



November 8, 2007

May Chiranand, Esq.
Presiding Official
Pipeline and Hazardous Materials Safety Administration
Department of Transportation
1200 New Jersey Avenue, S.E. (East Building)
Second Floor (E-26)
Washington, D.C. 20590

RE: Gulf South Pipeline Company, LP
CPF No. 4-2007-1003

Dear Ms. Chiranand:

As provided under 49 C.F.R. § 190.211(i), Gulf South Pipeline Company, LP, (Gulf South) submits a Supplemental Response for inclusion in the case file following the hearing that was convened on October 10, 2007 regarding the March 27, 2007 Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order issued by the Pipeline and Hazardous Materials Safety Administration.

Please contact the undersigned if you have any questions at 713-479-8059.

Respectfully submitted,

Michael E. McMahon / SAO

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PHMSA also should withdraw the NOPVs and eliminate the proposed civil penalties and proposed compliance orders relating to certain aspects of Gulf South's IMP. PHMSA does not have the legal authority to assess civil penalties in this case with respect to these issues, because its remedial authority is limited to the regulatory authority it had when it conducted the audit in January 2006. At that time, the Pipeline Safety Act required that PHMSA direct a pipeline to revise an IMP or risk analyses found to be inadequate. At the time the audit was conducted, PHMSA did not have the authority to assess civil penalties with respect to inadequate IMPs. In addition, Gulf South demonstrated at the hearing that its IMP addresses all of the components of PHMSA's regulations and that Gulf South complied with the regulation's requirements. To the extent PHMSA finds that Gulf South's IMP was deficient, the criteria set forth in 49 C.F.R. § 192.225 warrant elimination or reduction of the proposed civil penalties, or withdrawal of the NOPVs. Alternatively, PHMSA should convert the NOPVs into NOAs.

Those same considerations also support PHMSA's withdrawal of NOPV items that do not propose civil penalties. Gulf South made a good faith effort to address each regulatory requirement and demonstrated that it has complied with each regulatory requirement. Alternatively, PHMSA should convert those NOPVs into NOAs.

II. NOPVs 1A and 1B: Gulf South's Repairs Complied with Industry Standards, the O&M Manual, and Pipeline Safety Regulations.

NOPVs 1A and 1B allege that Gulf South's repairs to two sections of pipe on Index 129 exhibiting external corrosion violated §§ 192.605 and 192.713 of PHMSA's pipeline safety regulations. Specifically, the NOPVs contend that Gulf South repaired selective seam corrosion improperly by not installing a Type B sleeve. In addition, NOPV 1A contends that Gulf South did not properly repair a girth weld defect. The NOPVs contend that Gulf South did not comply with industry standards and its O&M procedures, and did not use a repair method "that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe." 49 C.F.R. § 192.713(a)(2). The NOPV proposes to assess a \$30,000 civil penalty for each NOPV and to require Gulf South to excavate both sections of pipe and perform additional repairs.

At the October 10 hearing, Gulf South presented evidence demonstrating that these NOPVs are based on the inaccurate assumption that the corrosion found on these sections of pipe was selective seam corrosion rather than localized pitting. At the time the repairs were made, Gulf South had qualified corrosion personnel at each site who determined, based upon his inspection of the pipe, that the corrosion present was localized pitting and not selective seam corrosion. Gulf South's repairs were consistent with these findings and complied with applicable industry standards, the O&M Manual, and pipeline safety regulations. Gulf South also properly concluded that the corrosion on the girth weld was localized corrosion pitting and not a "girth weld" defect. With respect to NOPV 1B, Gulf South's use of a composite sleeve exceeded industry standards. NOPV 1A and 1B, the proposed civil penalties, and proposed compliance orders should be withdrawn.

