

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on July 11, 2019

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Diane X. Burman
James S. Alesi
Tracey A. Edwards

CASE 17-G-0317 - Proceeding on Motion of the Commission to Investigate The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid Compliance with Operator Qualification, Performance, and Inspection Requirements with Respect to Work Completed by Company and Contractor Personnel.

ORDER INSTITUTING PROCEEDING AND TO SHOW CAUSE

(Issued and Effective July 12, 2019)

BY THE COMMISSION:

INTRODUCTION

This Order concerns numerous potential violations of gas safety regulations identified by the Staff of the Department of Public Service (DPS or Department). Today's order initiates a proceeding and directs National Grid USA subsidiaries, The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid (National Grid, the Company), to show cause why a penalty action and prudence proceeding should not be brought against the Company.

On January 28, 2016, during construction of the Northern Queens Transmission Pipeline (Queens Pipeline),

National Grid formally alerted Staff that an internal inspection tool had been lodged inside the Queens Pipeline in December 2015. National Grid's contractor, Network Infrastructure, Inc. (Network) allegedly caused the problem by failing to fully open the valves in the pipeline before commencing the internal inspection.¹ This event was the first among hundreds, detailed below, in which Department Staff observed or confirmed construction practices of National Grid contractors that, in the view of Staff, violated numerous Commission gas safety regulations.²

The alleged violations identified by Staff concerned the contractors' work on the Queens Pipeline and other projects completed for National Grid in 2015 and 2016 as well as the impacts of alleged cheating on written Operator Qualification exams. In turn, Network's alleged actions raised safety concerns and led to hundreds of National Grid re-digs of Network's completed construction projects.³ Moreover, in compliance with the Commission's Order Requiring Local Distribution Companies to Follow and Complete Remediation Plans as Modified by this Order and to Implement New Inspection Protocols (issued May 15, 2015) (May 2015 Order), National Grid

¹ Called a "PIG," or "ILI," the device is inserted into a pipeline to confirm the pipe has no internal obstructions or other problems.

² In acting on behalf of National Grid in its construction work, Network acted as National Grid's agent; Network's alleged lack of compliance with construction practices, therefore, is imputed to National Grid. Public Service Law §25-a(10); See Time Warner City Cable v. Adelphi Univ., 27 A.D.3d 551, 552 (2d Dept. 2006) [An agent is a party who acts on behalf of the principal with the latter's express, implied, or apparent authority].

³ DPS Staff immediately investigated and confirmed the Northeast Gas Association (NGA) exams had been compromised.

reported that contractors Asplundh Construction, LLC, Hawkeye Construction LLC, Bancker Construction Corp., and Hallen Corporation had completed plastic fusions that should have failed visual inspection during a lapse in their workers' operator qualifications. During the inspections, Staff documented what it deemed construction practices that failed to comply with Commission regulations and which are the subject of this Order.

Based upon Staff's inspections and findings, National Grid is ordered to show cause why a penalty action and prudence proceeding should not be commenced against it for its apparent contractor violations of gas safety regulations. Specifically, National Grid is ordered to show cause why a Public Service Law §25-a penalty action and a prudence proceeding should not be brought against National Grid for what Staff contends are (1) multiple instances of construction practices that violated multiple requirements of Commission gas safety regulations and (2) multiple failures by National Grid to inspect sufficiently the work its contractors completed to ensure that such work complied with gas safety regulations.

BACKGROUND

After the Commission discovered, during Staff's investigation in Case 14-G-0201, that Con Edison's operator qualification testing did not include the required destructive testing of practice fuses to confirm proficiency in completing plastic fuses, the Commission instructed all local distribution companies (LDCs) to confirm their operator qualifications of their workers had been proper.⁴ Later, in issuing the May 2015

⁴ See Case 14-G-0201 - In the Matter of the Investigation Relating to the Explosion and Collapse of the Buildings at 1644 and 1646 Park Avenue, New York, New York in the Service Territory of Consolidated Edison Company of New York, Inc. on March 12, 2014.

