# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on March 17, 2011

#### COMMISSIONERS PRESENT:

Garry A. Brown, Chairman Patricia L. Acampora Maureen F. Harris Robert E. Curry, Jr. James L. Larocca

CASE 11-G-0077 - Proceeding on Motion of the Commission to Investigate Whether a Penalty Should be Imposed on Consolidated Edison Company of New York, Inc. Concerning the Natural Gas Explosion on July 25, 2008, at 147-25 Sanford Avenue, Queens.

ORDER TO SHOW CAUSE WHY A PENALTY SHOULD NOT BE IMPOSED

(Issued and Effective March 17, 2011)

BY THE COMMISSION:

#### INTRODUCTION

On July 25, 2008, a natural gas explosion occurred within an apartment building located at 147-25 Sanford Avenue, Queens (Sanford incident). The explosion took place soon after Consolidated Edison Company of New York, Inc. (Con Edison or Company) and the plumbers left the premises after restoring gas service to seven "risers" in the building. The explosion caused serious injury to two apartment occupants served by riser "P", ultimately resulting in the death of one. Department of Public Service - Gas Safety Staff (Staff) investigated the incident and drafted a report dated April 2009 (Report). The Report concluded

<sup>&</sup>lt;sup>1</sup> A riser is piping beyond the customer's meter inside a building serving individual apartments.

that Con Edison failed to follow its procedures when restoring gas service. Specifically, the Report (at 19) determined that Con Edison employees violated G-11836-9 by: i) not performing the piping system bleeds during the gas system integrity test (G-11836-9, §4.5 and §11.3); ii) restoring gas service to risers G, M and P despite conditions in apartments that contradicted the Company's procedure G-11836-9 (§11.4(E)) and the plumbers' Gas Turn-On affidavits (G-11836-9, §11.6); and, iii) restoring gas service for all risers without receiving integrity test affidavits (G-11836-9, §11.4). The Report and incident itself emphasizes the need for Con Edison and its employees to adhere to the Company's gas turn-on procedures.

Con Edison Procedure: G-11836-9, "Meter Turn-on and Turn-off for: Meter Changes, New Meter Sets and When Restoring Gas Service Inside Buildings After Meter/Service Has Been Turned Off."

The Report (at 20-22) explains that Con Edison revised G-11836 and revised its training curriculum following the Sanford incident. One of the revisions is designed to turn on gas riser by riser to reduce the time between the integrity test and turn on of gas.

This Order's recitation of the events of July 25, 2008 is based on information contained in the Report prepared by the Gas Safety Section of the Department's Office of Electric, Gas & Water, as part of that Office's investigation of the Sanford Avenue explosion of July 25, 2008. The Report is entitled "STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE, 147-25 Sanford Avenue, Queens Natural Gas Explosion, July 25, 2008, Consolidated Edison Company of New York." The Commission acknowledges, however, the existence of information, in addition to what is contained in the Report, and that such information may supplement, vary from, and/or support different conclusions than those set forth in the Report. Accordingly, at this stage of this proceeding, the Commission is not endorsing, adopting or ratifying, the contents of the Report. The Commission will treat the Report as a preliminary, investigative document, and is not, in this order to show cause, reaching any final decision or judgment about the events of July 25, 2008.

This Order requires the Company to show cause why the Commission should not initiate a penalty action under Public Service Law (PSL) §25 (2) and (3) based on the Company's violations of our order requiring Con Edison to perform an integrity test prior to restoring gas service. The procedures created pursuant to the Ashburton Order, for safely restoring gas service in multiple unit dwellings, are stated in Con Edison procedure G-11836. The Company's ultimate restoration of service in this case with knowledge of a failure to comply with its procedures also creates a violation of Public Service Law §§ 5 and 65 mandating safe and adequate service. Finally, the utility's failure to follow its procedures appears to violate 16 NYCRR §255.603(d).6

### SUMMARY OF EVENTS CULMINATING IN THE SANFORD INCIDENT

As stated in the Report, on June 11, 2008, a fire in apartment 5G led the New York City Fire Department (FDNY) to turn off gas service to the building, and Con Edison to issue a

(d) Each operator shall satisfactorily conform with the program submitted.

The program referred to is described in §255.603(b), which requires:

(b) Each operator shall prepare and file a detailed written operating and maintenance plan for complying with all the provisions of this Part....

