

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

Central Hudson Gas and Electric Corporation
Cases 08-E-0887 & 08-G-0888

November 2008

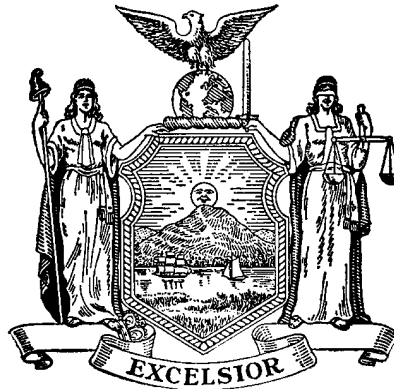
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STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE



2007 ELECTRIC RELIABILITY PERFORMANCE REPORT

Electric Distribution Systems
Office of Electric, Gas, and Water
September 8, 2008

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EXECUTIVE SUMMARY

This report presents Staff's assessment of electric reliability performance in New York State. As a means of monitoring the levels of service, utilities are required to submit detailed interruption data. Staff relies on two primary metrics to measure reliability performance: the System Average Interruption Frequency Index (SAIFI or frequency) and the Customer Average Interruption Duration Index (CAIDI or duration).¹ By compiling the results of individual utilities, the average frequency and duration of interruptions can be reviewed to assess the overall reliability of electric service in New York State.

The statewide interruption frequency for 2007, excluding major storms, was the same as that recorded in 2006. The statewide duration in 2007 was much better than in 2006. Some of this improvement in duration performance, however, is because the duration for 2006 was high due to the extended outages in Consolidated Edison Company of New York, Inc.'s (Con Edison) Long Island City network. Overall, a review of reliability performance over a five year period indicates that reliability performance appears to be leveling off with respect to frequency and improving slightly with respect to duration. Similar overall patterns exist when analyzing the reliability data excluding Con Edison performances.²

With respect to individual utilities' performance in 2007, Orange and Rockland Utilities, Inc. (Orange and Rockland) and Rochester Gas and Electric Corporation (RG&E) performed at, or better than, their historic levels. On the opposite end of the spectrum, New York State Electric and Gas Corporation (NYSEG) had its worst performance for both frequency and duration since we have been collecting

¹ The System Average Interruption Frequency Index, SAIFI, is the average number of times that a customer is interrupted during a year. The Customer Average Interruption Duration Index, CAIDI, is the average interruption duration time for those customers that experience an interruption during the year.

² Con Edison's system includes many large, highly concentrated distribution networks. As a result, its interruption frequency is extremely low compared to other utilities' and typically skews aggregated data measurements. Therefore, we examine statewide statistics both including and excluding Con Edison's data.

interruption data. Staff's analysis determined that some of NYSEG's poor frequency performance was related to a decline in distribution tree trimming expenditures over the past five years. In addition, Staff's analysis found a 10% reduction in field personnel from 2003, which could contribute to a service decline, especially with regard to restoration times.

Con Edison's performance in 2007 for network frequency was significantly worse than historic levels due to a lightning event which affected two of its underground networks. Con Edison also had a bad year with regard to duration performance on its radial system. Con Edison attributes this to increased levels of minor storms and several feeder outages with long durations.

Niagara Mohawk Power Corporation d/b/a National Grid's (National Grid) performance for frequency in 2007 was better than in recent years, but still not at the level expected. Staff has been working with the Company to resolve reliability and infrastructure concerns through its capital expenditure filing and commitment to invest \$1.47 billion in the next five years.³ National Grid performed adequately with respect to the duration metric.

Central Hudson Gas and Electric Corporation's (Central Hudson) frequency and duration performances in 2007 were both better than the previous two years, but still worse than its five-year averages. The Company continues to experience a high level of tree caused interruptions. As a result, Central Hudson is revamping its line clearance program to be more effective in deterring tree caused interruptions.

Electric utilities have reliability performance mechanisms (RPMs) in place as part of their rate plans. The reliability performance mechanisms are designed such that companies are subject to negative revenue adjustments for failing to meet electric reliability targets.⁴ In 2007, Con Edison failed to achieve the frequency target in its reliability performance mechanism for the network component of its distribution system

³ Case 06-M-0878, Joint Petition of National Grid PLC and KeySpan Corporation for Approval of Stock Acquisition and other Regulatory Authorizations

⁴ NYSEG was the only utility not under an RPM because its mechanism expired in 2006. As a result, NYSEG was not subject to revenue adjustments for its poor performance last year.

and failed the duration target for its radial system. National Grid failed to achieve the frequency target in its reliability performance mechanism for 2007. Combined, these failures resulted in about \$22.2 million in negative revenue adjustments.

Based on these findings, Staff developed several recommendations for improvement. Staff recommends that Con Edison perform a self assessment into why its duration performance associated with its radial systems has deteriorated. Staff recommends that NYSEG conduct a review the relationship between frequency performances with respect to tree related interruptions and changes in its distribution tree trimming program. Staff further recommends that NYSEG conduct an assessment of the effects that changes in field crew levels and deployment has on the Company's overall duration performance. Finally, Staff recommends that Central Hudson conduct a review the effectiveness of its modified tree trimming program and determine whether the program should be expanded or accelerated.

This report, which includes the associated recommendations, will be transmitted to an executive level operating officer of each electric utility with a letter from the Director of the Office of Electric, Gas, and Water. Utilities are expected to complete all applicable assessments and submit a report on said assessments within 90 days from the date of the letter. The report shall include a description and timetable for implementation of the improvements necessary to achieve the applicable performance levels. The corrective action plan due to be filed by March 31, 2009 as a part of the annual report should include an assessment of the status and effectiveness of the improvements.

INTRODUCTION

The following report is an overview of the electric reliability performance in New York State. As a means of monitoring the levels of service quality, the Commission's Rules and Regulations require utilities delivering electricity in New York State to collect and submit information to the Commission about electric service interruptions on a monthly basis.⁵ Using the data, Staff calculates two primary performance metrics: the System Average Interruption Frequency Index (SAIFI or frequency) and the Customer Average Interruption Duration Index (CAIDI or duration). The information provided is also subdivided into 10 categories that reflect the nature of the cause of interruption (cause code).⁶ By doing so, analysis of the cause code data can be used to highlight areas where increased capital investment or maintenance is needed. As an example, if a circuit were shown to be prone to lightning-caused interruptions, devices could be installed on that circuit to try to minimize the problem. In general, most of a utility's interruptions are a result of major storms, tree contacts, equipment failures, and accidents.⁷ Staff maintains the interruption information in a database that dates back to 1989, which allows us to observe trends.

In addition, the Commission adopted standards on the reliability of electric service by establishing minimum acceptable levels for both the frequency and duration of service interruptions for each major electric utilities' operating divisions. The utilities are required to submit a formal reliability report by March 31st of every year containing detailed assessments on performance, including outage trends in a utility's various geographic regions, reliability improvement projects, and analyses of worst-performing feeders. There are no revenue adjustments for failure to meet a minimum level under the

⁵ 16 NYCRR Part 97, Notification of Interruption of Service. Utilities are required to keep detailed back-up data for six years.

⁶ 16 NYCRR Part 97, Notification of Interruption of Service defines the following ten cause codes that reflect the nature of the interruptions: major storms, tree contacts, overloads, operating errors, equipment failures, accidents, prearranged interruptions, customers equipment, lightning, and unknown. There are an additional seven cause codes used exclusively for Con Edison's underground network system.

⁷ The accident cause codes covers events not typically in the utilities' control including vehicular accidents, sabotage, and animal contacts. Lightning is reported under a separate cause code.

service standards; utilities are, however, required to include a corrective action plan as part of the annual report.⁸ The service standards were last revised in 2004.

Interruption data is presented in two ways in this report, with major storms excluded and with major storms included. A major storm is defined by the Commission's regulations as any storm which causes service interruptions of at least 10 percent of customers in an operating area, and/or interruptions with duration of 24 hours or more.⁹ Major storm interruptions are excluded from the data when calculating performance levels for service standards and reliability performance mechanisms. The purpose of this policy is to achieve a balance between service interruptions under a utility's control, such as equipment failures and line maintenance, and those over which a utility's control is more limited, such as severe ice storm or a heavy wet snowstorm. Performance inclusive of major storms shows the actual customer experience during a year.

⁸ Revenue adjustments for inferior performances are implemented through individual Reliability Performance Mechanisms established in rate orders.

⁹ Major storms do not include heat-related service interruptions.

2007 RELIABILITY PERFORMANCE

The following sections provide a summary discussion of the reliability performance statewide and for each of the major utilities. Each year, Staff also prepares an Interruption Report summarizing the monthly interruption data submitted by the utilities. The 2007 Interruption Report contains detailed interruption data for each utility and statewide statistics for the past five years. The Interruption Report for 2007 is attached as an Appendix. Individual company discussions identify issues or actions within each company that influenced performance levels for 2007 and indicates company-specific trends where applicable.

In addition, performances are compared to utilities' reliability performance mechanisms (RPMs) placed into effect as part of their rate orders. The reliability performance mechanisms are designed such that companies are subjected to negative revenue adjustments for failing to meet electric reliability targets. The targets are based on the indices used by the Commission's electric service standards.

Con Edison and National Grid failed to achieve one or more targets in their reliability performance mechanisms for 2007. Con Edison failed to achieve the frequency target for its network system and the duration target for its radial system, resulting in negative rate adjustments of \$5 million and \$4 million, respectively. National Grid failed to achieve its frequency target, and in accordance with the provision in the National Grid-Keyspan merger order,¹⁰ this performance results in a negative revenue adjustment of \$13.2 million. Combined, these failures result in \$22.2 million in negative revenue adjustments.

¹⁰ Case 06-M-0878, Joint Petition of National Grid PLC and KeySpan Corporation for Approval of Stock Acquisition and other Regulatory Authorizations.

STATEWIDE

For many years, Staff has been combining the individual utility performances into overall statewide statistics. By doing so, we evaluate the level of reliability provided and identify statewide trends. Because Con Edison's system includes many large, highly concentrated distribution networks, its interruption frequency is extremely low as compared with other utilities. This, combined with the fact that it serves the largest number of customers in the state, typically results in a skewing of the performance measures. As a result, we examine and present aggregated data including and excluding Con Edison's data.

Statewide, the frequency of interruptions when excluding major storms was 0.65 in 2007, which is just over than the five-year average of 0.64. As shown in Figure 1, the frequency performance has been relatively stable since 2004. This stable performance trend continues even when Con Edison is excluded. Frequency performance for 2007, excluding Con Edison, is 1.02 and slightly worse than the five-year average of 0.99.

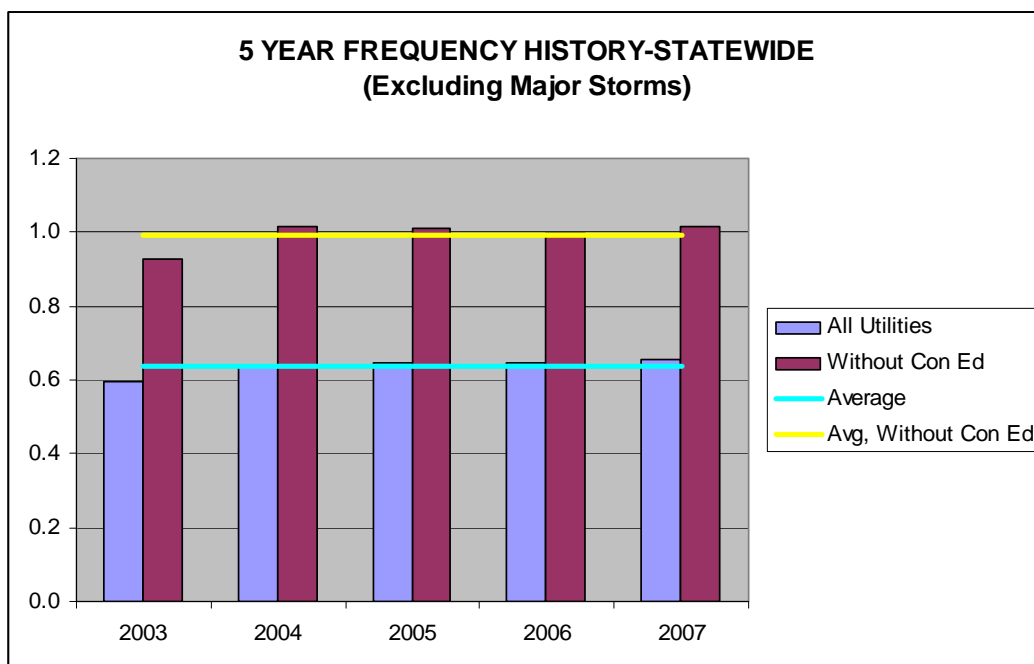


Figure 1: Statewide Frequency Performance

Con Edison’s Long Island City network outages greatly affected the statewide duration in 2006. Figure 2 shows the statewide duration index for 2007, excluding major storms. The overall statewide duration index is at a more normal level of 1.89 hours, as compared with 2.57 hours in 2006. The statewide duration index, excluding Con Edison, was 1.88 hours in 2007, which is slightly better than 2006, but still above the five-year average of 1.84.

