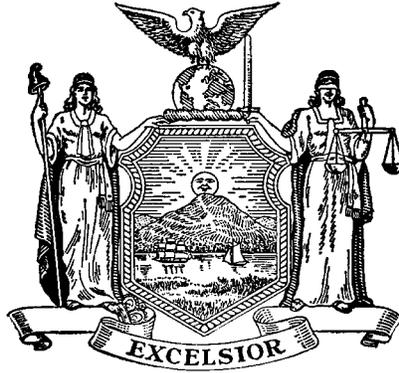


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STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE



2008 GAS SAFETY
PERFORMANCE MEASURES REPORT
(CASE 09-G-0454)

Safety Section
Office of Electric, Gas & Water
June 2, 2009

EXECUTIVE SUMMARY

This report examines the New York State natural gas local distribution companies' (LDCs) 2003 through 2008 performance in three areas pertaining to safety: damage prevention, emergency response, and leak management.

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 six year period.

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 25% during 2008. The number of requests to locate underground gas facilities (tickets) received by the utilities increased by over 19%, which is most likely attributable to a combination of improved compliance by excavators, the 811 dialing initiative, and an increase in construction activity, particularly in New York City. Double-digit improvements from 2007 were achieved in 2008 for all of the four damage categories.

Staff attributes these positive results in part, to public education efforts undertaken by both the LDCs and the One-Call Centers, and the Commission's enforcement process for non-compliance with its regulations protecting 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.

Mismarks - In the area of damages due to Mismarks (failure to accurately mark the location of underground facilities) the statewide level improved over 26% from 2007. In the previous two reports Niagara Mohawk Power Corporation d/b/a National Grid (NGrid Upstate) was identified as the worst performer relative to the statewide average in this metric. It continued its improvement in 2008, even though it experienced a higher rate of these damages than the statewide average level. Other LDCs that improved significantly over their 2007 levels are Central Hudson Gas & Electric Corporation (Central Hudson), Corning Natural Gas Corporation (Corning), The Brooklyn Union Gas Company d/b/a National Grid NY (NGrid NY), NGrid Upstate, Orange & Rockland Utilities, Inc. (O&R), and Rochester Gas & Electric Corporation (RG&E).

Damages caused by Mismarks is an area where LDCs have more control over their level of performance than they would relative to Excavator Error and No-call damages. Staff expects that through training, quality control, vendor procurement practices and increased management attention, the LDCs should be able to achieve reductions in damages caused by Mismarks.

Company & Company Contractor - Another area where LDCs have more direct control of their performance is in the area of damages due to Company & Company Contractor personnel error. These are excavation damages caused by the LDC employees or their directly hired and trained contractors. These types of damages have historically been the lowest percentage of excavation damages. O&R has historically had difficulty in this area due to older vintages of pipe that were installed with relatively poor mapping and lack of a tracer wire.¹ O&R significantly improved in this area during 2008 to its best level since 2003. Even though it performed worse than the statewide level, it damaged its own facilities at a rate less than Consolidated Edison Company of New York, Inc. (Con Edison) and Central Hudson. Con Edison had steadily improved over a four year period but experienced a higher rate of these damages in 2007 and 2008. The company reports it is adjusting to the higher level of infrastructure renewal projects both in its gas and electric businesses. Central Hudson, while also performing a greater level of infrastructure enhancement, experienced its third consecutive year of worsening performance, performing at its worst level ever.

Excavator Error - After remaining flat for a year, the statewide level for damages due to Excavator Error improved 24% during 2008. Nearly all LDCs experienced a double-digit improvement over 2007 performance levels, with the exception of Central Hudson and KeySpan Gas East Corporation d/b/a National Grid (NGrid LI). Central Hudson

¹ A wire commonly installed next to a plastic pipeline that can carry a small impressed current to enable locating from above ground.

experienced a minor deterioration in 2008, but not approaching its higher historical levels. NGrid LI improved its performance 9% over 2007. Even though NGrid Upstate, O&R, and St. Lawrence Gas Company, Inc. (St. Lawrence) all experienced double digit percentage improvements (17%, 27% and 16%, respectively), they remain well above the statewide level.

No-calls - For the third year in a row, statewide damages due to No-calls experienced a double-digit improvement. Since 2005, the statewide level has improved over 56%. All LDCs have participated over the past two years in providing Staff with details of damages due to No-calls for possible enforcement actions. Many have reported this to be a beneficial program which has contributed to more awareness of the One-Call regulations.

Although LDC performance in the Excavator Error and No-call damage measures are dependent on the behavior of outside parties, improvements are achievable through outreach efforts such as excavator education and safety programs, aggressive recovery of repair costs, and providing information to Staff for potential enforcement actions. Staff anticipates that the implementation of public outreach efforts associated with the 811 three-digit dialing initiative will also lead to better performance in the future.

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 continued to improve across the state in 2008. Staff attributes this progress 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 an emergency notification, 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.

For the first time since 2003, all LDCs met all three response goals. 2008 was the first year NGrid NY met the 75% within 30-minutes goal. It attributes its improvement to better work practices and training, and fewer leak and odor calls than it had received in previous years. Central Hudson, NGrid LI, NGrid NY, and O&R all achieved their best performances in the 30-minute measure since 2003.

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. Since year-end

2003, the backlog has decreased 70% statewide. Central Hudson continues to be the only LDC to have a significantly higher backlog in 2008 than in 2003. LDCs with notable percent decreases in leak backlog over the period are Con Edison, NGrid LI, NGrid Upstate, NYSEG, O&R and RG&E.

The net result statewide for year-end 2008 is a 34.7% decrease in the number of leaks requiring repair compared to year-end 2007. During 2007 the only LDC to experience an increase in leak backlog at year-end was National Fuel Gas Distribution Corporation (NFG), and it improved during 2008 to complete the year at its best level ever. Central Hudson continues to have difficulty managing its year-end backlog, and focusing its efforts all year long in order minimize the number of active potentially hazardous leaks when heading into the frost season.

After experiencing an increase in its backlog during 2005 and 2006, Corning managed a significant improvement during 2007, and managed to hold its backlog in 2008 to near its 2007 level. It is continuing an aggressive leak-prone pipe replacement program which aids its ability to remove many active leaks on its system while lowering future leakage rates.

Infrastructure Replacement

LDCs across the state are collectively working to update the gas distribution infrastructure. In 2009 LDCs expect to replace over 300 miles of leak-prone pipe in New York. The pipe targeted for replacement is being identified through the use of risk-based methodologies. These efforts will improve public safety, and over time, will help reduce the leakage rates LDCs experience.

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. Those LDCs identified as having room for improvement within the various measures will be asked to respond within 45 days describing action plans to improve performance.

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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 gas delivery system safety by measuring local distribution companies' (LDCs) 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, and whether safety aspects are improving, remaining stable, or deteriorating.

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 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 2008

Throughout this report, all of the figures display performance results for 2003-2008 for each LDC with the grey columns in the bar graphs representing 2003-2007, and the color columns representing 2008 results. Red numbers in tables represent failure to meet the target level for the measure or a decline in performance from the previous year.

Damage Prevention

Damage due to excavation activity is the leading cause 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, 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 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 number of facility damages per 1000 one-call tickets.

The numbers of damages are categorized by:

- damages resulting from mismarks
- damages resulting from excavator error
- damages resulting from company and company contractor error
- damages resulting from "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 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 ideally 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.

