

Voluntary Mitigation Plan

Name: SNGME Electrofusion Coupling Mitigation Plan

Date: September 21, 2015

Plan:

Effective immediately, SNGME is implementing this mitigation plan to locate and inspect the electro-fusion couplings identified below, and to replace the electro-fusion couplings that fail visual inspection (the "Plan"). SNGME commits to work with MPUC Gas Safety Staff to use a data driven process similar to the one used for electro-fusion tee mitigation: 1) SNGME will locate all the couplings issued to CCB, Inc., Tetra Tech and PES, the three contractors who have a demonstrated history of improper pipe preparation (the "Identified Contractors"); and 2) SNGME will work with the MPUC Gas Safety Staff to identify the crews who appear to have mis-installed electro-fusion couplings and prioritize the mitigation efforts based the results of visual inspections.

The location of the distribution systems where the Identified Contractors performed electrofusion coupling work is shown on the maps on Attachment A. These maps will be supplemented as additional information is collected from the field.

Process for Crews of Identified Contractors

By December 31, 2015, all electro-fusion couplings installed by crews of the Identified Contractors shall be:

- Excavated and inspected;
- Those couplings failing visual inspection shall be replaced;
- A minimum of five couplings, installed by each Identified Contractor, which pass visual inspection, shall be removed for destructive testing by the coupling manufacturer in accordance with ASTM F1055; and
- Failure of the above testing by any of these samples shall warrant the replacement of all couplings installed by the Identified Contractor(s).

Process for Other Contractors

By December 31, 2015, the following inspection process shall be used for all other contractors that installed electro-fusion couplings in 2013 and 2014:

- A minimum of 5 couplings, installed by each contractor, shall be excavated and visually inspected;
- Any coupling failing visual inspection shall be replaced;
- For any contractor experiencing failure of visual testing, a minimum of five couplings installed by each contractor, which pass visual inspection, shall be removed for destructive testing by the coupling manufacturer in accordance with ASTM F1055; and
- Failure of the above testing by any of these samples shall warrant the replacement of all couplings installed by the contractor.



The MPUC Gas Safety Staff shall be provided a schedule of all field inspections and replacements associated with the plan. Additionally, SNGME will provide the Commission with weekly reports detailing progress made on overall mitigation.

Other Risk Mitigation Measures

Starting immediately, and throughout the inspection and replacement process for the electrofusion couplings subject to this Plan, SNGME will continue to operate its distribution systems identified on Attachment A at reduced pressures. SNGME commits to operating its systems at the lowest pressure necessary to serve customer load, but in no event shall SNGME operate its systems at pressures exceeding 90% of MAOP until the MPUC Gas Safety Staff has approved a higher operating pressure. SNGME will verify and demonstrate to MPUC Gas Safety Staff that all couplings have been inspected and replaced if necessary, prior to increasing the operating pressure of any segment of the distribution system that falls within the scope of this Plan.

Throughout the implementation period of this Plan, SNGME will continue to perform leak surveys every 75 days. In addition, SNGME will perform leak surveys no less than every 30 days for the portions of the distribution system which have yet to be inspected and all necessary replacements made. If any leaks are detected, SNGME will notify the MPUC Gas Safety Staff and request Commission approval of any modifications to this Plan as may be necessary based on the assessment of the leak.

If Any Mitigation Work is Not Completed by December 31, 2015

In the event that SNGME is unable to complete the inspections and any warranted replacements by December 31, 2015, SNGME shall provide a plan to shut down or otherwise cease operation of affected portions of the distribution system. SNGME acknowledges that this date may be amended based on weather conditions causing accelerated ground frost.

As a contingency for this eventuality SNGME, shall also propose a plan to provide customers impacted by a shutdown or cessation of the operating status of the system with alternative fuel sources, at no incremental cost to such customers. SNGME shall submit a draft plan to the Gas Safety Staff no later than October 15, 2015. This draft plan will include provisions for customer communications and provide details of construction planning.

Requests to Modify Mitigation Plan

SNGME may submit a request to MPUC Gas Safety Staff to modify this Mitigation Plan. Under no circumstances will this Plan be modified without the prior approval of the Commission. For example, SNGME may use field inspections to demonstrate to the MPUC Safety Staff that there is not a safety concern with regard to work performed by a specific crew.

¹ SNGME currently operates its system at 50% of MAOP in Waterville and Fairfield and 90% of MAOP in Madison. The remainder of SNGME's system operates at 40% of MAOP.



SNGME reserves the right to perform tests at the University of Maine and present those results to the MPUC Gas Safety Staff. SNGME may use these test results in a request to the Commission to modify this Plan.

Under no circumstances will this plan be modified without the express approval of the Commission and SNGME acknowledges that the Commission may amend this Plan of its own accord.