Order, the Commission required "a successful inspection of each plastic fusion by someone other than the person who completed the plastic fusion." After the May 2015 Order, National Grid reviewed its records and found fusions that had been inspected by workers whose operator qualifications had lapsed. The Company re-dug fusions inspected by these individuals and learned that many should not have passed visual inspection.

Queens Pipeline

National Grid had planned that the Queens Pipeline (Queens Pipeline) would go into service in late 2015. The project scope included installation of 36,000 feet of 20-inch, 0.500 - inch wall thick pipe, certified for maximum allowable operating pressure of 450 psig (pounds per square inch) and planned to operate at 350 psig.⁵ The Queens Pipeline passes through the congested area of Northern Queens and crosses other underground structures and utilities within close proximity.

The Queens Pipeline installation and pressure testing, however, was beset with construction problems. An early sign of such problems occurred on December 18, 2015, when Network had failed to fully open valves in the pipeline prior to an in-line inspection (ILI) to confirm the pipeline's integrity. After the internal inspection tool was removed, the tool was found to be severely damaged, indicating damage had possibly occurred to the pipeline itself. Subsequent investigation showed damage to several valves that needed replacing and internal gouging of the pipe that warranted remediation.

Soon after, Staff witnessed as National Grid conducted pipe-to-soil testing and discovered six locations along just-

⁵ Gauge pressure is measured relative to ambient atmospheric pressure. A vessel completely void of any air molecules (at sea level) would be roughly -14.7 psig, and ambient air pressure is always measured as 0 psig, regardless of whatever current barometric pressure is.

completed sections of pipe that had inadequate cathodic protection. In early 2016, National Grid reported damage to the newly-installed Queens Pipeline, which was caused by a water main break nearby.⁶ Leaking water from the broken water main had acted as a sand-blast on the gas pipeline, causing the wall of the transmission pipeline to become completely eroded, causing a hole to form, which allowed water to enter the gas pipeline. Adequate distance between the two pipes would have prevented the damage. However, upon further inspection, Staff found that pipeline had been installed only 3 inches away from the water main without any protective barrier in between to shield it from water impact.⁷

By Spring, 2016, the Queens Pipeline was still not in service. At that time, National Grid ordered an ultra-sonic pipeline inspection using an internal tool between the Corona regulator station and Rockaway Boulevard because of the concerns of internal damage raised by the gauge ILI run in December 2015. During the ultra-sonic inspection, National Grid identified two anomalies of three types: two pipeline dents (at dig site number 5); four locations of wall loss (from dig numbers 1, 2, 3, & 4); and twelve locations of a maximum 12% level of wall loss.

In late Summer, 2016, National Grid reported to Staff that a post-installation close interval survey (CIS) of the pipeline at Ascan Avenue and Queens Boulevard revealed that the main was in contact with a New York City water main. Once excavated, Staff observed that no fiber protection boards (FPB) had been installed between the gas transmission pipe and the

⁶ The damage was a one-inch hole that had been cut through the ½ inch thick steel main.

⁷ Protection such as fiberboards is required when a 12-inch minimum clearance cannot be achieved. See 16 NYCRR §255.325(a).

water main before the pipeline had been covered over. National Grid's inspection also revealed that the pipeline was in contact with another subsurface structure. In both instances, the installation of fiberboard was required.

Anonymous Allegations Concerning
Construction Practices

On November 29, 2016, an anonymous letter asserted that Network had completed the Queens Pipeline using unsafe and non-compliant construction practices.⁸ Specifically, the letter alleged that, National Grid had not required Network to dig up sewer chute crossings or other lateral utility crossings after they had been installed in an unlawful manner. The letter also described problems Staff had already witnessed, including the 2016 water main break along the Queens Pipeline project; the letter-writer surmised this water main break was one example of National Grid's failure to replace existing water and sewer facilities that had been undermined during the pipeline's installation (despite established National Grid procedures requiring replacement of other utility lines when they are crossed by a new gas pipeline). National Grid, the complainant asserted, should "inspect" the existing facilities after the "entire length of the job is re-excavated." Moreover, Network had "disregarded all DEP [NYC Department of Environmental Protection] specs and standards required for replacing existing lines crossed and encroached upon." The letter alleged that Network had made only temporary repairs to New York City DEP sewer and water facilities, both where permanent repairs should have been made and at intersections where other utility