No-call damages 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 2008, more than 99.72% of one-call tickets had no associated damages to natural gas facilities. There were a total of 2,026 damages to natural gas LDC facilities in 2008, 13.6% less than in 2007. When these damages are normalized with an increase of 86,565 one-call tickets (13.6%) during 2008, the result is a significant improvement(26%) in total damages per 1000 one-call tickets. The increase in one-call tickets is an indication that excavators may be gaining better awareness of the one-call system and regulations, and that possibly more excavation work is being conducted. 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.

During 2007, legislation by the Federal Communications Commission (FCC) mandated the creation of a single nation-wide one-call process for excavators to be implemented using the three-digit telephone number 811. The single telephone number relieves excavators from having to remember multiple phone numbers if they work in areas covered by different one-call centers. It also facilitates national one-call education efforts and carries a message that is applicable no matter where excavators work in the country. Both One-Call Centers in New York State are participating.²



Figure #1³ below displays the collective statewide performance regarding the damage prevention measures. Note the significant increase in the number of tickets over the

² Case 05-C-1413, DIG SAFELY NEW YORK, INC., NYC & LI ONE CALL/DIG SAFELY, INC., presented to the Commission on April 18, 2007.

³ Con Edison revised its 2007 damages due to Company and Company Contractor error performance from 0.19 to 0.29. The resulting change to statewide performance level was 0.14 to 0.16, and Total damage performance 3.76 to 3.78.

period as previously mentioned. Also take note of the significant improvement in the Total Damages measure.

Metric	2003	2004	2005	2006	2007	2008
# Tickets	481,179	522,204	560,257	598,603	636,338	722,903
Damages/1000 tickets Due to:						
Mismarks	1.14	1.05	1.11	0.89	0.73	0.53
Co. & Co. Contractor	0.27	0.31	0.22	0.17	0.16	0.13
Excavator Error	3.28	2.61	2.55	1.83	1.84	1.40
No-Calls	1.84	1.78	1.70	1.33	1.05	0.74
Total (per 1000)	6.53	5.75	5.59	4.21	3.78	2.80

Figure #1 - Damages per 1000 Tickets Statewide

All four metrics composing the Total Damage measure continue to improve. The greatest improvement in 2008 came in the damages due to No-calls (29.6%) closely followed by the damages due to Mismarks (26.6%) and damages due to Excavator Error (24.1%). There was also continued improvement in the damages due to Company and Company Contractor Error. It is encouraging to see that LDCs have collectively maintained, and continue to improve, performance over the past several years. Performance in each measure has improved to less than half the rate of damages LDCs experienced in 2003. LDC performance in Total damages and Excavator Error damages is displayed in **Figure #2** and **Figure #3** below. Individual LDC damage performance is discussed in further detail in the next section.

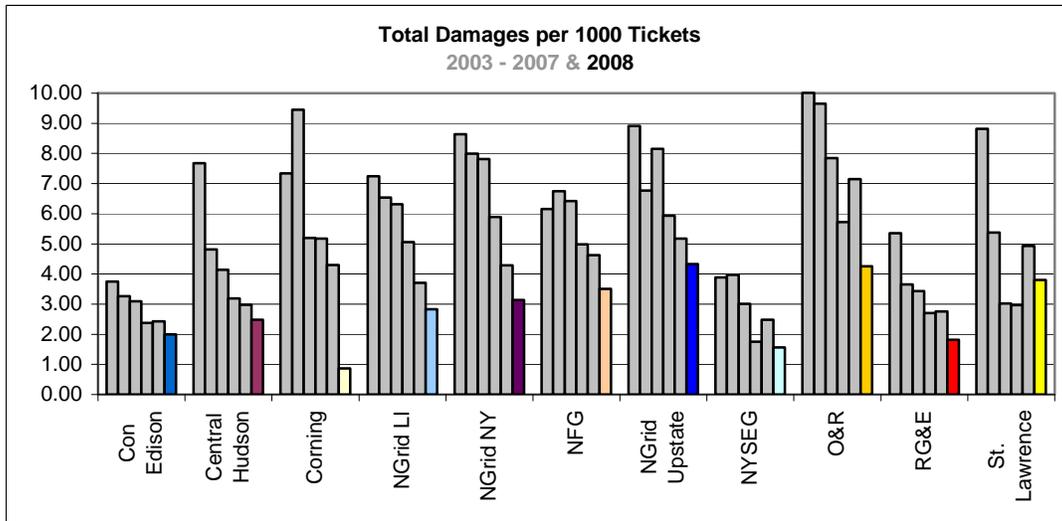


Figure #2 - Total Damages per 1000 Tickets Statewide

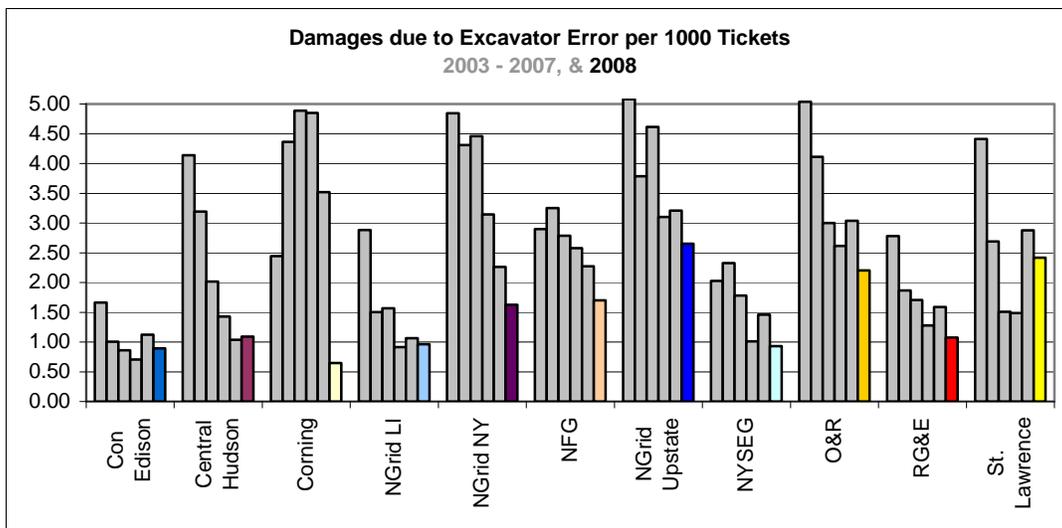


Figure #3 - Excavator Error Damages per 1000 Tickets Statewide

The continued improvement statewide for No-call damages is a positive sign, particularly when coupled with the increase in One-Call tickets. The improvement 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 (Code Rule 753). In order to aid in the enforcement of Code Rule 753, *Protection of Underground Facilities*, Staff requested LDCs to forward information about contractors who damaged underground facilities without having markout requests. 2008 was the first complete year of this program which began in mid-2007. 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. In 2008, most LDCs improved with Central Hudson experiencing approximately the same rate while NGrid Upstate experienced a slight decline in performance. LDC performance in No-call damages is displayed in **Figure #4** below:

