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Comments of the Pipeline Safety Trust

Docket No. PHMSA-2013-0255

Pipeline Safety: Valve Installation and Minimum Rupture Detection Standards

In the past ten years there have been several disastrous pipeline failures, each of which was made much worse by one or more of these shortcomings: 1) the failure of the operator to have a system capable of quickly identifying a pipeline failure such that valves were left open or were opened and closed repeatedly; 2) valves that were too far apart, allowing large volumes of product to be released, even once the valves were closed; 3) by valves requiring manual closure allowing uncontrolled releases for far too long. Twenty-six years ago, the National Transportation Safety Board first weighed in on the installation of automatic and remote-control valves following the rupture and explosion of a natural gas pipeline in Edison, New Jersey. Nine years ago, the NTSB strengthened its recommendations to PHMSA regarding the use of remote control and automatic valves and their spacing, and Congress directed PHMSA to enact regulations for new and replaced lines.

If enacted in their current form, the proposed rules, nine years in the making, would not prevent or mitigate the damage caused by the failure of PG&E's pipeline in San Bruno, California that led to the issuance of NTSB Safety Recommendation P-11-11. We support the NTSB's comments submitted to this docket by letter of March 25, 2020. We further urge PHMSA to make improvements to this proposal consistent with the NTSB recommendations and the comments below before finalizing it.

General Comments –

There are terms used in the proposed rule, like "rupture," that are defined differently than they are used in other pipeline regulatory contexts, there are others that are quite vague and surely susceptible to confusion, misunderstanding and enforcement challenges, like "may be representative of an unintentional and uncontrolled release event". These language choices should be rethought to produce a clear set of directives that operators and the public can understand.

One of the biggest disappointments in this proposal is the continuing failure to undertake rulemaking for leak detection requirements beyond rupture recognition and mitigation on new and replacement transmission lines. At several points in the NPRM, PHMSA refers to

continuing work to “address the effectiveness of leak detection systems”, inexplicably citing to the 2010 docket for the hazardous liquid rule enacted last year. Nearly 10 years after the NTSB recommended in P-11-10 leak detection systems that meet regulatory performance standards on all transmission and distribution lines, PHMSA’s continuing response is essentially: “Not yet.” There is no further rulemaking underway, at least not in any publication available to the public – the subject does not appear in the Secretary’s current report on significant rulemakings – not for existing pipelines, not for leak detection beyond rupture detection. The shortcomings in the industry’s capacity to recognize pipeline failures persist, and it is well past time that PHMSA, in its role as a regulator, do more to further the development and use of leak detection systems. Participating in industry standards development is not sufficient: voluntary standards full of discretionary language are not sufficient for regulatory purposes. Congress and the NTSB recognized the need for more remote control and automatic valves nearly 10 years ago. In the intervening decade, many tens of thousands of miles of transmission pipelines have been built without the safety improvements called for in this proposal. It should not be another 10 years before PHMSA fulfills the remaining aspects of the NTSB safety recommendations.

Comments on specific sections:

192.3 Definitions

“Rupture” – see comments above. Also, if the definition of rupture in this proposed rule is not the same as the definition of rupture for incident/accident reporting purposes it will make it impossible to track effectiveness of this rule over time, and to know whether this rule is driving safety.

192.179 Transmission line valves

This section raises several issues than run throughout the NPRM. First, there is no indication as to what an operator must show to avoid the requirement for a remote or automatic valve. The text of the NPRM suggests a “sufficient justification” but does not explain what that means or might require. What does economically infeasible mean in this context? Operational and technical limitations are easier to imagine, like the space limitations suggested in the NPRM as an example. But how expensive is enough to be economically infeasible for a company making billions of dollars in profit each quarter?

Second, PHMSA defines “entirely replaced” to mean replacement of not less than 2 miles of pipe. There is no explanation of how that distance was arrived at, whether recent replacement projects were tallied to see how many recent projects that distance would include or exclude. In our view there are two problems with it. Choosing a shorter distance would include more replacement projects, and therefore result in more of the nation’s pipeline systems having the additional protection of automatic or remote-control valves. Moreover, because it is such a long distance, it seems an easier distance to design around to avoid application of this rule. We suggest a much shorter length to be considered “entirely replaced” – something on the order of 600 contiguous feet, or more than 600 feet of any contiguous 1000 feet: longer than a single

integrity repair might require, but short enough to capture smaller replacement projects. It is especially important to get this definition right, because of the apparent limitations on changing design and construction requirements on existing pipeline systems. Small sequential replacement projects of less than 2 miles could entirely avoid the requirements for automatic or remote-control valves.

