

STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE



2010 GAS SAFETY
PERFORMANCE MEASURES REPORT
(CASE 11-G-0242)

Safety Section
Office of Electric, Gas & Water
June 1, 2011

EXECUTIVE SUMMARY

This report examines the results of New York State natural gas local distribution companies' (LDCs) performance in three specific safety areas (damage prevention, emergency response, and leak management) for 2010. Historic data back to 2003 is also provided in the Appendices to show trends and context.

The performance measures are the result of collaborative efforts between Staff and the LDCs to improve identification and tracking of areas that are critical to gas safety. The data used in the report were gathered and submitted by the LDCs using processes developed from these collaborative efforts. Overall, the data indicate that LDC performance has substantially improved across the state over the eight year period. There has been a 65% improvement in total damage prevention performance, the 30-minute emergency response time has improved from 76.8% in 2003 to 81.6% in 2010, and the year-end leak backlog of potentially hazardous leaks has decreased 84%, from 1,154 to 188. As LDCs continue their outreach efforts, adopt better practices in responding to leak and odor calls, and work to replace leak-prone infrastructure, Staff expects further improvement will occur.

Staff recommends those LDCs identified as having improvement opportunities conduct a self-evaluation, and respond within 45 days with specific details on how they plan to improve performance. A more detailed discussion of the 2010 results for each performance measure follows.

Damage Prevention

The first measure, damage prevention, gauges the ability of LDCs to minimize damage to buried facilities caused by excavation activities. The damage measure is further broken down into four categories: damages due to (1) mismarks (inaccurate marking by the LDC of its buried facilities); (2) company and company contractor error; (3) third party excavator error; and (4) lack of notification of intent to excavate (no-calls).

Overall, damage prevention performance across the state improved over 7% during 2010. After rising for several years, the number of requests to locate underground gas facilities (tickets) received by the LDCs has remained mostly flat over the past three years. Tickets increased 0.9% in 2010 to 729,067. This is most likely attributable to the relatively stagnate level of construction activity due to the slowing of the economy, although a couple of LDCs experienced increases. All four categories composing the Total Damage measure continued to improve during 2010. The greatest improvement in 2010 came in damages due to mismarks (8.4%), followed by damages due to Excavator Error (7.3%), and then damages due to No-calls (6.7%). Damages due to Company and Company Contractor also improved 1.3%. Staff attributes these positive results, in part, to continuing public education efforts undertaken by both the LDCs and the One-Call Centers, the 811 three-digit dialing initiative, and the Commission's enforcement process for non-compliance with its regulations intended to protect underground facilities. Despite overall statewide improvement, a few LDCs experienced increased damage rates within one or more of the four categories of damages described above.

Emergency Response

The second measure, emergency response, gauges the ability of LDCs to respond promptly to reports of gas leaks or emergencies by examining the percentage of calls that fall within various response times. This performance measure contains three specific response goals: respond to 75% of emergency calls within 30 minutes, 90% within 45 minutes, and 95% with 60 minutes. Response performance declined slightly across the state during 2010, but general improvement has occurred over the past eight years. Statewide performance during 2010 marked three years in a row that all 11 LDCs met the three response targets. Staff attributes this sustained performance to LDCs adopting more efficient work practices, fewer numbers of leak and odor calls, utilization of new technologies such as global positioning systems (GPS) to quickly identify the most appropriate employee to respond to a gas leak or odor call, continued public awareness initiatives on the properties of natural gas, and placement of existing or additional personnel in certain geographical areas during the times of day that have historically had high volumes of emergency notifications.

Leak Management

The third measure, leak management, examines LDCs' performance in effectively maintaining leak inventories and keeping potentially hazardous leaks to a minimum. The measure focuses on the year-end backlog of leaks requiring repair. The end of the calendar year is regarded as the beginning of the frost season, when there is a greater chance of gas migration into buildings because the gas cannot vent as readily through the ground to the

atmosphere due to the blanket of frost. The statewide year-end 2010 backlog was 35.6% less than year-end 2009. Compared to 2003, the first year of performance measures reporting, it is 84% less. All LDCs have demonstrated sustained improvement over the past several years.

Next Steps

The analysis of each performance measure in this report identifies specific areas where certain LDCs have room for improvement. Staff recommends that those LDCs develop action plans to improve performance. In some cases, Staff suggests certain issues to examine, although the LDCs need not limit themselves to Staff's suggestions and are free to explore additional areas.

This report will be transmitted to an executive level operating officer of each LDC. For those LDCs identified as having improvement opportunities, Staff recommends that those companies conduct a self-evaluation, and provide the Safety Section of the Office of Electric, Gas and Water within 45 days specific details on how they plan to improve performance.

Table of Contents

COMPANY ACRONYMS 2

INTRODUCTION 3

PERFORMANCE AND ANALYSIS FOR 2010 4

Damage Prevention 4

 Figure #1 - *Damages per 1000 Tickets Statewide*..... 7

 Figure #2 - *Total Damages per 1000 Tickets Statewide*..... 9

 Figure #3 - *Excavator Error Damages per 1000 Tickets Statewide*... 10

 Figure #4 - *No-call Damages per 1000 Tickets Statewide*..... 11

 Figure #5 - *Mismark Damages per 1000 Tickets Statewide*..... 13

 Figure #6 - *Company & Company Contractor Damages per 1000 Tickets Statewide*..... 14

Emergency Response 16

 2010 Results and Analysis18

 Figure #7 - *Statewide ERT Performance for All Goals*..... 18

 Figure #8 - *Response Times for 30-Minute Goal*..... 19

Leak Management 21

 2010 Results and Analysis22

 Figure #9 - *Leak Backlog 2006 - 2010*..... 24

CONCLUSION 26

RECOMMENDATIONS 28

APPENDIX A 29

 Reported & Computed LDC Damage Performance 29

 Individual LDC Damage Performance 32

APPENDIX B 34

 Reported Emergency Response Data 34

APPENDIX C 35

 Reported Leak Data 35

APPENDIX D 36

 Backlog of Leaks Requiring Repair 36

 Repaired Leaks Requiring Repair 36

COMPANY ACRONYMS

Company	Acronym in Report
Central Hudson Gas & Electric Corporation	Central Hudson
Consolidated Edison Company of New York, Inc.	Con Edison
Corning Natural Gas Corporation	Corning
KeySpan Gas East Corporation d/b/a National Grid	NGrid LI
The Brooklyn Union Gas Company d/b/a National Grid NY	NGrid NY
National Fuel Gas Distribution Corporation	NFG
New York State Electric & Gas Corporation	NYSEG
Niagara Mohawk Power Corporation d/b/a National Grid	NGrid Upstate
Orange & Rockland Utilities, Inc.	O&R
Rochester Gas & Electric Corporation	RG&E
St. Lawrence Gas Company, Inc.	St. Lawrence

INTRODUCTION

Gas safety performance measures were developed as a means of effectively improving local distribution companies' (LDCs) gas delivery system safety performance in areas identified as presenting the highest risks. Performance measures are tools that Staff and the LDCs can utilize to monitor the safe operation and maintenance of distribution systems. They indicate how companies are performing from year to year as well as trends over time.

In developing the performance measures, Staff first identified areas in LDCs' systems or operations that carry the greatest potential for harm to the public if performance is sub-standard. Staff then evaluated methods for capturing and tracking appropriate data so it could be used as a practical management tool. This process led to the identification of three performance measures:

Damage Prevention: This measure examines damages to the LDCs' buried facilities resulting from excavator activities, which is the leading cause of incidents involving buried gas pipelines.

Emergency Response Time: This measure examines the amount of time that it takes an LDC to reach the scene of a reported gas leak or odor.

Leak Management: This measure examines LDC performance in effectively maintaining leak inventory levels and keeping potentially hazardous leaks to a minimum.

PERFORMANCE AND ANALYSIS FOR 2010

Throughout this report, all of the figures display performance results for 2006-2010 for each LDC with the grey columns in the bar graphs representing 2006-2009, and the color columns representing 2010 results.¹ The blue horizontal line represents the 2010 statewide performance level.

Red numbers in tables represent failure to meet the target level for the measure or a decline in performance from the previous year. When no bar is shown in the graph for a particular company and year, there were no incidents for that measure.

Damage Prevention

Damage due to excavation activity is one of the leading causes of natural gas pipeline failures and accidents, both statewide and nationwide.

The damage-prevention procedures are designed to work as follows: (1) excavators provide notice of their intent to excavate to a one-call system,² which transmits an excavation notice (one-call ticket or ticket) to the member operators potentially affected by that excavation; (2) member operators clearly and accurately mark the location of their buried facilities in or near the excavation site; and (3) excavators work carefully around the marked facilities in order to avoid damaging them. Damages to underground facilities can be categorized by identifying

¹ Data going back to the year 2003 is continued in the Appendices.