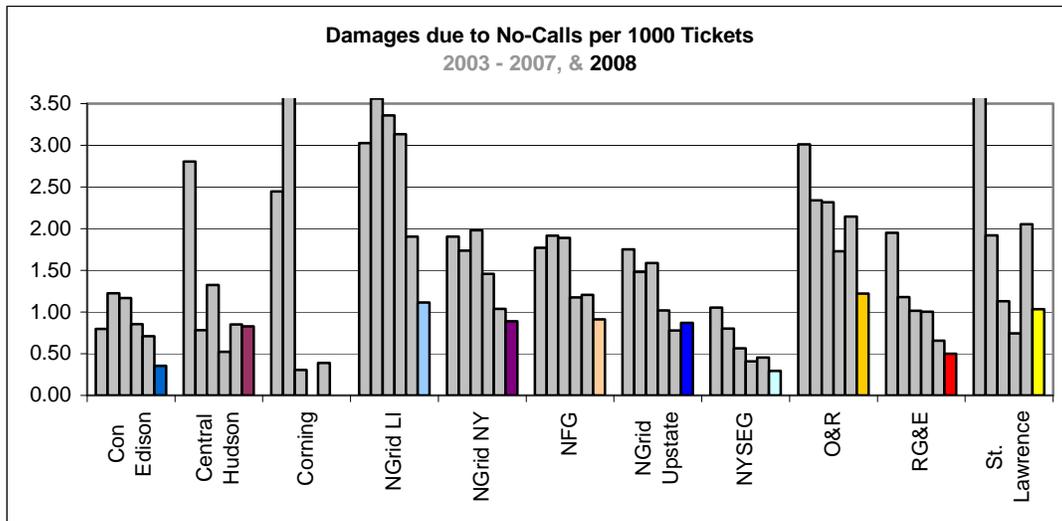


Figure #4 - No-call Damages per 1000 Tickets Statewide

Damages due to Mismarks also improved during 2008, further contributing to the overall improvement in the statewide total damages measure. 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. Central Hudson, Corning, NGrid NY, NFG, NGrid Upstate, NYSEG, O&R, and RG&E all improved at least 22% over their 2007 performance levels in damages due to Mismarks, with Central Hudson and RG&E improving over 50%. St. Lawrence experienced one damage due to a Mismark whereas it had zero in 2007, and Con Edison and NGrid LI remained virtually unchanged from their 2007 performance. NFG continues to be among the worst performers in the state and Staff recommends that NFG perform a self-analysis of its performance and take corrective action to improve. LDC performance in damages due to Mismarks is displayed in **Figure #5** below:

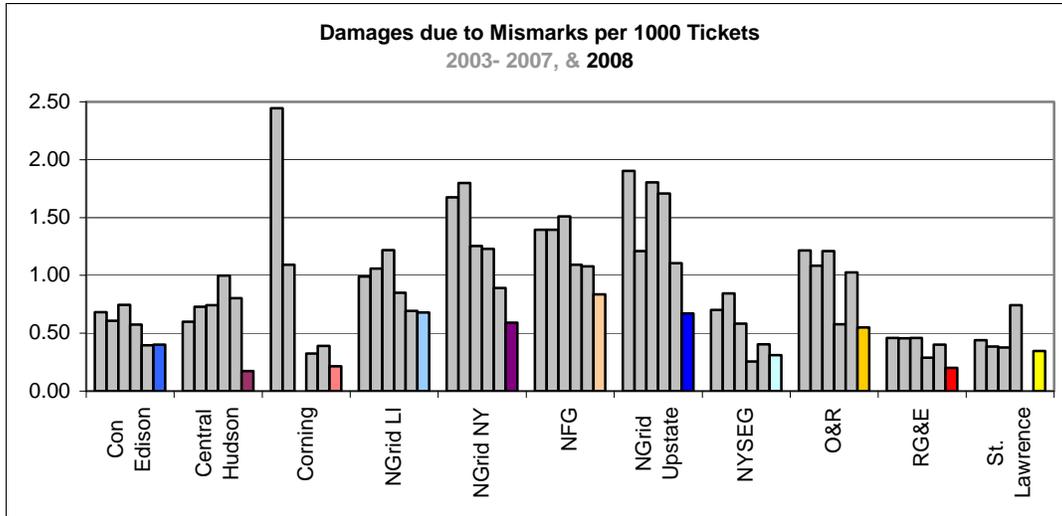


Figure #5 - *Mismark Damages per 1000 Tickets Statewide*

Company & Company Contractor⁴ damages continued to improve during 2008, occurring at less than half of the rate which they did in 2003. The greatest improvements in 2008 over 2007 performance were experienced by NGrid NY, NYSEG, and RG&E. Con Edison, NGrid LI, and NGrid Upstate experienced a greater number of damages due to Company and Company Contractors in 2008 while Central Hudson experienced its highest level of these damages in the past six years, with its third consecutive year of worsening performance. Similar to damages due to Mismarks, Staff expects to see general improvement in this area as LDCs develop better controls over their employees and direct contractors. LDC performance in Company and Company Contractor damages is displayed in **Figure #6** below:

⁴ LDCs that experience damages from other utility operations within the same company, such as electric crews damaging a gas facility, include those damages in this measure.

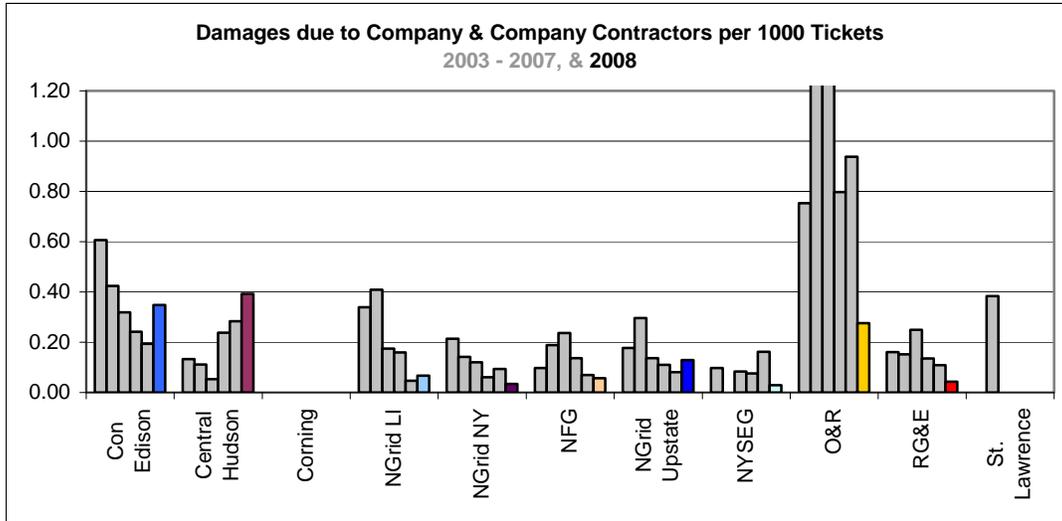


Figure #6 - Company & Company Contractor Damages per 1000 Tickets Statewide

Note that Corning and St. Lawrence did not experience any damages due to Company & Company Contractor Error. Staff recommends that Con Edison and Central Hudson perform a self-analysis on their performance and take corrective actions to improve.

2008 LDC Damage Results and Analysis

This section reviews damage performance on a company-by-company basis over the past six years.