A. NOPV 1A: Corrosion on Index 129 Was Localized Pitting and Was Properly Repaired by Recoating.

NOPV 1A alleges that Gulf South's repair of "localized pitting in the pipe seam and girth weld" on Index 129 by recoating the pipe did not comply with Gulf South's O&M procedures, in violation of § 192.605 of PHMSA's regulations. Based solely on photographs contained in the dig packet containing documentation relating to Gulf South's repair, PHMSA presumed that the corrosion pitting was both a "defect" and selective seam corrosion. The NOPV then asserts that Gulf South's repair of these "defects" did not reflect a method "that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe," as required under § 192.713(a)(2). According to the NOPV, the only acceptable method of repairing "ERW Selective Corrosion" was to install a Type B sleeve, and that the only acceptable repair for a girth-weld defect was "Grinding, Deposited Weld Metal and Type B Sleeve."

As an initial matter, Gulf South notes that PHMSA's NOPV is inherently inconsistent insofar as the PHMSA first states that the pipe "exhibited localized corrosion pitting in the seam," and at the same time asserts that Gulf South should have performed a repair appropriate for selective seam corrosion. Localized corrosion pitting and selective seam corrosion are two totally different types of anomalies. Simply because localized pitting happens to be located near or on a seam does not necessarily mean the anomaly is selective seam corrosion. In fact, the localized corrosion on Index 129 was not selective seam corrosion.

Further, the NOPV improperly assumes that the corrosion pitting on Line 129 was a "defect." This characterization is incorrect and inconsistent with common industry terminology. NACE Standard RP0102-2002, "Standard Recommended Practice, In-Line Inspections of Pipelines," defines a defect as a "an anomaly for which an analysis indicates that the pipe is approaching failure as the nominal hoop stress approaches the specified minimum yield strength of the pipe material." By contrast, NACE defines an anomaly as a "possible deviation from sound pipe material or weld" and an imperfection as an "anomaly in the pipe that will not result in pipe failure at pressures below those that produce nominal hoop stresses equal to the specified minimum yield strength of the pipe material." As explained below, Gulf South determined that the corrosion pitting on Index 129 did not constitute a condition where the pipe was approaching failure. The pitting observed on this line was an anomaly, not a "defect." PHMSA's characterization is incorrect and unsupported.

Gulf South also explained that Index 129 is constructed of flash-welded A.O. Smith line pipe, not electric resistance welded (ERW) pipe, which is more conducive to selective seam corrosion. As requested by PHMSA at the hearing, Gulf South has included as part of Attachment B-1 a copy of the pipeline mill test report (MTR) confirming that the pipeline is not ERW pipe.

At the hearing, Gulf South presented evidence that qualified corrosion personnel evaluated this pipeline at the time of the repair and concluded that the corrosion present was localized corrosion pitting. In addition, Gulf South's expert consultant, Dennis Johnston from Keifner and Associates, a respected independent consulting firm on pipeline evaluation and repairs, explained that based on its analysis of the photographic evidence, given that the corrosion in the seam was not deeper than the corrosion in the adjacent body of the pipe, the

corrosion on this line pipe was not preferential and was not selective seam corrosion. The corrosion observed in the photographs also was not consistent with PHMSA's own description of selective seam corrosion. Keifner and Associates's conclusion was further supported by the fact that the pipeline has no history of failure, leaks or other integrity issues related to selective seam corrosion. (Attachment A at slides 6-20) Keifner and Associates also stated that, based on the measured depths and measured lengths of the anomalies, they would not result in pipe failure at pressures below those that produce nominal hoop stresses equal to the specified minimum yield strength of the pipe material. These anomalies, therefore, were imperfections, not "defects."

At the hearing, Gulf South also demonstrated that, because this line had no known weld defects, Gulf South correctly evaluated corrosion affecting a girth weld as localized corrosion and not as a "girth weld" defect. Gulf South explained that localized corrosion pitting on a girth weld was not a weld defect as asserted by PHMSA in its NOPV.

