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**Talking points for Preparing Comments on PHMSA's Proposed Rules on the Safety of Gas Transmission and Gathering Pipelines**
**Docket no: PHMSA-2011-0023**

Comments are due July 7 on an extensive set of proposed rule changes relating to gas transmission and gathering pipelines. PHMSA issued an Advanced Notice of Proposed Rulemaking (ANPRM) in 2011, raising many issues and asking many questions about what rules needed to be improved and what practices operators already employ. Along with Congress, the National Transportation Safety Board and other offices of the Department of Transportation recommended changes to the rules relating to gas transmission lines following the rupture and explosion of a PG&E transmission line in San Bruno, California in 2010.

PHMSA then prepared a proposed rule that was published in April 2016, responding to some, but not all of those recommendations.

In an effort to support the efforts of those members of the public and other groups who may want to submit comments, we've prepared this outline of what the agency is proposing, and a short description of how we intend to comment on each section. We will be posting our full comments before the deadline so that you can see the full details of our response and make use of them in preparing your own, if you choose to.

To prepare this outline and our own comments, we will proceed through the proposal following the Section-by-Section Analysis, which appears in Section V of the proposal, starting on page 20806 of the Federal Register notice of April 8, 2016. The Section numbers refer to regulations appearing in Part 49 of the Code of Federal Regulations. There are a few minor changes that we don't comment on here, although we may include something about them in our full comments.

**§191.1 Scope**
This proposed change will require operators of onshore gas gathering lines to submit incidents, safety related conditions, and annual summary data reports. The rule will accomplish this by eliminating certain exemptions under which gathering lines currently operate. We support this change, as it will provide the first information available to gauge the safety of the previously unreported lines and allow the agency to determine what additional safety regulations may be necessary. Unfortunately, the rule does not propose to require these lines to report data to the National Pipeline Mapping System and become subject to one call systems, both proposals that we believe should be included.

**§191.23 Reporting Safety Related Conditions**
Congress required in the 2011 reauthorization that PHMSA require operators to report exceedances of their maximum allowable operating pressure (MAOP). This section and the following one impose that reporting requirement, which we support, so that PHMSA can begin gathering information about how often exceedances happen and whether additional safety regulations are required to limit them.

**§191.25 Filing Safety related condition reports**
The proposed change relates to the imposition of a reporting requirement for MAOP exceedances and the procedures for filing those reports. We support the proposal.

**§192.3 Definitions**
The two biggest changes here are the definition of onshore gathering line, which proposes to repeal the use of the industry definition in API recommended practice 80 and includes a less ambiguous definition of gathering line. We support this change for the reasons given by PHMSA in the proposal.

The second major change is the inclusion of a definition for "Moderate consequence area", a new concept intended to be used to define the subset of areas where some integrity assessment are required on a very long reassessment interval and where MAOP verification and materials documentation is required. While these are improvements over the rules that currently apply in this area, we have concerns with the subset of integrity rules PHMSA intends to apply to these areas, as we think that assessing them with in line inspection (ILI) tools without the requisite threat identification and risk assessment required for high consequences areas could result in the expense of tools being used without the operator, the public or the regulator gaining any valuable integrity information that would lead to improved safety of the system. We'll talk about this more under the substantive rule proposal.

There are some other minor definition changes that we will speak to in our comments

**§192.5 Class locations**
This proposal requires operators to make and retain for the life of the pipeline documentation of how they determine the class location. We support this proposal, although it is disturbing to find that requiring this kind of recordkeeping is necessary, as it seems like a fundamental basis of safely operating a system.

**§ 192.8 Determination of gathering lines**
As mentioned above under "scope", PHMSA is proposing to repeal the use of API RP-80 in determining what is a gathering line because of conflicting and ambiguous language in that RP. We support this change.

**§ 192.9 what requirements apply to gathering lines?**
This proposed section outlines some of the distinctions between various types of gathering lines based on size and location, as an attempt to respond to a GAO recommendation that PHMSA impose rules to reduce the risks of high pressure, large diameter gathering lines being used in new shale plays. Again, we do not oppose these, but think there should be additional regulation of gathering lines.