Con Edison

Con Edison	2003	2004	2005	2006	2007	2008
Tickets	77,576	87,340	94,083	99,375	118,380	132,175
Damages/1000 tickets Due to:						
Mismarks	0.68	0.61	0.74	0.57	0.40	0.40
No-Calls	0.80	1.23	1.17	0.86	0.71	0.36
Co. & Co. Contractor	0.61	0.42	0.32	0.24	0.29	0.35
Excavator Error	1.66	1.01	0.86	0.70	1.12	0.89
Total	3.75	3.26	3.09	2.37	2.42	2.00

Figure #7 - Con Edison Damage Performance

Con Edison continues to experience an increase in the number of one-call tickets, which the company attributes to a substantial increase in city construction projects. Con Edison's total damage performance improved during 2008 to its best level in the past six years, largely due to a significant reduction in damages due to No-calls. However, it experienced its second consecutive year of declining performance in damages due to Company & Company Contractor Error. Con Edison attributes the higher damage rate to increased work around its own facilities driven by its accelerated pipe replacement initiative. Staff recommends that Con Edison perform a self-analysis in this area and take corrective actions to improve.

Central Hudson

Central Hudson	2003	2004	2005	2006	2007	2008
Tickets	14,979	17,869	18,854	21,024	21,171	22,931
Damages/1000 tickets Due to:						
Mismarks	0.60	0.73	0.74	1.00	0.80	0.17
No-Calls	2.80	0.78	1.33	0.52	0.85	0.83
Co. & Co. Contractor	0.13	0.11	0.05	0.24	0.28	0.39
Excavator Error	4.14	3.19	2.02	1.43	1.04	1.09
Total	7.68	4.81	4.14	3.19	2.98	2.49

Figure #8 - Central Hudson Damage Performance

Central Hudson's performance in damages due to Excavator Error improved significantly in 2007, and declined very slightly in 2008. After three years of deterioration in Mismarks it made a notable improvement in 2007, with a significant improvement in 2008.

Central Hudson experienced its worst performance in Company & Company Contractor damages in the six years data has been collected. Its performance in this area has now deteriorated for three straight years. In addition,

the Company's first quarter 2009 data indicates it continues to have difficulties in this area. Its 2009 first quarter data indicates it is damaging its own facilities at a rate of 0.58. Even though Central Hudson continues to experience a greater number of damages by its own work force, it has continued to improve its overall performance due to improvements in the other damage prevention categories. Staff recommends that Central Hudson perform a self-analysis of its performance in damages due to Company & Company Contractor Error and take corrective actions to improve.

Corning

Corning	2003	2004	2005	2006	2007	2008
Tickets	2,045	2,750	3,273	3,093	2,558	4,644
Damages/1000 tickets Due to:						
Mismarks	2.44	1.09	0.00	0.32	0.39	0.22
No-Calls	2.44	4.00	0.31	0.00	0.39	0.00
Co. & Co. Contractor	0.00	0.00	0.00	0.00	0.00	0.00
Excavator Error	2.44	4.36	4.89	4.85	3.52	0.65
Total	7.33	9.45	5.19	5.17	4.30	0.86

Figure #9 - *Corning Damage Performance*

Corning again experienced a single Mismark damage in 2008, but its normalized performance improved due to the increase in one-call tickets.⁵ As identified in the 2006 and 2007⁶ reports, its rate of damages due to Excavator Error was high relative to the statewide average and it was

⁵ 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.

⁶ Cases 07-G-0461 and 08-G-0413 In the Matter of Staff's Analysis of Local Distribution Company Safety Performance and Performance Measures

recommended to take actions to improve. During 2008 Corning significantly improved its Excavator Error performance and its Total Damage performance.

NGrid LI

NGrid LI	2003	2004	2005	2006	2007	2008
Tickets	70,718	83,137	80,402	94,156	105,488	119,216
Damages/1000 tickets Due to:						
Mismarks	0.99	1.06	1.22	0.85	0.69	0.68
No-Calls	3.03	3.56	3.36	3.13	1.91	1.12
Co. & Co. Contractor	0.34	0.41	0.17	0.16	0.05	0.07
Excavator Error	2.88	1.50	1.57	0.91	1.06	0.96
Total	7.24	6.53	6.32	5.06	3.71	2.83

Figure #10 - NGrid LI Damage Performance

NGrid LI experienced general improvement in damages due to Mismarks and Excavator Error, and significantly improved in damages due to No-calls. The company did experience deterioration in damages due to Company & Company Contractor Error, but not to its previous performance levels. It was identified as a significant outlier in the 2006 report for No-call damages and managed to make a significant improvement during 2007, and furthered its progress during 2008. This is a noteworthy improvement because efforts to improve in this area require educating excavators of their duties, therefore is not within the direct control of the company. NGrid LI has indicated that reporting No-call damages to Staff for possible enforcement actions has contributed to its improvement. NGrid LI also performed at its best level for Total Damages over the six year period. Even though NGrid LI has shown improvement in damages due to Mismarks over the past four years, it remains above the statewide average and should continue to make efforts to improve.

NGrid NY

NGrid NY	2003	2004	2005	2006	2007	2008
Tickets	56,132	63,335	66,184	65,838	75,164	87,895
Damages/1000 tickets Due to:						
Mismarks	1.67	1.80	1.25	1.23	0.89	0.59
No-Calls	1.91	1.74	1.98	1.46	1.04	0.89
Co. & Co. Contractor	0.21	0.14	0.12	0.06	0.09	0.03
Excavator Error	4.85	4.31	4.46	3.14	2.26	1.63
Total	8.64	7.99	7.81	5.89	4.28	3.14

Figure #11 - *NGrid NY Damage Performance*

NGrid NY continued to improve its total damage performance in 2008. It gained notable improvements in damages due to Mismarks and Excavator Error. It also achieved its best performance level in damages due to Company and Company Contractor Error. NGrid NY was identified in the 2006 report as an outlier in damages due to Mismarks and Excavator Error, and it reduced these types of damages in 2008 to nearly half of what they were in 2006. Even though NGrid NY's performance in damages due to Mismarks has improved substantially over the past two years, it remains worse than the statewide average and should continue its efforts to improve.

NFG

NFG	2003	2004	2005	2006	2007	2008
Tickets	71,772	68,887	76,142	80,690	86,281	105,292
Damages/1000 tickets Due to:						
Mismarks	1.39	1.39	1.51	1.09	1.08	0.84
No-Calls	1.77	1.92	1.89	1.18	1.21	0.91
Co. & Co. Contractor	0.10	0.19	0.24	0.14	0.07	0.06
Excavator Error	2.90	3.25	2.78	2.58	2.27	1.70
Total	6.16	6.75	6.42	4.98	4.62	3.50

Figure #12 - *NFG Damage Performance*

NFG continued to improve in every metric during 2008 with notable improvements in damages due to Mismarks and Excavator Error. It also experienced a significant improvement in damages due to No-calls after a small increase in 2007. Even though NFG has generally shown improvement since 2004, its performance continues to be relatively weak in every metric except Company & Company Contractor Error damages when compared to the statewide levels. It is important to note that NFG was identified as an outlier in damages due to Mismarks in the 2006 and 2007 reports, and did realize a 22% improvement during 2008, but still remains the worst performer in the state. Staff recommends that NFG perform a self-analysis of its performance in damages due to Mismarks and continue to take corrective actions to improve.