Con Edison's operating and maintenance plan includes G-11836-9, and therefore, its failure to follow G-11836-9 violates our mandate under  $\S255.603(d)$ .

<sup>&</sup>lt;sup>5</sup> Case 15686, Explosion and Fire at 188 Ashburton Avenue, Yonkers, New York on October 22, 1979, Untitled Order (issued December 27, 1979)(Ashburton Order).

<sup>&</sup>lt;sup>6</sup> That regulation requires:

warning tag. <sup>7</sup> In accordance with Con Edison's procedure, its mechanic installed a lock at the valve, turned off and locked the building's meter and issued a class "A" warning tag. The turn off of the building's gas service impacted the boiler pilots, hot water, heat, laundry service and cooking gas supply. Repairs were made to the piping within the building by a licensed plumbing contractor ("plumber") over the next several weeks.

On July 1, 2008, Con Edison's Energy Services

Department (ESD) contacted Gas Operations and requested turn-on of a riser located entirely on the ground floor. Approximately 80 feet of new piping had been installed from the meter to the boiler pilots following the June 11, 2008 fire in order to restore hot water service (and heat, if required) to the building while other repair work was in progress. A GDS mechanic was dispatched and restored gas service to the meter, and then to the riser. The mechanic also isolated the rest of the building risers.

On July 23, 2008, ESD was contacted by the building plumber requesting the turn-on of riser "B". ESD communicated the need for a signed affidavit, and faxed blank copies to the plumber. A supervisor from ESD was on site for an inspection conducted by the NYC Department of Buildings, 9 including the

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Warning tags are issued by utility operators to alert customers of unsafe conditions on their piping or appliances. The customer is responsible for repairs. The Commission's regulations pertaining to warning tags are contained in 16 NYCRR Part 261.

<sup>&</sup>lt;sup>8</sup> Within Con Edison, building gas turn-on functions are typically coordinated with ESD. ESD maintains contact with building superintendents and plumbers, and when the building has met the requirements for gas turn on, ESD contacts Gas Operations to dispatch a Con Edison Gas Distribution Service (GDS) mechanic to perform the turn-on.

NYC Department of Buildings presence was confirmed by viewing its work order website.

required plumber's pressure test. The GDS mechanics arrived and a satisfactory integrity test was performed in the presence of the Con Edison supervisor. Riser B was then "gassed-in," and the plumber agreed to "gas-in" the six ranges on that riser. Con Edison did not gas in at least one appliance as required by procedure G-11836-9.

On July 24, 2008, ESD received an affidavit from the plumber requesting a turn on of risers A, F, N, T and laundry room. On July 25, 2008 a turn-on ticket was issued for those risers, and a GDS mechanic was dispatched. At around 12:25 PM the mechanic began the turn-on process, and shortly after a Con Edison supervisor arrived to assist. In accordance with G-11836-9 §11.4(c), the supervisor verified, in at least one apartment on each of the A, F, N, and laundry room risers, that an appliance valve was installed.

After the supervisor confirmed the presence of appliance valves in at least 10% of the apartments, the GDS mechanic proceeded to perform integrity tests on the A, F, N, and laundry room risers. Riser F was tested first, with the manometer set up by the mechanic in apartment L5 on the lobby floor. After holding the pressure on the F riser, the supervisor and plumber proceeded to the fifth floor to bleed the riser. The supervisor did not observe the bleed, but remained outside the apartment while the plumber entered it to perform the bleed. The mechanic witnessed the drop in pressure on the

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The GDS mechanic and supervisor were informed by the plumber that there was no "T" riser as listed on the Gas Turn-On affidavit.

A manometer or U-gauge shows a drop in pressure as a riser is "bled" of air. The gauge is a u-shaped tube partially filled with liquid, which is displaced upward by pressure exerted on one end of the tube.

manometer, indicating that pressure had been relieved by the opening of a valve, and then disconnected the manometer assembly.

The testing process was repeated, except this time with the manometer placed on an upper floor and the bleed being done by the plumber on a lower floor. Once again, the supervisor did not directly observe the bleed, but remained outside the apartment while the plumber entered and performed the bleed. The GDS mechanic in apartment 5N confirmed a drop in pressure and a short time later the supervisor and plumber returned.