⁸ While also mentioning Network's work on behalf of Consolidated Edison Company of New York, Inc., the letter was addressed, and had been sent directly, to National Grid.

facilities were located. The letter further alleged that Network failed to notify the DEP of damaged City facilities and used unlicensed plumbers to make repairs.⁹

The complaint alleged that many problems were caused by improperly back-filled areas of excavation (which, generally, causes nearby utilities to sink as the backfill settles, allowing possible breakage of underground utilities). It alleged broken duct-bank lines and a failure to install steel plates where required because of the shallow cover; the letter acknowledged that the welds themselves, which had been X-rayed, seemed sound.

Finally, the letter-writer recommended that entire projects - transmission and distribution mains completed by Network - should be re-excavated due to "poor quality workmanship and lack of training" and that fuse inspections should be conducted.

Cheating Allegations

The November 29, 2016 letter also alleged that Network's training program "is a joke and guys were sent to the field without any training." It alleged that Network employees had been given the answers to online Operator Qualification tests administered by the Northeast Gas Association (NGA). In one instance, it alleged, high schoolers sat in to take the test and then took cell phone pictures of the test questions from which answer sheets were created.

According to the letter, workers who had been tested allegedly had been given the answers to the NGA operator qualifications tests that they had taken online. The complaint

⁹ New York City appears to have been aware of problems during construction. The complaint notes the existence of "countless documented DOT (New York City Department of Transportation) summonses" and "hundreds of DOT violations on the project."

alleged that answers, which had been photographed, had been turned into "study guides" and included "the exact answers" and that Network's office staff had emailed the answer sheets to workers.¹⁰ The anonymous letter included copies of the answer sheets that had been circulated "from company trucks." Further, some Network workers had been "sent to the field without any training." The letter further asserted that cheat sheets, copies of which were provided to DPS along with the letter, had been made widely available to Network and other workers who had been operator qualified based on having passed the Northeast Gas Association tests.¹¹ The letter stated that Network had worked on behalf of National Grid, Consolidated Edison Company of N.Y., Inc. (Con Edison) and a Connecticut utility.¹²

Confirming Allegations That
NGA Exams Had Been Compromised

After receiving the anonymous complaint, DPS Staff met with the NGA on December 6, 2016, to review NGA's tests.¹³

¹⁰ Since the Commission does not assert jurisdiction over Network, which acted as National Grid's agent only with respect to work completed, the Commission will not address Network's responsibility to prevent the cheating, the extent to which Network's cheating was coordinated, nor whether management was involved in the cheating. Specifically, the Commission will examine (a) whether National Grid complied with Commission regulations and orders and (b) whether any penalty is warranted.

¹¹ The Department was unable to substantiate one allegation, that Network had overbilled National Grid.

¹² In Case 17-G-0316, the Commission has issued an Order to Show Cause against Con Edison. See Order Instituting Proceeding and to Show Cause (issued March 15, 2019).

¹³ The Northeast Gas Association, which is made up of local distribution company executives as its Board of Directors, has begun in recent years to act as the operator qualification testing center for some LDCs. National Grid began using NGA's on-line tests in 2002.

Because the letter had included copies of the "cheat sheets" Network had allegedly distributed to its employees, Staff was able to confirm during the meeting with NGA that the correct answers for specific NGA test questions had been made available to Network workers; this substantiated the allegations in the letter. Staff informed NGA what it had discovered.

Once Staff confirmed that NGA Operator Qualification tests had been compromised, Staff informed all the local distribution companies of the problem and instructed them to stop all non-emergency gas work pending further action. The Department instructed the LDCs, including National Grid, to "identify the extent of the [cheating] problem statewide," stating, "It is incumbent on local distribution companies that use NGA's testing program to determine, or at least estimate, how many contractor companies and company workers may have had access to the answer sheets."¹⁴ If an LDC determined any of its workers or contractors had taken the compromised tests, the LDC was instructed to retest all of its workers and contractors.