² New York has two one-call systems, one for New York City and Long Island, and another for the remainder of the State.

where in this three-step process the root cause of an incident lies.

Evaluating the number of damages in relation to the volume of construction and excavation activity in an LDC's operating territory provides a useful basis for assessing performance in this area. The data used in the analyses are contained in Appendix A. The method used to normalize each LDC's data is the number of facility damages per 1000 one-call tickets.

The numbers of damages are categorized by damages resulting from:

- mismarks
- excavator error
- company and company contractor error
- "no-calls"

Each one-call ticket received provides an LDC the opportunity to mark its facilities correctly. Hence, the Mismatch measure specifically addresses this by examining damages caused by mismarks per 1000 tickets.

Once a one-call ticket is requested and the facilities are marked correctly, it provides an excavator the opportunity to work carefully and avoid damages. Damages due to Excavator Error per 1000 tickets tracks this category. Excavator Error damages are historically the largest component of Total Damages, partially because it entails the most effort to educate third-party contractors. Most professional excavators are well aware of the existence of the One-Call Centers and the requirement to notify it of planned excavation work. Many excavators are not as well versed in the additional requirements such as tolerance zones and verifying locations of underground

facilities with hand-dug test holes, maintaining the marks, maintaining clearances with powered equipment, etc.

Educating excavators on how to avoid damages once markouts have been requested requires more in-depth training and outreach.

Damages that are caused by LDC personnel, or by LDC direct contractors, are also included in the damage analysis as a separate category. These personnel should have the training and experience to work carefully near their own facilities. LDCs should also have better control over outside contractors they hire to perform work for them than they do over third-party contractors. Thus, this category should be the smallest contributor to the total damages. The current measure tracks damages caused by all utility operations within a particular LDC. That is, for a combination LDC, damages to gas facilities caused by electric crews or electric company contractors are included.

Damages due to No-calls are simply instances where no ticket was generated because the excavator did not provide notice of intent to excavate. This metric provides an indication of the general level of awareness excavators have about the one-call notification systems. A high percentage of damages in this category indicates that efforts are needed to make excavators aware of the dangers of working around buried facilities and the importance of using the one-call notification systems.

It is important to note that the damage prevention measures evaluate actual damages to LDCs' underground facilities. Based on the data reported in 2010, more than 99.77% of one-call tickets in LDC gas areas had no associated damages to natural gas facilities. There

were a total of 1,666 damages to natural gas LDC facilities in 2010, 5.9% less than in 2009. When these damages are normalized with the slight increase of 6,164 one-call tickets (0.9%) during 2010, the result is a significant improvement(-7.1%) in total damages per 1000 one-call tickets. While these are encouraging statistics, a single damage could lead to a catastrophic event, so it is important that LDCs and excavators strive to minimize damage to facilities.

The Department enforces the Commission’s damage prevention regulations - 16 NYCRR Part 753 - Protection of Underground Facilities. Over the past five years approximately 2000 citations have been issued leading to over \$745,000 in penalties collected. The Department has also sponsored legislative changes to increase the level of the penalties, but has not been successful.

Figure #1 below displays the collective statewide performance regarding the damage prevention measures. Note the significant increase in the number of tickets over the period. Also take note of the significant improvement in the Total Damages measure.

Metric	2006	2007	2008	2009	2010
# Tickets	598,603	636,338	722,903	719,475	729,067
Mismarks	0.89	0.73	0.53	0.54	0.50
Co. & Co. Contractor	0.17	0.16	0.13	0.11	0.10
Excavator Error	1.83	1.84	1.40	1.27	1.18
No-Calls	1.33	1.05	0.74	0.54	0.50
Total (per 1000)	4.21	3.78	2.80	2.46	2.29

Figure #1 - Damages per 1000 Tickets Statewide

All four metrics composing the Total Damage measure improved during 2010.³ The greatest improvement in 2010 came in damages due to mismarks (8.4%), followed by damages due to Excavator Error (7.3%), and then damages due to No-calls (6.7%). Damages due to Company and Company Contractor also improved 1.3%. It is encouraging to see that LDCs have collectively maintained, and continue to improve, performance over the past several years. The total number of tickets increased slightly during 2010. The past three years seem to have leveled off with the decrease in construction activity due to the slowdown of the economy likely outpacing gains in participation from excavators' use of the one-call system. An interesting note is that the LDCs in the New York City area continue to experience an increase in tickets while the rest of the state experienced a collective decline in tickets. RG&E was the only upstate LDC with a notable increase in tickets. It attributed the ticket increase to a larger number of road projects. Con Edison reported that a reason for the downstate's increase in tickets is that stimulus money continues to drive an increase in construction in the downstate urban areas. Another possible driver for the increase in the number of tickets downstate was a large tree removal and sidewalk repair program after the tornado in September 2010 that impacted Brooklyn, Queens, and Staten Island. Each LDC's actual number of tickets received, and individual annual performance in each area of damage prevention is located in Appendix A.

³ The Total Damage performance may not equal the sum of the four metrics due to rounding.

LDC performance in Total damages and Excavator Error damages is displayed in **Figure #2** and **Figure #3** below.

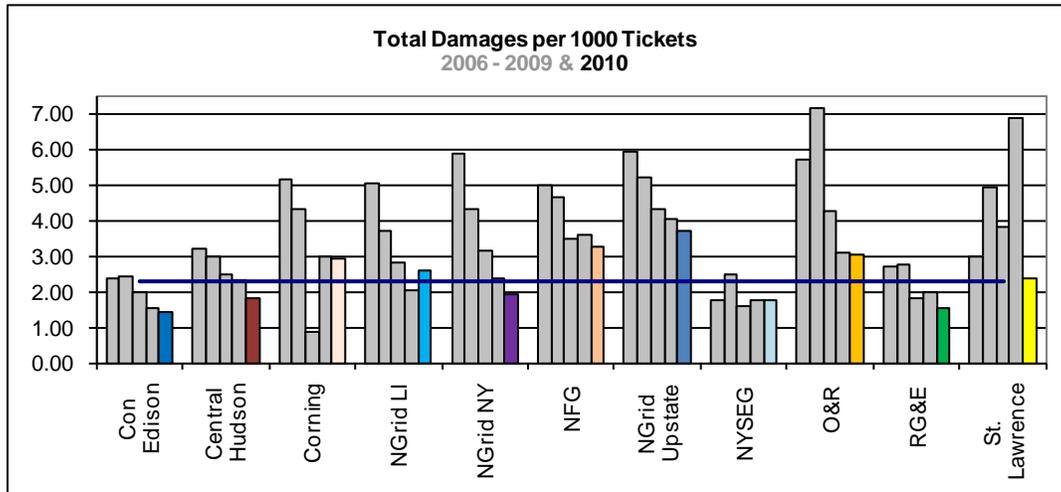


Figure #2 - Total Damages per 1000 Tickets Statewide

As seen in **Figure #2**, most LDCs improved across the state during 2010. St. Lawrence experienced the greatest improvement during 2010, one year after achieving its worst performance since 2003 when it had difficulty with a problem excavator. Con Edison, Central Hudson, NGrid NY, NFG, NGrid Upstate, O&R, RG&E, and St. Lawrence all experienced their best performance since data has been collected. Even with improvement in 2010, Corning, NFG, NGrid Upstate, and O&R remain outliers in the overall damage performance measure. NGrid LI's performance deteriorated 25% during 2010 as it experienced more damages (7.5%) and fewer tickets (-11.4%). Note that due to Corning's and St. Lawrence's relatively small size and lower number of one-call tickets received, a single damage in any metric can magnify its impact on performance considerably more than for other LDCs.