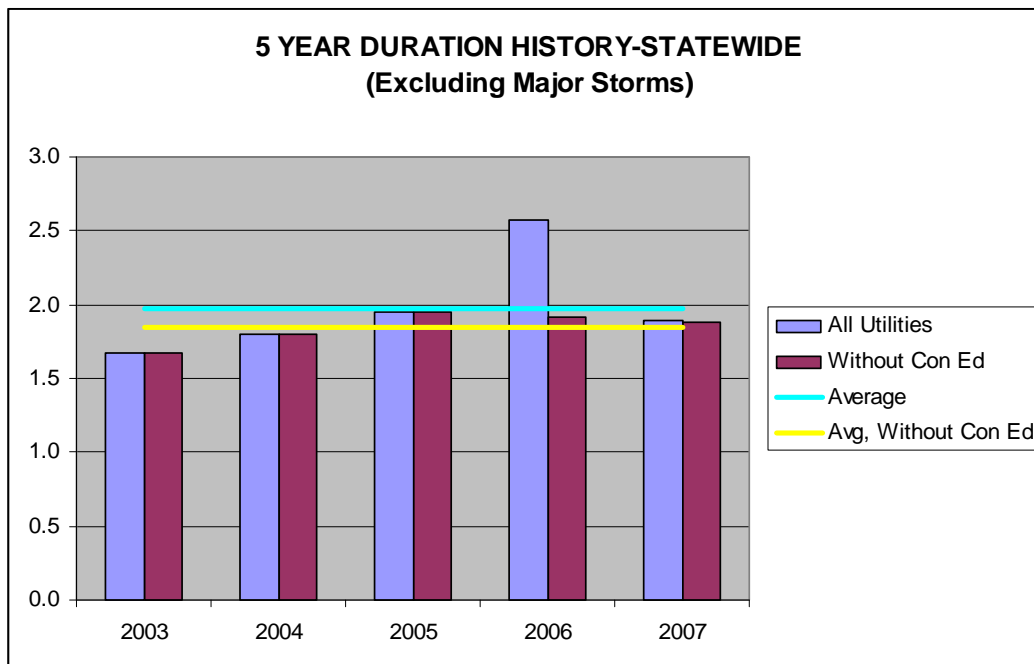


Figure 2: Statewide Duration Performance

The year 2007 was a relatively uneventful year when considering severe weather effects. When including major storms, the 2007 statewide frequency and duration performances were 0.83 and 2.61, respectively. When excluding Con Edison, the 2007 statewide frequency and duration performances including major storms were 1.31 and 2.56, respectively. All four of these measures were better than the five-year averages. Overall, customer-hours of interruption caused by major storms were only a fifth of that for 2006, and were at a level of less than half of the five-year average. Major storms in 2007, however, still accounted for 44% of the overall customer-hours of interruptions and 22% of the overall number of customers affected.

New York State investor-owned electric utilities must submit a report to the Commission addressing all facets of their restoration effort if customer outages associated with a major storm last more than three days.¹¹ In 2007, there were only two reports submitted on major storms as listed in Table 1. Although customers affected by the Troy load-shed event were restored within three days, Staff requested that National Grid include the incident in a report due to the unique circumstances surrounding the event. Staff’s analysis of the utilities’ filings resulted in formal reports with recommendations for improvements. Staff’s reports were shared with the utilities and all recommendations, except for three that require long-term planning, have been implemented.

Table 1: Storm reports filed in 2007

Date	Company	Area Affected	Reason for Interruptions
May	NYSEG	Brewster	Thunder Storm
July	National Grid	Capital District & Troy area	Wind Storm w/Load Shed

CON EDISON

Table 2: Con Edison’s Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Network Systems						
Frequency (SAIFI)	0.01	0.01	0.01	0.02	0.07	0.02
Duration (CAIDI)	3.29	3.64	4.44	60.81	1.79	14.80
Radial System						
Frequency (SAIFI)	0.49	0.39	0.51	0.54	0.38	0.46
Duration (CAIDI)	1.61	1.64	1.91	2.66	2.07	1.98

Note: Data presented in red represents a failure to meet the RPM target for a given year.

¹¹ 16 NYCRR Part 97, Part 105.4

Con Edison serves approximately 3.2 million customers in New York City and Westchester County. Electricity is supplied to 2.4 million customers using network systems. The remaining 900,000 customers are supplied by radial systems.

In 2007, Con Edison's network frequency index increased significantly compared to previous years and failed to meet its RPM target for a second straight year. Poor performance in 2007 was largely due to customer interruptions in the Yorkville and West Bronx networks that occurred as a result of a lightning strike in the vicinity of a substation on June 27th. This one incident, which underwent investigation by Department Staff, accounted for approximately 137,000 interruptions or more than three-quarters of the total customers affected during the year. Based on its findings, Con Edison has taken corrective measures to prevent such a reoccurrence at the affected substation and to mitigate similar conditions throughout its system. Because the Yorkville and West Bronx outages lasted less than one hour, Con Edison's network duration of 1.79 was well below historic performances and its RPM target of 3.74.

To minimize the frequency of customer outages, Con Edison's networks are designed with redundant supply paths. Individual service lines to customer premises, however, lack any supplemental supply. Given these design criteria and underground settings, the majority of interruptions (86%) are associated with the service portion of the network system, as shown in Figure 3. Failures on parts of the network grid itself (secondary feeders or mains) are the second highest cause for interruptions at 12%.

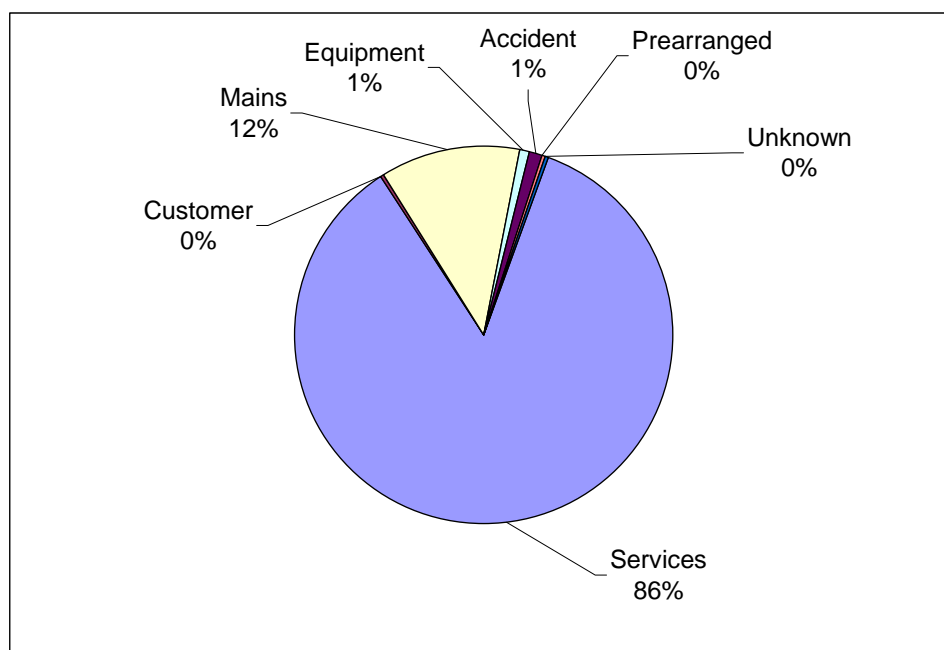


Figure 3: Con Edison's 2007 Network Interruptions by Cause

On its radial systems, Con Edison's frequency performance has been improving. In 2007, the Company frequency was the best it has been in the past five years. Equipment failures are responsible for 74% of the interruption on the radial systems, followed by trees and accidents at 12% and 8%, respectively, as shown in Figure 4. While the percentage of interruptions from equipment failures is still high, Con Edison has had a reduction in the number of interruption resulting from that cause. Interruptions due to tree and accident causes are consistent with historical performances.

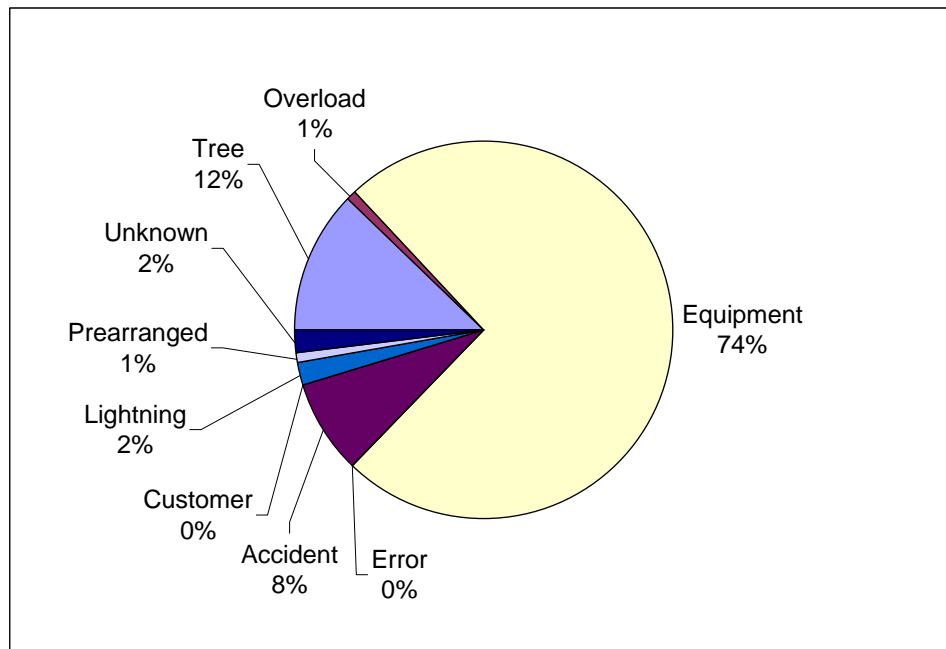


Figure 4: Con Edison's 2007 Radial Interruptions by Cause

While Con Edison showed improvement in its radial systems frequency metric, the Company continued to struggle with its duration performance. In 2007, the radial system performance of 2.07 was significantly higher than its historical performances in 2003 and 2004. When questioned on its poor performance, the Company attributed it to some lengthy outages due to minor storms and cable failures.

Con Edison has missed the radial duration target of 1.85 in its RPM for the third straight year. As a result, Staff recommends that the Company conduct a detailed self assessment into why its duration performance associated with its radial systems has deteriorated. The assessment should include corrective actions to be taken and quantify the effectiveness of steps already taken in 2008.

NATIONAL GRID

Table 3: National Grid's Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Frequency (SAIFI)	0.87	1.02	0.98	1.01	0.96	0.97
Duration (CAIDI)	2.00	2.04	2.32	2.05	2.01	2.08

Note: Data presented in red represents a failure to meet the RPM target for a given year.

National Grid serves approximately 1.59 million customers across upstate New York. The Company's territory includes metropolitan areas such as the cities of Buffalo, Albany, and Syracuse. National Grid also serves many rural areas in northern New York and the Adirondacks.

National Grid's frequency performance continues to be of concern to Staff. The Company has failed its reliability performance mechanism for frequency since 2004 by missing a target level of 0.93. Last summer, to improve service to National Grid's upstate service areas, the Commission placed additional emphasis on National Grid's reliability performance in association with its acquisition of Keyspan¹², which provides electric distribution services to the Long Island Power Authority.

As can be seen in Figure 5, equipment failures are the leading cause of interruption for National Grid. In 2007, equipment failures were responsible for 26% of the interruptions. To improve reliability, National Grid has committed to spend \$1.47 billion on capital improvements to its transmission and distribution system over the five-year period from 2007-2011. The five-year investment plan contains proposed projects and strategies to address weaknesses in its electric system. In particular, the Company developed a Reliability Enhancement Plan (REP) to improve its performance by focused maintenance work on poor performing circuits (feeder hardening) and replacing aging distribution assets. The REP also provides for the installation of sectionalizing equipment and animal guards that will help to minimize the number of customers affected when an interruption occurs, or to avoid interruptions altogether. Staff's review of National Grid's

¹² Case 06-M-0878, Joint Petition of National Grid PLC and KeySpan Corporation for Approval of Stock Acquisition and other Regulatory Authorizations.

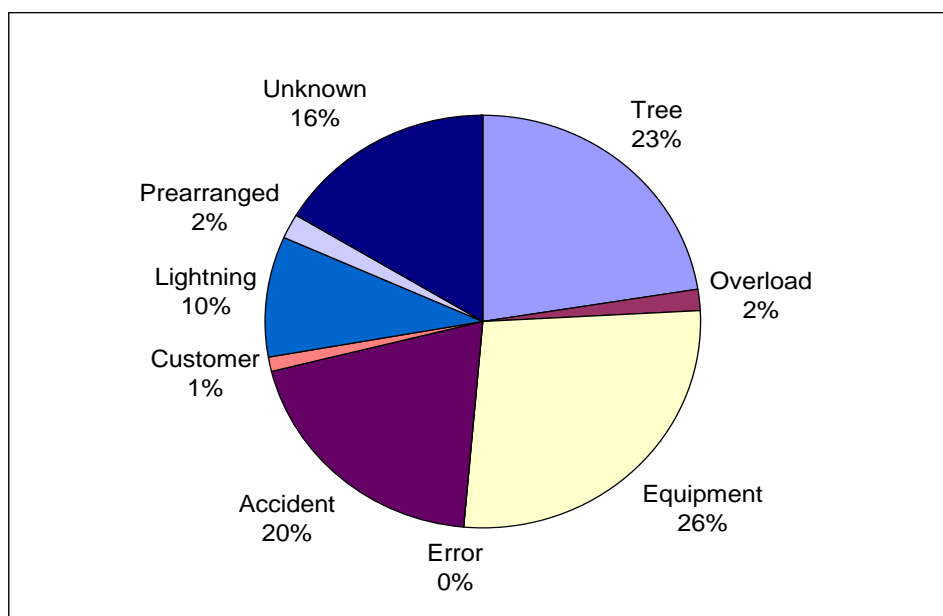


Figure 5: National Grid’s 2007 Interruptions by Cause

programs found that the Company’s initial plans are sound, but more detailed information must be filed with regard to future years. Staff has and will continue to actively monitor National Grid’s investments and work efforts to ensure programs are fully implemented.