Development of New Operator Qualification Exams

The Northeast Gas Association's testing was suspended until NGA developed an entirely new set of Operator Qualification exams for every test covered by the NGA's operator qualification plan. The DPS also instructed NGA immediately to develop new security protocols to be used for all future testing, so employees and contractors could return to work with proper operator qualifications. By January 30, 2017 NGA began

¹⁴ See Letter from Commission Chair, Audrey Zibelman, dated December 20, 2016 at 1, Case 17-G-0318 - In the Matter of an Investigation Into Local Distribution Company Use of Northeast Gas Association Operator Qualification Program.

offering the new set of written examinations covering 71 "covered tasks" in New York.¹⁵

DPS worked with the Northeast Gas Association to develop the new security protocols that would be used for all future testing. In addition to other safeguards, the new testing protocols include:

1. Modifying all NGA written tests using subject matter experts;
2. LDCs offering tests only at LDC testing facilities;
3. Contractors would not be allowed to test at their own facilities nor use their own computers to take on-line tests. Contractors may use either LDC testing sites or third-party, off-site, testing centers;
4. Two proctors will monitor each test given; and
5. Test-takers will relinquish all cell phones and other belongings before each test.

Post-Cheating Re-Digs

After the Department confirmed the NGA tests were compromised, the Public Service Commission Chair sent a letter to National Grid confirming that the Company would submit "a work plan to assess any covered task completed by contractor or company personnel that may have had access to any covered task question and answer sheet(s)," which would include "randomly testing sections of the pipelines."¹⁶ The Department also instructed National Grid that, wherever problems were found on completed work, investigation of other completed work would be

¹⁵ In April 2017, the Department directed each LDC to submit individual testing plans using the new protocols.

¹⁶ The Department later made it clear that any workers at Network who were requalified properly could be hired onto other crews at National Grid.

required for the workers who had completed and inspected those tasks, including further re-digs.¹⁷

Lapsed Operator Qualifications

The Commission's May 2015 Order required that LDCs keep records of the location of every plastic fusion, the name of the fuser, and the name of the inspector; therefore, National Grid was able to inspect the completed work of five other of its contractors. The May 2015 Order was in effect when the work of Network, Asplundh Construction, LLC, Hawkeye Construction LLC, Bancker Construction Corp., and Hallen Corporation had been completed and initially inspected. National Grid found that at least some work performed by workers for every contractor working for the utility had been completed during some type of operator qualification lapse.

Most recently, for instance, on March 3, 2019, National Grid contractor Asplundh installed a 4-inch by ½-inch electric fuse tee; Asplundh backfilled the area and gassed-in the pipe at a location on Long Island. Later, when a National Grid Quality Control (QC) inspector arrived and checked the qualifications of the crew members at that location, the National Grid QC inspector identified only one person on the crew who had the required qualifications to inspect joints. National Grid instructed the Asplundh crew to excavate the joint for further inspection and determined that only one worker, the fuser, had identified himself on the joint.¹⁸ Although National Grid stated that the crew list it received and reviewed named

¹⁷ Re-digs of work completed under the supervision of specific foremen continues.

¹⁸ Per the May 2015 Order, both the fuser and the inspector are required to sign a completed fuse.

two qualified fusers and inspectors on the job, Staff learned that only one was in fact qualified.¹⁹

Starting in 2015, Department Staff has identified hundreds of instances of apparent violations of gas safety regulations in National Grid's KEDNY and KEDLI service territories. These violations, plus National Grid's failure to adequately inspect Network's work while the work was being performed, would make National Grid potentially liable for at least 1616 violations of gas safety rules.²⁰