NGrid Upstate

NGrid Upstate	2003	2004	2005	2006	2007	2008
Tickets	73,613	77,667	87,517	91,286	85,985	84,857
Damages/1000 tickets Due to:						
Mismarks	1.90	1.21	1.81	1.71	1.10	0.67
No-Calls	1.75	1.48	1.59	1.02	0.78	0.87
Co. & Co. Contractor	0.18	0.30	0.14	0.11	0.08	0.13
Excavator Error	5.08	3.79	4.62	3.10	3.21	2.65
Total	8.91	6.77	8.15	5.94	5.18	4.32

Figure #13 - *NGrid Upstate Damage Performance*

NGrid Upstate was identified as a significant outlier in damages due to Mismarks in the 2006 report and responded with substantial improvement in 2007. It continued its improvement during 2008 and is no longer the worst performer in the state for Mismarks. It made a notable improvement in No-call damage performance in 2007, but was the only LDC to experience deterioration in performance during 2008. NGrid made a notable improvement in Excavator Error damages in 2008 after a slide in 2007, but did experience deterioration in damages due to Company & Company Contractor Error, back to nearly its 2005 rate. Since a considerable deterioration in 2005, NGrid Upstate's combined efforts in all damage metrics continued to improve its Total Damage performance. However, its Total Damage performance places it as the worst performer in the state, just behind O&R. Staff recommends that NGrid Upstate perform a self-analysis of its overall damage prevention program, particularly in the areas where it is worse than the statewide average (Mismarks, No-calls, and Excavator Error) and take corrective actions to improve.

NYSEG

NYSEG	2003	2004	2005	2006	2007	2008
Tickets	51,252	48,590	60,046	66,178	61,629	67,772
Damages/1000 tickets Due to:						
Mismarks	0.70	0.84	0.58	0.26	0.41	0.31
No-Calls	1.05	0.80	0.57	0.41	0.45	0.30
Co. & Co. Contractor	0.10	0.00	0.08	0.08	0.16	0.03
Excavator Error	2.03	2.33	1.78	1.01	1.46	0.93
Total	3.88	3.97	3.01	1.75	2.48	1.56

Figure #14 - NYSEG Damage Performance

After experiencing deterioration across the board during 2007, NYSEG performed a self assessment of its damage prevention operations, and took several actions to improve its performance in 2008. NYSEG was able to minimize damages to the lowest rate across the state since data was collected starting in 2003. Some of the efforts NYSEG reported as contributing to its improvement were expanding its participation in excavator training seminars, internal training to peripheral staff that had not obtained specific damage prevention training in the past, and increased excavator job site visits by company employees.

O&R

O&R	2003	2004	2005	2006	2007	2008
Tickets	17,274	17,512	18,995	22,559	22,395	25,389
Damages/1000 tickets Due to:						
Mismarks	1.22	1.08	1.21	0.58	1.03	0.55
No-Calls	3.01	2.34	2.32	1.73	2.14	1.22
Co. & Co. Contractor	0.75	2.11	1.32	0.80	0.94	0.28
Excavator Error	5.04	4.11	3.00	2.62	3.04	2.21
Total	10.02	9.65	7.84	5.72	7.14	4.25

Figure #15 - O&R Damage Performance

After experiencing a significant deterioration in every damage metric during 2007, O&R significantly improved during 2008 to its best levels since data was collected starting in 2003. O&R was consistently identified as a significant outlier in damages due to Company & Company Contractor Error, and while its performance during 2008 remains worse than the statewide level of 0.13, it has improved significantly and actually performed better than two other LDCs. O&R attributes part of its improvements to creating a longer career path for its locating employees to minimize turnover and inexperience, instituting better controls over its workforces, and reporting No-call damages to Staff for enforcement. With that said, Staff expects O&R to continue its improvement in the future as it remains among the worst performers in the state in every metric except damages due to No-calls. Similar to the recommendation for NGrid Upstate, Staff recommends that O&R perform a self-analysis of its overall damage prevention program, as it is worse than the statewide average in every metric, and continue to take corrective actions to improve.

RG&E

RG&E	2003	2004	2005	2006	2007	2008
Tickets	43,550	52,513	52,108	51,712	54,854	69,836
Damages/1000 tickets Due to:						
Mismarks	0.46	0.46	0.46	0.29	0.40	0.20
No-Calls	1.95	1.18	1.02	1.01	0.66	0.50
Co. & Co. Contractor	0.16	0.15	0.25	0.14	0.11	0.04
Excavator Error	2.78	1.87	1.71	1.28	1.59	1.07
Total	5.35	3.66	3.44	2.71	2.75	1.82

Figure #16 – *RG&E Damage Performance*

After a minor deterioration in performance during 2007, RG&E was able to improve significantly during 2008.

RG&E reports it took many of the same initiatives, some jointly, as listed for NYSEG's efforts to improve. RG&E also performed better than the statewide performance levels in each metric.

St. Lawrence

St. Lawrence	2003	2004	2005	2006	2007	2008
Tickets	2,268	2,604	2,653	2,692	2,433	2,896
Damages/1000 tickets Due to:						
Mismarks	0.44	0.38	0.38	0.74	0.00	0.35
No-Calls	3.97	1.92	1.13	0.74	2.06	1.04
Co. & Co. Contractor	0.00	0.38	0.00	0.00	0.00	0.00
Excavator Error	4.41	2.69	1.51	1.49	2.88	2.42
Total	8.82	5.38	3.02	2.97	4.93	3.80

Figure #17 - St. Lawrence Damage Performance

After experiencing deterioration in performance during 2007, St. Lawrence improved during 2008. Its greatest improvement was in the area of damages due to No-calls. The actual number of damages due to No-calls was three, compared to five during 2007. However, when the increased number of tickets is factored in, the normalized rate was approximately halved. St. Lawrence continues to experience a relatively higher damage rate for damages due to Excavator Error. As indicated in the 2007 report, St. Lawrence should continue to work towards educating local excavators in an effort to minimize these types of damages.

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.⁷

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 dispatch to the time of arrival of qualified⁸ company personnel at the location.

When an LDC responds to a report of a gas, or an otherwise unidentified odor, and an investigation determines that the problem is not attributed to natural gas, the event is nevertheless included in the 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 provides

⁷ The LDCs are expected to review the circumstances of each instance exceeding 60 minutes and where possible work towards their elimination.

⁸ *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.

additional data showing when the desired response level is actually achieved.

2008 Results and Analysis

Figure #18 displays the collective annual statewide Emergency Response Time (ERT) performance for each goal since 2003, with 2008 performance presented in color. The statewide performance has improved for each goal over the past six years with a 4.7% increase in the 30-minute goal, from 76.8% to 81.5%, leading the performance gains.

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

Figure #19 presents data for calendar years 2003 through 2008 arranged by LDC and percentage of responses achieved within 30 minutes. Performances that did not meet the goal are shown in red.