Tree-related interruptions are National Grid’s second highest contributor to its 2007 interruption performance, surpassing incidents related to accidents. Poorer performance over the past few years has prompted the Company to shorten its trimming cycle from six years to the more traditional five year period in urban areas. National Grid has also expanded its program to remove “danger” trees outside of the standard clearance zone.

On the positive side, the 2007 data reflect fewer customer outages related to accidents. Some of this reduction can be attributed to the increased installation of animal guards as part of the feeder hardening program. National Grid has indicated it expected a greater improvement based on the animal guard installations. As a result, the Company is continuing to review the types of animal guards used and where they should be installed.

As part of Case 06-M-0878, National Grid is required to report on its capital expenditure programs and condition of assets. Staff will use these reports to continue to monitor National Grid’s progress.

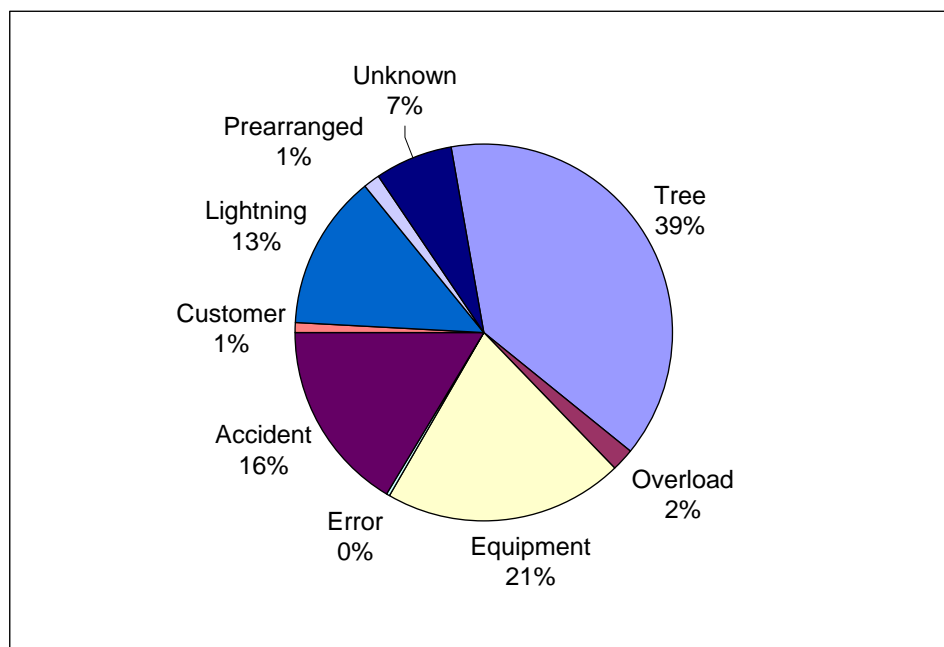
NEW YORK STATE ELECTRIC AND GAS

Table 4: NYSEG’s Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Frequency (SAIFI)	1.07	1.13	1.12	1.12	1.20	1.12
Duration (CAIDI)	1.77	1.96	1.96	2.01	2.22	1.99

Approximately 840,000 customers are served by NYSEG. The Company is primarily located in Binghamton and Finger Lakes regions, but does have localized service regions, including areas near Plattsburgh, Brewster, and Lancaster.

Last year was a bad performance year for NYSEG; it recorded its worst performance for both frequency and duration in the last 20 years.¹³ NYSEG’s 2007 frequency performance of 1.20 was higher than both the previous year’s performance and its five year average performance level. The 2007 duration performance of 2.22 was also higher than both the previous year’s performance and the five year average. As is typical with other New York State utilities, the two major contributors to NYSEG’s interruptions were tree contacts (39%) and equipment failures (21%), as shown in Figure 6.



¹³ The Company was not subject to any revenue adjustments for 2007 performances because it was not under an RPM for that year.

Figure 6: NYSEG’s 2007 Interruptions by Cause

In response to Staff inquiries, NYSEG stated that its reliability indices were adversely affected last year by an increased number of minor storms¹⁴ as compared with previous years. A review of NYSEG’s cause codes information for 2007 indicates a 16% increase in the number of customers affected by interruptions associated with lightning and trees as compared with 2006, which is consistent with the Company’s claim regarding minor storms. Staff’s analysis, however, also notes a trend showing deterioration of performance associated with tree-caused interruptions (see figure 7 below) unrelated to storms. Given this trend, the extent to which additional tree related interruptions in 2007 were based on storms and the extent to which additional tree caused interruptions were due to reduced tree trimming are unclear.

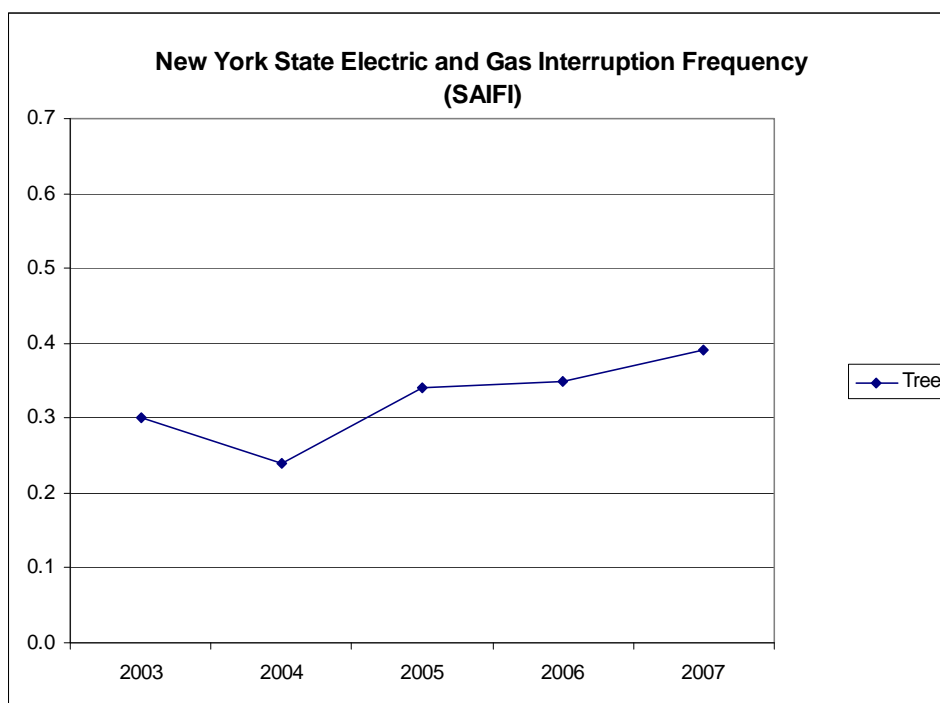


Figure 7: Frequency (SAIFI) for Tree Caused Interruptions

Staff asked the Company to explain the mitigation actions it was taking to address the deteriorating performance. NYSEG indicated it had increased tree trimming

¹⁴ Minor storms refer to weather events that result in customer interruptions, but do not meet the Commission’s definition of major storm. As a result, the effects are included in NYSEG’s reliability indices.

activities over the past two years. This increase, however, is associated with the change in the Commission’s transmission right-of-way clearance requirements and is limited to transmission facilities, which generally are not associated with customer service interruptions. Information provided by the Company indicates that its overall and distribution tree trimming expenditures have decreased annually over the past five years (see table 5).

Table 5: NYSEG’s Line Trimming Expenditures

	2003	2004	2005	2006	2007
Trimming Expenditures	\$17,183,000	\$15,882,425	\$14,388,233	\$14,220,368	\$13,672,682
Percent Change from Previous Year	----	-7.6%	-9.4%	-9.9%	-3.9%

Staff is not satisfied with the Company’s distribution practices and expenditures because the Company should be aware of the relationship between its reduced tree trimming expenditures and increasing tree related interruption rate. We recommend that NYSEG conduct a detailed self assessment of its existing distribution tree trimming program, procedures, and expenditures. This assessment should identify improvements that can be implemented to help reduce the effect of tree contact interruptions on system reliability.

NYSEG’s slippage in performance could also be a result in part due to a reduction (approximately 10% overall) in both line mechanics and construction/maintenance mechanics personnel from 2003 through 2007 (see table 6 below).

Table 6: NYSEG’s Field Personnel Information

	2003	2004	2005	2006	2007
Total Number of Field Personnel	678	646	651	619	608
Percent Change from Previous Year	----	-4.7%	+0.8%	-4.9%	-1.8%

Staff is also concerned about NYSEG’s policies with regard to crew size and utilization and their impact on response times and deteriorating duration

performance. In recent years, Staff and the Company discussed Staff’s concern that fewer crews have been used in storm response than in years past. NYSEG reports that it is in the midst of a hiring and training period to increase the number of field personnel. While hiring more apprentices is beneficial, it will take several years to train these new employees before they can advance to qualified lineman positions. Furthermore, these additional employees may only offset employees that will soon be retiring. NYSEG should have implemented such measures in prior years to ensure that workforce reductions do not affect reliability. NYSEG should conduct a detailed self assessment of its existing crewing / field work personnel levels, crew locations, and the effect these levels have on system reliability, particularly interruption duration. Assessment should include historical personnel levels and field work locations broken down per operating division, along with the Company’s future plans.

ROCHESTER GAS AND ELECTRIC

Table 7: RG&E’s Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Frequency (SAIFI)	0.74	0.86	0.79	0.79	0.83	0.80
Duration (CAIDI)	1.63	1.84	1.87	1.78	1.73	1.77

RG&E serves approximately 360,000 customers. Although the Company is comprised of four service areas, its Rochester division accounts for approximately 80% of its customer base. As a result, its overall reliability statistics mirror that of the Rochester division.

With regard to service reliability, RG&E is one of the better performing utilities within the state. The Company has not failed its RPM targets of 0.90 for SAIFI and 1.90 for CAIDI as established in its rate orders. As shown in Table 8, RG&E’s 2007 performance for frequency and duration is fairly consistent with its five year average. RG&E’s 2007 frequency performance of 0.83 was slightly higher than both the previous

year's performance of 0.79 along with the five year average of 0.80. RG&E's 2007 duration performance of 1.73 was better than both the previous year's performance of 1.78 and the five year average of 1.77. Figure 8 shows that the two major contributors to interruptions were equipment failures (29%) and tree contacts (20%). The levels are slightly higher than the five year averages of 28% for equipment failures and 18% for tree contacts. Both frequency and duration measures for 2007 were better than the Company's RPM targets of 0.90 for SAIFI and 1.90 for CAIDI.

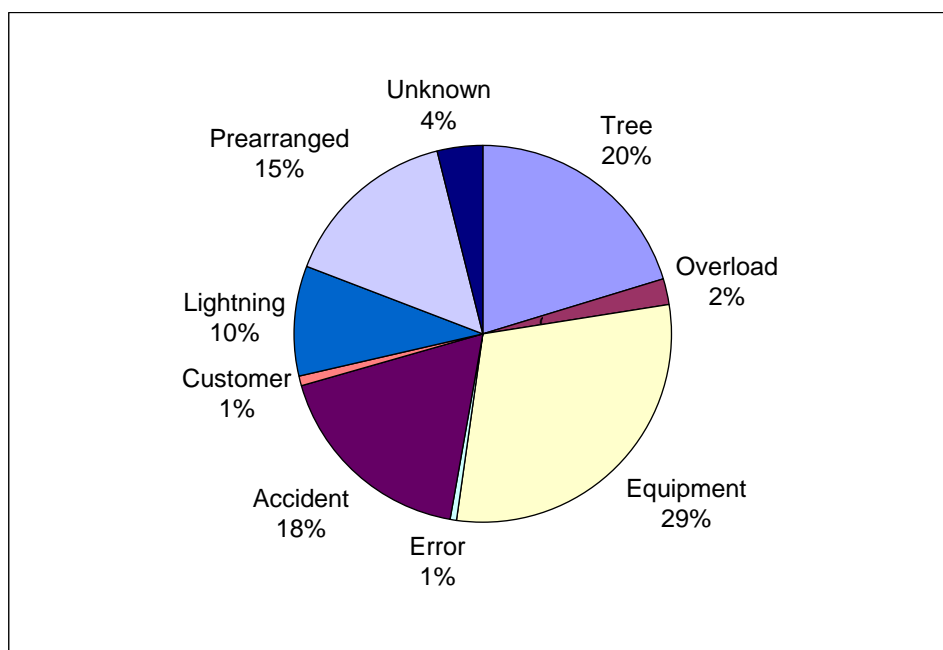


Figure 8: RG&E's 2007 Interruptions by Cause

In 2007, RG&E's Rochester division experienced a slight increase in equipment failures as compared with historic data. In RG&E's more rural divisions, interruptions caused by accidents are on the rise. At this time, however, there are no indications that RG&E's electric service and reliability are deteriorating. Provided the Company continues its practices, RG&E is expected to continue performing at, or better than, its RPM levels in years to come.