Based on its determination that anomalies on the pipe were localized corrosion pitting, Gulf South assessed the condition of the pipe consistent with the 1994 edition of the Pipeline Research Council International, Inc. (PRCI) Pipeline Repair Manual, which was in effect at the time of the repair in 2003. (1994 PRCI Manual at p. 70 & Fig. 14) In accordance with this Manual and procedures in its O&M Manual, Gulf South determined that the deepest penetration was less than 80% of the wall thickness of the pipe and performed an ASME B31G modified remaining strength calculation. The calculation indicated a safe pressure of 994 psig, and a burst pressure of 1380.9 psig. Because the maximum allowable operating pressure (MAOP) of the line is 609 psig, Gulf South determined that the anomalies did not affect the operating pressure of the pipeline or impair its serviceability, further confirming that the localized corrosion pitting were not "defects."

At the hearing, PHMSA suggested that Gulf South's use of the ASME B31G modified remaining strength calculation was inappropriate for evaluating corrosion on flash-welded pipe. PHMSA based its position on a 1989 report by PRCI entitled "A Modified Criteria for Evaluating the Remaining Strength of Corroded Pipe." The reasons that the 1989 report discourages the use of the ASME B31G strength test for flash-welded pipe, however, do not apply to Index 129. First, the 1989 report assumes that corrosion is generally selective in nature. As demonstrated above, this assumption is invalid with respect to the corrosion found on Index 129. Second, the 1989 report is based on tests of flash-welded pipe showing that the seam failed at a lower pressure than the pipeline itself. For Index 129, this concern also is not present. The MTR shows that the pipe burst pressure is 1835 psig (page 49 of MTR for 24", 0.281 W.T.) which is more than 3 times the MAOP of 609 psig. Given the facts in this case, Gulf South's use of ASME Modified B31G calculation was appropriate.

The 1994 PRCI Pipeline Repair Manual, which was in effect at the time of Gulf South's repair, does not exclude use of the ASME Modified B31G evaluation. (1994 PRCI Manual at p. 70) PRCI's 2006 Updated Pipeline Repair Manual also contemplates use of the ASME B31G evaluation method. (2006 PRCI Manual at 61)

When an anomaly does not affect a pipeline's operating pressure, the 1994 PRCI Manual provides that recoating the pipeline is the appropriate repair. (1994 PRCI Manual at p. 70 & Fig.

14) This repair method is reconfirmed by PRCI's 2006 Updated Pipeline Repair Manual (2006 PRCI Manual at pp. 60-61 & Fig. 26) and is consistent with Table 4 of ASME B31.8S-2004, Managing System Integrity of Gas Pipelines (ASME B31.8S). Gulf South's repair also was consistent with its O&M procedure 10.8, Repair of Leaks and Defective Pipe, which permits recoating when the corrosion is not selective seam corrosion. This chapter reflects industry standards by providing that pipeline recoating is a permanent repair method for localized external corrosion pitting. Therefore, Gulf South repaired this imperfection by using a repair method that is consistent with industry standards and its O&M Manual. Excerpts of the documents supporting Gulf South's repair are included in Attachment B-1 to this Supplemental Response.

Gulf South properly concluded that corrosion on Index 129 was localized corrosion pitting that did not affect serviceability of the pipe and repaired the line in a manner that was consistent with established industry standards, Gulf South's O&M Manual, and federal pipeline safety regulations. This NOPV, the proposed civil penalty, and proposed compliance order should be withdrawn.

B. NOPV 1B: Gulf South's Repairs Met and Exceeded Industry Standards and the Requirements of the O&M Manual.

NOPV 1B alleges that Gulf South's repair of "localized and general corrosion pitting in a longitudinal weld" by using a composite sleeve did not comply with Gulf South's O&M repair procedures or reflect a repair method "that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe." The NOPV asserts that the only appropriate repair was installation of Type B sleeve.

Like NOPV 1A, this NOPV is inherently inconsistent because PHMSA states that the pipe exhibited "localized and general corrosion," while at the same time asserting that Gulf South should have performed a repair to address selective seam corrosion. PHMSA appears to be assuming that localized and general corrosion pitting are the same thing as selective seam corrosion. This assumption is not supported by the facts. Localized or general pitting near or on a seam is not necessarily selective seam corrosion. Gulf South demonstrates below that the corrosion on Index 129 was not selective seam corrosion.