LEGAL AUTHORITY

Public Service Law §65(1) requires utilities to provide "service, as shall be safe and adequate and in all respects just and reasonable." In accordance with this statutory requirement, the Commission adopted gas safety regulations, 16 NYCRR Part 255. Moreover, Public Service Law §25-a(3) authorizes the Commission to commence an administrative penalty proceeding to determine, by a preponderance of the evidence, whether a utility violated Commission regulations. PSL §25-a(3) states,

3. Any combination gas and electric corporation determined by the commission to have failed to reasonably comply as shown by a preponderance of the evidence with a provision of this chapter, regulation or an order adopted under authority of this chapter so long as the same shall be in force shall forfeit a sum not exceeding the greater of one hundred thousand dollars or two one-hundredths of one percent of the annual intrastate gross operating revenue of the corporation, not including taxes paid to and revenues collected on behalf of government entities,

¹⁹ Staff was able to observe up to 30% of the re-digs. Staff confirmed the remaining alleged violations described in this Order through National Grid documentation of non-compliances discovered during the re-digs.

²⁰ In a number of instances, one Company act that appears to have violated an individual Commission safety regulation might also violate inspection and operator qualification requirements.

constituting a civil penalty for each and every offense and, in the case of a continuing violation, each day shall be deemed a separate and distinct offense.²¹

DISCUSSION AND CONCLUSION

Department Staff has been overseeing the Queens Pipeline project and re-digs of contractor work completed on behalf of National Grid for at least three years. Excavations for re-dig inspections of completed work continues. Staff has catalogued each instance of an apparent violation that Staff found at specific locations; the details of each violation will be provided by Staff to National Grid upon issuance of this Order to Show Cause.

Staff identified up to a total of 1,616 apparent violations over the three years, broken down into three groups; the first were those found during the re-inspection of the Queens Pipeline. This re-dig program was started after the specific instance of the water service rupture (described above) and after the installation and backfill of the 20-inch transmission pressure natural gas main. After Staff's investigation was complete, Staff confirmed the transmission main had been installed, at different points, either in very close proximity to, or directly in contact with, various other underground utilities.

Staff separately identified a second set of apparent violations during the re-digs of contractor work completed after workers were tested during the period of the alleged Network testing breach. In addition to this work Network completed for National Grid during 2015 and 2016, Network installed various

²¹ To the extent a portion of the alleged pipeline(s) is part of an interstate pipeline, Staff is authorized to inspect them pursuant to New York's state agent agreement with the Federal Department of Transportation Pipeline and Hazardous Material Safety Administration (PHMSA).

new gas mains and main replacements in Nassau County, New York. National Grid has been using a statistical sampling method to identify locations for these random re-dig inspections. This work continues.²²

The third category of violations includes the Company's re-dig inspections for both Company employees and contract workers whose plastic fusion, other joining, or joint inspection qualifications had lapsed. Because the work completed during these lapses was unlawfully completed by workers not properly qualified, such work completed by non-properly qualified workers would appear to be in violation of Commission pipeline safety regulations and Ordering Clause 7 of the May 15, 2015 Order.

Apparent Violations

Staff found the total apparent violations for each applicable regulation include:

16 NYCRR §255.273(b) - General

- b) Each joint must be made in accordance with written procedures that have been proved by test or experience to produce strong gas-tight joints.

During nine re-dig inspections, National Grid documented some form of gas leak on the then recently installed gas service indicating that the electrofusion tees had not been properly installed. During another inspection, a mechanical coupling was found to have been installed improperly in that the restraining bolts had been hand-tightened only and not torqued as required. Finally, at seven locations, National Grid conducted a destructive test on plastic fusions (required after a visually failed fusion) and the seven fuses failed this

²² Review of National Grid work continues. As these investigative findings unfold, they may be the subject of a future Order to Show Cause.

testing.

If National Grid does not sufficiently rebut these inspection results, Staff's findings would constitute 17 violations of 16 NYCRR §255.273(b).

16 NYCRR §255.273(c) - General

(c) Each joint must be inspected to ensure compliance with this Part.