CENTRAL HUDSON GAS AND ELECTRIC

Table 8: Central Hudson’s Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Frequency (SAIFI)	1.04	1.38	1.46	1.61	1.44	1.38
Duration (CAIDI)	1.93	2.35	2.70	2.58	2.43	2.40

Note: Data presented in red represents a failure to meet the RPM target for a given year.

Central Hudson serves approximately 298,000 customers in the Mid-Hudson Valley region. The Company’s territory is mainly suburban and rural. Central Hudson does serve some urban regions, such as the cities of Poughkeepsie and Newburgh. Central Hudson’s RPM targets were reestablished at 1.45 for frequency and 2.50 for duration in its most recent rate order, effective in 2006.¹⁵

Central Hudson’ frequency performance of 1.44 in 2007 was better than the previous two years, but still higher than its five-year average. The 2007 duration performance of 2.43 was also better than both the previous two year’s performances, but higher than its five year average. Figure 9 shows that 39% of customer interruptions are

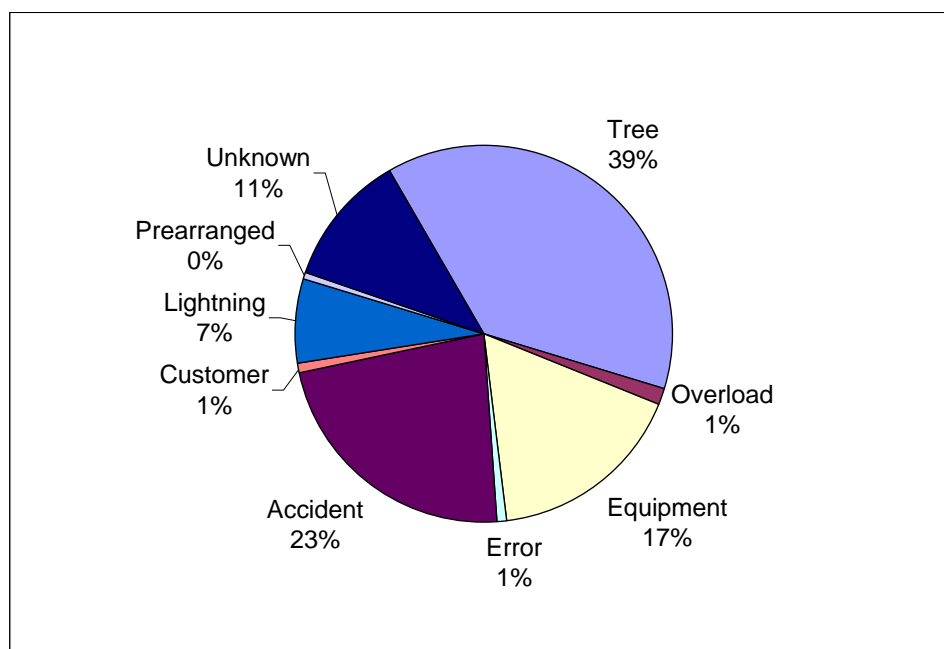


Figure 9: Central Hudson’s 2007 Interruptions by Cause

¹⁵ As part of the joint agreement adopted in the last rate order, Central Hudson was not assessed revenue adjustments for 2005 performances.

due to tree related issues, followed by accidents at 23%. Central Hudson has had a reduction in equipment failures resulting in customer outages since 2005. In 2007, equipment failures were responsible for only 17% of the interruptions.

As a result of its continued high level of tree caused interruptions, Central Hudson has been revamping its line clearance program to be more effective in reducing the incidence of tree caused interruptions. Central Hudson’s plan has been recently modified to place more emphasis on eliminating overhanging branches as well as elimination of “danger” trees. The Company began its modified program in the spring of 2007.

Central Hudson has been struggling to control tree caused interruptions for several years now. While we are encouraged that the Company continues to modify its program, we want to ensure that it has looked at all facets of its program. Therefore, we recommend Central Hudson conduct a detailed self assessment of the effectiveness of its modified tree trimming program. The analysis should justify the scope of program and determine whether it should be expanded to include entire distribution circuits (single and multi-phase sections) and/or be accelerated. This information will enable Staff to properly evaluate whether the Company is taking the appropriate steps to mitigate tree caused interruptions.

ORANGE AND ROCKLAND

Table 9: O&R’s Historic Performances Excluding Major Storms

Metric	2003	2004	2005	2006	2007	5-Year Average
Frequency (SAIFI)	1.18	1.30	1.36	1.23	1.03	1.22
Duration (CAIDI)	1.47	1.61	1.71	1.51	1.60	1.58

Note: Data presented in red represents a failure to meet the RPM target for a given year.

Orange and Rockland is the smallest of the major investor-owned electric utilities. It serves approximately 212,000 customers in three New York counties along the New Jersey and Pennsylvania border. In 2007, the Company performed well with

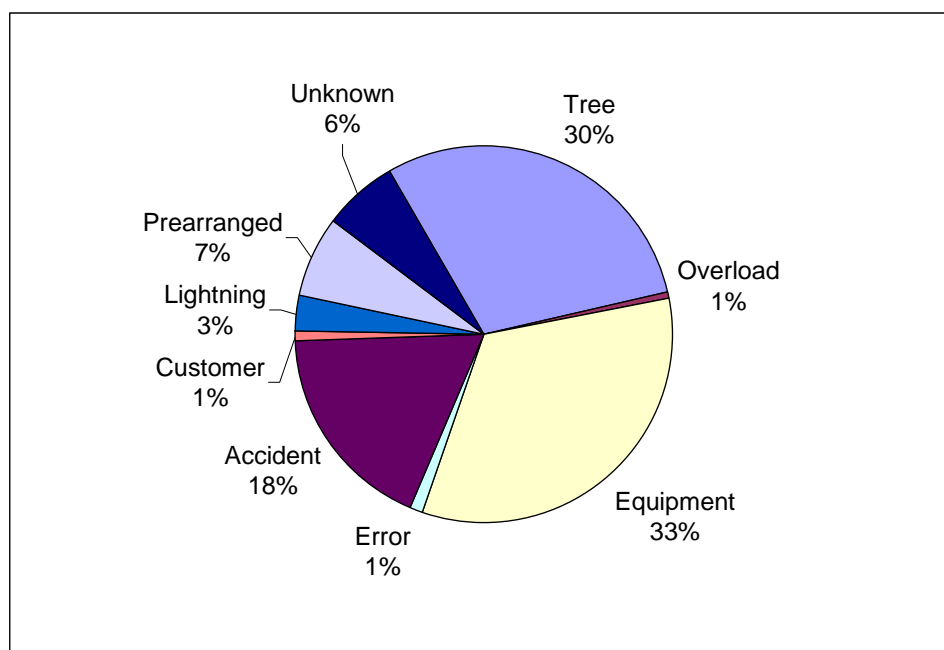


Figure 10: Orange and Rockland's 2007 Interruptions by Cause

regard to frequency as compared with its historic performances. As shown in Figure 10, equipment failures (33%) and trees (30%) caused the majority of interruptions in 2007.

Orange and Rockland is addressing reliability issues due to equipment failures through a number of capital improvement projects on both the distribution and transmission systems. These projects are identified in both rate cases 06-E-1433 and 07-E-0949. Several substation construction and upgrade projects and transmission line upgrade projects have been underway over the last couple years and will continue through the coming years.

The Company is addressing the tree concerns through increased efforts on its line clearance programs. The Company has continued to identify additional efforts to address these issues in its recent rate cases. Programs such as distribution and transmission danger tree and expanded right of way clearance programs should help reduce the impact of tree contacts on the Company's electrical system.

It appears that Orange and Rockland's capital investments and reliability programs are showing success. Both the number of interruption and number of customers affected by equipment failures and tree contacts have reduced each year since 2005. The numbers show small, but steady improvements within these areas with expectations for continued improvement in the years to come with the finalization of additional capital projects.

RECOMMENDATIONS

The following is a summary of Staff recommendations based on our analysis of reliability performances in 2007:

1. Con Edison should conduct a detailed self assessment into why its duration performance associated with its radial systems has deteriorated. The assessment should include corrective actions to be taken and quantify the effectiveness of steps already taken in 2008.
2. NYSEG should conduct a detailed self assessment of its existing distribution tree trimming program, procedures, and expenditures. The assessment should identify improvements that can be made to help reduce the effect of tree contact interruptions on system reliability.
3. NYSEG should conduct a detailed self assessment of its existing crew / field work personnel levels, crew locations, and the effect these levels have on system reliability, particularly interruption duration. Assessment should include historical personnel levels and field work locations broken down according to operating division and include the Company's future plans. The assessment should identify improvements to ensure that an adequate workforce remains in place so that reliability is maintained at pre 2007 levels.
4. Central Hudson should conduct a detailed self assessment of the effectiveness of its modified tree trimming program. The analysis should justify the scope of program and whether it should be expanded to include entire distribution circuits (single and multi-phase sections) and/or be accelerated based on its results.

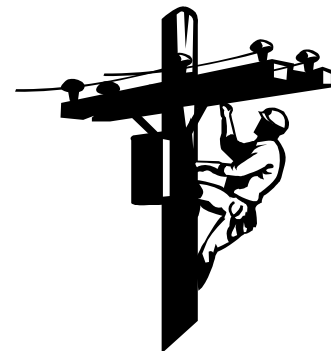
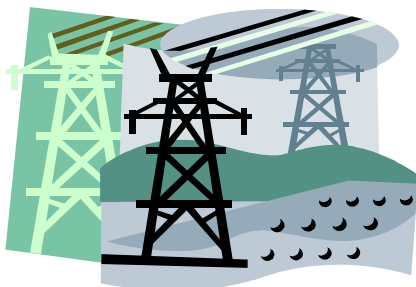
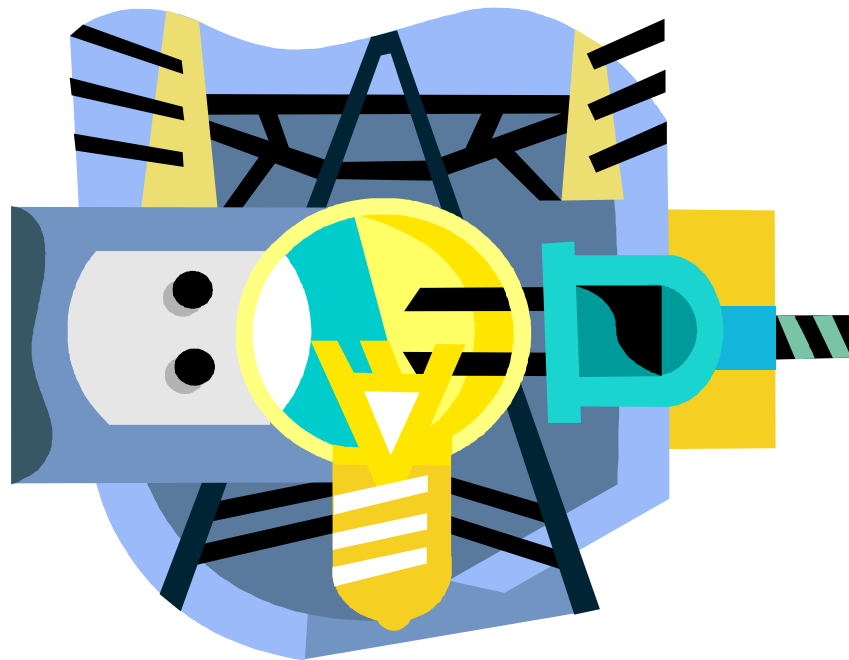
This report will be transmitted to an executive level operating officer of each electric utility with a letter from the Director of the Office of Electric, Gas, and Water. Utilities are expected to complete all applicable assessments and submit a report on said assessments within 90 days from the date of the letter. The report shall include a

description and timetable for implementation of the improvements necessary to achieve the applicable performance levels. The corrective action plan due to be filed by March 31, 2009 as a part of the annual report should include an assessment of the status and effectiveness of the improvements.

APPENDIX

2007 INTERRUPTION REPORT

The 2007 Interruption Report



Office of Electricity Gas and Water
August, 2008

ATTACHMENT
Definitions and Explanations of Terms Used in the 2007
Statewide Electric Service Interruption Report

Interruption is the loss of service for five minutes or more.

Customer hours is the time a customer is without electric service.

Customers affected is the number of customers without electric service.

Customers served is the number of customers as of the last day of the **current year**. For example, for the calendar year of **2007**, customers served is the number of customers as of 12/31/2007. For indices using customers served, the **previous** year is used.

Frequency (SAIFI) measures the average number of interruptions experienced by customers served by the utility. It is the customers affected divided by the customers served at the end of the **previous** year, i.e., 12/31/2006.

Duration (CAIDI) measures the average time that an affected customer is out of electric service. It is the customer hours divided by the customers affected.

Availability (SAIDI) is the average amount of time a customer is out-of-service during a year. It is the customer hours divided by the number of customers served at the end of the **previous** year, i.e., 12/31/2006. Mathematically, it also is **SAIFI** multiplied by **CAIDI**.

Interruptions Per 1000 Customers Served is the number of interruptions divided by the number of customers served at the end of the **previous** year, i.e., 12/31/2006, divided by 1,000.

Major Storm is defined as any storm which causes service interruptions of at least ten percent of customers in an operating area, or if the interruptions last for 24 hours or more.

Operating Area is a geographical subdivision of each electric utility's franchise territory. These areas are also called regions, divisions, or districts.