LDC performance in damages due to Excavator Error is displayed in **Figure #3** below:

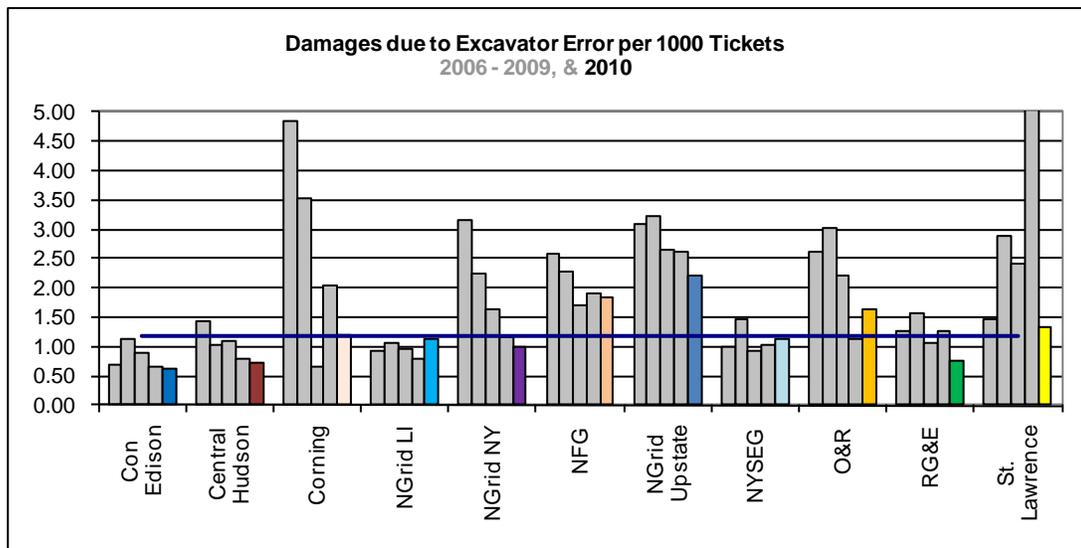


Figure #3 - Excavator Error Damages per 1000 Tickets Statewide

As can be seen in **Figure #3**, most LDCs have continued their improvement in damages due to Excavator Error. The greatest improvement in performance was by St. Lawrence which experienced four damages during 2010 when it had 21 similar damages during 2009. Damages due to Excavator Error was the largest driver in St. Lawrence's Total Damage improvement. Con Edison, Central Hudson, NGrid NY, NGrid Upstate, RG&E, and St. Lawrence all achieved their best performance levels yet. Three LDCs experienced deterioration during 2010. Leading the increased rate of damages was O&R (-44%), closely followed by NGrid LI (-41%). NYSEG experienced its second consecutive year of deterioration but remains slightly better than the statewide performance level. NFG and NGrid Upstate continue to perform significantly worse than the statewide level, while O&R's slide in performance lowered it to worse

than the statewide level. It is recommended that NFG, NGrid Upstate, and O&R perform an analysis of their damage prevention program and outreach efforts to identify methods to further educate the excavating community.

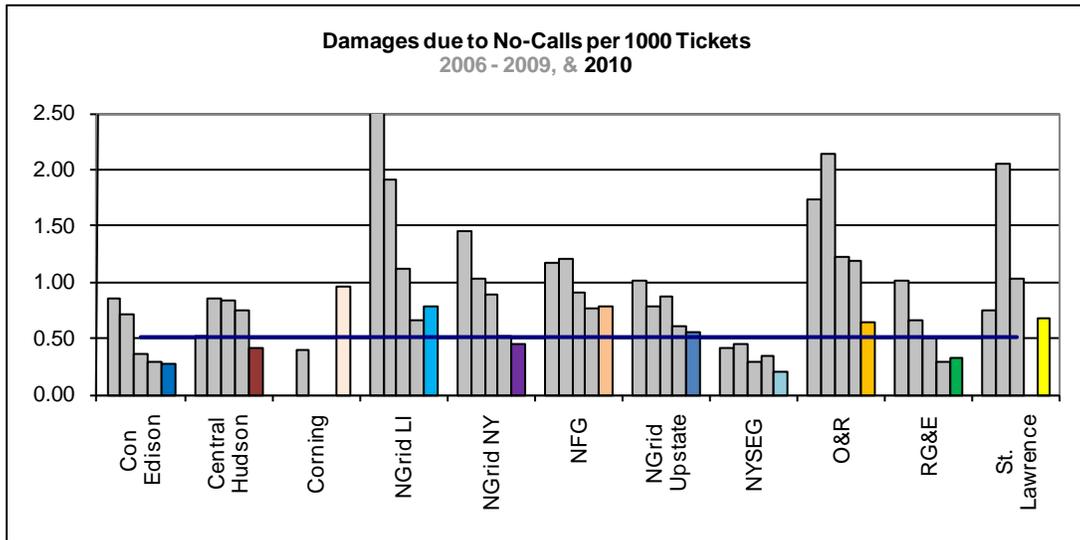


Figure #4 - No-call Damages per 1000 Tickets Statewide

For damages due to No-calls, O&R was identified as the worst performer in the state in the 2009 report. It improved its performance 45% during 2010, as seen in **Figure #4**. Central Hudson also improved 45% during 2010, followed by NYSEG with a 41% improvement. NGrid LI experienced a 5% increase in actual damages due to No-calls over 2009, but when coupled with its decline in the number of tickets, its normalized performance deteriorated 18%. RG&E also experienced a deterioration in performance (-14%) but remains a better performer in the state. Corning and St. Lawrence each experienced zero damages due to No-calls during 2009, but experienced four and two damages, respectively, during 2010. The impact of these damages in 2010, coupled with the relatively smaller number of tickets received compared to other LDCs, results in them performing

notably worse than the statewide level. NFG remained statistically flat during 2010 and still has room for improvement. It is recommended that NFG and NGrid LI perform an analysis of their damage prevention program and outreach efforts to identify methods to further educate the excavating community.

After experiencing significant improvement since 2006, the statewide improvement in damages due to No-calls (**Figure #4**) further improved 6.7% during 2010. The continued improvement statewide for No-call damages is a positive sign. It indicates that more excavators are becoming aware of their obligation to utilize the One-call system. Likely key contributors to the improvement are the 811 program, outreach efforts, and the voluntary reporting of these damages to Staff by the LDCs for enforcement actions for violations of 16 NYCRR Part 753. In order to aid in the enforcement of 16 NYCRR Part 753, Staff requested LDCs to forward information about contractors who damaged underground facilities without having markout requests. The program began in mid-2007, so 2010 was the third complete year of data. Staff evaluates the details of each damage and pertinent information regarding the excavator, and takes enforcement actions where appropriate. This enforcement effort generates word-of-mouth communications among the excavating community about the requirements of excavators to notify the One-call centers prior to carrying out excavation work, further deterring non-compliance.

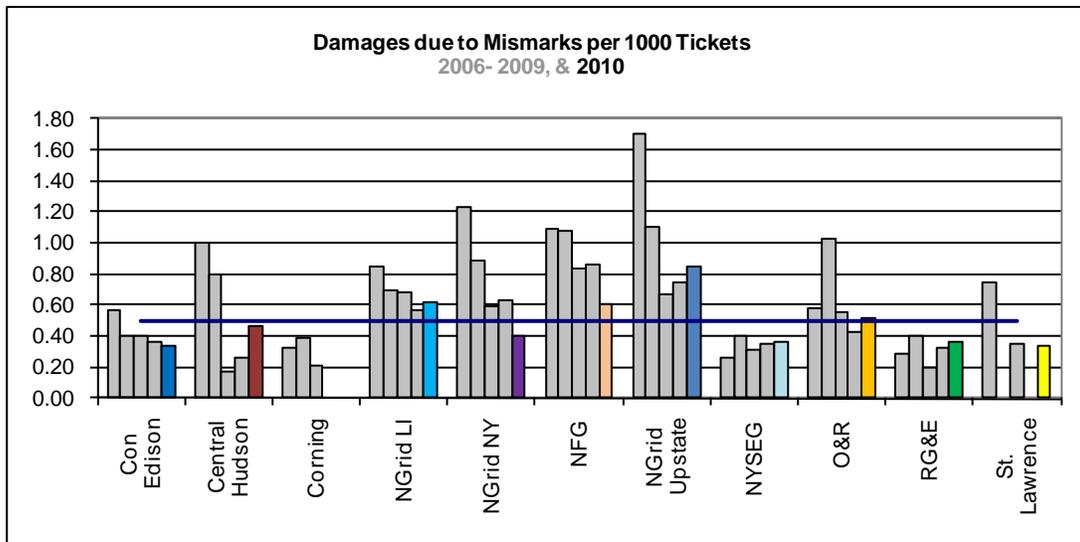


Figure #5 - *Mismark Damages per 1000 Tickets Statewide*

LDC performance in damages due to Mismarks is displayed in **Figure #5** above. Although seven of the 11 LDCs experienced deteriorated performance from 2009 levels, the statewide level improved 8.4%. Leading the slide in performance during 2010 was Central Hudson with a normalized 72% increase in damages due to Mismarks. Central Hudson, NGrid Upstate, NYSEG, and RG&E all experienced deteriorated performance for the second year in a row. It is recommended that each of these LDCs review the reasons for this occurrence and develop and complete appropriate changes to reverse this trend. Leading the statewide level improvement were NGrid NY with a 37% improvement and NFG with a 29% improvement. These two LDCs were identified in the 2009 report as outliers and managed to improve notably in 2010. NGrid Upstate was also identified as an outlier in the 2009 report and continued to experience deterioration in performance. Staff expects to see general improvement in this area as LDCs continually adopt best practices to locate their facilities and develop better controls over their locating contractors. NFG,

NGrid LI, and NGrid Upstate are recommended to evaluate their locating programs and adopt methods that could further improve markout accuracy.

