

ORDER NO. 89685

Investigation of Baltimore Gas and
Electric Company Regarding a Building
Explosion and Fire in Columbia,
Maryland

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BEFORE THE
PUBLIC SERVICE COMMISSION
OF MARYLAND

CASE NO. 9653

Issue Date: January 7, 2021

ORDER IMPOSING CIVIL PENALTY

1. On Sunday, August 25, 2019, a gas explosion occurred at 8865 Stanford Boulevard in Columbia, Maryland, within Baltimore Gas and Electric Company’s (“BGE”) service territory. BGE notified the Commission of the incident pursuant to Code of Maryland (“COMAR”) 20.50.03.04G and Public Utilities Article (“PUA”), *Annotated Code of Maryland*, § 5-304(a)(1). The explosion occurred at an office complex but caused no injuries or fatalities as none of the affected businesses were open at the time.

A. Commission Staff’s Original Report on the Explosion

2. After being notified of the explosion, the Commission’s Engineering Division (“PSCED” or “Staff”) initiated an investigation later that same day.

3. On September 24, 2019, BGE filed an Electric Utility Accident Notice and Investigation Form EN-6 pursuant to COMAR 20.50.03.04G. The PSCED also reviewed the Howard County Fire and Rescue Case Initiation Report (“HCFR Report”) and the National Response Center Report (“NRC Report”) concerning the incident.

4. Additionally, PSCED’s on-site inspection of the location of the explosion revealed what appeared to be an electrical fault in one of BGE’s underground electric lines that serviced the building. The electrical fault occurred in close proximity to an underground BGE gas service line in the “joint trench,” as several holes were also found in one of the gas pipes.

5. On August 6, 2020, Staff filed with the Commission its official report based upon all of the data it had obtained, which included specific information requests to BGE, the HCFR Report, and the NRC Report (the “Report”). Based upon this investigation, Staff concluded that the evidence to date indicates that:

The sequence of events on August 25, 2019 [was] initiated by an underground secondary fault of unknown cause, which resulted in thermal degradation of the polyethylene gas service piping from this electrical failure that persisted either consistently or intermittently ... until the building explosion.¹

6. The Report concluded that this finding indicates that BGE violated several State and Federal statutes and regulations. First, Staff asserted that BGE violated Rule 352.C of the National Electric Safety Code (“NESC”), which requires certain minimum vertical and horizontal distances, or clearance, between parallel, underground gas and electric facilities.² Pursuant to NESC Rule 352.C,³ BGE had developed its own underground construction standards but failed to comply with the minimum separation of the underground lines specified for joint trench installations in its internal standards.⁴

¹ Report at 14.

² Report at 19. Staff also concluded that the same lack of sufficient distance violates 49 CFR § 192.13(c).

³ In BGE’s case, Staff determined that because the company owns both the gas and electric service lines, NESC Rule 352.C allowed BGE to establish a minimum clearance in the Company’s internal BGE Underground Construction Standards. Report at 18-19.

⁴ Report at 18-19, 22.

7. Staff also determined that BGE violated several other safety standards, including PUA § 5-303, COMAR 20.50.02.01, COMAR 20.50.02.02A, and COMAR 20.55.02.02A(3), all of which broadly require utilities to comply with existing standards and ensure the safe provision of service.⁵ Finally, Staff concluded that a quality control inspection process should have prevented the installation defect at issue.⁶

B. Staff's Recommendations

8. Staff recommended that the Commission issue an order to show cause whether a maximum civil penalty should be imposed as well as order BGE to perform three specific actions. First, regarding the penalty, 49 CFR § 190.223(a) expressly provides that any operator of a gas pipeline found to have violated a provision of the Federal Natural Gas Pipeline Safety Act is subject to a maximum civil penalty of \$218,647 for each violation and each day the violation continues, not to exceed \$2,186,465 for this and any related series of violations. However, Staff recommended the Commission assess a total civil penalty of \$218,647.⁷

9. Second, Staff recommended that the Commission order BGE to submit a proposed corrective action plan with the Commission within 60 days of an order addressing Staff's concerns. BGE's proposed plan should address the potential extent within BGE's territory that similar safety violations might exist for other joint trench installations. The plan should also satisfy the Commission that BGE's current quality

⁵ Report at 24.

⁶ Report at 24-25.

⁷ Report at 26-27.

control process for joint trench installations is adequate to prevent a recurrence of what occurred at Stanford Boulevard.⁸

10. Staff also recommended that BGE's plan identify an appropriate number of joint trench candidate sites for site inspections to evaluate the extent of similar potential dangers. Staff recommended that BGE identify all of the factors upon which it relied in identifying the specific sites for inspection. Staff would then select a reasonable number of locations from BGE's list and accompany BGE on these site inspections.⁹

11. Finally, Staff recommended the Commission order BGE to establish a regulatory liability with carrying charges for all investigation and corrective action plan expenses for a prudency determination at a later date.¹⁰ Staff also recommended the Commission should direct BGE to submit a written report upon completion of their corrective action plan.¹¹

12. In response to Staff's Report, the Commission issued a show-cause order on September 15, 2020. This order directed BGE to respond to Staff's Report within 60 days. In its response, the Commission directed BGE to address the three Staff recommendations described above as well as "the appropriate amount of any civil penalty in the event the Commission concludes a civil penalty is warranted by the record."¹²

C. BGE's Response

13. On November 16, 2020, BGE submitted a response to Staff's Report and addressed the issues set forth in the Commission's Order to Show Cause. In its

⁸ Report at 27-28.