At approximately 2:15 PM, a Con Edison planner arrived along with a second GDS mechanic. While the planner was briefed by the supervisor, the two GDS mechanics set up for an integrity test of the A riser. Shortly thereafter, the planner and the supervisor were approached by the plumber who requested the turnon of three additional risers: G, M, and P. The planner granted the request without first confirming with ESD that the required affidavits had been submitted, or at least requesting that the plumber provide copies of the submitted affidavits. The Con Edison planner accepted the plumber's verbal representation that the G, M and P risers met all the conditions that must be sworn to in the "Integrity Test" and "Gas Turn-On" affidavits that those risers were ready to be energized. The planner then left the location, and the supervisor went outside to his vehicle to complete paperwork and plan for the day's shift change.

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Staff's post-incident review of Con Edison records found that the plumber had filed a "Gas Turn-On" affidavit for these risers, which stated that they had been pressure tested and "gas cocks and flexors" had been replaced on these risers. However, Integrity Test affidavits confirming that all gas piping in inaccessible apartments was continuous and complete and that all appliance valves were closed were not filed by the plumber and were not requested by Con Edison prior to restoring gas service to any of the risers, as required by G-11836-9 §11.4(B).

The mechanics proceeded to pressure test riser A. The manometer was set in place at the pipe outlet and air was introduced and pressure was monitored. Following the hold time, the mechanics stated that the plumber proceeded unaccompanied to another floor to bleed the riser. They witnessed the pressure drop on the manometer, and then proceeded to disconnect the test equipment.

The laundry room integrity test was performed next, commencing at the lobby level. Following this test all four riser valves were unlocked and opened and gas was introduced to all four risers tested (laundry room, F, A, N).

The two Con Edison mechanics remained in the building to perform integrity tests on risers G, M and P. Although the two mechanics conducted the pressure tests on the G and M risers, no Con Edison employee performed, witnessed the bleeds, or even accompanied the plumber to the site of the bleed, as required by G-11836-9 §11.3 ["an integrity test will be performed by Con Edison to establish the tightness of the customer's gas piping"] and §4.5. The GDS mechanics stated in post-incident interviews that the bleeds were performed by the building superintendent or the plumber, while the mechanics watched the manometer for the pressure drop. Also, the mechanics stated that in apartment L3 (G riser) an appliance valve had not yet been installed, which contradicted the conditions represented by the plumber and was inconsistent with the later reviewed affidavits.

At approximately 2:55 PM the GDS mechanics moved on to perform the final integrity test on riser P. The mechanics set up the manometer in apartment 6P. They found the range disconnected and, as had been observed in apartment L3 while testing the G riser, no appliance valve had been installed. The mechanics saw the appliance valve assembly on the counter top, and the open end of the riser piping was secured with a pipe nipple and cap. Although it did not conform to G-11836-9, the

mechanics nonetheless agreed to conduct the integrity test, prior to the valve being installed, by removing the cap and securing the manometer to the open end of the riser. Air was introduced into riser P, and following the hold period the riser was bled. Con Edison employees neither bled, nor witnessed the bleed, of the P riser, but instead yelled out to someone standing by the apartment 6P door to proceed with the bleed. 13 The mechanics stated that they witnessed the pressure drop on the manometer and then disconnected the equipment. Though not in conformity with G-11836-9, the open end of the riser was left uncapped, with the understanding that the plumber would install the appliance valve after the Con Edison mechanics left the unit. However, photographs taken immediately following the Sanford incident indicate that an appliance valve was not installed at the open end of the riser in apartment 6P and a nipple and cap had been re-installed.

At approximately 3:20 PM the mechanics returned to the lobby level to open the riser valves, introducing gas into risers P, M, and G (in that order). The turning-on of the risers took approximately 15-20 minutes and occurred at approximately 3:40 PM.

The GDS mechanics gathered their equipment and prepared to leave the building. They saw the plumbers leave at approximately 4:05 PM, and they left at around 4:15 PM. Con Edison received notification of the explosion at 4:20 PM.

The explosion occurred in apartment 2P and was caused by natural gas entering the apartment through an open appliance valve on a gas pipe behind the kitchen stove, which was not connected to the valve and pipe. According to a post-accident

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<sup>&</sup>lt;sup>13</sup> The GDS mechanics could not identify the individual. Further, the mechanics could not verify in which apartment the bleed was performed.

interview, the building superintendent recalled seeing the tenants of apartment 2P in the building's lobby sometime around 3:30 PM. According to the FDNY, while in the ambulance the adult tenant of apartment 2P stated to a police officer in the presence of an Emergency Medical Technician: "I went to light the stove pilot and it exploded." The escaping gas ignited, causing two people (an adult and infant, both tenants of apartment 2P) to be critically injured. The explosion also caused property damage to apartment 2P and surrounding apartments.