	30 Minute					
	2003	2004	2005	2006	2007	2008
Central Hudson	81.0%	78.6%	78.9%	83.0%	84.1%	82.5%
Corning	77.0%	83.5%	82.2%	82.4%	74.7%	79.3%
Con Edison	71.9%	75.9%	76.4%	78.5%	80.3%	80.8%
NGrid LI	67.9%	74.8%	75.3%	76.2%	75.8%	76.5%
NGrid NY	67.6%	68.0%	65.9%	69.7%	74.3%	77.0%
NFG	87.1%	87.4%	88.5%	91.1%	91.4%	88.7%
NGrid Upstate	76.8%	80.8%	79.4%	82.2%	82.0%	82.3%
NYSEG	80.4%	81.1%	81.5%	78.0%	78.9%	79.9%
O&R	68.0%	71.7%	72.5%	78.4%	80.3%	80.7%
RG&E	95.0%	95.1%	95.3%	92.8%	92.4%	92.3%
St. Lawrence	72.4%	78.6%	81.1%	80.6%	78.9%	80.2%

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

Eight of the 11 LDCs improved over their 2007 performance level in the 30-minute measure, and all LDCs

reached the 30-minute goal, compared to nine in 2007. This is the first time over the six year period that NGrid NY met the 30-minute goal. It has made a significant improvement since 2006, improving its percentage of calls responded to within 30 minutes by 7.3%. NGrid NY has committed to implementing Global Positioning System (GPS) technology by the end of 2009 which will complement its automated dispatching computer system, and should help to further improve its response performance. The company also reported that a 9.3% decrease in call volume during 2008 helped it improve its overall response time.

Con Edison, NGrid LI, NGrid Upstate, and O&R all reached their highest performance level in the 30-minute target over the six years.

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 six years of the collected data, leak and odor calls statewide have decreased from **Error! Not a valid link.** in 2003, to 171,464 in 2008, or a nearly 25% 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 2008. 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 delimitating 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 minimizing potentially hazardous leaks through the year. This will be discussed further under the Leak Management section.

It is encouraging to see that all LDCs have made the 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. Staff recommends that LDCs evaluate different regions or areas in their distribution systems where response times are significantly below those in the rest of their system. Another area LDCs should continue to monitor and strive to improve is response times that exceed 60 minutes. **Figure #20** shows the percentage of responses that have exceeded 60-minutes for the LDCs over the past six years; where numbers in red indicate deterioration from the previous year.

% Calls >60min	2003	2004	2005	2006	2007	2008
Central Hudson	0.07%	0.13%	0.10%	0.22%	0.11%	0.11%
Coning	2.09%	0.42%	3.16%	0.77%	2.93%	1.25%
Con Edison	0.10%	0.18%	0.07%	0.05%	0.30%	0.02%
NGrid LI	0.08%	0.15%	0.03%	0.13%	0.20%	0.37%
NGrid NY	1.67%	1.63%	2.08%	2.18%	0.75%	0.34%
NFG	1.12%	1.07%	1.01%	0.97%	0.92%	1.24%
NGrid Upstate	2.92%	1.98%	2.05%	1.44%	1.83%	1.33%
NYSEG	0.60%	0.56%	0.75%	1.22%	0.88%	0.66%
O&R	0.33%	0.73%	0.54%	0.13%	0.09%	0.04%
RG&E	0.05%	0.04%	0.19%	0.23%	0.14%	0.21%
St. Lawrence	1.79%	1.53%	0.81%	0.76%	1.15%	0.42%

Figure #20 - Percentage of LDC Responses Greater than 60 Minutes

As seen in **Figure #20**, all LDC performance has fluctuated over the period. About half of the LDCs have improved since 2003 while Central Hudson, NGrid LI, NFG, NYSEG, and RG&E all performed worse during 2008 that they did in 2003. Of these five, Central Hudson, NGrid LI, and NFG did improve in the 30-minute metric. Con Edison, NGrid NY, NGrid Upstate, O&R, and St. Lawrence, have demonstrated

significant improvements since 2003. It is important to note that collectively the statewide performance for responses in less than 60-minutes, as displayed in **Figure #18**, have improved from 99.0% to 99.4%.

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 backlog⁹ of leaks at the end of the year. There are requirements in the natural gas safety regulations contained in 16 NYCRR Part 255 for classifying, monitoring and repairing different types of leaks. The regulations contain a scheme to classify these 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

⁹ A backlog is defined as potentially hazardous active leaks in the system, consisting of Type 1 - requires immediate effort to protect life and property, continuous action to eliminate the hazard, and repairs on a day-after-day basis or the condition kept under daily surveillance until corrected; Type 2A - monitored every two weeks and repaired within six months; Type 2 - monitored at least every two months and repaired within one year.

data analyses are presented as of December 31, 2008 (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 reduce safety risks by replacing deteriorating and leak-prone infrastructure and/or reducing leak backlogs have been incorporated into past and current rate agreements for LDCs.

Staff is focused on evaluating overall system integrity and management of leaks in view of public safety. 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

2009 the LDCs across the state plan to collectively remove over 300 miles of leak-prone main.

2008 Results and Analysis

Compared to 2003, the statewide year-end backlog of leaks requiring repair has declined by 809, or 70%. 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 (95%), NYSEG (85%), NGrid LI (83%) Con Edison (63%), RG&E (63%), and O&R (62%).

Figure #21 displays the backlog of leaks requiring repair (Types 1, 2A, and 2) on December 31st of 2003 through 2008. The total year-end backlog of leaks requiring repair across the state decreased from 528 in 2007 to 345 in 2008 (-35%). Numerical leak data is contained in Appendix D.

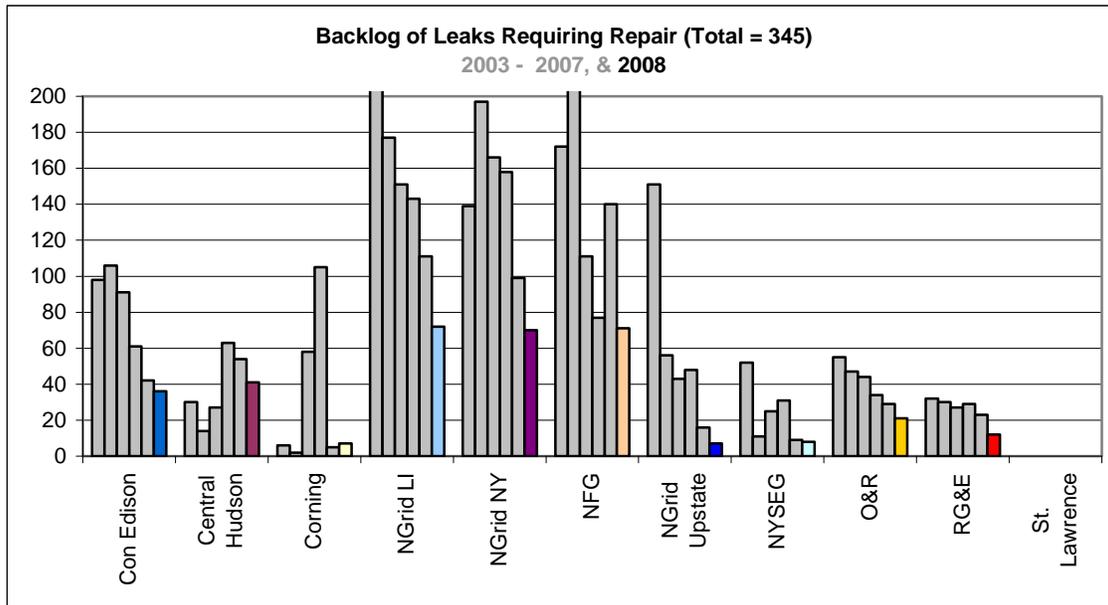


Figure #21 - Leak Backlog 2003 - 2008

As indicated in **Figure #21**, those with significant improvements in year-end backlogs during 2008 are NGrid Upstate with a reduction of 56%, NFG with 49%, and RG&E with 48%. 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 four or more years. St. Lawrence continues to maintain its year-end backlog at zero.