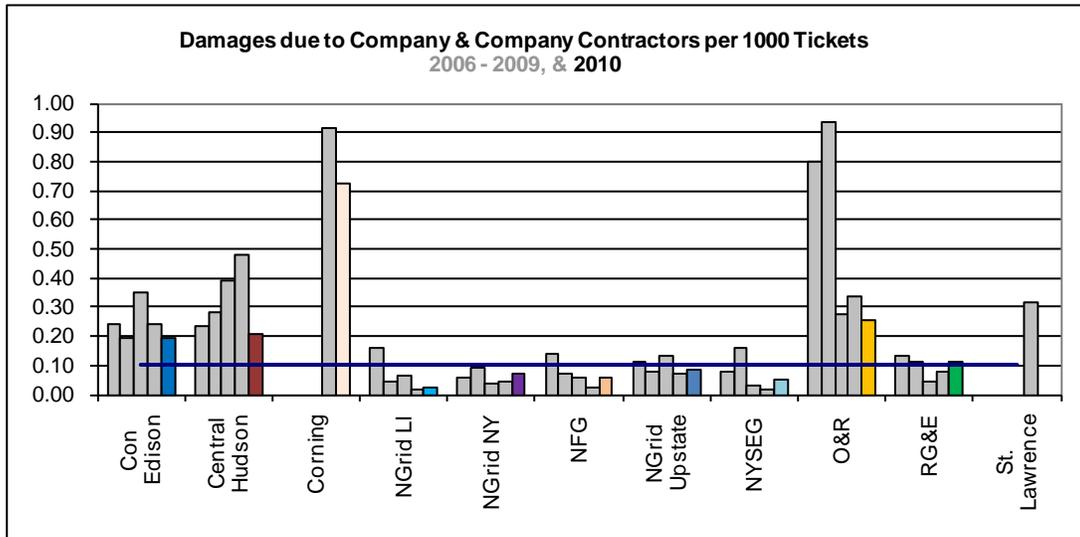


Figure #6 - Company & Company Contractor Damages per 1000 Tickets Statewide

Company & Company Contractor Error damages realized a slight improvement statewide during 2010. See **Figure #6** above for individual LDC performance. There were actually the same number of damages (76) in 2009, but since tickets increased slightly, the statewide level improved 1.3%. As LDCs have increased the proactive replacement of leak-prone pipe in recent years, the increased excavation activity around their own facilities has resulted in the need for better excavation practices, and the adoption of greater controls. LDCs such as Central Hudson and Corning have notability struggled in the past couple of years, and based on 2010 performance, may be beginning to improve performance.

Central Hudson has been identified for several years as a poor performer in damages due to Company &

Company Contractor error. It improved its performance during 2010 to a level it has not seen since 2005. Con Edison, Corning, and O&R were also identified as needing improvement in the 2009 report and all improved during 2010. However, these three LDCs, plus Central Hudson, still experienced at least twice the rate of damages as the statewide level and must continue efforts to improve performance. Note in **Figure #6** that in the past five year, St. Lawrence only experienced one of these types of damages, which occurred in 2009. Corning has experienced these damages in the past two years (four in 2009 and three in 2010) and must examine its excavation practices to determine methods to prevent future occurrences. It is recommended that Central Hudson, Con Edison, Corning, and O&R continue their efforts in identifying problem areas and adopting best practices when excavating around their own facilities.

Emergency Response

16 NYCRR §255.825(d) requires that LDCs provide a monthly report to Staff that includes a breakdown of the total number of gas leak and emergency calls received during the month and responded to in intervals of 15 minutes during normal business hours, weekdays outside business hours, and weekends and holidays. The report also indicates the percentage of calls responded to within 30, 45, and 60 minutes. The following have been established as acceptable overall response time standards: 75% within 30 minutes, 90% within 45 minutes, and 95% within 60 minutes. Each company has a very small number of instances of response times exceeding 60 minutes.⁴

The intent of the reporting requirement and the performance measure is to evaluate company responses to gas leak, odor, and emergency calls that are generated by the public and other authorities (e.g. police, fire, and municipal employees). For the purposes of reporting, the response time is measured from the time the call is sent to the company dispatcher to the time of arrival of qualified⁵ company personnel at the location.

When an LDC responds to an odor, and an investigation determines that the problem is not attributed to natural gas, the event is nevertheless included in the

⁴ The LDCs are expected to review the circumstances of each instance exceeding 60 minutes and where possible work towards their elimination.

⁵ *Qualified personnel* is defined as company representatives who are properly trained and equipped to investigate gas leak and odor reports in accordance with accepted company procedures and 16 NYCRR §255.604 - Operator Qualification.

reported data. This is because LDCs must respond as if it is an actual gas emergency until proven otherwise.

Any LDC that does not meet one of the target response levels at 30, 45, or 60 minutes also must provide additional data showing when the target response level is actually achieved.

2010 Results and Analysis

Figure #7 displays the collective annual statewide Emergency Response Time (ERT) performance for each goal since 2006, with 2010 performance presented in color. This is the third consecutive year that all of the LDCs met the 30-minute goal. Although the statewide performance declined slightly during 2010, it has improved for each goal over the past five years with a 2.5% increase in the 30-minute goal, from 79.1% to 81.6%, leading the performance gains.

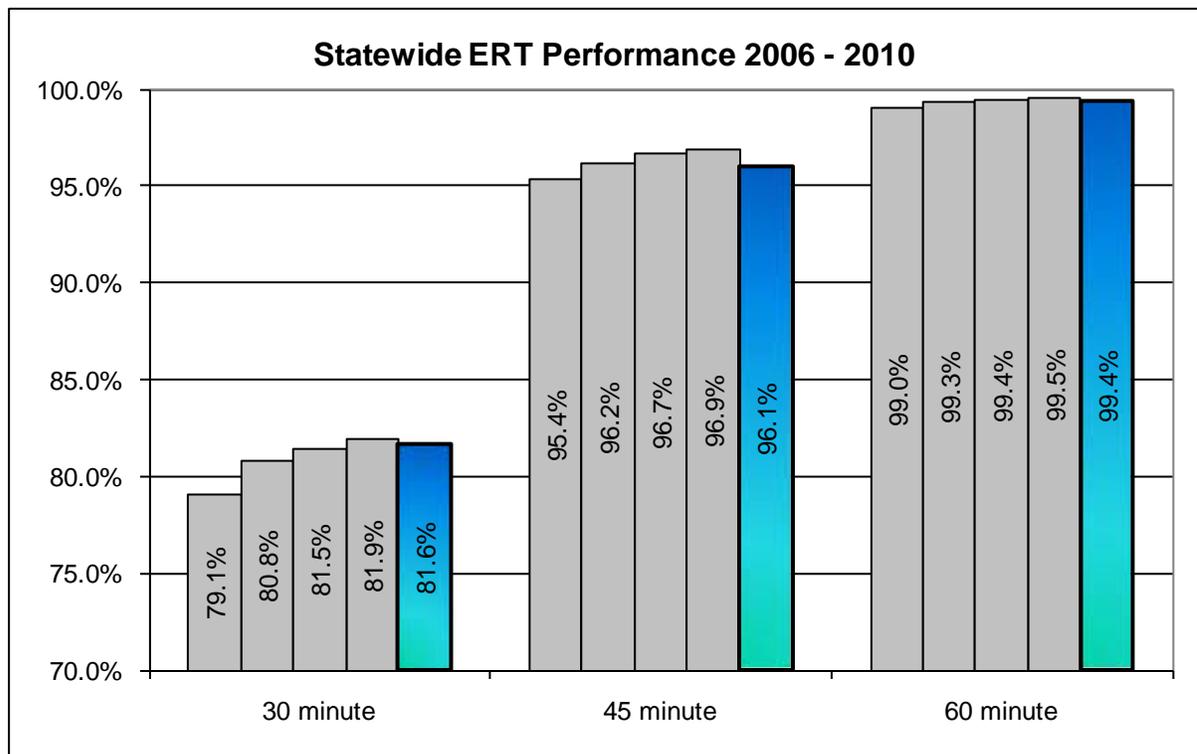


Figure #7 - *Statewide ERT Performance for All Goals*

Figure #8 presents data for calendar years 2006 through 2010 arranged by LDC and percentage of responses achieved within 30 minutes. Performances that did not meet the goal are shown in red.

	30 Minute				
	2006	2007	2008	2009	2010
Central Hudson	83.0%	84.1%	82.5%	81.6%	80.0%
Corning	82.4%	74.7%	79.3%	81.0%	83.1%
Con Edison	78.5%	80.3%	80.8%	80.8%	81.8%
NGrid LI	76.2%	75.8%	76.5%	76.5%	76.0%
NGrid NY	69.7%	74.3%	77.0%	77.2%	78.2%
NFG	91.1%	91.4%	88.7%	89.8%	90.9%
NGrid Upstate	82.2%	82.0%	82.3%	84.0%	82.9%
NYSEG	78.0%	78.9%	79.9%	81.9%	80.2%
O&R	78.4%	80.3%	80.7%	81.0%	82.8%
RG&E	92.8%	92.4%	92.3%	92.4%	90.8%
St. Lawrence	80.6%	78.9%	80.2%	82.7%	77.9%

Figure #8 - *Response Times for 30-Minute Goal*

All LDCs reached the 30-minute goal. However, six of the 11 LDCs declined compared to their 2009 performance level. NGrid NY failed to meet the target until 2008, but has continued its improvement to perform at its best level yet. In addition, Con Edison and O&R each reached their highest performance level in the 30-minute target over the eight years data has been collected.