**§192.13 General**
This proposal makes important improvements to the regulation of all operators, by clarifying record creation and retention requirements and by imposing a requirement that operators evaluate and mitigate risks to the public and the environment as part of managing design, construction, operation, maintenance, and integrity, including management of change. We strongly support the inclusion of these changes in the final rule, as these seem to be basic obligations that should be met by an operator transporting natural gas in neighborhoods, cities and environmentally sensitive areas.

**§192.67 Records: Materials**
This proposal responds to Section 23 of the 2011 Act requiring new rules to validate records used to establish MAOP. It will require operators to make and retain for the life of the pipeline records documenting tests, inspections, and manufacturing specifications. We strongly support.

**§192.127 Records: Pipe design**
This is another proposal designed to comply with Section 23 of the 2011 Act and will require operators to create and retain records relating to pipeline design and determination of design pressure. We strongly support.

**§192.150 Passage of internal inspection devices**
This proposal will incorporate by reference the NACE standard on designing for passage of ILI devices, which should improve the consistency of design and construction of line pipe to accommodate ILI devices. We support.

**§ 192. 205 Records: Pipeline components**
This is another proposal designed to comply with the record improvement requirements of Section 23 of the 2011 Act relating to determination of MAOP and will require operators to create and maintain for the life of the pipeline manufacturing and testing information for valves and other components. We support.

**§192.227 Qualification of Welders**
Records relating to welder qualifications will be required to be created and retained. Again, this is intended to improve recordkeeping relating to determination of MAOP to make sure that operators know what the physical and operational characteristics of the pipes in the ground are. We support.

**§ 192.285 Plastic pipe Qualifying persons to make joints**
Another record creation and retention rule that we support.

**§192.319 Installation of pipe in a ditch**
This rule will require an indirect assessment of the coating of a pipeline immediately following installation to make sure that there has been no mechanical damage to the coating during construction. Records of this assessment must be created and maintained. We support, as this proposal is directly related to an incident caused by corrosion that resulted from poor construction practices that damaged the pipeline's coating.

**§192.461, .465, .473 External corrosion rules**
All three of these proposals are aimed at reducing damages to pipeline from external corrosion by clarifying the characteristics of coatings, require the remediation of any damage to the coating, monitoring external corrosion, and requiring surveys to determine if coatings might be affected by interference currents. Given the high percentage of incidents that are still caused by corrosion, we strongly support these rules as an effort to bring down the number of those incidents that occur.

**§ 192.478 Internal corrosion control - monitoring**
As mentioned in the PHMSA analysis, between 2002 and November 2012, there were 206 incidents that were caused by internal corrosion, a number that is wholly unacceptable for a cause that is entirely within the control of operators. This proposal includes several measures that should help bring those numbers down by requiring operators to undertake monitoring of deleterious gas stream constituents and regularly reviewing their corrosion mitigation and monitoring program. We strongly support, as these provide an enforceable mechanism to hold operators accountable for future incidents caused by internal corrosion.

**§192.485 Remedial measures - transmission lines**
This is a records requirement specifying the requirements for records of the pipe and material properties used in remaining strength calculations. We strongly support.

**§192.493 Inline Inspection of pipelines**
This proposal incorporates by reference some industry standards on performance of ILI assessments. We support, but would like PHMSA to insist that these standards, like all incorporated standards, be made available to the public free of charge.

**§ 192.506 Spike hydrostatic pressure testing**
Following San Bruno, the NTSB recommended that all pre-1970 pipes that had never undergone a pressure test be subjected to a hydrostatic pressure test including a spike test. This proposal is part of PHMSA's response to that recommendation, and while it is not fully responsive to the NTSB's recommendation, we support it. See additional details under discussion of §192.624.

**§192.605 Procedural manual**
This requirement incorporates clarifications as to PHMSA's expectations for items to be included in an operator's procedural manuals, including means to prevent exceedances of MAOP. PHMSA determined this requirement was necessary when it received 14 notifications of MAOP exceedances in a bit over 6 months after issuing an advisory bulletin relating to reporting them.