The adult tenant of Apartment 2P subsequently died on October 9, 2008.

## DISCUSSION AND CONCLUSION

PSL §25 states that a public utility and agents and employees thereof shall obey and comply with the provision of the statute, orders of the Commission or regulations adopted under the authority of the PSL. Additionally, PSL §25(7) states that the acts of an employee are deemed to be acts of the utility itself.

Concerning the Sanford incident, PSL §25(2) provides that where Con Edison or its employees "knowingly fails or neglects to obey or comply with a provision of this chapter or an order adopted under authority of this chapter . . . shall forfeit to the people of the state of New York a sum not exceeding one hundred thousand dollars constituting a civil penalty for each and every offense . . . ". As previously discussed, based on Staff's investigation, it appears that seven distinct violations of G-11836-9 mandated by the Ashburton Order, equaling a total penalty under PSL §25(2) of up to \$700,000. The Ashburton Order requires procedures for conducting an integrity test prior to the turning on of gas to house piping. Here, Con Edison failed to follow needed procedures for an integrity test prior to restoring gas service in the piping.

The Report found that Con Edison violated G-11836-9 by its failure to bleed, or even accompany the plumber to perform the bleed, of risers A, G, M and P. $^{14}$  Each separate violation results in a penalty not exceeding \$100,000, for a total of \$400,000.

Further, Con Edison violated G-11836-9 by accepting verbal representations of completed affidavits, which were later contradicted by what was seen on site. Con Edison failed to request and receive the Integrity Test Affidavit for risers G, M and P, in violation of G-11836-9, §11.4(B). The Report states that in two separate instances thereafter, on the G and P risers Con Edison employees saw that appliance valves had not been installed prior to the integrity test and restoration of gas service. Con Edison employees thus had actual knowledge that onsite conditions contradicted the verbal assurances that affidavit requirements were satisfied. These conditions put Con Edison on notice that the verbal representations and the affidavits filed were unreliable. 15 Proceeding with restoration of gas service despite these found conditions violated Con Edison procedures. Con Edison's decision to turn on risers G, M and P without requiring adherence to the affidavit requirements prior to the integrity test and restoration of gas service for those risers, G, M and P, creates three violations resulting in a penalty not exceeding \$300,000.

In total, there appear to be seven violations of G-11836-9 that could result in a potential penalty under PSL §25(2) equaling up to \$700,000. Con Edison will be directed to show

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As a result, Con Edison could not confirm compliance with G-11836-9, §4.5, which required that in "testing with a U gauge go to the furthest accessible part supplied and relieve the pressure."

Later review of the Gas-Turn On affidavits showed that the lack of the appliance valves was contrary to the affirmations in the affidavits, as well as G-11836-9, § 11.4(E).

cause why an action for such a penalty should not be commenced by the Commission pursuant to PSL §24.

PSL §25(3) provides that an enhanced penalty may be imposed where Con Edison or its employees

knowingly fails or neglects to obey or comply with a provision of this chapter, or an order or regulation adopted under the authority of this chapter, adopted specifically for the protection of human safety, including but not limited to the commission's code of gas safety regulations shall, if it is determined by the commission that such safety violation caused or constituted a contributing factor in bringing about a death or personal injury

N.Y. Publ. Serv. L. §25(3) (McKinney 2000). Under PSL §25(3), the penalty is \$250,000 for each separate and distinct violation. It appears that Con Edison's decision to violate its procedures and continue service restoration even after it was aware of missing valves created one distinct PSL §25(3) violation of the Ashburton Order, statute and §255.603(d). The Ashburton Order required "detailed procedures . . . for the turning on of gas meters including a requirement to conduct a meter dial test of house piping." Compliance with such procedures is not only necessary to comply with that order, but also to ensure safe provision of service under the Public Service Law. Gas should not be restored in situations where it might escape and cause an explosion. Inasmuch as that violation appears to have contributed to death or personal injury it equals a total possible penalty under PSL §25(3) of \$250,000.