All LDCs met the 45-minute and 60-minute goals. The data for the 45-minute and 60-minute targets are provided in Appendix B.

Over the eight years of the collected data, leak and odor calls statewide have decreased from 227,905 in 2003, to 162,918 in 2010, or a 28.5% decrease over the period. The number of calls did increase slightly during 2007, but that appears to be an anomaly as calls have continued the downward trend in the past three years. It is difficult to pinpoint an exact reason for the declining number of leak and odor calls. However, the LDCs indicate it may be due in part to the increased public awareness

efforts by the LDCs to delineate former affiliated company operations (i.e. appliance and service businesses) with those from gas distribution activities, and also the greater efforts LDCs are taking to minimize potentially hazardous leaks through the year. This effort will be discussed further under the Leak Management section.

It is encouraging to see that all LDCs have made efforts over the years to reach the statewide goals jointly established for this measure. Staff expects all LDCs to continue to evaluate and monitor their performance and identify areas where best practices can be implemented. Another area LDCs should continue to monitor and strive to improve is response times that exceed 60 minutes. Statewide, approximately 0.63% of calls fell into this category during 2010, an increase from the 0.47% attained in 2009, which was the best performance since data has been collected.

Leak Management

The intent of evaluating LDCs' leak management programs is to gauge performance in reducing the number of leaks that occur, eliminating potentially hazardous leaks that are found, and reducing the backlog of potentially hazardous leaks at the end of the year. The natural gas safety regulations contained in 16 NYCRR Part 255 include requirements for classifying leaks according to the relative hazard, considering factors such as whether gas migration is detected near buildings, in manholes, vaults or catch basins, or under paved versus unpaved areas, etc. All leaks classified as potentially hazardous must be monitored and repaired according to the gas safety regulations, and any hazardous conditions must be eliminated immediately.

Unrepaired potentially hazardous leaks are an increased safety risk in LDCs' systems. The risk is further increased when there is frost in the ground due to the increased chance of gas migration into buildings, because the gas cannot vent through the ground to the atmosphere as readily due to the blanket of frost. Although a leak backlog on any particular day is a snapshot in time, the end of a calendar year is significant since it is typically the beginning of the frost season. Thus, all data analyses are presented as of December 31, 2010 (data as reported by the LDCs used in analyses are contained in Appendix C). The leak management measure looks at the year-end backlog of leaks requiring repair. This measure does not substitute for, and is not a reflection upon any LDCs' compliance with the gas safety regulations.

The data reported by the LDCs includes leaks found, and leaks repaired on mains and services categorized by:

- Leaks discovered by type of leak
- Leaks repaired on mains by type and pipe material
- Leaks repaired on services by type and pipe material
- Backlog of leaks by type

Analysis of leakage data can also provide an indication of the pipe material's susceptibility to leakage. As one means of continuously improving leak management programs, Staff encourages the identification and removal of leak-prone pipe, such as cast iron and bare or poorly coated steel pipe that is difficult to protect against corrosion. Incentive programs to replace deteriorating and leak-prone infrastructure and/or reducing leak backlogs have been incorporated into past and current rate agreements for LDCs. The long-term goal is to eliminate pipeline infrastructure that, due to its vulnerability to leaks, presents greater safety risks to the public. As the aging pipe infrastructure is replaced by more modern materials, general leak concerns should decrease over time. During 2011 the LDCs across the state collectively plan to remove over 310 miles of leak-prone main.

2010 Results and Analysis

The statewide year-end backlog of leaks requiring repair has declined from 1154 in 2003 to 188 in 2010, an 84% drop. This demonstrates that LDCs are paying more attention to managing leak surveys and completing them earlier in the year to allow for time to repair discovered

leaks before heading into the frost season. Of note are the improvements since 2003 of NGrid Upstate (99%), NGrid LI (93%), NGrid NY (88%), NYSEG (88%), and O&R (85%).

Figure #9 displays the backlog of leaks requiring repair (Types 1, 2A, and 2) on December 31st of 2006 through 2010. The total year-end backlog of leaks requiring repair across the state decreased from 292 in 2009 to 188 in 2010 (-35.6%). Numerical leak data is contained in Appendix D.

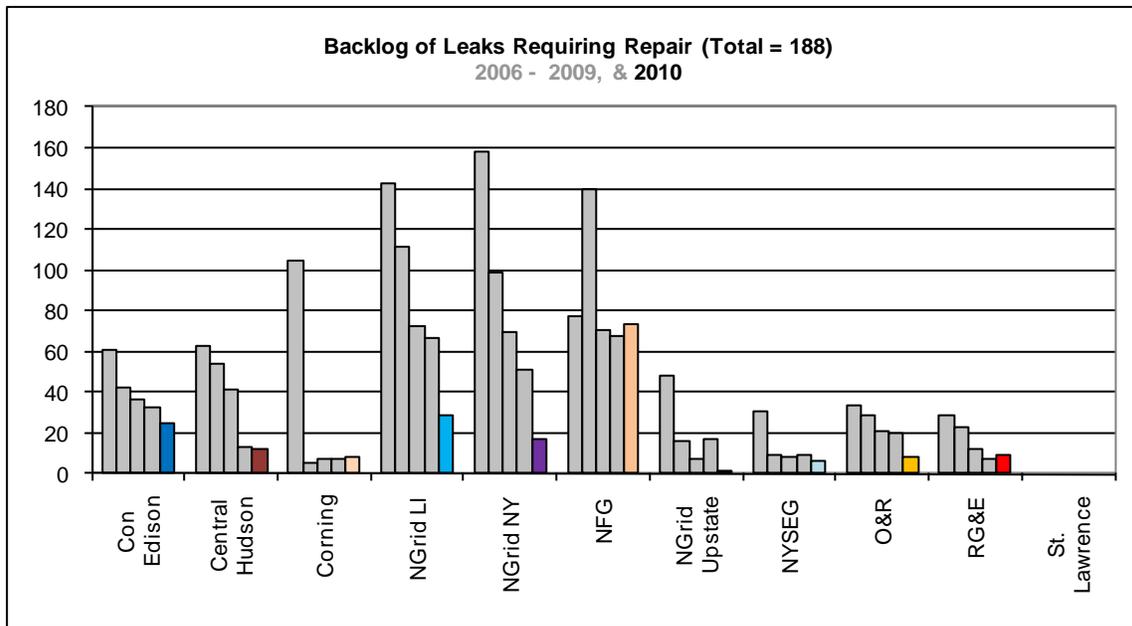


Figure #9 - Leak Backlog 2006 - 2010

As indicated in **Figure #9**, those with significant improvements in year-end backlogs during 2010 are NGrid Upstate (94%), NGrid NY (67%), O&R (60%), and NGrid LI (57%). Con Edison, NGrid LI, NGrid NY, and O&R also continued their trend of reducing their year-end backlogs by lowering the number of unrepaired leaks in each of the past six or more years. St. Lawrence continues to maintain its year-end backlog at zero.

After experiencing two years (2005 and 2006) of significant increases in its leak backlog, Corning has maintained a fairly level backlog of less than 10 leaks since 2007. Its aggressive leak-prone pipe replacement program has helped it get ahead of and maintain control over its backlog of potentially hazardous leaks.

Central Hudson improved its leak backlog at the end of 2010 for the fourth year compared to its 2006 backlog. It was identified in three consecutive reports (2006, 2007, and 2008) as needing to improve its management

of repairable leaks, and maintained its improved level during 2010.

NGrid Upstate experienced an increase in its 2009 backlog over its 2008 backlog, which was its lowest ever. It was noted in the 2009 report that its performance would be monitored to determine if it can successfully maintain its improved performance level achieved over the years. For 2010, it managed to finish the year with a single potentially hazardous leak as its backlog.

Both NGrid LI and NGrid NY have been identified as outliers in previous reports. Both have also made notable improvements since 2007. The 2009 report noted that Con Edison, another downstate LDC with a large urban service territory, had continually achieved an even lower backlog than NGrid LI and NGrid NY for several years. During 2010, NGrid LI and NGrid NY completed the year with 29 and 17 repairable leaks, respectively, while Con Edison had 25.