**§192.607 Verification of pipeline material**
This proposal relates to the same issue as many others: Section 23 of the 2011 reauthorization act requires PHMSA to require verification of records used to establish MAOP. PHMSA determined through information gathered in annual reports that many miles of pipelines do not have adequate records to establish MAOP or adequately describe the physical and operational characteristics of the pipelines. PHMSA proposes to require operators to verify pipeline characteristics whenever pipes are exposed, and to propose criteria for material verification in higher risk areas of HCAs, class 3 and 4 areas. The proposal further requires creation and

maintenance of traceable, verifiable and complete records relating to this verification. While we support this rule, we are frankly quite horrified at the number of miles of pipeline that are subject to integrity management rules for which operators have no verifiable information about their characteristics. To put it bluntly, they don't know what's in the ground. IM rules require a threat identification and risk assessment as the foundation of an integrity management plan. On what foundation have operators been developing integrity management plans for over a decade when they have no records of what they've got in the ground?

**§192.613 Continuing surveillance -**
Like the similar proposal in the hazardous liquid rule, we do not oppose this proposal to require inspection of pipes within 72 hours of a natural disaster. We simply marvel that such a rule is required at all when risks to pipelines are supposed to have been identified and planned for.

**§192.619 MAOP**
This proposal is in response to an NTSB recommendation following San Bruno to ensure that manufacturing defects only be considered stable in situations where they have been subject to a hydrostatic test for which the operator has and maintains traceable, verifiable records, of 1.25 times the MAOP. This proposed rule incorporates that recommendation and we strongly support it.

**§ 192.624 MAOP verification**
After the PG&E pipeline rupture and explosion in San Bruno, CA in 2010, the NTSB issued two recommendations relating to hydrotesting pipelines: first, they recommended that the so called "grandfather clause" allowing the continuing use of pre-1970 pipes that had never been hydrotested be repealed and that all pre-1970 pipes be subjected to a hydrotest incorporating a hydrotest. The Board also recommended that PHMSA amend its regulations so that an operator could only consider manufacturing and construction related defects to be stable if the pipe segment had been subjected to a post-construction hydrotest of at least 1.25 times the segment's MAOP. The Trust has supported implementation of those two recommendations in previous testimony before Congress. In simplified form, we agreed with the NTSB that if an operator has no record of a hydrotest of the strength of a pre-1970 pipe on which to base its MAOP calculation, then the pipe should undergo a hydrotest and the MAOP should be validated or changed. Similarly, if a known manufacturing or construction defect has never been hydrotested, it should be, or it should be managed as if it is not stable.

In response to these two recommendations, PHMSA held a workshop and has published various flowcharts showing how it intended to require the verification of the integrity of these pipes - a process they have shorthanded to become IVP, or integrity verification process. They also gathered information from operators about how many miles of pipe line are in operation that fall into this category: pre-1970 pipe with no verifiable record of a strength hydrotest. Unfortunately, the answer was that there are a lot more miles than PHMSA previously believed. This somewhat complicated proposed rule is the outcome of that administrative process.

It is complicated in two ways: PHMSA is choosing to address these recommendations only with respect to certain pipeline segments, rather than a wholesale change applying across the board. So there are 3 sets of criteria that define the places where this new rule will apply. Then there are five (either a hydrotest or four other options) choices of methods to reestablish MAOP for

the pipelines in these areas that are operating without (ever or since an in-service incident with certain specific causes) having had a hydrotest (or a record of one). We will go into these limitations in detail in our full comments, and we urge you to read carefully through proposed 192.624, but here are the major takeaways:

* The proposal does not meet the intent of the NTSB recommendation in that it will only apply to certain pipelines, and not all pipelines. It will not require new verification of pipelines in non-HCA areas within classes 1 and 2 by completely rescinding the grandfather clause, and for those areas for which the shortcoming is adequate records of a hydrotest, it also will not apply in areas newly designated as an MCA and piggable.