As stated above, the Report indicates that Con Edison violated G-11836-9 by restoring gas service to risers G, M and P despite conditions found in apartments that contradicted the Company's procedure G-11836-9 (§11.4(E)), and statements in the plumbers' affidavits (G-11836-9, §11.6). Specifically, the GDS mechanics directly observed that a gas appliance valve was not

installed in the G riser and in like fashion not installed in apartment 6P of the P riser. These conditions violated §11.4(E), which requires a "shut-off valve for each appliance" prior to restoring gas service. Further, these conditions would not allow for an Integrity Test affidavit to be accepted by Con Edison under G-11836-9, and put Con Edison on notice that the allegedly filed "Gas Turn-On" affidavits were inaccurate and unreliable. The Report states (at 17) that these conditions "contradicted the affidavits previously provided by the plumber."

Con Edison procedures and practice required an Integrity Test affidavit prior to the integrity test. The improperly accepted plumbers' verbal representations apparently substituted for the requirements of the affidavit because Con Edison continued with the integrity test. However, the conditions encountered prior to the integrity tests of risers G and P necessarily contradicted the filed "Gas Turn-On" affidavits 16 and presumably the plumbers' verbal representations. Further, these inconsistencies are to be combined with Con Edison's failure to require Integrity Test Affidavits for risers G, M and P, the purpose of which is to attest that all appliance valves are closed prior to restoring gas service. Con Edison's violations may have contributed to the explosion by improperly not adhering to turn-on procedures and continuing to proceed with the integrity tests prior to the restoration of gas service.

The Report concludes that in both instances where the GDS mechanisms observed missing appliance valves, they "should have questioned the existence and validity of any plumbers' affidavits rather than proceed with the integrity test." Had Con Edison followed G-11836-9, the open valve in Apartment 2P may have

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The "Gas Turn-On" affidavits reviewed after the incident indicate that the plumbers replaced the "gas cocks and flexes for these risers".

been detected or rectified. More fundamentally, Con Edison would not have proceeded with the integrity test on riser P, and would not have restored gas service to this riser on July 25, 2008. But for Con Edison's action of restoring gas service to riser P the explosion would not have occurred. Therefore, Con Edison's improper restoration of gas service, in violation of the statute, G-11836-9 and 16 NYCRR §255.603(d), may have "constituted a contributing factor in bringing about a death or personal injury" resulting from the explosion.

The restoration of gas service to riser P, with actual knowledge that the conditions precedent to turning on gas specified in Con Edison's procedures were not met, creates a possible basis for the Commission pursuing a penalty under PSL §25(3). Such restoration also provides a basis for finding the creation of an unsafe situation in violation of the Public Service Law. Con Edison will be required to explain why the Commission should not pursue a separate violation for a penalty of \$250,000.

 $<sup>^{17}</sup>$  The Report observed (at 20) that a refusal to restore gas service might have avoided the incident, but concluded that such refusal might not have prevented, but only postponed, the incident because "[t]he same event could have happened even if the Con Edison personnel had fully followed procedure G-11836." Nothing in PSL 25(3) requires, however, that we determine that full utility compliance would have prevented the death or injury; rather the statute requires a Commission determination that the noncompliance "caused or constituted a contributing factor." The Report's speculation as to what might have happened on some subsequent day had the restoration of service been postponed does not necessarily defeat Con Edison's contribution to what actually happened on July 25, 2008. Report indicates the appliance valve was unconnected to the range and was probably opened in 2P either during the "bleed" of the "P" riser, or after the integrity test was completed, but before the restoration of gas service to the "P" riser. Moreover, had gas restoration been postponed to another day, then the stove might well have been connected in 2P and/or the appliance valve closed prior to any restoration attempt, and any incident would thereby have been avoided.

Therefore, Con Edison will be directed to show cause why an action for imposition of such a penalty should not be commenced. In particular, Con Edison is directed to provide its explanation and legal analysis, as well as providing all evidence of which it is aware, including evidence, and positions taken, by Con Edison and any other parties, in any other litigation or proceedings concerning the subject explosion, that bears upon the issues raised in the Order to Show Cause.

## The Commission orders:

- 1. Consolidated Edison Company of New York, Inc. is ordered to show cause, within thirty (30) days of the effective date of this Order, why the Commission should not commence a penalty action against it for failure to comply with procedures filed pursuant to Commission order and statute and for failure to comply with 16 NYCRR §255.603(d).
  - 2. This proceeding is continued.

By the Commission,

JACLYN A. BRILLING
Secretary