NFG has had two instances where its year-end backlog increased significantly, the latest being in 2007. During 2008 it was able to reduce its backlog to nearly half its 2007 level, and improved slightly more during 2009. During 2010, its backlog increased slightly, but has remained relatively flat during the past three years.

CONCLUSION

Natural gas is a safe and reliable energy product, if handled and transported properly. Safety performance measures are an important management tool that provides Staff and LDCs the ability to evaluate trends in key areas of gas safety (damage prevention, emergency response time, and leak management). The LDCs must continue to focus on these areas to maintain an adequate level of safety and to further reduce safety risks in distributing natural gas to consumers.

Over the past eight years LDCs have collectively worked to improve performance in the key areas of safety identified in this report. There has been a 65% improvement in total damage performance, the 30-minute emergency response time has improved from 76.8% in 2003 to 81.6% in 2010, and the year-end leak backlog of potentially hazardous leaks has decreased 84%, from 1,154 to 188. As LDCs continue their outreach efforts, adopt better practices in responding to leak and odor calls, and work to replace aging leak-prone infrastructure, Staff expects further improvement will occur.

Staff will continue to evaluate LDCs' performance via the measures contained in this report and will send letters to those LDCs, mentioned as having improvement opportunities, requesting that those LDCs to provide the Safety Section of the Office of Electric, Gas and Water with specific details on how they plan to improve. It is recommended that those LDCs evaluate their current and past practices, as well as reach out to other LDCs that experience higher performance levels to determine what incremental, and if necessary, entirely new approaches to pursue in order to realize improvement. It is further

encouraged that those LDCs that were able to make significant improvements respond to this report and share best practices which enabled them to obtain such improvement. Staff will continue to meet with LDCs on a regular basis and monitor LDC performance. Performance trends are discussed with LDCs at those meetings and will be analyzed in future performance measure reports.

Recommendations

For each of the measures listed below, it is recommended that the LDCs identified self-assess their performance. Staff will send letters to these LDCs which were identified as poor performers within this report. They should take into consideration the analyses and recommendations in this report, and respond with improved action plans outlining incremental efforts on how they will work to improve performance in the future.

- Total damages - NGrid Upstate
- Mismatch damages - NFG, NGrid LI, and NGrid Upstate
- No-call damages - NFG and NGrid LI
- Company & Company Contractor damages - Central Hudson, Con Edison, Corning, and O&R
- Excavator Error damages - NFG, NGrid Upstate, and O&R

Appendix A

Reported & Computed LDC Damage Performance

2010 LDC Reported Totals	# One Call Tickets							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	77,576	87,340	94,083	99,375	118,380	132,175	140,170	158,596
Central Hudson	14,979	17,869	18,854	21,024	21,171	22,931	18,670	19,568
Coning	2,045	2,750	3,273	3,093	2,558	4,644	4,380	4,143
NGrid LI	70,718	83,137	80,402	94,156	105,488	119,216	149,860	132,813
NGrid NY	56,132	63,335	66,184	65,838	75,164	87,895	94,117	94,573
NFG	71,772	68,887	76,142	80,690	86,281	105,292	91,786	88,512
NGrid Upstate	73,613	77,667	87,517	91,286	85,985	84,857	85,165	82,850
NYSEG	51,252	48,590	60,046	66,178	61,629	67,772	56,134	60,469
O&R	17,274	17,512	18,995	22,559	22,395	25,389	23,690	23,225
RG&E	43,550	52,513	52,108	51,712	54,854	69,836	52,313	61,332
St. Lawrence	2,268	2,604	2,653	2,692	2,433	2,896	3,190	2,986

2010 LDC Reported Totals	Damages due to Mismarks							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	53	53	70	57	47	53	51	53
Central Hudson	9	13	14	21	17	4	5	9
Coning	5	3	0	1	1	1	0	0
NGrid LI	70	88	98	80	73	81	85	82
NGrid NY	94	114	83	81	67	52	60	38
NFG	100	96	115	88	93	88	79	54
NGrid Upstate	140	94	158	156	95	57	64	70
NYSEG	36	41	35	17	25	21	20	22
O&R	21	19	23	13	23	14	10	12
RG&E	20	24	24	15	22	14	17	22
St. Lawrence	1	1	1	2	0	1	0	1

2010 LDC Computed Performance	Damages due to Mismarks (per 1000 Tickets)							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	0.68	0.61	0.74	0.57	0.40	0.40	0.36	0.33
Central Hudson	0.60	0.73	0.74	1.00	0.80	0.17	0.27	0.46
Coning	2.44	1.09	0.00	0.32	0.39	0.22	0.00	0.00
NGrid LI	0.99	1.06	1.22	0.85	0.69	0.68	0.57	0.62
NGrid NY	1.67	1.80	1.25	1.23	0.89	0.59	0.64	0.40
NFG	1.39	1.39	1.51	1.09	1.08	0.84	0.86	0.61
NGrid Upstate	1.90	1.21	1.81	1.71	1.10	0.67	0.75	0.84
NYSEG	0.70	0.84	0.58	0.26	0.41	0.31	0.36	0.36
O&R	1.22	1.08	1.21	0.58	1.03	0.55	0.42	0.52
RG&E	0.46	0.46	0.46	0.29	0.40	0.20	0.32	0.36
St. Lawrence	0.44	0.38	0.38	0.74	0.00	0.35	0.00	0.33

2010 LDC Reported Totals	No-Call Damages							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	62	107	110	85	84	47	41	44
Central Hudson	42	14	25	11	18	19	14	8
Coning	5	11	1	0	1	0	0	4
NGrid LI	214	296	270	295	201	133	100	105
NGrid NY	107	110	131	96	78	78	49	42
NFG	127	132	144	95	104	96	71	69
NGrid Upstate	129	115	139	93	67	74	51	46
NYSEG	54	39	34	27	28	20	19	12
O&R	52	41	44	39	48	31	28	15
RG&E	85	62	53	52	36	35	15	20
St. Lawrence	9	5	3	2	5	3	0	2

Co. & Co. Contractor Damages							
2003	2004	2005	2006	2007	2008	2009	2010
47	37	30	24	34	46	34	31
2	2	1	5	6	9	9	4
0	0	0	0	0	0	4	3
24	34	14	15	5	8	3	3
12	9	8	4	7	3	4	7
7	13	18	11	6	6	2	5
13	23	12	10	7	11	6	7
5	0	5	5	10	2	1	3
13	37	25	18	21	7	8	6
7	8	13	7	6	3	4	7
0	1	0	0	0	0	1	0

2010 LDC Computed Performance	No-Call Damages (per 1000 Tickets)							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	0.80	1.23	1.17	0.86	0.71	0.36	0.29	0.28
Central Hudson	2.80	0.78	1.33	0.52	0.85	0.83	0.75	0.41
Coning	2.44	4.00	0.31	0.00	0.39	0.00	0.00	0.97
NGrid LI	3.03	3.56	3.36	3.13	1.91	1.12	0.67	0.79
NGrid NY	1.91	1.74	1.98	1.46	1.04	0.89	0.52	0.44
NFG	1.77	1.92	1.89	1.18	1.21	0.91	0.77	0.78
NGrid Upstate	1.75	1.48	1.59	1.02	0.78	0.87	0.60	0.56
NYSEG	1.05	0.80	0.57	0.41	0.45	0.30	0.34	0.20
O&R	3.01	2.34	2.32	1.73	2.14	1.22	1.18	0.65
RG&E	1.95	1.18	1.02	1.01	0.66	0.50	0.29	0.33
St. Lawrence	3.97	1.92	1.13	0.74	2.06	1.04	0.00	0.67

Co. & Co. Contractor Damages (per 1000 Tickets)							
2003	2004	2005	2006	2007	2008	2009	2010
0.61	0.42	0.32	0.24	0.29	0.35	0.24	0.20
0.13	0.11	0.05	0.24	0.28	0.39	0.48	0.20
0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.72
0.34	0.41	0.17	0.16	0.05	0.07	0.02	0.02
0.21	0.14	0.12	0.06	0.09	0.03	0.04	0.07
0.10	0.19	0.24	0.14	0.07	0.06	0.02	0.06
0.18	0.30	0.14	0.11	0.08	0.13	0.07	0.08
0.10	0.00	0.08	0.08	0.16	0.03	0.02	0.05
0.75	2.11	1.32	0.80	0.94	0.28	0.34	0.26
0.16	0.15	0.25	0.14	0.11	0.04	0.08	0.11
0	0.38	0.00	0.00	0.00	0.00	0.31	0.00

2010 LDC Reported Totals	Excavator Error Damages							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	129	88	81	70	133	118	92	97
Central Hudson	62	57	38	30	22	25	15	14
Coning	5	12	16	15	9	3	9	5
NGrid LI	204	125	126	86	112	115	119	150
NGrid NY	272	273	295	207	170	143	110	93
NFG	208	224	212	208	196	179	176	162
NGrid Upstate	374	294	404	283	276	225	224	183
NYSEG	104	113	107	67	90	63	57	68
O&R	87	72	57	59	68	56	27	38
RG&E	121	98	89	66	87	75	66	46
St. Lawrence	10	7	4	4	7	7	21	4