* The options to determine the strength of the pipeline and to re-establish its MAOP include 1) hydrotest and maintain the records of such a test; 2) down-rate the pipe (operate it at a lower pressure) 3) replace the pipe and hydrotest the new segment; 4) Run a smart pig and do an "engineering critical assessment" to establish a safety margin equivalent to that provided by a pressure test; or 5) other unspecified technology that provides an equivalent or greater margin of safety, providing PHMSA notice of the proposed use of such technology in advance.

Obviously, the two that are of concern here are the fourth and fifth: ILI plus ECA and "other." We commissioned a short white paper on engineering critical assessments from Rick Kuprewicz, which you can find on our web page for rulemaking opportunities. http://pstrust.org/wp-content/uploads/2015/10/5-16-16-Signed-Final-Report-to-PST-on-ECA.pdf

We are pleased that PHMSA is responding to the NTSB recommendations and Congressional mandates to address these grandfathered pipes and records deficiencies, but we have some concerns about the reliance on ECAs where the use of assumptions about a pipe's characteristics can result in erroneous strength estimates. We will go into these concerns in detail in our full comments.

**§192.710 Pipeline Assessments**

One of the major shortcomings of existing gas pipeline regulations is that no integrity assessments are required for areas outside of High Consequence Areas (HCAs) - and those HCAs cover less than 7% of the mileage of existing transmission lines. This new proposal will require periodic integrity assessments of areas in a newly defined group of moderate consequence areas. Unfortunately, this proposal has several major shortcomings: It allows 15 years for the first set of assessments to be complete, and requires assessments only every 20 years after that - an implementation and reassessment interval that is simply insufficient to provide a real safety improvement. Its larger shortcoming is that, unlike the integrity management rule, this assessment rule does **not** require an operator to first identify the threats to these segments and develop a plan based on a risk assessment to manage and assess for those risks. This proposal would simply allow an operator to run an inline tool (or conduct a "direct assessment" in unpiggable segments) without ever determining what risks to the segment are and whether the tool chosen will assess for those threats. Without that fundamental risk assessment, this rule simply requires operators to pig and dig - once every 20 years, at that.

**§192.917 Risk assessment/ threat identification**
This proposal applies only to those segments subject to integrity management rules, but it indicates that PHMSA is increasingly concerned about the quality of the risk assessments being performed by operators. This section proposes a number of clarifications to specify certain pipeline attributes, interactive threats, information, records and data analysis that PHMSA believes need to be a part of these risk assessments. We support these changes, since these clarifications and specifications will improve the quality of these assessments that are the foundation of each operator's integrity management program, and they will allow PHMSA to better enforce these expectations when they determine that operators are not complying.

**§192.921 Baseline assessments**
This proposal adjusts the accepted and preferred methods of assessing pipelines under the integrity management rules. It explicitly limits the use of direct assessment to segments that are not piggable. We support the proposed changes.

**§192.927 and 192.929 Direct Assessments**
These two proposals essentially adjust the rules for the use of direct assessments to identify internal corrosion and stress corrosion cracking, and incorporate recent NACE guidelines for these purposes. We support these changes.

**§192.933 Addressing integrity issues**
The proposed changes to this section will adjust some of the repair criteria and timeframes for repairs, make explicit when an engineering assessment of stress corrosion cracking must be made, and makes adjustments to the definition of discovery of a condition. And once again, it proposes specifying certain records on strength calculations must be verifiable and maintained. We support these changes as responsible regulatory adjustments that reflect lessons learned from two major incidents.

**§192.935 Preventive and mitigative measures**
PHMSA is proposing to add a list of prescribed preventive and mitigative measures that an operator must consider in its risk assessment. We strongly support the inclusion of these items to provide additional guidance to operators about their risk assessments and to improve the quality of those assessments.

**§192.937 continual evaluation and assessment**
This proposal will require that the continual assessment and evaluation be consistent with data integration and risk assessment information to adequately identify and manage for the risks to each segment covered by the integrity management rules.

Data integration, threat identification and risk assessment are the foundation of managing the integrity of pipelines. We support these changes.