Most of the data is presented two ways, with major storms included and major storms excluded. Major storms tend to distort a utility's performance trend. Tables and graphs that exclude major storms illustrate interruptions that are more under the utility's control. It portrays a utility's system facilities under normal conditions, although this can be misleading because interruptions during "normal" bad weather are included and it is difficult to analyze from year to year.

The first two tables show frequency and duration indices for the last five years for each utility and Statewide with and without Con Edison data. Con Edison has by far the lowest frequency numbers and tends to distort the Statewide data. Much of Con Edison's distribution system consists of a secondary network. In a secondary network, a customer is fed from multiple supplies, making the probability of an interruption relatively rare.

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

	2003	2004	2005	2006	2007	5 YR AVG
CHGE						
FREQUENCY	1.04	1.38	1.46	1.61	1.44	1.38
DURATION	1.93	2.35	2.70	2.58	2.43	2.40
CONED						
FREQUENCY	0.14	0.11	0.14	0.16	0.16	0.14
DURATION	1.69	1.71	1.99	8.23	1.97	3.12
LIPA *						
FREQUENCY	0.89	0.84	0.85	0.75	0.90	0.85
DURATION	1.08	1.04	1.07	1.37	1.20	1.15
NAT GRID						
FREQUENCY	0.87	1.02	0.98	1.01	0.96	0.97
DURATION	2.00	2.04	2.32	2.05	2.01	2.08
NYSEG						
FREQUENCY	1.07	1.13	1.12	1.12	1.20	1.12
DURATION	1.77	1.96	1.96	2.01	2.22	1.99
O&R						
FREQUENCY	1.18	1.30	1.36	1.23	1.03	1.22
DURATION	1.47	1.61	1.71	1.51	1.60	1.58
RG&E						
FREQUENCY	0.74	0.86	0.79	0.79	0.83	0.80
DURATION	1.63	1.84	1.87	1.78	1.73	1.77
STATEWIDE (WITHOUT CONED)						
FREQUENCY	0.93	1.02	1.01	1.00	1.02	0.99
DURATION	1.67	1.81	1.95	1.92	1.88	1.84
STATEWIDE (WITH CONED)						
FREQUENCY	0.60	0.64	0.65	0.65	0.65	0.64
DURATION	1.67	1.80	1.95	2.57	1.89	1.98

* 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.

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

	2003	2004	2005	2006	2007	5 YR AVG
CHGE						
FREQUENCY	1.90	1.43	1.85	2.23	1.52	1.79
DURATION	3.20	2.45	3.27	4.12	2.51	3.11
CONED						
FREQUENCY	0.15	0.11	0.15	0.23	0.18	0.16
DURATION	2.04	1.74	2.32	12.31	3.12	4.31
LIPA *						
FREQUENCY	1.09	0.91	1.08	1.18	1.04	1.06
DURATION	1.44	1.12	1.42	1.99	1.37	1.47
NAT GRID						
FREQUENCY	1.29	1.12	1.28	1.48	1.31	1.29
DURATION	3.84	2.15	2.76	7.18	2.70	3.73
NYSEG						
FREQUENCY	2.01	1.41	1.77	1.79	1.71	1.74
DURATION	5.39	2.26	3.27	10.32	3.62	4.97
O&R						
FREQUENCY	1.58	1.46	1.83	1.81	1.17	1.57
DURATION	1.77	1.77	2.42	2.15	1.92	2.01
RG&E						
FREQUENCY	2.65	0.98	0.93	0.98	1.16	1.34
DURATION	19.83	2.04	1.90	2.14	1.80	5.54
STATEWIDE (WITHOUT CONED)						
FREQUENCY	1.54	1.15	1.36	1.49	1.31	1.37
DURATION	5.93	1.97	2.60	6.02	2.56	3.81
STATEWIDE (WITH CONED)						
FREQUENCY	0.96	0.71	0.85	0.96	0.83	0.86
DURATION	5.67	1.95	2.58	6.65	2.61	3.89

* 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.

STATEWIDE (WITHOUT CON ED)

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	50,383	50,242	54,434	55,211	55,425	53,139
Number of Customer-Hours	6,720,518	8,015,041	8,631,869	8,439,916	8,439,464	8,049,361
Number of Customers Affected	4,026,132	4,439,677	4,433,386	4,400,072	4,495,428	4,358,939
Number of Customers Served	4,363,799	4,382,285	4,404,653	4,426,394	4,430,976	4,401,621
Average Duration Per Customer Affected (CAIDI)	1.67	1.81	1.95	1.92	1.88	1.84
Average Duration Per Customers Served	1.55	1.84	1.97	1.92	1.91	1.84
Interruptions Per 1000 Customers Served	11.60	11.51	12.42	12.53	12.52	12.12
Number of Customers Affected Per Customer Served (SAIFI)	0.93	1.02	1.01	1.00	1.02	0.99

STATEWIDE (WITH CON ED)

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	62,544	59,458	65,019	65,752	66,746	63,904
Number of Customer-Hours	7,439,078	8,596,012	9,506,355	12,603,322	9,429,452	9,514,844
Number of Customers Affected	4,451,904	4,779,817	4,873,534	4,905,844	4,996,967	4,801,613
Number of Customers Served	7,506,845	7,543,669	7,591,865	7,644,815	7,675,773	7,592,593
Average Duration Per Customer Affected (CAIDI)	1.67	1.80	1.95	2.57	1.89	1.98
Average Duration Per Customers Served	1.00	1.15	1.26	1.66	1.23	1.26
Interruptions Per 1000 Customers Served	8.37	7.92	8.62	8.66	8.73	8.46
Number of Customers Affected Per Customer Served (SAIFI)	0.60	0.64	0.65	0.65	0.65	0.64

* 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.

STATEWIDE (WITHOUT CON ED)

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	68,419	53,535	66,767	70,872	61,753	64,269
Number of Customer-Hours	39,754,277	9,852,887	15,493,419	39,413,242	14,848,512	23,872,467
Number of Customers Affected	6,705,907	5,009,438	5,960,730	6,548,910	5,808,516	6,006,700
Number of Customers Served	4,363,799	4,382,285	4,404,653	4,426,394	4,430,976	4,401,621
Average Duration Per Customer Affected (CAIDI)	5.93	1.97	2.60	6.02	2.56	3.81
Average Duration Per Customers Served	9.16	2.26	3.54	8.95	3.35	5.45
Interruptions Per 1000 Customers Served	15.76	12.27	15.24	16.09	13.95	14.66
Number of Customers Affected Per Customer Served (SAIFI)	1.54	1.15	1.36	1.49	1.31	1.37

STATEWIDE (WITH CON ED)

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	81,504	62,806	77,937	86,734	74,261	76,648
Number of Customer-Hours	40,730,272	10,454,054	16,612,929	48,437,221	16,630,252	26,572,946
Number of Customers Affected	7,184,725	5,355,101	6,442,863	7,282,114	6,379,276	6,528,816
Number of Customers Served	7,506,845	7,543,669	7,591,865	7,644,815	7,675,773	7,592,593
Average Duration Per Customer Affected (CAIDI)	5.67	1.95	2.58	6.65	2.61	3.89
Average Duration Per Customers Served	5.45	1.39	2.20	6.38	2.18	3.52
Interruptions Per 1000 Customers Served	10.91	8.37	10.33	11.42	9.71	10.15
Number of Customers Affected Per Customer Served (SAIFI)	0.96	0.71	0.85	0.96	0.83	0.86

* 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.

CENTRAL HUDSON

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	5,741	6,514	6,911	7,538	6,386	6,618
Number of Customer-Hours	563,491	917,136	1,125,389	1,201,109	1,021,859	965,797
Number of Customers Affected	291,245	389,969	416,547	464,765	420,769	396,659
Number of Customers Served	282,814	286,080	289,080	292,816	295,368	289,232
Average Duration Per Customer Affected (CAIDI)	1.93	2.35	2.70	2.58	2.43	2.40
Average Duration Per Customers Served	2.01	3.24	3.93	4.15	3.49	3.37
Interruptions Per 1000 Customers Served	20.45	23.03	24.16	26.08	21.81	23.10
Number of Customers Affected Per Customer Served (SAIFI)	1.04	1.38	1.46	1.61	1.44	1.38

CENTRAL HUDSON

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	8,113	6,756	8,309	10,066	6,681	7,985
Number of Customer-Hours	1,710,608	994,057	1,735,705	2,649,690	1,117,802	1,641,572
Number of Customers Affected	533,810	405,534	530,319	643,778	444,813	511,651
Number of Customers Served	282,814	286,080	289,080	292,816	295,368	289,232
Average Duration Per Customer Affected (CAIDI)	3.20	2.45	3.27	4.12	2.51	3.11
Average Duration Per Customers Served	6.09	3.51	6.07	9.17	3.82	5.73
Interruptions Per 1000 Customers Served	28.90	23.89	29.04	34.82	22.82	27.89
Number of Customers Affected Per Customer Served (SAIFI)	1.90	1.43	1.85	2.23	1.52	1.79

* Customers Served is the number of customers served at the end of the current year.

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

CON ED (SYSTEM)

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	12,161	9,216	10,585	10,541	11,321	10,765
Number of Customer-Hours	718,561	580,971	874,487	4,163,407	989,988	1,465,483
Number of Customers Affected	425,772	340,140	440,148	505,772	501,539	442,674
Number of Customers Served	3,143,046	3,161,384	3,187,212	3,218,421	3,244,797	3,190,972
Average Duration Per Customer Affected (CAIDI)	1.69	1.71	1.99	8.23	1.97	3.12
Average Duration Per Customers Served	0.23	0.18	0.28	1.31	0.31	0.46
Interruptions Per 1000 Customers Served	3.89	2.93	3.35	3.31	3.52	3.40
Number of Customers Affected Per Customer Served (SAIFI)	0.14	0.11	0.14	0.16	0.16	0.14

CON ED (SYSTEM)

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	13,085	9,271	11,170	15,862	12,508	12,379
Number of Customer-Hours	975,995	601,167	1,119,510	9,023,979	1,781,740	2,700,478
Number of Customers Affected	478,818	345,663	482,133	733,204	570,760	522,116
Number of Customers Served	3,143,046	3,161,384	3,187,212	3,218,421	3,244,797	3,190,972
Average Duration Per Customer Affected (CAIDI)	2.04	1.74	2.32	12.31	3.12	4.31
Average Duration Per Customers Served	0.31	0.19	0.35	2.83	0.55	0.85
Interruptions Per 1000 Customers Served	4.19	2.95	3.53	4.98	3.89	3.91
Number of Customers Affected Per Customer Served (SAIFI)	0.15	0.11	0.15	0.23	0.18	0.16

* Customers Served is the number of customers served at the end of the current year.

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

CON ED (NETWORK)

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	6,625	4,360	4,967	4,274	5,571	5,159
Number of Customer-Hours	66,219	44,195	59,566	2,947,306	316,477	686,753
Number of Customers Affected	20,131	12,138	13,406	48,467	176,430	54,114
Number of Customers Served	2,307,841	2,319,321	2,339,622	2,363,897	2,361,145	2,338,365
Average Duration Per Customer Affected (CAIDI)	3.29	3.64	4.44	60.81	1.79	14.80
Average Duration Per Customers Served	0.03	0.02	0.03	1.26	0.13	0.29
Interruptions Per 1000 Customers Served	2.89	1.89	2.14	1.83	2.36	2.22
Number of Customers Affected Per Customer Served (SAIFI)	0.01	0.01	0.01	0.02	0.07	0.02

* Customers Served is the number of customers served at the end of the current year.

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

CON ED (RADIAL)

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	5,536	4,856	5,618	6,267	5,750	5,605
Number of Customer-Hours	652,341	536,776	814,921	1,216,101	673,511	778,730
Number of Customers Affected	405,641	328,002	426,742	457,305	325,109	388,560
Number of Customers Served	835,205	842,063	847,590	854,524	883,652	852,607
Average Duration Per Customer Affected (CAIDI)	1.61	1.64	1.91	2.66	2.07	1.98
Average Duration Per Customers Served	0.78	0.64	0.97	1.43	0.79	0.92
Interruptions Per 1000 Customers Served	6.63	5.81	6.67	7.39	6.73	6.65
Number of Customers Affected Per Customer Served (SAIFI)	0.49	0.39	0.51	0.54	0.38	0.46

CON ED (RADIAL)

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	6,460	4,911	6,203	11,588	6,937	7,220
Number of Customer-Hours	909,776	556,972	1,059,944	6,076,673	1,465,264	2,013,726
Number of Customers Affected	458,687	333,525	468,727	684,737	394,330	468,001
Number of Customers Served	835,205	842,063	847,590	854,524	883,652	852,607
Average Duration Per Customer Affected (CAIDI)	1.98	1.67	2.26	8.87	3.72	3.70
Average Duration Per Customers Served	1.09	0.67	1.26	7.17	1.71	2.38
Interruptions Per 1000 Customers Served	7.74	5.88	7.37	13.67	8.12	8.55
Number of Customers Affected Per Customer Served (SAIFI)	0.55	0.40	0.56	0.81	0.46	0.55

* Customers Served is the number of customers served at the end of the current year.