Total Damages							
2003	2004	2005	2006	2007	2008	2009	2010
291	285	291	236	287	264	218	225
115	86	78	67	63	57	43	35
15	26	17	16	11	4	13	12
512	543	508	476	391	337	307	340
485	506	517	388	322	276	223	180
442	465	489	402	399	369	328	290
656	526	713	542	445	367	345	306
199	193	181	116	153	106	97	105
173	169	149	129	160	108	73	71
233	192	179	140	151	127	102	95
20	14	8	8	12	11	22	7

2010 LDC Computed Performance	Excavator Error Damages (per 1000 Tickets)							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	1.66	1.01	0.86	0.70	1.12	0.89	0.66	0.61
Central Hudson	4.14	3.19	2.02	1.43	1.04	1.09	0.80	0.72
Coning	2.44	4.36	4.89	4.85	3.52	0.65	2.05	1.21
NGrid LI	2.88	1.50	1.57	0.91	1.06	0.96	0.79	1.13
NGrid NY	4.85	4.31	4.46	3.14	2.26	1.63	1.17	0.98
NFG	2.90	3.25	2.78	2.58	2.27	1.70	1.92	1.83
NGrid Upstate	5.08	3.79	4.62	3.10	3.21	2.65	2.63	2.21
NYSEG	2.03	2.33	1.78	1.01	1.46	0.93	1.02	1.12
O&R	5.04	4.11	3.00	2.62	3.04	2.21	1.14	1.64
RG&E	2.78	1.87	1.71	1.28	1.59	1.07	1.26	0.75
St. Lawrence	4.41	2.69	1.51	1.49	2.88	2.42	6.58	1.34

Total Damages (per 1000 Tickets)							
2003	2004	2005	2006	2007	2008	2009	2010
3.75	3.26	3.09	2.37	2.42	2.00	1.56	1.42
7.68	4.81	4.14	3.19	2.98	2.49	2.30	1.79
7.33	9.45	5.19	5.17	4.30	0.86	2.97	2.90
7.24	6.53	6.32	5.06	3.71	2.83	2.05	2.56
8.64	7.99	7.81	5.89	4.28	3.14	2.37	1.90
6.16	6.75	6.42	4.98	4.62	3.50	3.57	3.28
8.91	6.77	8.15	5.94	5.18	4.32	4.05	3.69
3.88	3.97	3.01	1.75	2.48	1.56	1.73	1.74
10.02	9.65	7.84	5.72	7.14	4.25	3.08	3.06
5.35	3.66	3.44	2.71	2.75	1.82	1.95	1.55
8.82	5.38	3.02	2.97	4.93	3.80	6.90	2.34

Individual LDC Damage Performance

Con Edison	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	77,576	87,340	94,083	99,375	118,380	132,175	140,170	158,596	729,067
Damages/1000 tickets Due to:									
Mismarks	0.68	0.61	0.74	0.57	0.40	0.40	0.36	0.33	0.50
No-Calls	0.80	1.23	1.17	0.86	0.71	0.36	0.29	0.28	0.50
Co. & Co. Contractor	0.61	0.42	0.32	0.24	0.29	0.35	0.24	0.20	0.10
Excavator Error	1.66	1.01	0.86	0.70	1.12	0.89	0.66	0.61	1.18
Total	3.75	3.26	3.09	2.37	2.42	2.00	1.56	1.42	2.29

Central Hudson	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	14,979	17,869	18,854	21,024	21,171	22,931	18,670	19,568	729,067
Damages/1000 tickets Due to:									
Mismarks	0.60	0.73	0.74	1.00	0.80	0.17	0.27	0.46	0.50
No-Calls	2.80	0.78	1.33	0.52	0.85	0.83	0.75	0.41	0.50
Co. & Co. Contractor	0.13	0.11	0.05	0.24	0.28	0.39	0.48	0.20	0.10
Excavator Error	4.14	3.19	2.02	1.43	1.04	1.09	0.80	0.72	1.18
Total	7.68	4.81	4.14	3.19	2.98	2.49	2.30	1.79	2.29

Corning	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	2,045	2,750	3,273	3,093	2,558	4,644	4,380	4,143	729,067
Damages/1000 tickets Due to:									
Mismarks	2.44	1.09	0.00	0.32	0.39	0.22	0.00	0.00	0.50
No-Calls	2.44	4.00	0.31	0.00	0.39	0.00	0.00	0.97	0.50
Co. & Co. Contractor	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.72	0.10
Excavator Error	2.44	4.36	4.89	4.85	3.52	0.65	2.05	1.21	1.18
Total	7.33	9.45	5.19	5.17	4.30	0.86	2.97	2.90	2.29

NGrid LI	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	70,718	83,137	80,402	94,156	105,488	119,216	149,860	132,813	729,067
Damages/1000 tickets Due to:									
Mismarks	0.99	1.06	1.22	0.85	0.69	0.68	0.57	0.62	0.50
No-Calls	3.03	3.56	3.36	3.13	1.91	1.12	0.67	0.79	0.50
Co. & Co. Contractor	0.34	0.41	0.17	0.16	0.05	0.07	0.02	0.02	0.10
Excavator Error	2.88	1.50	1.57	0.91	1.06	0.96	0.79	1.13	1.18
Total	7.24	6.53	6.32	5.06	3.71	2.83	2.05	2.56	2.29

NGrid NY	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	56,132	63,335	66,184	65,838	75,164	87,895	94,117	94,573	729,067
Damages/1000 tickets Due to:									
Mismarks	1.67	1.80	1.25	1.23	0.89	0.59	0.64	0.40	0.50
No-Calls	1.91	1.74	1.98	1.46	1.04	0.89	0.52	0.44	0.50
Co. & Co. Contractor	0.21	0.14	0.12	0.06	0.09	0.03	0.04	0.07	0.10
Excavator Error	4.85	4.31	4.46	3.14	2.26	1.63	1.17	0.98	1.18
Total	8.64	7.99	7.81	5.89	4.28	3.14	2.37	1.90	2.29

NFG	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	71,772	68,887	76,142	80,690	86,281	105,292	91,786	88,512	729,067
Damages/1000 tickets Due to:									
Mismarks	1.39	1.39	1.51	1.09	1.08	0.84	0.86	0.61	0.50
No-Calls	1.77	1.92	1.89	1.18	1.21	0.91	0.77	0.78	0.50
Co. & Co. Contractor	0.10	0.19	0.24	0.14	0.07	0.06	0.02	0.06	0.10
Excavator Error	2.90	3.25	2.78	2.58	2.27	1.70	1.92	1.83	1.18
Total	6.16	6.75	6.42	4.98	4.62	3.50	3.57	3.28	2.29

NGrid Upstate	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	73,613	77,667	87,517	91,286	85,985	84,857	85,165	82,850	729,067
Damages/1000 tickets Due to:									
Mismarks	1.90	1.21	1.81	1.71	1.10	0.67	0.75	0.84	0.50
No-Calls	1.75	1.48	1.59	1.02	0.78	0.87	0.60	0.56	0.50
Co. & Co. Contractor	0.18	0.30	0.14	0.11	0.08	0.13	0.07	0.08	0.10
Excavator Error	5.08	3.79	4.62	3.10	3.21	2.65	2.63	2.21	1.18
Total	8.91	6.77	8.15	5.94	5.18	4.32	4.05	3.69	2.29

NYSEG	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	51,252	48,590	60,046	66,178	61,629	67,772	56,134	60,469	729,067
Damages/1000 tickets Due to:									
Mismarks	0.70	0.84	0.58	0.26	0.41	0.31	0.36	0.36	0.50
No-Calls	1.05	0.80	0.57	0.41	0.45	0.30	0.34	0.20	0.50
Co. & Co. Contractor	0.10	0.00	0.08	0.08	0.16	0.03	0.02	0.05	0.10
Excavator Error	2.03	2.33	1.78	1.01	1.46	0.93	1.02	1.12	1.18
Total	3.88	3.97	3.01	1.75	2.48	1.56	1.73	1.74	2.29

O&R	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	17,274	17,512	18,995	22,559	22,395	25,389	23,690	23,225	729,067
Damages/1000 tickets Due to:									
Mismarks	1.22	1.08	1.21	0.58	1.03	0.55	0.42	0.52	0.50
No-Calls	3.01	2.34	2.32	1.73	2.14	1.22	1.18	0.65	0.50
Co. & Co. Contractor	0.75	2.11	1.32	0.80	0.94	0.28	0.34	0.26	0.10
Excavator Error	5.04	4.11	3.00	2.62	3.04	2.21	1.14	1.64	1.18
Total	10.02	9.65	7.84	5.72	7.14	4.25	3.08	3.06	2.29