⁹ Report at 28.

¹⁰ *Id.*

¹¹ *Id.*

¹² Show Cause Order at ¶ 16.

Response, BGE stated that it “does not contest the central findings of the Staff Report or the recommended fine.”¹³ Instead, BGE stated that it “is focusing its attention and effort on completing enhancements that an internal team of experts developed to ensure that an event like this does not occur again.”¹⁴ BGE identified several programs to enhance safety that it has implemented since 1997, as well as its plan to address similarly situated joint trench construction sites going forward (the “Remediation Plan”).

14. Specifically, BGE agreed that the cause of the explosion was buried electric service cables that failed for unknown reasons, causing a significant thermal event that damaged a two-inch high pressure plastic service pipe located in a joint trench. BGE conceded that the joint trench installations at the Stanford Boulevard building did not adhere to its internal construction standards in 1997. However, between 1997 and the 2019 explosion at Stanford Boulevard, BGE had enhanced its joint trench installation practices in several ways.

15. First, BGE explained that it has increased the minimum separation distance between gas and electric lines servicing the same building.¹⁵ Second, BGE described its enhancements to quality control measures to ensure its construction standards are followed subsequent to the construction at Stanford Boulevard. Specifically, BGE stated that it now assigns field inspectors to perform random inspections of ongoing construction operations.¹⁶ These field inspectors are on-site during joint trenching

¹³ BGE Response at 1.

¹⁴ *Id.*

¹⁵ Much of the detail regarding BGE’s current internal policies has been submitted to the Commission in a confidential fashion and will be omitted from this order. However, the Commission and Staff were provided the more detailed description of BGE’s internal policy changes.

¹⁶ BGE Response at 6.

operations to ensure compliance with all safety requirements.¹⁷ Additionally, beginning in 2017, BGE required its contractors to submit a Quality Management Plan consistent with the International Organization for Standardization’s 2008 quality standards.¹⁸ Separate from its field inspectors, BGE created a new Quality Control Department in January 2020 “dedicated to audit the workmanship of construction tasks via detailed checklists.”¹⁹

16. Third, BGE explained that it has further enhanced its construction standards and quality control measures subsequent to the Stanford Boulevard explosion. Additionally, BGE stated that it has created the Joint Trench Enhancement Strategy (“JTES”), an inter-departmental collaboration to identify and address many safety issues for construction similar to the joint trench facilities at Stanford Boulevard. The JTES has recommended new practices going forward, including the continued installation of Excess Flow Valves (“EFVs”), which are designed to restrict gas service when gas flow exceeds certain limits.²⁰ The JTES has also implemented contractor training for those contractors involved in joint trench construction work.²¹

17. Fourth, BGE stated that the JTES has developed a strategy to identify and enhance joint trench installations similar to the lay-out at Stanford Boulevard. To date, BGE has identified 253 such installations in which electric service cables were installed in the same trench as a two-inch high pressure gas line. BGE noted that it intends to enhance all 253 locations, taking advantage of new technology, rather than perform

¹⁷ *Id.*

¹⁸ *Id.* at 7.

¹⁹ *Id.*

²⁰ *Id.* at 8. As of December 2019, BGE had installed approximately 84,000 EFVs.

²¹ *Id.* at 8-9.

random trench excavations as recommended by Staff.²² Under BGE's recommended approach, the old buried electric service for each of these locations will be abandoned in place, and a new electric service will be installed in its own new conduit.²³ BGE will also upgrade gas service lines at these locations to current standards. BGE added that it intends to complete this work by the end of 2021. BGE has also identified another 1,000 buildings on its distribution system that are served with 1.25-inch high-pressure gas lines in a joint trench with electric service, and BGE intends to enhance all of these locations by installing conduit seals for the electric service and EFVs for the gas service.²⁴ BGE estimated that this work will be completed by the end of 2023.

18. BGE also estimated the total cost for the work related to the approximately 1,250 locations will be approximately \$17 million between 2020 and 2023. BGE stated it has not incurred these expenses nor sought any recovery from ratepayers. Therefore, BGE submitted that a regulatory liability is unnecessary, but rather the Commission should perform a prudence review in a future rate case.²⁵

19. Regarding Staff's proposed penalty of \$218,647, BGE asserted that it has responded diligently following this incident and has developed a plan to ensure such an incident will not occur in the future. Nonetheless, BGE did not object to Staff's proposed civil penalty under PUA § 13-203.

²² *Id.* at 10.

²³ *Id.* at 11.

²⁴ *Id.* at 11-12.

²⁵ *Id.* at 12.

