

STATE OF NEW YORK

# Public Service Commission

Garry A. Brown, Chairman

Three Empire State Plaza, Albany, NY 12223

Further Details: James Denn, (518) 474-7080

<http://www.dps.state.ny.us>

FOR RELEASE: IMMEDIATELY

08023/07-S-0984

## **Department of Public Service Issues Report on Steam Rupture Incident -Staff's Comprehensive Report Identifies 13 Recommendations for Improvement-**

Albany, NY—02/13/08—Staff of the Department of Public Service (Staff) today presented its recommendations in its *Report on Steam Pipeline Rupture, 41<sup>st</sup> Street & Lexington Avenue, Consolidated Edison Company of New York, Inc. July 18, 2007* (Staff Report) to the Public Service Commission that will further contribute to the prevention of similar steam system events in the future.

The Staff Report concerning the steam rupture is based on extensive investigation and analysis of the company's operating practices and procedures, personal observations of the events surrounding the incident, the reports of various consultants and the Con Edison December 2007 Recommendations and Action Plan. The Staff Report identifies various deficiencies in the Con Edison's operations and maintenance practices and procedures and includes 13 recommendations for improvement.

“This incident has brought to light various deficiencies in Con Edison's operation of the steam system that must be addressed to ensure continued safe and adequate service,” said Commission Chairman Garry Brown. “While the company has begun efforts to implement its own Recommendations and Action Plan, we believe these efforts do not go far enough. To ensure the focus remains on the safety of the steam system operations, and to strengthen the company's oversight, the Commission today is directing Con Edison to implement the Staff recommendations or show cause why such recommendations should not be implemented within 30 days of the Commission's written order in this matter.”

The Staff Report describes in detail the steam event that took place on July 18, 2007, the clean up efforts surrounding the incident site, the response to human needs, and the impact on gas, electric and telecommunications facilities. The report also describes the materials and evidence recovery and testing processes and the maintenance history at the intersection of 41<sup>st</sup> Street and Lexington Avenue. Finally, the report identifies various deficiencies in Con Edison's operations and maintenance practices and procedures and includes 13 recommendations (see below) which, when implemented, will contribute further to the safety and adequacy of service on the steam system.

A copy of Staff Report in Case 07-S-0984 when filed will be available on the Department's [www.dps.state.ny.us](http://www.dps.state.ny.us) Web site by accessing the File Room section of the homepage. Many libraries offer free Internet access. The Staff Report also can be obtained from the Files Office, 14<sup>th</sup> Floor, Three Empire State Plaza, Albany, NY 12223 (518-474-2500).

### **Staff Report Recommendations**

1. Con Edison must establish a specific procedure for direct physical inspection of steam facility manholes that are historically prone to flooding due to significant precipitation events or other causes of water infiltration. The procedure must include detailed criteria warranting the inclusion and updating of specific manhole locations, and specific actions to be taken by company personnel in response to observed conditions. The documentation process must include the inspection results and the follow-up actions.
2. Con Edison must establish a procedure for identifying and continually evaluating manhole locations, including information from field crews, to identify locations that require automatic pumping capability.
3. Con Edison must evaluate its steam system to identify locations that, based on elevation profile and potential for water infiltration or flooding, are similar to the piping arrangement that existed on 41st Street across Lexington Avenue prior to the incident. These locations must be subject to detailed engineering evaluation to determine all reasonable actions that are necessary to alleviate potentially unsafe conditions.
4. Con Edison must establish a detailed trap inspection procedure sufficient to periodically ensure that the steam traps are clear of any debris and can freely operate at the design capacity. At a minimum, it will require the replacement of all traps on an annual basis and internal inspection of all traps removed from service. Traps that fail inspection must be immediately replaced, and promptly investigated to determine the cause of failure.
5. Con Edison must establish training and operating procedures to ensure that instances of steam system damage or degradation detected by company personnel are documented and referred to Steam Engineering for appropriate detailed evaluation and analysis. The company must prioritize conditions based on the likelihood and consequences of a system failure and recommended actions to correct unsafe conditions must be timely completed.

6. Con Edison must revise its manhole inspection procedure to explicitly state that the condition of the steam facilities within the manhole, be checked during the inspections, and to include a timeframe for correcting deficiencies as required by 16 NYCRR 420.4(b) (4).
7. Con Edison must establish procedures for effective control of contract vendors performing any operations, maintenance, or repair work on its steam system. The procedures must ensure that contract stipulations are strictly adhered to based on oversight by appropriate, knowledgeable company personnel with extensive experience in the steam system operations, maintenance, and repair procedures and processes.
8. Con Edison must categorize repairs to the steam system as temporary or permanent, based on detailed engineering evaluation of the repair method. Repairs categorized as temporary must be eliminated in favor of a permanent repair within a specific timeframe supported by the evaluation, but not to exceed six months. Con Edison also must revise Procedure S-11971 - Welded Repairs of Steam Distribution Piping, to provide a specific time frame for repairs, including such repairs in manholes. Repair intervals for all components must be addressed for compliance with 16 NYCRR 420.4(b) (4).
9. Con Edison must establish a procedure to review its Steam Operation and Maintenance Information System (SOMIS) and other pertinent records to determine the status of any outstanding recommendations or notations for repair, replacement, analysis, etc. upon which it has not acted, and to prioritize completion.
10. Con Edison must establish procedures to control tracking of projects in its SOMIS to ensure that all work is completed. The procedures should prohibit initiating and assigning unrelated work to existing project numbers and avoid closing out projects in SOMIS when the originally intended work has yet to be completed.
11. Con Edison must discontinue the use of leak sealant injections as a method to seal leaks unless it can demonstrate that effective controls are in place to verify the proper quantity of material injected, limit excessive applications, and ensure that the steam system components will not be adversely affected (as previously directed by the Commission in its January 18, 2008 Order).
12. Con Edison must conduct feasibility analyses for remote monitoring systems to detect real-time water infiltration into subsurface structures containing steam pipeline facilities. Con Edison must also conduct feasibility analysis on systems to detect condensate levels within steam piping at specific locations identified based on history of excessive condensate formation requiring actions to alleviate potentially unsafe conditions. Bi-monthly progress reports should be submitted to the Commission's Office of Electric, Gas and Water.
13. Con Edison must conduct feasibility analysis of high capacity stream traps and trap assembly designs with the aim of improving debris removal. Bi-monthly progress reports should be submitted to the Public Service Commission's Office of Electric, Gas and Water.