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

LIPA

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	16,856	15,423	17,728	18,634	18,736	17,475
Number of Customer-Hours	1,042,642	942,669	999,412	1,129,275	1,190,411	1,060,882
Number of Customers Affected	962,011	908,253	931,276	823,396	995,077	924,003
Number of Customers Served	1,084,196	1,089,394	1,096,472	1,103,162	1,108,540	1,096,353
Average Duration Per Customer Affected (CAIDI)	1.08	1.04	1.07	1.37	1.20	1.15
Average Duration Per Customers Served	0.97	0.87	0.92	1.03	1.08	0.97
Interruptions Per 1000 Customers Served	15.66	14.23	16.27	16.99	16.98	16.03
Number of Customers Affected Per Customer Served (SAIFI)	0.89	0.84	0.85	0.75	0.90	0.85

LIPA

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	19,704	15,956	21,317	24,905	20,077	20,392
Number of Customer-Hours	1,694,357	1,105,002	1,675,011	2,564,134	1,564,559	1,720,613
Number of Customers Affected	1,178,438	986,170	1,177,059	1,289,698	1,142,365	1,154,746
Number of Customers Served	1,084,196	1,089,394	1,096,472	1,103,162	1,108,540	1,096,353
Average Duration Per Customer Affected (CAIDI)	1.44	1.12	1.42	1.99	1.37	1.47
Average Duration Per Customers Served	1.57	1.02	1.54	2.34	1.42	1.58
Interruptions Per 1000 Customers Served	18.31	14.72	19.57	22.71	18.20	18.70
Number of Customers Affected Per Customer Served (SAIFI)	1.09	0.91	1.08	1.18	1.04	1.06

* LIPA is not regulated by the NYS PSC.

* Customers Served is the number of customers served at the end of the current year.

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

NATIONAL GRID

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	13,710	13,917	13,680	13,665	14,606	13,916
Number of Customer-Hours	2,735,530	3,274,229	3,598,884	3,289,340	3,045,363	3,188,669
Number of Customers Affected	1,368,441	1,602,708	1,551,448	1,607,461	1,518,634	1,529,738
Number of Customers Served	1,577,798	1,580,131	1,585,383	1,589,949	1,594,179	1,585,488
Average Duration Per Customer Affected (CAIDI)	2.00	2.04	2.32	2.05	2.01	2.08
Average Duration Per Customers Served	1.73	2.08	2.28	2.07	1.92	2.02
Interruptions Per 1000 Customers Served	8.69	8.82	8.66	8.62	9.19	8.79
Number of Customers Affected Per Customer Served (SAIFI)	0.87	1.02	0.98	1.01	0.96	0.97

NATIONAL GRID

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	16,801	14,760	16,211	16,279	16,222	16,055
Number of Customer-Hours	7,793,193	3,800,127	5,568,127	16,813,162	5,605,931	7,916,108
Number of Customers Affected	2,029,601	1,766,092	2,020,066	2,341,235	2,075,480	2,046,495
Number of Customers Served	1,577,798	1,580,131	1,585,383	1,589,949	1,594,179	1,585,488
Average Duration Per Customer Affected (CAIDI)	3.84	2.15	2.76	7.18	2.70	3.73
Average Duration Per Customers Served	4.94	2.41	3.52	10.61	3.53	5.00
Interruptions Per 1000 Customers Served	10.65	9.35	10.26	10.27	10.20	10.15
Number of Customers Affected Per Customer Served (SAIFI)	1.29	1.12	1.28	1.48	1.31	1.29

* Customers Served is the number of customers served at the end of the current year.

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

NYSEG

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	8,946	8,946	10,190	9,682	10,317	9,616
Number of Customer-Hours	1,586,402	1,866,112	1,872,868	1,913,315	2,299,142	1,907,568
Number of Customers Affected	894,383	952,258	955,009	953,941	1,034,113	957,941
Number of Customers Served	844,912	849,335	854,508	859,440	859,963	853,632
Average Duration Per Customer Affected (CAIDI)	1.77	1.96	1.96	2.01	2.22	1.99
Average Duration Per Customers Served	1.89	2.21	2.21	2.24	2.68	2.23
Interruptions Per 1000 Customers Served	10.67	10.59	12.00	11.33	12.00	11.27
Number of Customers Affected Per Customer Served (SAIFI)	1.07	1.13	1.12	1.12	1.20	1.12

NYSEG

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	16,446	10,269	14,364	12,835	12,928	13,368
Number of Customer-Hours	9,072,066	2,687,162	4,926,508	15,787,602	5,314,914	7,557,650
Number of Customers Affected	1,682,913	1,188,998	1,504,612	1,529,247	1,469,825	1,475,119
Number of Customers Served	844,912	849,335	854,508	859,440	859,963	853,632
Average Duration Per Customer Affected (CAIDI)	5.39	2.26	3.27	10.32	3.62	4.97
Average Duration Per Customers Served	10.82	3.18	5.80	18.48	6.18	8.89
Interruptions Per 1000 Customers Served	19.61	12.15	16.91	15.02	15.04	15.75
Number of Customers Affected Per Customer Served (SAIFI)	2.01	1.41	1.77	1.79	1.71	1.74

* Customers Served is the number of customers served at the end of the current year.

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

O&R

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	2,479	2,546	2,718	2,688	2,596	2,605
Number of Customer-Hours	360,874	440,617	493,591	397,977	356,514	409,915
Number of Customers Affected	244,762	274,124	289,022	264,121	222,895	258,985
Number of Customers Served	210,472	212,352	214,546	216,268	215,694	213,866
Average Duration Per Customer Affected (CAIDI)	1.47	1.61	1.71	1.51	1.60	1.58
Average Duration Per Customers Served	1.73	2.09	2.32	1.85	1.65	1.93
Interruptions Per 1000 Customers Served	11.91	12.10	12.80	12.53	12.00	12.27
Number of Customers Affected Per Customer Served (SAIFI)	1.18	1.30	1.36	1.23	1.03	1.22

O&R

Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	3,155	2,729	3,123	3,546	2,738	3,058
Number of Customer-Hours	581,212	542,652	942,127	836,046	483,938	677,195
Number of Customers Affected	327,964	307,396	388,553	388,164	252,650	332,945
Number of Customers Served	210,472	212,352	214,546	216,268	215,694	213,866
Average Duration Per Customer Affected (CAIDI)	1.77	1.77	2.42	2.15	1.92	2.01
Average Duration Per Customers Served	2.79	2.58	4.44	3.90	2.24	3.19
Interruptions Per 1000 Customers Served	15.16	12.97	14.71	16.53	12.66	14.40
Number of Customers Affected Per Customer Served (SAIFI)	1.58	1.46	1.83	1.81	1.17	1.57

* Customers Served is the number of customers served at the end of the current year.

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

RG&E

Excluding Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	2,651	2,896	3,207	3,004	2,784	2,908
Number of Customer-Hours	431,578	574,278	541,725	508,899	526,175	516,531
Number of Customers Affected	265,290	312,365	290,084	286,388	303,940	291,613
Number of Customers Served	363,607	364,993	364,664	364,759	357,232	363,051
Average Duration Per Customer Affected (CAIDI)	1.63	1.84	1.87	1.78	1.73	1.77
Average Duration Per Customers Served	1.20	1.58	1.48	1.40	1.44	1.42
Interruptions Per 1000 Customers Served	7.36	7.96	8.79	8.24	7.63	8.00
Number of Customers Affected Per Customer Served (SAIFI)	0.74	0.86	0.79	0.79	0.83	0.80

RG&E

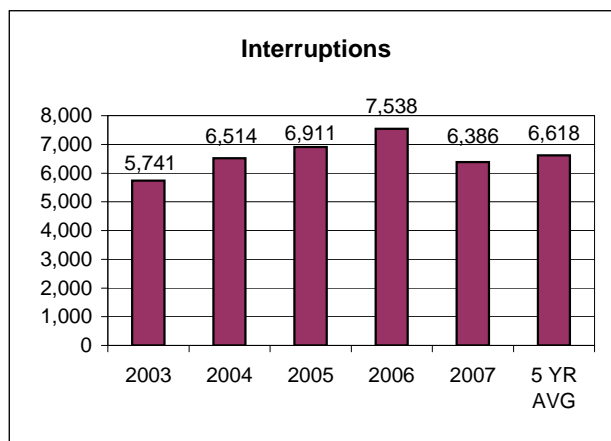
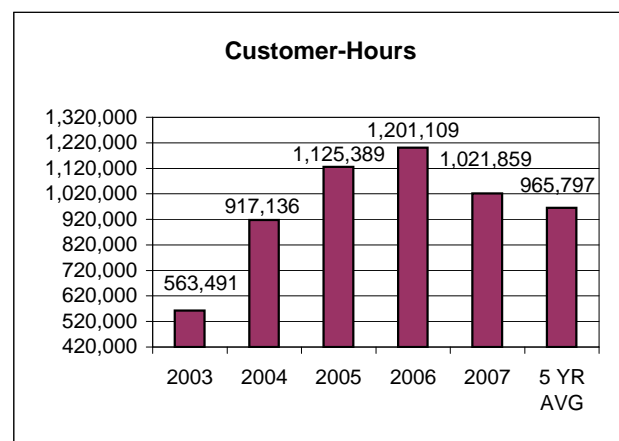
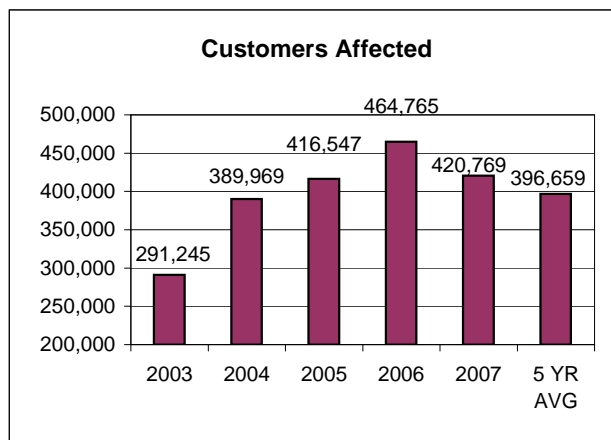
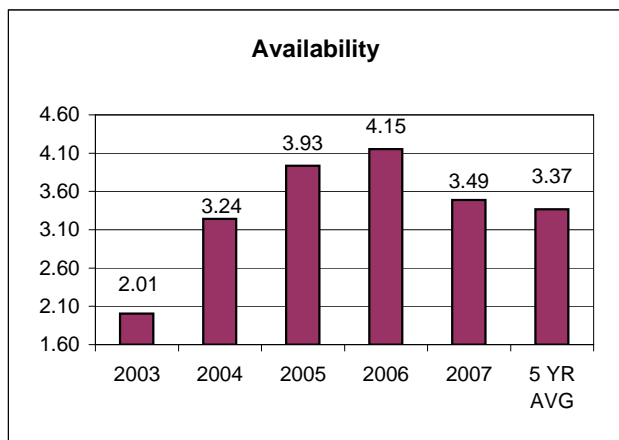
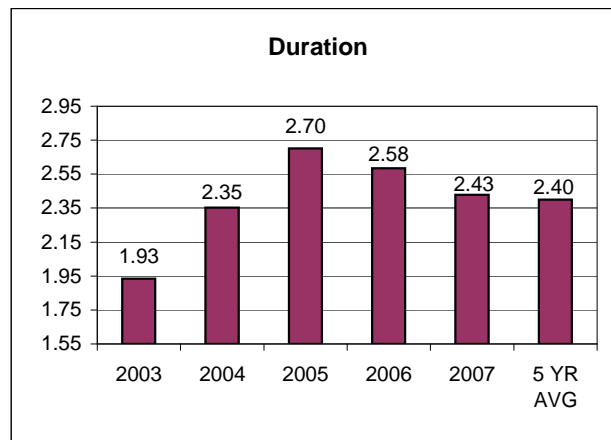
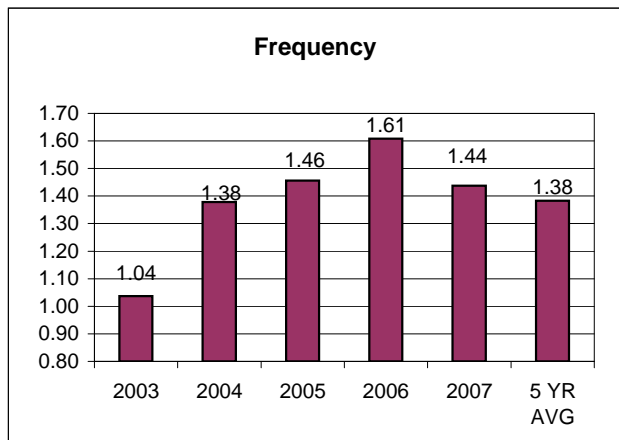
Including Major Storms

	2003	2004	2005	2006	2007	5 YR AVG
Number of Interruptions	4,200	3,065	3,443	3,241	3,107	3,411
Number of Customer-Hours	18,902,840	723,887	645,940	762,609	761,368	4,359,329
Number of Customers Affected	953,181	355,248	340,121	356,788	423,383	485,744
Number of Customers Served	363,607	364,993	364,664	364,759	357,232	363,051
Average Duration Per Customer Affected (CAIDI)	19.83	2.04	1.90	2.14	1.80	5.54
Average Duration Per Customers Served	52.49	1.99	1.77	2.09	2.09	12.08
Interruptions Per 1000 Customers Served	11.66	8.43	9.43	8.89	8.52	9.39
Number of Customers Affected Per Customer Served (SAIFI)	2.65	0.98	0.93	0.98	1.16	1.34