At 26 locations, Department Staff found evidence that National Grid found plastic fuses to be a visually failure during re-inspection, which means they were not sufficiently inspected "to ensure compliance" as required by §255.273(c). If National Grid does not sufficiently rebut these inspection results, Staff's observations would constitute 26 violations of the Company will have violated 16 NYCRR §255.273(c).

16 NYCRR §255.281(c) - Plastic Pipe²³

(c) The quality of the joints shall be checked visually. If there is any reason to believe the joint is defective, it shall be removed and replaced.

At 26 locations, National Grid re-inspections revealed that the plastic fuse was visually unacceptable. Therefore, these 26 fuses should have been removed and replaced. If Staff's findings are confirmed, National Grid will have violated 16 NYCRR §255.281(c) 26 times.

16 NYCRR §255.285 - Plastic pipe: Qualifying Persons to Make Joints

Because Network employees were not properly qualified to fuse plastic pipe, it appears that National Grid violated

²³ The requirements of §255.273 mandate that fusions be inspected. The requirements of §255.281 is that if they failed inspection, they must be removed and replaced. Staff asserts that neither requirement was met.

§255.285 each time a Network worker completed a covered task.

The regulation states,

- (a) No person may make a plastic pipe joint unless that person has been qualified under the applicable joining procedure by:
 - (1) appropriate training or experience in the use of the procedure . . .

Staff's investigation found 144 apparent violations of 16 NYCRR §255.285 by National Grid.

Further, DPS investigators oversaw re-digs of Network tasks completed on National Grid's behalf. DPS investigators found the following problems with National Grid's work completed by Network:

16 NYCRR §255.319(b) Installation of Pipe in a Ditch

- (b) When a ditch for a transmission line or main is backfilled, it must be backfilled in a manner that:
 - (1) provides firm support under the pipe; and
 - (2) prevents damage to the pipe or pipe coating from equipment or from the backfill material.

The Department's investigation revealed eleven apparent violations of 16 NYCRR §255.319 by National Grid.

16 NYCRR §255.321 - Installation of Plastic Pipe

- (e) Plastic pipe that is not encased must have an electrically conductive wire or other approved means of locating the pipe. Tracer wire may not be wrapped around the pipe and contact with the pipe must be minimized but is not prohibited.

The Department's investigation identified 18 apparent violations of 16 NYCRR §255.321(e) by National Grid.

16 NYCRR §255.325(a) - Underground clearance

- (a) Each transmission line shall be installed with at least 12 inches (305 millimeters) of clearance from any other underground structure not associated with the transmission line. If this clearance cannot be attained, a minimum clearance of two inches (51 millimeters) must be attained provided the transmission line is protected from damage

that might result from the proximity of the other structure.

The Department's investigation identified 61 potential violations of 16 NYCRR §255.325(a) by National Grid.²⁴

16 NYCRR §255.325(b) - Underground clearance

- (b) Each distribution main shall be installed with at least six inches (152 millimeters) of clearance from any other underground structure to allow proper maintenance and to protect against damage that might result from proximity to other structures. If this clearance cannot be attained, the main may be installed with a minimum clearance of two inches (51 millimeters), provided the main is suitably protected from damage that might result from the proximity of the other structure.

The Department's investigation identified five potential violations of §255.325(b) by National Grid. The gas distribution main National Grid installed showed, upon excavation, that in five places, it had less than the required 2 inches of clearance. If further process supports a Commission finding of this insufficient clearance, National Grid would be potentially liable for five violations of 16 NYCRR §255.325(b).

16 NYCRR §255.327(b) - Cover

- b) Except as provided in subdivisions (c), (d), (e) and (f) of this section, each buried distribution main, other than those specified in subdivision 255.327(a), must be installed with at least 24 inches (610 millimeters) of cover.

²⁴ For each regulatory sub-section cited, the specific facts of each violation sub-section is identified in the List of Alleged Violations that Staff will provide to National Grid upon issuance of this Order.

At West Valley Stream Boulevard and Bell Street and at 15 Elder Place in Valley Stream, New York, at two locations National Grid installed a natural gas main without the minimum required cover and with no additional protection provided. The Department identified two apparent violations of 16 NYCRR §255.327(b).