After experiencing two years of significant increases in its leak backlog, Corning managed to maintain a fairly level backlog between 2007 and 2008. 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 2008 for the second year compared to its 2006 backlog. However, its backlog still remains greater than

it experienced in 2003 through 2005, and it is the only LDC to have a higher backlog in 2008 when compared to 2003. Even though it is showing progress, Central Hudson must continue to work year long to manage leak surveys and repairs of potentially hazardous leaks in order to minimize its backlog when heading into winter. It has been identified in four reports in a row as needing to improve its management of repairable leaks.

NGrid Upstate, NYSEG, and RG&E all experienced increases in their backlog during 2006 and have improved each year since. It is good to see LDCs continue to focus on managing leaks year-long to achieve annual improvement.

Both NGrid LI and NGrid NY were identified as outliers in the 2006 report. They made notable improvements during 2007 and continued improvement during 2008. Even with this level of improvement, Con Edison, another downstate LDC with an urban environment, has continually achieved an even lower backlog over the past several years. Staff recommends that NGrid LI and NGrid NY continue to evaluate approaches to minimizing potentially hazardous leaks at year-end, and continue to take actions to improve.

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. The company will be monitored in successive reports to determine if it can maintain or improve on its 2008 level. Even with the improvement, NFG continues to have one of the highest leak backlog levels in the state. Staff recommends that NFG continue to make efforts to reduce the number of potentially hazardous leaks at year-end.

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). 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 six years LDCs have collectively worked to improve performance in the key areas of safety identified in this report. There has been a 57% improvement in total damage performance, the 30-minute emergency response time has improved from 76.8% in 2003 to 81.5% in 2008, and the year-end leak backlog of potentially hazardous leaks has decreased 70%, from 1,154 to 345. 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 in the measures contained in this report and will expect those LDCs, mentioned as having improvement opportunities, 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 they adopted 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 below self-assess their performance. 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 and O&R
- Mismatch damages - NGrid LI, NGrid NY, and NFG
- Company & Company Contractor damages - Central Hudson and Con Edison
- Excavator Error damages - NGrid Upstate, O&R, and St. Lawrence
- Leak Management - Central Hudson, NGrid LI, NGrid NY, and NFG

Appendix A

Reported & Computed LDC Damage Performance

2008 LDC Reported Totals	# One Call Tickets						Damages due to Mismarks					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	77,576	87,340	94,083	99,375	118,380	132,175	53	53	70	57	47	53
Central Hudson	14,979	17,869	18,854	21,024	21,171	22,931	9	13	14	21	17	4
Conring	2,045	2,750	3,273	3,093	2,558	4,644	5	3	0	1	1	1
NGrid LI	70,718	83,137	80,402	94,156	105,488	119,216	70	88	98	80	73	81
NGrid NY	56,132	63,335	66,184	65,838	75,164	87,895	94	114	83	81	67	52
NFG	71,772	68,887	76,142	80,690	86,281	105,292	100	96	115	88	93	88
NGrid Upstate	73,613	77,667	87,517	91,286	85,985	84,857	140	94	158	156	95	57
NYSEG	51,252	48,590	60,046	66,178	61,629	67,772	36	41	35	17	25	21
O&R	17,274	17,512	18,995	22,559	22,395	25,389	21	19	23	13	23	14
RG&E	43,550	52,513	52,108	51,712	54,854	69,836	20	24	24	15	22	14
St. Lawrence	2,268	2,604	2,653	2,692	2,433	2,896	1	1	1	2	0	1

2008 LDC Computed Performance	# One Call Tickets						Damages due to Mismarks per 1000 Tickets					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	77,576	87,340	94,083	99,375	118,380	132,175	0.68	0.61	0.74	0.57	0.40	0.40
Central Hudson	14,979	17,869	18,854	21,024	21,171	22,931	0.60	0.73	0.74	1.00	0.80	0.17
Conring	2,045	2,750	3,273	3,093	2,558	4,644	2.44	1.09	0.00	0.32	0.39	0.22
NGrid LI	70,718	83,137	80,402	94,156	105,488	119,216	0.99	1.06	1.22	0.85	0.69	0.68
NGrid NY	56,132	63,335	66,184	65,838	75,164	87,895	1.67	1.80	1.25	1.23	0.89	0.59
NFG	71,772	68,887	76,142	80,690	86,281	105,292	1.39	1.39	1.51	1.09	1.08	0.84
NGrid Upstate	73,613	77,667	87,517	91,286	85,985	84,857	1.90	1.21	1.81	1.71	1.10	0.67
NYSEG	51,252	48,590	60,046	66,178	61,629	67,772	0.70	0.84	0.58	0.26	0.41	0.31
O&R	17,274	17,512	18,995	22,559	22,395	25,389	1.22	1.08	1.21	0.58	1.03	0.55
RG&E	43,550	52,513	52,108	51,712	54,854	69,836	0.46	0.46	0.46	0.29	0.40	0.20
St. Lawrence	2,268	2,604	2,653	2,692	2,433	2,896	0.44	0.38	0.38	0.74	0.00	0.35

2008 LDC Reported Totals	No-Call Damages						Co. & Co. Contractor Damages					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	62	107	110	85	84	47	47	37	30	24	34	46
Central Hudson	42	14	25	11	18	19	2	2	1	5	6	9
Corning	5	11	1	0	1	0	0	0	0	0	0	0
NGrid LI	214	296	270	295	201	133	24	34	14	15	5	8
NGrid NY	107	110	131	96	78	78	12	9	8	4	7	3
NFG	127	132	144	95	104	96	7	13	18	11	6	6
NGrid Upstate	129	115	139	93	67	74	13	23	12	10	7	11
NYSEG	54	39	34	27	28	20	5	0	5	5	10	2
O&R	52	41	44	39	48	31	13	37	25	18	21	7
RG&E	85	62	53	52	36	35	7	8	13	7	6	3
St. Lawrence	9	5	3	2	5	3	0	1	0	0	0	0

2008 LDC Computed Performance	No-Call Damages per 1000 Tickets						Co. & Co. Contractor Damages per 1000 Tickets					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	0.80	1.23	1.17	0.86	0.71	0.36	0.61	0.42	0.32	0.24	0.29	0.35
Central Hudson	2.80	0.78	1.33	0.52	0.85	0.83	0.13	0.11	0.05	0.24	0.28	0.39
Corning	2.44	4.00	0.31	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NGrid LI	3.03	3.56	3.36	3.13	1.91	1.12	0.34	0.41	0.17	0.16	0.05	0.07
NGrid NY	1.91	1.74	1.98	1.46	1.04	0.89	0.21	0.14	0.12	0.06	0.09	0.03
NFG	1.77	1.92	1.89	1.18	1.21	0.91	0.10	0.19	0.24	0.14	0.07	0.06
NGrid Upstate	1.75	1.48	1.59	1.02	0.78	0.87	0.18	0.30	0.14	0.11	0.08	0.13
NYSEG	1.05	0.80	0.57	0.41	0.45	0.30	0.10	0.00	0.08	0.08	0.16	0.03
O&R	3.01	2.34	2.32	1.73	2.14	1.22	0.75	2.11	1.32	0.80	0.94	0.28
RG&E	1.95	1.18	1.02	1.01	0.66	0.50	0.16	0.15	0.25	0.14	0.11	0.04
St. Lawrence	3.97	1.92	1.13	0.74	2.06	1.04	0	0.38	0.00	0.00	0.00	0.00