Third, there is very little explanation as to how a 40-minute shutdown requirement was arrived at, other than a suggestion that it is “reasonable.” Does that mean that a 30-minute shutdown might also be reasonable? We have seen spill response plans for hazardous liquid lines claiming that failures isolated within 15 minutes constitute an operator’s worst-case discharge. If those are accurately identified as the worst, then valves must be able to close that fast or even more quickly. The choice of the maximum allowable time frame in this proposed rule should be justified by data relating to the speed with which automatic valves can shut. If they can shut more quickly, then the maximum allowable timeframe should be shortened to that length of time.

192.610 Change in class location. This provision needs to be clarified to identify what actions will be required of an operator who seeks and obtains a special permit to avoid the pressure testing or down rating of a line in an area that undergoes a class location change. Will the valve spacing requirements still apply, requiring the installation of an additional valve(s)?

192.615 Emergency plans

With the caveat that we concur with the concerns of the NTSB relating to clarifying that these changes to emergency notification procedures apply to all pipelines and not just new or replaced lines, we support this provision.

192.617 Investigation of failures and incidents

Although paragraph (b) of this section requires the post incident lessons learned to be incorporated into an operator’s procedures, paragraph (c), relating to rupture and valve shut offs does not include that same requirement and should be amended to include a requirement that the results of the post-incident reviews be incorporated into operator’s procedures, not just read and kept.

192.634 Transmission lines: Onshore valve shut off for rupture mitigation

See comment above relating to the choice of 2 contiguous mile length.

(b) maximum spacing between valves: We will confess to some confusion in reading this section and its explanation in the NPRM, because we read it to allow rupture mitigation valves to be spaced at distances greater than the current valve spacing requirement, which we have difficulty understanding. Surely the goal here is to require more valves at closer spacing than the current rules, or at most, at the same spacing. If we are reading this correctly, we urge PHMSA to reduce this proposed maximum spacing to less than the current mainline valve spacing requirements.

192.745 Valve maintenance

We support the requirements for testing, maintenance, drills and incorporation of lessons learned into operational procedures.

192.935 What additional preventive and mitigative measures must an operator take?

We support the addition of performance measures in (c)(1-3) to ensure that operators do more than simply “consider” the factors in paragraph (c) in their risk analysis.

195.2 Definitions

See comments above relating to definition of rupture.

195.258 Valves: General

See comments above relating to showing required for determination of feasibility, 40 minute closure time.

195.260 Valves: Location

See comments above about choice of 2 or more miles of pipeline replacement to be considered “entirely replaced”. A 15-mile spacing for areas that might affect an HCA is much too big, particularly for large diameter pipes. That distance would allow a huge volume of product to be released, potentially into an HCA. The 20 -mile spacing for other areas is also too large. The reference to flood plains in (1) needs to be clarified, as does “flood conditions.” The process for notification of the agency that the valve spacing required by this proposed regulation is not necessary is much too lax, includes no standards that must be met by the operator or be used by the Associate Administrator in determining the necessity of compliance with the spacing requirements.

195.402 Procedural manual for operations, maintenance and emergencies As with the provisions in the proposed gas rules, with the caveat that we concur with the concerns of the NTSB relating to clarifying that these changes to emergency notification procedures apply to all pipelines and not just new or replaced lines, we support this provision.

Although this section requires the post incident lessons learned to be incorporated into an operator’s procedures, the paragraph relating to rupture and valve shut offs incident reviews does not include that same requirement and should be amended to include a requirement that the results of the post-incident reviews be incorporated into operator’s procedures, not just read and kept.

195.418 Valves: Onshore valve shut-off for rupture mitigation

Again, we reiterate our concerns with the valve spacing requirements being too large, with the lack of any stated basis why a shut-down period of less than 40 minutes is not possible, and with the length of 2 contiguous miles being required to be considered “replaced”. See our comments above on each of these issues. If PHMSA determines that shut off valves are not capable of isolating sections in less than 40 minutes after identification of a rupture, every facility response plan calculating the *worst case* discharge based on a shutoff of anything less

than 40 minutes after identification should be reviewed and rejected with directions to amend those sections and the resources necessary to respond to a WCD.

195.420 Valve maintenance

We support the testing, drills, repairs and record keeping requirements included in this section.

192.452 Integrity management – Use of EFRDs – We support the addition of the performance measures for the installation of EFRDs and their use as rupture mitigation valves.

We appreciate the opportunity to comment on these proposed rule changes.