16 NYCRR §255.355(b)(2) - Customer meters and regulators:
Protection from damage

- (b) The outside terminal of each service regulator vent and relief vent must:
 - (2) be located at a place where gas from the vent can escape freely into the atmosphere and away from any opening into the building (a minimum of 18 inches (457 millimeters), where practical).

At eight locations, Staff found the vent terminus National Grid installed did not have the proper clearance from the point of entry into a customer's residence. If National Grid does not sufficiently rebut these Department investigative findings, the Company would be liable for eight violations of §255.355(b)(2).

16 NYCRR §255.361(a) - Service lines: Installation

- (a) Each buried service line shall be installed with at least 18 inches (457 millimeters) of cover. However, where an underground structure prevents installation at those depths, the service line must be able to withstand any anticipated external load and suitable protection must be provided.

Staff identified one location at which National Grid failed to install a pipe without the required level of cover. This would constitute one violation of 16 NYCRR §255.361(a).

16 NYCRR §255.461(a)(1) - External corrosion control:
Protective coating

(a) Each external protective coating, whether conductive or insulating, applied for the purpose of external corrosion control must:

(1) be applied on a properly prepared surface;

At four locations, Staff found that the steel natural gas transmission main had improperly-applied external protective coating, which would constitute four apparent violations of 16 NYCRR §255.461(a)(1).

16 NYCRR §255.603(c) - General provisions

(b) Each operator shall establish and maintain the maps of its transmission lines and distribution mains and maps or records of its service lines as necessary to administer its operating and maintenance plan.

At one location, National Grid maps had incorrectly identified the location of an underground main.

16 NYCRR §255.604 - Operator Qualification

(a) Each operator shall have and follow a written qualification program. The program shall include provisions to: . . .

(2) Ensure through evaluation that individuals performing covered tasks are qualified; . . .

(8). . . provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities . . .

At 499 locations, Staff identified apparent violations of 16 NYCRR Part 255 and/or Company construction standards in that they were completed without the workers holding proper operator qualifications. These failures, if unrefuted, would

indicate that National Grid violated 16 NYCRR §255.604 499 times.²⁵

16 NYCRR §255.727(c) - Abandonment or Inactivation of Facilities

- (c) Except for service lines, each inactive pipeline that is not being maintained under this Part must be disconnected from all sources and supplies of gas; purged of gas; and sealed at the ends except that the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.

On Molyneux Road, in Valley Stream, New York, National Grid appears to have violated 16 NYCRR §255.727(c). At that location, Staff found that the abandoned gas main did not have its ends disconnected and sealed, as required. This would constitute a violation of 16 NYCRR §255.717.

16 NYCRR §255.727(d) Abandonment or inactivation of facilities

- (d) Whenever service to a customer is discontinued, one of the following apply.
- (1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

National Grid appears to have violated 16 NYCRR §255.727(d) three times. The gas service pipes that were no longer serving customers at three locations did not comply with the gas flow prevention requirement stated above.

²⁵ Pursuant to 16 NYCRR §255.303, in each of these 499 instances in which work was completed without proper operator qualification, National Grid also appears to have failed to abide by its own construction standards. The Commission, however, chooses to pursue the violations only under 16 NYCRR §255.604.

16 NYCRR §255.753(b) Bell and Spigot Joints

- (c) Each cast iron caulked bell and spigot joint that is exposed for any reason, must be sealed by a means other than caulking.

At two locations, cast iron joints had been exposed at the time of inspection and the joints were not sealed. These would constitute two violations of 16 NYCRR §255.753(b).

16 NYCRR §255.305(a-c) - Inspection: General

- (a) Each transmission line and main must be inspected during construction to ensure that it is constructed in accordance with this Part.
- (b) Inspections shall be made at sufficiently frequent intervals to assure the required quality of workmanship.
- (c) Inspectors shall be qualified by either experience or training and shall have the authority to order the repair or removal and replacement of any component that fails to meet the standards of this Part.