2008 LDC Reported Totals	Excavator Error Damages						Total Damages					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	129	88	81	70	133	118	291	285	291	236	287	264
Central Hudson	62	57	38	30	22	25	115	86	78	67	63	57
Corning	5	12	16	15	9	3	15	26	17	16	11	4
NGrid LI	204	125	126	86	112	115	512	543	508	476	391	337
NGrid NY	272	273	295	207	170	143	485	506	517	388	322	276
NFG	208	224	212	208	196	179	442	465	489	402	399	369
NGrid Upstate	374	294	404	283	276	225	656	526	713	542	445	367
NYSEG	104	113	107	67	90	63	199	193	181	116	153	106
O&R	87	72	57	59	68	56	173	169	149	129	160	108
RG&E	121	98	89	66	87	75	233	192	179	140	151	127
St. Lawrence	10	7	4	4	7	7	20	14	8	8	12	11

2008 LDC Computed Performance	Excavator Error Damages per 1000 Tickets						Total Damages per 1000 Tickets					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Con Edison	1.66	1.01	0.86	0.70	1.12	0.89	3.75	3.26	3.09	2.37	2.42	2.00
Central Hudson	4.14	3.19	2.02	1.43	1.04	1.09	7.68	4.81	4.14	3.19	2.98	2.49
Corning	2.44	4.36	4.89	4.85	3.52	0.65	7.33	9.45	5.19	5.17	4.30	0.86
NGrid LI	2.88	1.50	1.57	0.91	1.06	0.96	7.24	6.53	6.32	5.06	3.71	2.83
NGrid NY	4.85	4.31	4.46	3.14	2.26	1.63	8.64	7.99	7.81	5.89	4.28	3.14
NFG	2.90	3.25	2.78	2.58	2.27	1.70	6.16	6.75	6.42	4.98	4.62	3.50
NGrid Upstate	5.08	3.79	4.62	3.10	3.21	2.65	8.91	6.77	8.15	5.94	5.18	4.32
NYSEG	2.03	2.33	1.78	1.01	1.46	0.93	3.88	3.97	3.01	1.75	2.48	1.56
O&R	5.04	4.11	3.00	2.62	3.04	2.21	10.02	9.65	7.84	5.72	7.14	4.25
RG&E	2.78	1.87	1.71	1.28	1.59	1.07	5.35	3.66	3.44	2.71	2.75	1.82
St. Lawrence	4.41	2.69	1.51	1.49	2.88	2.42	8.82	5.38	3.02	2.97	4.93	3.80

Appendix B

Reported Emergency Response Data

	45 Minute						60 Minute					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Central Hudson	99.2%	98.8%	98.8%	98.7%	99.0%	99.0%	99.9%	99.9%	99.9%	99.8%	99.9%	99.9%
Corning	93.0%	96.1%	93.9%	95.8%	89.2%	96.1%	98.0%	99.6%	96.8%	99.2%	97.1%	98.7%
Con Edison	96.3%	97.3%	97.1%	97.6%	97.4%	97.8%	99.9%	99.9%	99.9%	99.9%	99.7%	99.9%
NGrid LI	93.1%	96.0%	96.2%	96.1%	95.5%	95.6%	99.9%	99.9%	99.9%	99.9%	99.8%	99.6%
NGrid NY	92.2%	92.4%	90.6%	91.8%	95.1%	96.6%	98.1%	98.4%	97.9%	97.8%	99.3%	99.7%
NFG	96.1%	96.3%	96.8%	97.0%	97.2%	96.3%	98.9%	98.9%	99.0%	99.0%	99.1%	98.8%
NGrid Upstate	92.1%	94.1%	93.6%	95.1%	94.8%	95.5%	97.2%	98.0%	98.0%	98.6%	98.2%	98.7%
NYSEG	96.2%	96.0%	96.0%	94.5%	95.0%	95.7%	99.4%	99.4%	99.2%	98.8%	99.1%	99.3%
O&R	94.2%	95.8%	95.1%	96.7%	97.1%	97.5%	99.7%	99.7%	99.5%	99.9%	99.9%	99.9%
RG&E	99.3%	99.5%	99.4%	98.9%	98.9%	98.8%	99.9%	99.9%	99.8%	99.8%	99.9%	99.8%
St. Lawrence	89.0%	91.0%	95.3%	95.5%	95.4%	96.3%	98.2%	98.5%	99.2%	99.2%	98.9%	99.6%

# Calls	2003	2004	2005	2006	2007	2008
Central Hudson	4,587	4,724	4,999	4,075	4,442	3,752
Corning	716	722	1,487	1,036	1,432	1,279
Con Edison	31,749	33,527	30,478	28,356	29,880	26,003
NGrid LI	30,593	28,459	27,922	25,034	23,486	21,605
NGrid NY	64,431	59,046	53,200	49,034	47,688	43,253
NFG	33,288	30,207	29,543	25,743	27,740	26,558
NGrid Upstate	28,602	27,507	25,206	22,682	23,465	21,681
NYSEG	10,210	9,487	9,999	8,995	9,828	8,395
O&R	8,231	8,260	8,033	7,656	7,820	6,982
RG&E	14,882	14,248	13,917	12,123	12,185	11,475
St. Lawrence	616	590	493	396	436	481
Total:	227,905	216,777	205,277	185,130	188,402	171,464

Appendix C

Reported Leak Data

2008 Total Leak Repairs on Mains by Type								
	Unprot. Bare	Unprot. Coated	Prot. Bare	Prot. Coated	Plastic	Cast/Wrt. Iron	Copper	Other
Con Edison	2,290	94	0	0	10	2,598	0	0
Central Hudson	0	65	0	78	18	95	0	0
Corning	119	0	0	2	0	0	0	1
NGrid LI	732	158	19	42	52	186	0	0
NGrid NY	78	0	0	28	12	2,143	0	0
NFG	2,242	0	0	107	116	401	0	26
NGrid Upstate	43	42	0	59	19	418	0	56
NYSEG	132	0	0	32	36	0	0	5
O&R	210	0	0	6	58	30	0	0
RG&E	98	16	0	202	20	69	0	0
St. Lawrence	0	0	0	1	0	0	0	0

2008 Total Leak Repairs on Services by Type								
	Unprot. Bare	Unprot. Coated	Prot. Bare	Prot. Coated	Plastic	Cast/Wrt. Iron	Copper	Other
Con Edison	1,980	137	0	0	146	0	124	0
Central Hudson	0	92	0	65	36	0	0	0
Corning	53	1	0	1	0	0	0	1
NGrid LI	911	237	23	45	261	0	12	0
NGrid NY	192	0	0	98	101	0	112	0
NFG	630	0	0	68	141	0	0	23
NGrid Upstate	307	72	0	75	138	6	19	53
NYSEG	105	0	0	32	48	0	0	1
O&R	179	0	0	4	55	0	0	0
RG&E	103	31	0	154	45	0	12	0
St. Lawrence	0	0	0	1	0	0	0	0

Appendix D

Backlog of Leaks Requiring Repair

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

Repaired Leaks Requiring Repair

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