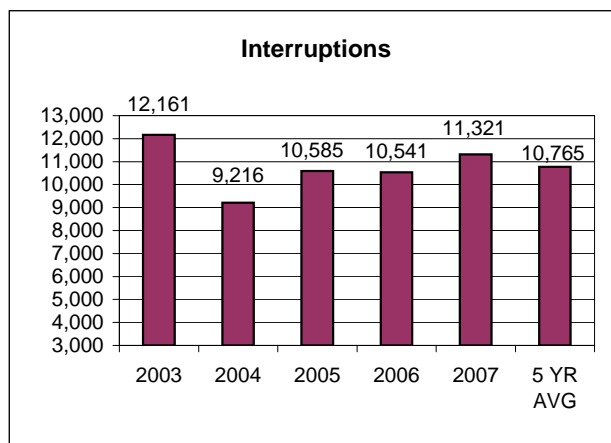
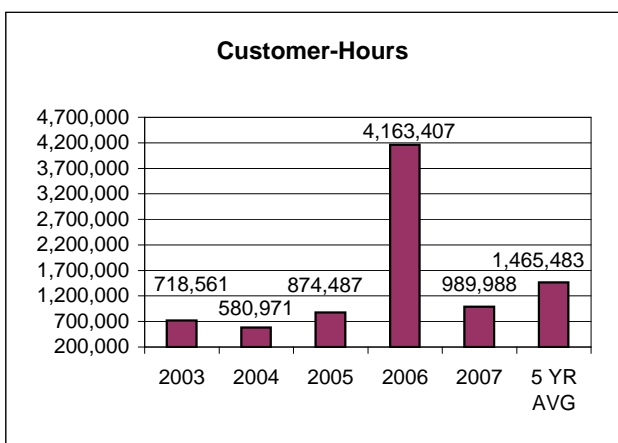
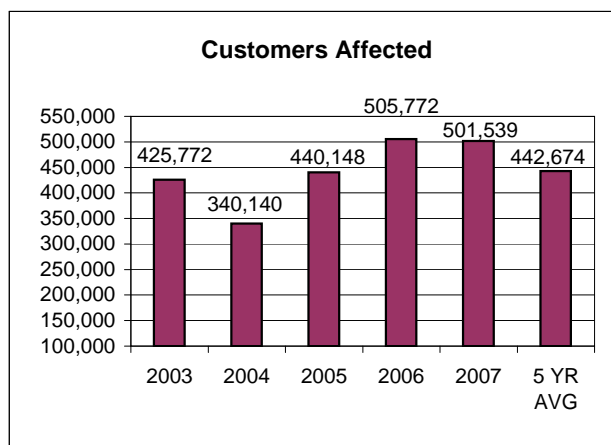
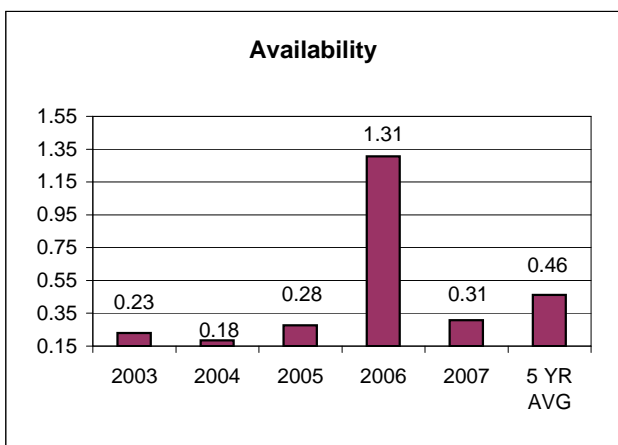
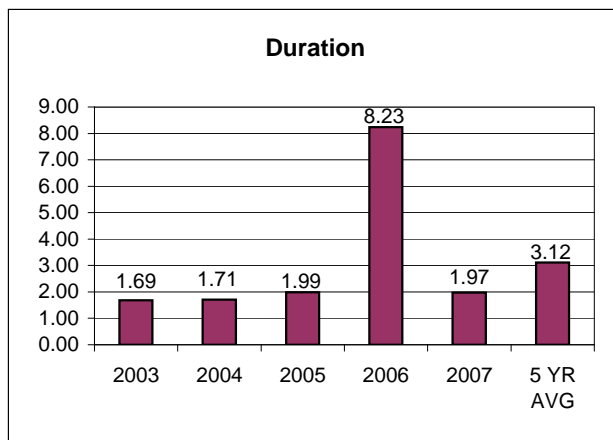
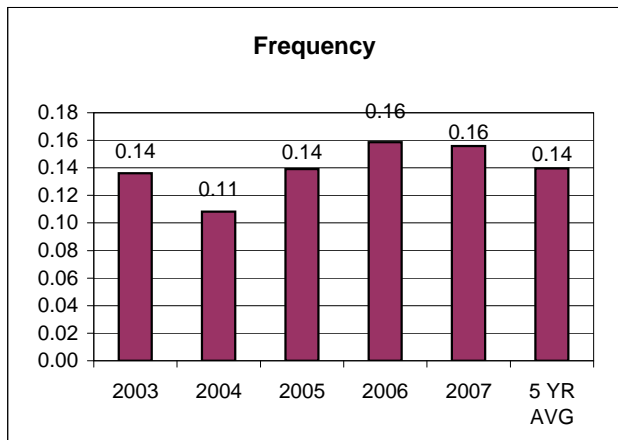
* Customers Served is the number of customers served at the end of the current year.

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

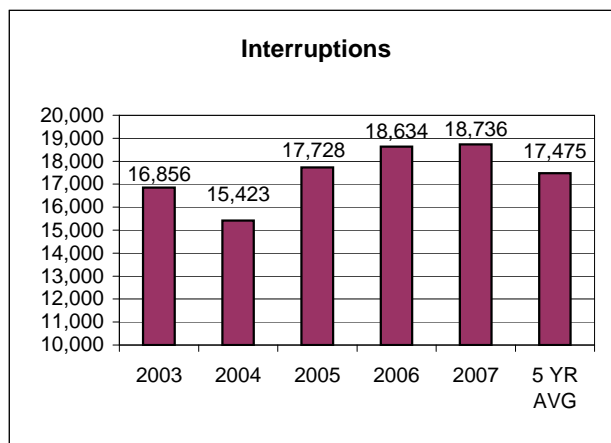
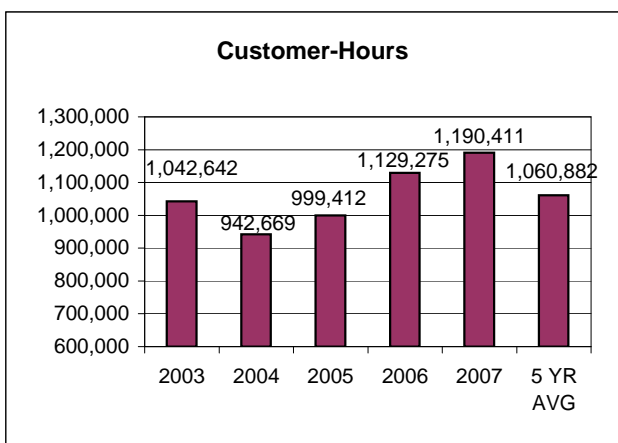
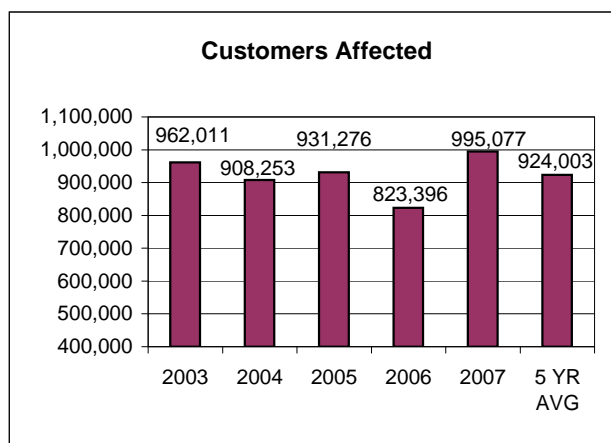
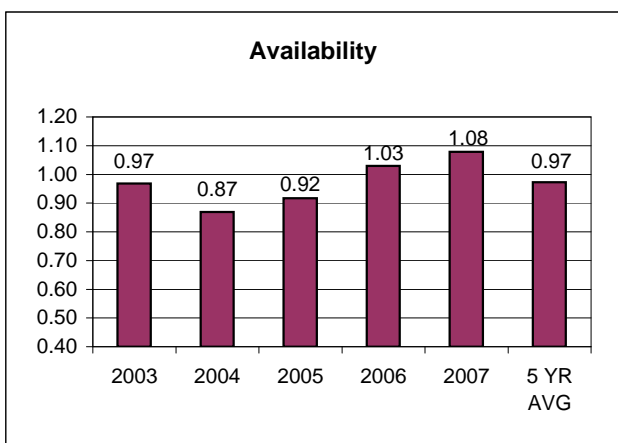
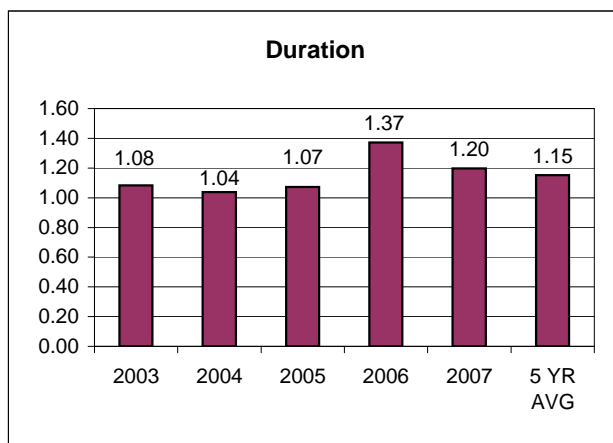
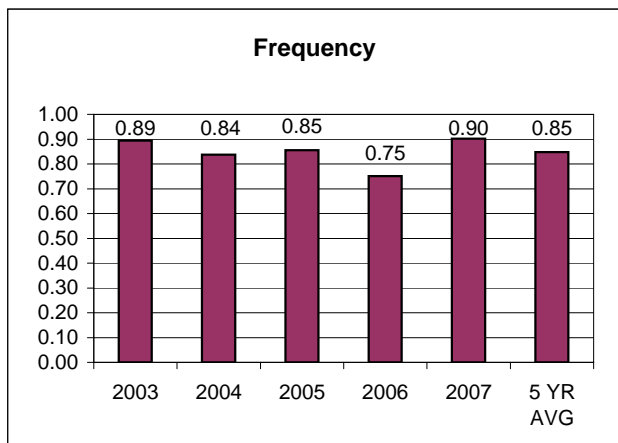
Central Hudson Gas and Electric (Excluding Major Storms)



Consolidated Edison - System (Excluding Major Storms)

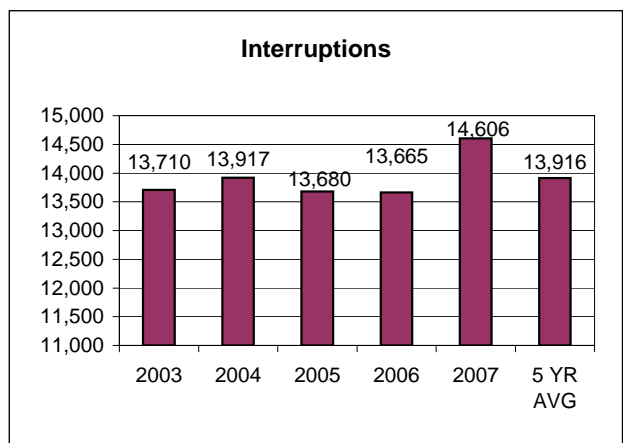
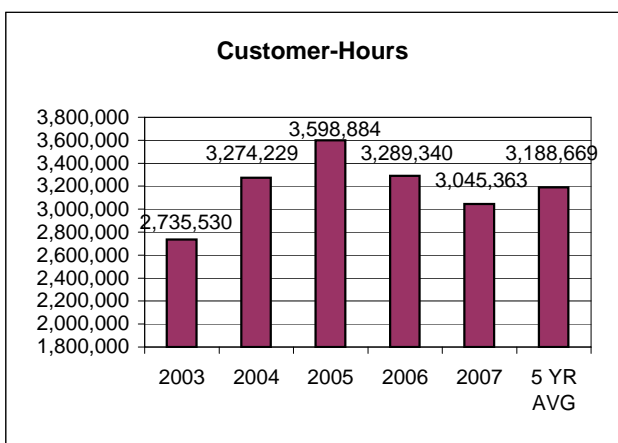
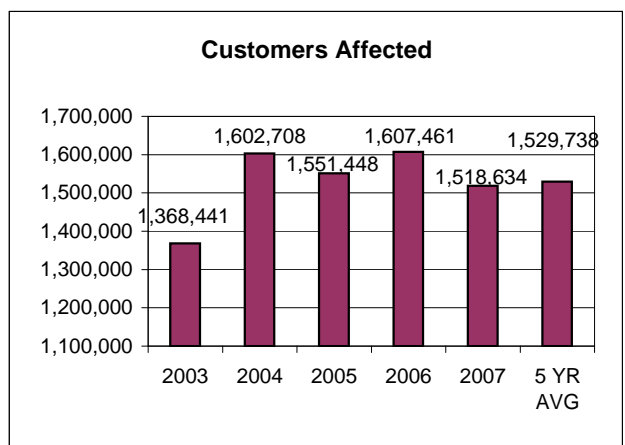
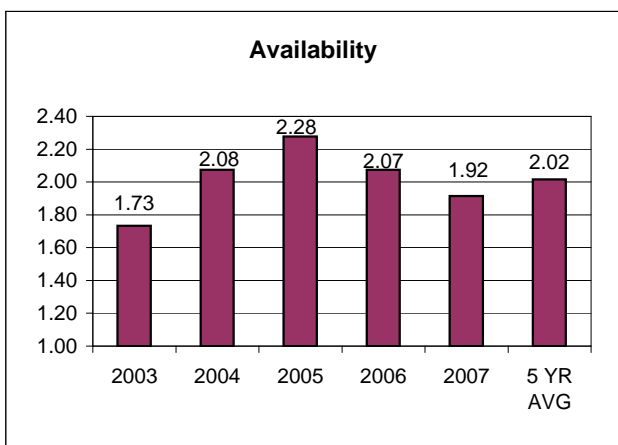
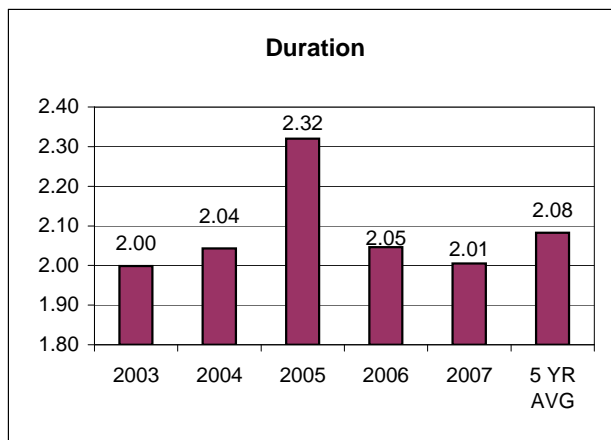
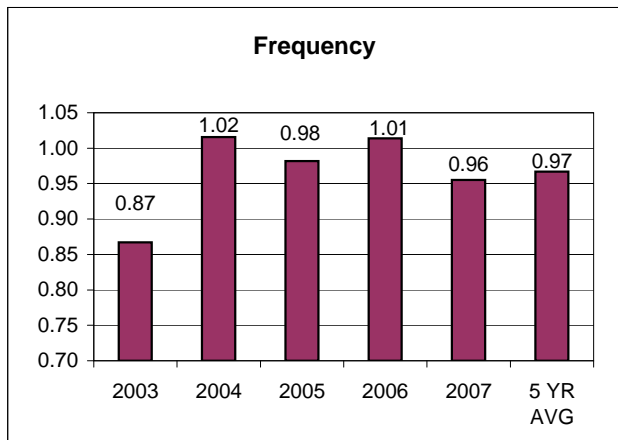


