare
14 to the previous reliability mechanism?

15 A. The previous mechanism had a potential total
16 annual revenue adjustment of \$50 million. Of
17 that amount, \$20 million was for network
18 frequency, network duration, radial frequency,
19 and radial duration. The remaining \$30 million
20 was for major outages. Our proposed mechanism
21 only shifts \$5 million in revenue adjustment
22 that was associated with network frequency to
23 network interruption and feeder open-autos. We
24 now propose a potential \$5 million revenue

1 adjustment for each of the following: network
2 duration; radial frequency; and radial duration
3 or, \$15 million total. We also propose a
4 potential revenue adjustment of \$4 million for
5 network interruptions, \$1 million for network
6 summer feeder open-autos, and \$30 million for
7 the major outage metric.

8 Q. Why is the Panel proposing the Remote Monitoring
9 System mechanism?

10 A. The Remote Monitoring System enables Con
11 Edison's control room operators to gain
12 sufficient information about the status of the
13 network system. The network system is very
14 complex and underground, which makes it hard to
15 monitor. Therefore, it is critical that the
16 Company meet this standard to gain optimal
17 knowledge of its system status for better
18 operation.

19 Q. What is the potential revenue adjustment
20 exposure for the Remote Monitoring System
21 mechanism?

22 A. It is \$10 million per network per measurement
23 interval for each network not meeting a 90%

1 reporting rate with an annual cap of \$50
2 million.

3 Q. What is the restoration mechanism?

4 A. This mechanism uses restoration time as the
5 means to measure the Company's performance.
6 Thresholds are set for the Company's overhead
7 emergency events for Upgraded to Full Scale
8 emergency categories.

9 Q. What is the reason for this mechanism?

10 A. Throughout Con Edison's history, there have been
11 instances where restorations times were not
12 derived in adequate time, not provided to
13 customers, and not adhered to by Con Edison.
14 This standard focuses on improving these
15 actions.

16 Q. What is the potential revenue adjustment for the
17 restoration mechanism?

18 A. At this time, we propose that this metric
19 continue on a trial basis with no negative
20 revenue adjustment for failure to meet the
21 standard. This should continue until further
22 data is derived to determine its usefulness and
23 applicability to Con Edison restoration effort.

1 Q. What measures are used in the special projects
2 category?

3 A. The previous set of special projects contains
4 measures for completion of work associated with
5 double poles, shunts, street lights, and over-
6 duty breakers.

7 Q. Why have the previous special projects remained
8 as part of the RPM measures?

9 A. These special projects are areas where the
10 Company previously failed to complete work under
11 its own initiative. The use of a revenue
12 adjustment for failure to complete this work in
13 the future should continue to ensure that the
14 Company complete these projects or face
15 potential revenue adjustment.

16 Q. What is the Panel's proposed potential revenue
17 adjustment for special projects metric and how
18 does this compare to the prior reliability
19 mechanism?

20 A. Previously, the special projects metric had a
21 total potential revenue adjustment of \$12
22 million. Our proposed RPM would continue at the
23 same revenue adjustment level.

1 Q. Does the Panel propose to continue the exclusion
2 provisions of the RPM adopted in Opinion No. 00-
3 14?

4 A. Yes. The exclusion provisions identified in
5 Appendix E of Opinion No. 00-14 should continue
6 without change.

7 Q. Does the Panel's proposal have any positive
8 revenue adjustments?

9 A. No. The purpose of the RPM is to ensure that an
10 appropriate level of reliability is provided to
11 customers and that the Company fulfills its
12 commitment to capital improvements and O&M.

13 Q. Does this conclude the Panel's testimony at this
14 time?

15 A. Yes.