RG&E	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	43,550	52,513	52,108	51,712	54,854	69,836	52,313	61,332	729,067
Damages/1000 tickets Due to:									
Mismarks	0.46	0.46	0.46	0.29	0.40	0.20	0.32	0.36	0.50
No-Calls	1.95	1.18	1.02	1.01	0.66	0.50	0.29	0.33	0.50
Co. & Co. Contractor	0.16	0.15	0.25	0.14	0.11	0.04	0.08	0.11	0.10
Excavator Error	2.78	1.87	1.71	1.28	1.59	1.07	1.26	0.75	1.18
Total	5.35	3.66	3.44	2.71	2.75	1.82	1.95	1.55	2.29

St. Lawrence	2003	2004	2005	2006	2007	2008	2009	2010	2010 Statewide
Tickets	2,268	2,604	2,653	2,692	2,433	2,896	3,190	2,986	729,067
Damages/1000 tickets Due to:									
Mismarks	0.44	0.38	0.38	0.74	0.00	0.35	0.00	0.33	0.50
No-Calls	3.97	1.92	1.13	0.74	2.06	1.04	0.00	0.67	0.50
Co. & Co. Contractor	0.00	0.38	0.00	0.00	0.00	0.00	0.31	0.00	0.10
Excavator Error	4.41	2.69	1.51	1.49	2.88	2.42	6.58	1.34	1.18
Total	8.82	5.38	3.02	2.97	4.93	3.80	6.90	2.34	2.29

Appendix B

Reported Emergency Response Data

	45 Minute							
	2003	2004	2005	2006	2007	2008	2009	2010
Central Hudson	99.2%	98.8%	98.8%	98.7%	99.0%	99.0%	99.1%	98.9%
Corning	93.0%	96.1%	93.9%	95.8%	89.2%	96.1%	97.1%	96.6%
Con Edison	96.3%	97.3%	97.1%	97.6%	97.4%	97.8%	97.9%	97.9%
NGrid LI	93.1%	96.0%	96.2%	96.1%	95.5%	95.6%	95.7%	95.2%
NGrid NY	92.2%	92.4%	90.6%	91.8%	95.1%	96.6%	96.6%	96.3%
NFG	96.1%	96.3%	96.8%	97.0%	97.2%	96.3%	97.1%	97.4%
NGrid Upstate	92.1%	94.1%	93.6%	95.1%	94.8%	95.5%	95.9%	95.1%
NYSEG	96.2%	96.0%	96.0%	94.5%	95.0%	95.7%	96.1%	95.3%
O&R	94.2%	95.8%	95.1%	96.7%	97.1%	97.5%	97.8%	98.1%
RG&E	99.3%	99.5%	99.4%	98.9%	98.9%	98.8%	98.9%	98.3%
St. Lawrence	89.0%	91.0%	95.3%	95.5%	95.4%	96.3%	96.1%	95.2%

	60 Minute							
	2003	2004	2005	2006	2007	2008	2009	2010
Central Hudson	99.9%	99.9%	99.9%	99.8%	99.9%	99.9%	99.97%	99.9%
Corning	98.0%	99.6%	96.8%	99.2%	97.1%	98.7%	98.7%	99.6%
Con Edison	99.9%	99.9%	99.9%	99.9%	99.7%	99.9%	99.97%	99.9%
NGrid LI	99.9%	99.9%	99.9%	99.9%	99.8%	99.6%	99.7%	99.6%
NGrid NY	98.1%	98.4%	97.9%	97.8%	99.3%	99.7%	99.6%	99.2%
NFG	98.9%	98.9%	99.0%	99.0%	99.1%	98.8%	99.2%	99.2%
NGrid Upstate	97.2%	98.0%	98.0%	98.6%	98.2%	98.7%	98.8%	98.5%
NYSEG	99.4%	99.4%	99.2%	98.8%	99.1%	99.3%	99.3%	99.0%
O&R	99.7%	99.7%	99.5%	99.9%	99.9%	99.9%	99.9%	99.97%
RG&E	99.9%	99.9%	99.8%	99.8%	99.9%	99.8%	99.8%	99.8%
St. Lawrence	98.2%	98.5%	99.2%	99.2%	98.9%	99.6%	99.6%	99.5%

# Calls	2003	2004	2005	2006	2007	2008	2009	2010
Central Hudson	4,587	4,724	4,999	4,075	4,442	3,752	3,485	3,578
Corning	716	722	1,487	1,036	1,432	1,279	1,102	941
Con Edison	31,749	33,527	30,478	28,356	29,880	26,003	25,834	27,389
NGrid LI	30,593	28,459	27,922	25,034	23,486	21,605	20,966	20,944
NGrid NY	64,431	59,046	53,200	49,034	47,688	43,253	42,036	40,590
NFG	33,288	30,207	29,543	25,743	27,740	26,558	26,016	25,542
NGrid Upstate	28,602	27,507	25,206	22,682	23,465	21,681	20,601	19,768
NYSEG	10,210	9,487	9,999	8,995	9,828	8,395	7,923	6,835
O&R	8,231	8,260	8,033	7,656	7,820	6,982	6,249	7,667
RG&E	14,882	14,248	13,917	12,123	12,185	11,475	9,261	9,244
St. Lawrence	616	590	493	396	436	481	490	420

Total:	227,905	216,777	205,277	185,130	188,402	171,464	163,963	162,918
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Appendix C

Reported Leak Data

2010 Total Leak Repairs on Mains by Material								
	Unprot. Bare	Unprot. Coated	Prot. Bare	Prot. Coated	Plastic	Cast/Wrt. Iron	Copper	Other
Con Edison	2,054	41	0	0	28	2,434	1	0
Central Hudson	36	0	0	44	7	94	0	0
Conning	117	5	0	0	1	0	0	0
NGrid LI	625	131	14	22	66	217	0	0
NGrid NY	81	0	0	32	7	1,886	0	0
NFG	1,895	0	0	72	103	207	0	11
NGrid Upstate	76	31	0	62	50	501	0	18
NYSEG	118	0	0	18	18	0	0	5
O&R	208	0	0	9	49	16	0	0
RG&E	143	0	0	278	18	44	0	0
St. Lawrence	0	0	0	2	0	0	0	0

2010 Total Leak Repairs on Services by Material								
	Unprot. Bare	Unprot. Coated	Prot. Bare	Prot. Coated	Plastic	Cast/Wrt. Iron	Copper	Other
Con Edison	2,135	124	0	0	285	0	119	0
Central Hudson	55	0	0	45	22	0	0	0
Conning	64	6	0	0	0	0	0	0
NGrid LI	921	177	26	29	223	0	11	0
NGrid NY	195	0	0	112	101	0	154	0
NFG	496	0	0	88	109	0	0	13
NGrid Upstate	268	119	0	85	300	30	28	44
NYSEG	139	0	0	6	86	0	0	2
O&R	326	0	0	9	101	0	0	0
RG&E	130	0	0	159	62	3	7	0
St. Lawrence	0	0	0	3	2	0	0	0

Appendix D

Backlog of Leaks Requiring Repair

LDC	Leak Backlog - Type 1, 2, and 2a							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	98	106	91	61	42	36	33	25
Central Hudson	30	14	27	63	54	41	13	12
Corning	6	2	58	105	5	7	7	8
NGrid LI	419	177	151	143	111	72	67	29
NGrid NY	139	197	166	158	99	70	51	17
NFG	172	213	111	77	140	71	68	73
NGrid Upstate	151	56	43	48	16	7	17	1
NYSEG	52	11	25	31	9	8	9	6
O&R	55	47	44	34	29	21	20	8
RG&E	32	30	27	29	23	12	7	9
St. Lawrence	0	0	0	0	0	0	0	0
Total:	1,154	853	743	749	528	345	292	188

Repaired Leaks Requiring Repair

LDC	Leaks Repaired - Type 1, 2, and 2a							
	2003	2004	2005	2006	2007	2008	2009	2010
Con Edison	7,769	7,498	6,445	6,312	7,509	5,800	6,592	5,993
Central Hudson	184	199	252	295	243	306	175	141
Corning	58	109	138	219	319	127	105	108
NGrid LI	6,327	4,127	3,730	3,359	2,651	2,282	2,325	2,170
NGrid NY	5,359	4,174	3,553	3,120	3,307	2,460	2,351	2,378
NFG	2,741	2,157	2,032	2,042	2,375	1,949	1,464	1,340
NGrid Upstate	1,407	1,446	1,212	1,067	1,264	1,033	1,316	1,354
NYSEG	665	713	432	385	148	242	207	266
O&R	456	716	528	499	374	362	339	480
RG&E	1,022	1,210	677	451	521	387	330	430
St. Lawrence	5	3	4	1	5	0	5	4