Long Island Power Authority (Excluding Major Storms)

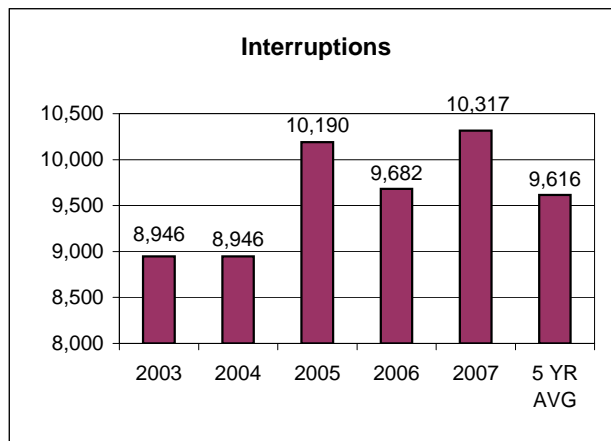
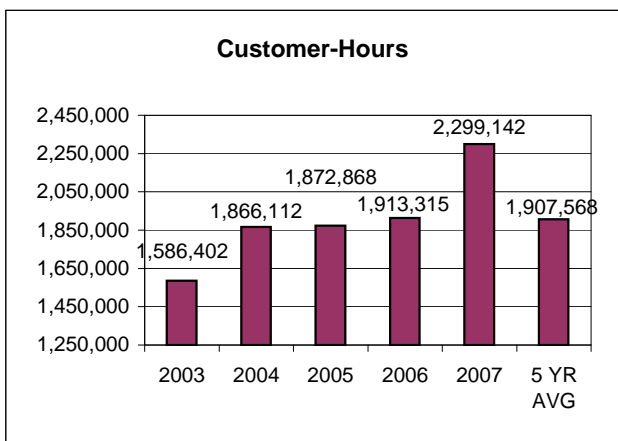
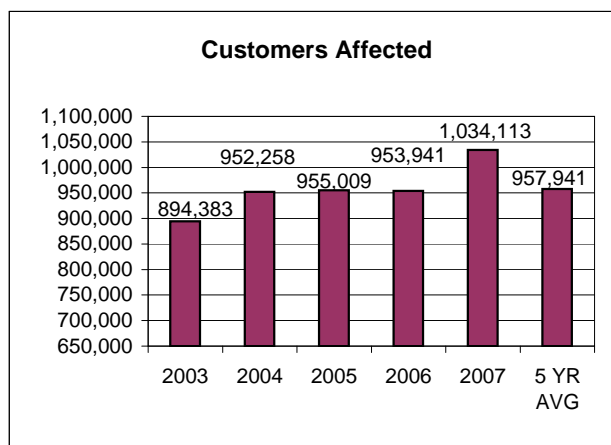
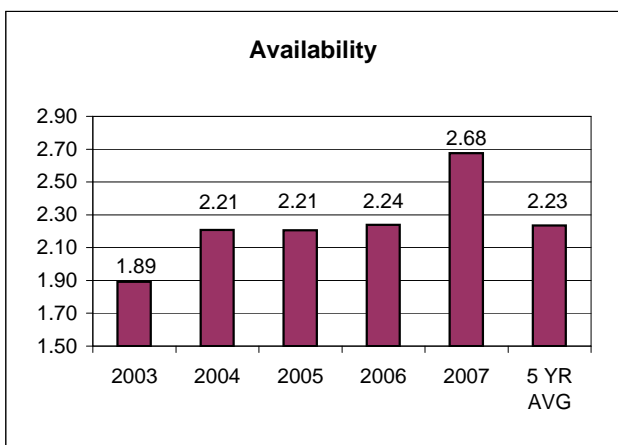
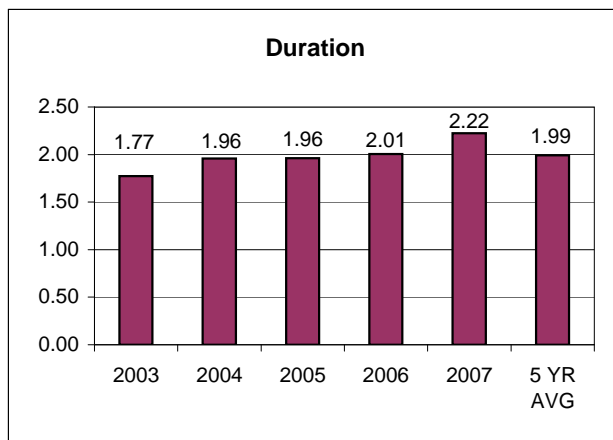
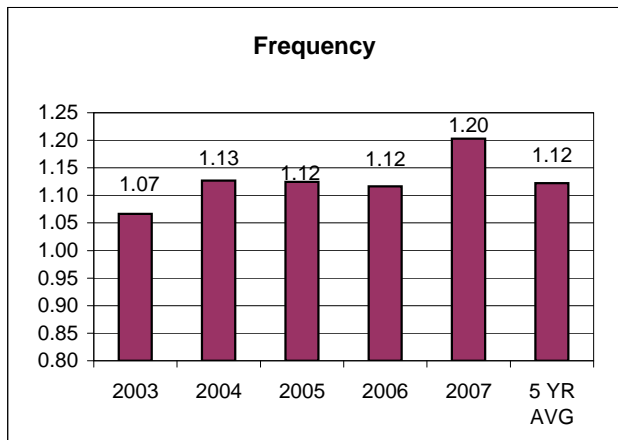


* LIPA is not regulated by the NYS PSC.

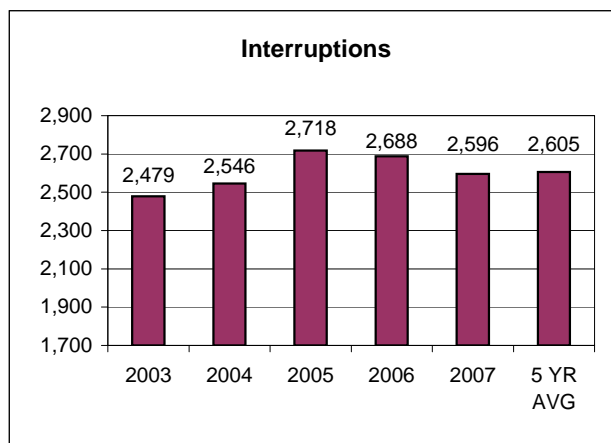
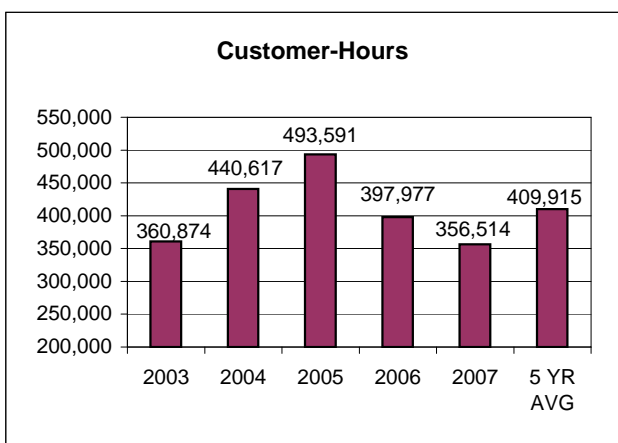
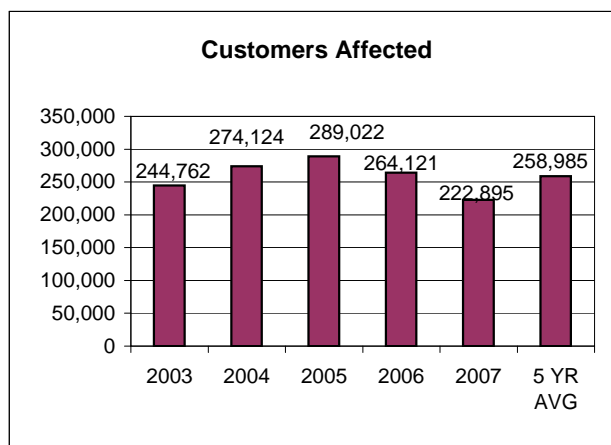
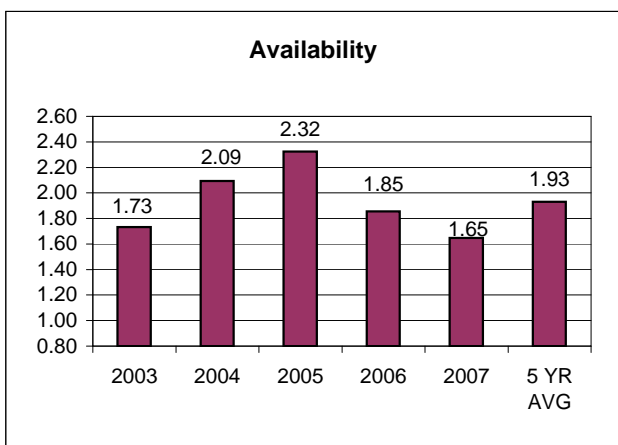
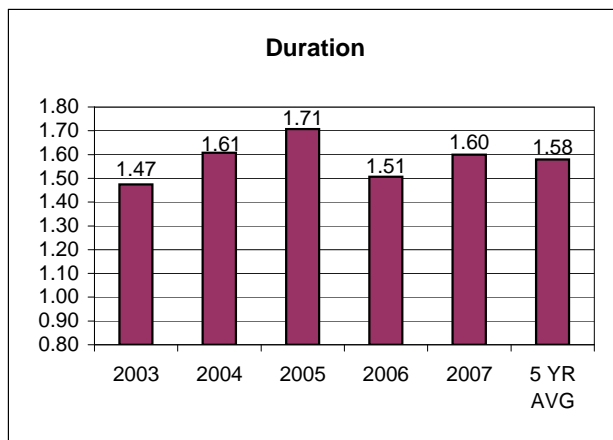
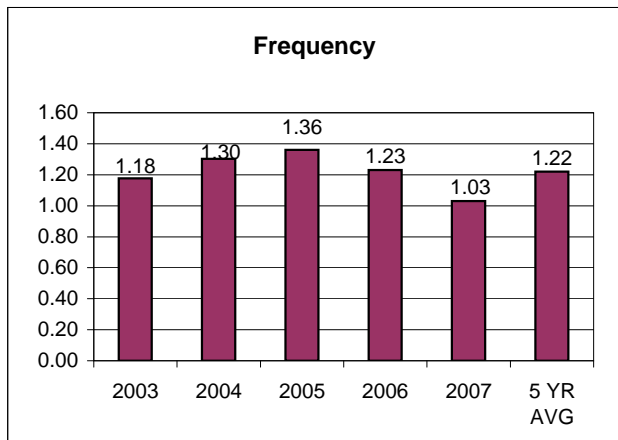
National Grid (Excluding Major Storms)



New York State Electric and Gas (Excluding Major Storms)



Orange and Rockland Utilities (Excluding Major Storms)



Rochester Gas and Electric (Excluding Major Storms)