D. Staff's Reply

20. On December 7, 2020, Staff submitted a Reply to BGE. Staff agreed with BGE's proposed Remediation Plan, including the identification and enhancement of locations similarly constructed as the building on Stanford Boulevard. Staff rescinded its original corrective plan recommendations. Additionally, Staff withdrew its recommendation that the Commission establish a regulatory liability, agreeing with BGE that a prudency review at a future date is appropriate.

21. However, Staff made one additional recommendation in its Reply, requesting that the Commission require BGE to file an updated status report by April 1 annually, which describes BGE's corrective action progress and expenditures.

E. Commission Decision

22. By the conclusion of the parties' submissions, the parties generally agree on all issues. First, the Commission finds that BGE has made a significant effort to identify 253 similarly constructed joint trench sites that may result in an incident similar to what occurred at Stanford Boulevard. The Commission also recognizes that BGE has identified an additional approximately 1,000 sites that may differ slightly from the circumstances at Stanford Boulevard, but for which safety upgrades should be performed. The Commission further finds that the proposed Remediation Plan and timeline are acceptable. The Commission therefore accepts the Remediation Plan as set forth in BGE's November 16, 2020 Response.

23. The Commission agrees with all parties that a regulatory liability is not appropriate in this case. Rather, the Commission orders BGE to track all expenditures related to its proposed Remediation Plan, and the Commission will conduct a prudency

review in a future rate case. The Commission further accepts Staff's proposed reporting requirement, and orders BGE to update the Commission on both the progress of its Remediation Plan as well as ongoing expenditures on an annual basis by April 1.

24. However, the Commission rejects the parties' position as to the appropriate civil penalty in this case. Staff recommends a civil penalty of \$218,647 based upon the maximum daily penalty permitted by 49 CFR § 190.223(a) for violations of the Federal Natural Gas Pipeline Safety Act. The provisions of that Act are incorporated by COMAR 20.55.02.02A(3), which requires that gas utilities in Maryland comply with the "Minimum Federal Safety Standards" as set forth in 49 CFR § 192. The Commission accepts the parties' proposed civil penalty of \$218,647 for BGE's violation of COMAR 20.55.02.02 as incorporated into PUA § 13-203.

25. However, the Commission also finds that a similar penalty should be imposed on BGE for its violation of Rule 352.C of the National Electrical Safety Code ("NESC"). BGE concedes that it did violate this Rule by failing to "adhere to the Company's internal construction standard for minimum facility separation for joint trench installations at the time the Stanford Boulevard building was constructed."²⁶

26. COMAR 20.50.02.02A requires all utilities to comply with provisions of the NESC. The Commission concludes therefore that this explosion was the result of both a violation of gas and electric regulations in COMAR. Further, the Commission concludes that the violation related to the NESC and the violation related to the Federal Natural Gas Pipeline Safety Act are equally serious and equally responsible for the explosion at Stanford Boulevard. Therefore, the Commission concludes that each violation warrants

²⁶ See BGE Response at 4-5.

an identical penalty. The parties have agreed that a penalty of \$218,647 is appropriate for BGE's violation of the Federal Natural Gas Pipeline Safety Act. The Commission agrees that this is appropriate for that violation and will therefore impose an identical civil penalty under PUA §13-202. That provision addresses any safety violation by a public service company related to the provision of electricity and provides for a maximum penalty of \$25,000 per day. Therefore, the civil penalty the Commission imposes for BGE's violation of the NESC is significantly below the maximum penalty permitted by that statutory provision.

27. The Commission recognizes that BGE has responded diligently subsequent to the Stanford Boulevard explosion. Moreover, BGE notes that it began making changes to its installation and quality control practices in 2001. However, due to the seriousness of the results of the two violations, which the Company does not dispute, the Commission concludes that a penalty of \$218,647 is warranted for each of BGE's violations of the provisions of COMAR. Therefore, the Commission imposes a total civil penalty of \$437,294.²⁷

IT IS THEREFORE, this 7th day of January, in the year Two Thousand and Twenty-One, by the Public Service Commission of Maryland;

ORDERED: (1) That the Commission accepts Baltimore Gas and Electric Company's proposed Remediation Plan and orders BGE to track all expenditures related to that plan;

²⁷ The Commission recognizes the gas explosion at issue involves a dual violation, and therefore both penalties could have been imposed under PUA §13-203.

(2) That the Commission will conduct a prudency review regarding all expenditures related to Baltimore Gas and Electric Company's Remediation Plan in a future proceeding;

(3) That Baltimore Gas and Electric Company shall report to the Commission annually by April 1 as to the progress of the Remediation Plan as well as ongoing expenditures until such time when the Remediation Plan is deemed complete by the Commission.

(4) That BGE shall address the results of the survey that BGE conducted, resulting in the identification of the approximately 1,250 sites subject to the Remediation Plan; and

(5) That Baltimore Gas and Electric Company shall pay a civil penalty of \$437,294 within 15 business days of the date of this Order.

/s/ Jason M. Stanek _____

/s/ Michael T. Richard _____

/s/ Anthony J. O'Donnell _____

/s/ Odogwu Obi Linton _____

/s/ Mindy L. Herman _____

Commissioners