



National Fuel

October 10, 2014

Mr. Kevin Speicher
Chief, Safety Section
Department of Public Service
Office of Electric, Gas and Water
3 Empire State Plaza
Albany, New York 12223-1350

Re: Plastic Fusions Remediation Plan

Dear Mr. Speicher:

This letter responds to your correspondence addressed to Mr. James Ramsdell, National Fuel Gas Distribution Corporation (“Distribution” or the “Company”) and dated September 29, 2014, in which LDCs, including Distribution, were directed to submit a remediation plan for Staff’s review. As you are aware, Distribution filed a remediation plan in the above-referenced proceeding on July 23, 2014. Thereafter, in a letter to you dated September 16, 2014, the Company notified Staff that the Company had commenced implementation of its plan filed on July 23, 2014. The Company has compared its remediation plan with the requirements outlined in your letter of September 29, 2014 and submits the instant revised plan (“Plan”) designed to more fully address Staff’s concerns.

The instant Plan is informed by the concerns outlined in your letter and is based on the results of our fusion requalification effort as well as the historical performance of our plastic system. Your letter states that Staff expects the LDCs to use statistical sampling in their plastic fusion remediation plan, among other measures listed. The Company’s Plan complies by utilizing a combination of fusion sampling as well as accelerated leak surveys.

Beginning in July 2014, the Company commenced an internal requalification effort that ultimately involved 325 personnel (164-Contractors, 124-Distribution Construction/Emergency & 37-Distribution Supervisors). During requalification testing, a total of 1,275 destructive tests were performed, including 22 destructive tests performed on fusions that failed the visual/procedural evaluation. Only one (1) fusion, which occurred on a fusion that failed the visual/procedural evaluation, failed destructive testing. The fact that all visually acceptable fusions passed destructive testing confirms the industry consensus that a visual evaluation is a good predictor of fusion quality and performance in destructive testing.

The Company recently undertook an analysis of its plastic failure data for mains installed during the 10-year period prior to the issuance of the Order. For mains installed during that period, the Company experienced only two fusion failures, both electrofusions, which resulted in non-

hazardous Type 3 leaks. During the 10-year period the Company installed 1,062 miles of plastic mains with an estimated 117,000 fusions, resulting in a failure rate of 0.0017%. Over the same period, there were no failures of butt-fusion joints. This analysis included fusions performed by individuals who were not properly qualified (that is, without destructive testing), with results showing a very low probability of failure.

The Company has identified 60 individuals who were not fully qualified (i.e., who were qualified during the period that destructive testing was omitted) and performed fusions in the field. During the Company's recent requalification effort, 39 of these individuals successfully passed both a visual and procedural evaluation of their fusions in addition to destructive testing, on their first attempt, for fusions of the type that they performed in the field. Even though these individuals demonstrated their proficiency with plastic fusions, the Company's Plan involves conducting accelerated leak surveys of the projects where these individuals were assigned.

Twenty-one (21) of the total group of 60 employees/contractors who were not fully qualified did not perform a successful fusion during requalification. In addition, 14 qualified individuals also failed to perform a successful fusion during requalification, for a total of 35 employees/contractors, fully qualified or not, who failed a requalification test (for the type of fusion that the individual performed in the field). For this group, the Company's Plan is based on statistical sampling. Company records indicate that these individuals performed a total of 1,283 fusions in the field. The Company has designated a statistically reasonable sample of 128 fusions, or ten percent, for initial evaluation. The sample will be distributed among the 35 individuals based on the number of fusions they performed in the field, with a maximum initial sample of 10 per individual, and focused in areas of higher potential risk.

Fusion sampling will be conducted as follows:

- Visual examination in accordance with the Company's visual appearance guidelines by two qualified individuals including one Distribution supervisor
- Photographic documentation of each fusion
- Leakage check
- Removal of visually unacceptable fusions for destructive testing
- Removal and destructive testing of at least 1 visually acceptable fusion for each individual
- As an alternative to visual examination, the Company may review a sample of available electrofusion download reports for individuals requiring evaluation of electrofusions. Electrofusion download data specifies fusion parameters as well as any errors that might have occurred during the electrofusion process. If an error was identified (and was not previously corrected), or if the Company elects, for any other reason, not to rely on a download report, then the site will be evaluated according to the above procedure for all other fusions.

Where fusions are discovered that fail visual examination, the Company will select a second sample of fusions for evaluation. Based on the inspection results of the two samples, a plan for additional sampling or removal of fusions will be developed for the individual.

Due to the approaching winter and the difficulty of interrupting flows on certain lines involved in the sampling plan, the Company anticipates completing initial evaluations by June 1, 2015. The Company's ability to achieve this timeline, however, will be influenced by the severity of the winter and the resumption of the construction season.

As noted above, in addition to fusion sampling, leakage surveys will be conducted on all projects where fusions were performed by individuals who were not properly qualified plus the 14 individuals who were properly qualified and failed a requalification test. Surveys will commence on or before October 31st and will be performed quarterly for a minimum of three years or until no leaks are discovered for a period of three years. Where a fusion leak is discovered, a plan for additional sampling or removal of fusions will be developed for the individual.

As directed in your letter, the Company will provide immediate written notification of each defective plastic fusion discovered under the plan to the Department of Public Service. In addition, the Company will file a monthly report with the Secretary to the Commission identifying the number and type of each plastic fusion examined by visual and destructive testing, including inspection results.

The Company is prepared to immediately commence the Plan described herein. When complete, the Plan will confirm the reliability of Distribution's plastic pipeline system, and the reliability of the visual test as the primary means of evaluating fusion integrity. We welcome the opportunity to discuss the Company's Plan in greater detail with Staff.

Very truly yours,

A handwritten signature in blue ink that reads "Kevin D. House". The signature is written in a cursive style with a prominent initial 'K'.

Kevin D. House

cc: James D. Ramsdell