During Staff's oversight of National Grid's construction of the Queens Pipeline, Staff identified 64 instances of apparent violations, which, if found true, would confirm that during the installation of the Queens Pipeline, National Grid failed to inspect the installation at 64 locations. In these locations, construction standards and requirements were not met; therefore, they had not been inspected "at sufficiently frequent intervals to assure the required quality of workmanship."

With respect to Network's work completed in 2016, National Grid allegedly failed to inspect the installation of mains made in violation of construction standards 56 times, allegedly failing to fulfill the requirement to inspect "at sufficiently frequent intervals to assure the required quality of workmanship."

Similarly, for Network's completed work in 2015, at 54 locations where mains revealed apparent construction violations, National Grid appears to have failed to inspect installations 54

times, which would fail to comply with the requirement that inspections occur "at sufficiently frequent intervals to assure the required quality of workmanship."

Moreover, when National Grid conducted re-digs of Networks' work after the Department confirmed the operator qualification testing breach, National Grid's identification of construction and regulatory failures shows that National Grid failed to inspect 325 locations on distribution mains, thereby reflecting additional apparent violations of the requirement that mains be inspected "at sufficiently frequent intervals to assure the required quality of workmanship." In total, National Grid appears to have abdicated its statutory duty to provide safe and adequate service and its specific regulatory obligation to inspect main installations "at sufficiently frequent intervals to assure the required quality of workmanship" 499 times.

Ordering Clause 7

Finally, Ordering Clause seven of the May 15 Order required all LDCs to,

modify and implement all operating procedures involving plastic fusions to . . . require a successful inspection of each plastic fusion by someone other than the person who completed the plastic fusion and who is qualified to inspect plastic fusions.

Department Staff found that National Grid completed 288 plastic fuses after the May 15 Order's effective date of October 1, 2015 that were inspected by second-person inspectors who were not "qualified to inspect the plastic fusion." Therefore, Staff asserts that National Grid violated the May 15 Order, 288 times.

CONCLUSION

The Department's investigation presents credible information to warrant Commission action requiring National Grid to formally respond to this Order to Show Cause and the Department's findings that National Grid violated Commission regulations and the May 15, 2015 Order 1616 times. It is important to note that any one violation of the Commission's natural gas safety regulations can lead to an incident that could present danger to persons or significant property damage. Therefore, the Commission directs Staff to provide to National Grid, upon issuance of this Order, detailed lists identifying the violations alleged in this Order.

Based upon the evidence before the Commission, National Grid is ordered to respond to this Order to Show Cause within 45 days. National Grid shall show cause why (1) a penalty action pursuant to PSL §25-a(3) should not be commenced and a penalty should not be assessed against National Grid for the Company's apparent multiple and continuing failures to comply with 16 NYCRR §§255.273(b), 255.273(c), 255.281(c), 255.285, 255.319(b)(2), 255.321, 255.325(a), 255.325(b), 255.327(b), 255.355(b)(2), 255.361(a), 255.305(a),(b), and (c), 255.461(a)(1), 255.603(c), 255.727(c), 255.727(d), 255.753(b), 255.604 and Ordering Clause seven of the Commission's Order Requiring Local Distribution Companies to Follow and Complete Remediation Plans as Modified by this Order and to Implement New Inspection Protocols (issued May 15, 2015); and (2) why a prudence proceeding should not be commenced against National Grid to ensure that the costs incurred to identify and correct the hundreds of apparent construction deficiencies will not be borne by ratepayers.

The Commission orders:

1. A proceeding is instituted.
2. National Grid USA shall show cause, within 45 days of the date of this Order, why a penalty action pursuant to Public Service §25-a should not be commenced against it for the reasons stated in this Order.
3. National Grid USA shall show cause, within 45 days of the date of this Order, why a prudence proceeding shall not be commenced against it to ensure that the costs unreasonably incurred to correct the hundreds of apparent deficiencies in pipeline installations should not be borne by ratepayers.
4. This proceeding is continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS
Secretary