Similarly, NOPV 1B improperly assumes that the corrosion pitting on Index 129 was a "defect" instead of an anomaly or imperfection. As explained below, Gulf South performed tests and determined that Index 129 was not approaching failure as a result of the corrosion. The pitting observed on this line, therefore was not a "defect." PHMSA's characterization is incorrect and unsupported.

NOPV 1B also reflects the incorrect assumption that the corrosion on the exterior of Index 129 was selective seam corrosion. As Gulf South explained above in response to NOPV 1A, its qualified corrosion personnel evaluated the pipeline at the time of the repair and determined that the corrosion was localized pitting. This determination was confirmed in 2007 by Keifner & Associates, who analyzed the photographic evidence of this pipe and found that:

- The grooving ratio, or the ratio of the depth of corrosion at the weld line to the depth of corrosion outside of the weld line in the same corrosion area, was less than 1.0. A grooving ratio below 1.4 indicates no preferential corrosion in the EFW seam, and
- The corrosion in the body of the pipe was deeper than the corrosion in the flash weld seam.

Keifner and Associates's conclusion was further supported by the fact that the pipeline has no history of failure, leaks or other integrity issues related to selective seam corrosion.

In addition, the corrosion did not match PHMSA's own description of selective seam corrosion, which describes selective seam corrosion as "a localized corrosion attack along the weld bondline of ERW and EFW pipe, that leads to the development of a wedge shaped groove that is often filled with corrosion products." Attachment A at slides 6-20. Rather, because the corrosion in the seam was not deeper than the adjacent pipe and the grooving ratio was less than 1.0, Keifner and Associates concluded that the corrosion was not selective seam corrosion.

In assessing the anomaly and determining the appropriate repair, Gulf South followed the procedures of the 1994 PRCI Manual and its O&M procedures. Gulf South determined that the deepest penetration was less than 80% of the wall thickness of the pipe, and performed an ASME B31G modified remaining strength calculation. As demonstrated above in response to NOPV 1A, use of the B31G strength calculation was appropriate and supported by the 1994 PRCI Manual. The calculation indicated a safe pressure of 694 psig and a burst pressure of 964.1 psig. Because the MAOP of the line is 609 psig, Gulf South determined that the corrosion did not affect the operating pressure of the pipeline or impair its serviceability. The corrosion, therefore, was not a "defect."

Because Gulf South anticipates possibly increasing the MAOP of this line in the future, Gulf South decided to repair the pipe by installing a composite sleeve manufactured by PermaWrap,TM followed by recoating. This repair exceeded the requirements of the 1994 PRCI Manual and Gulf South's O&M Procedure 10.8, Repair of Leaks and Defective Pipe. The suitability of PermaWrapTM to repair localized pitting imperfections is supported by engineering tests performed in 2001 by Stress Engineering Services, Inc., an independent consulting engineering firm. Stress Engineering performed numerous tests and analyses on PermaWrap and found that the performance of the repair system was "very good." In particular, Stress Engineering found that the PermaWrap composite sleeve "can restore the burst strength of the pipe." The increasing use and acceptability of composite sleeves, like PermaWrap, is noted in PRCI's 2006 Updated Pipeline Repair Manual. PRCI states that composite reinforcement sleeves have been proven and have gained regulatory and code acceptance for specific applications. Therefore, Gulf South repaired this imperfection by using a repair method that is consistent with industry standards and its O&M Manual. Documentation supporting Gulf South's repair is included in Attachment B-1 of this Supplemental Response.

Gulf South has demonstrated that the corrosion identified in NOPV 1B was localized corrosion pitting that did not affect the serviceability of the pipe and that its repair method was consistent with and exceeded established industry standards, Gulf South's O&M Manual, and

federal pipeline safety regulations. PHMSA should withdraw this NOPV, the proposed civil penalty, and proposed compliance order.

III. PHMSA Does Not Have Authority to Assess Civil Penalties With Respect to Gulf South's IMP.

When PHMSA conducted its audit of Gulf South's IMP in January 2006, PHMSA's enforcement authority with respect to inadequate or non-compliant IMPs was limited to requiring that the pipeline revise its IMP to comply with regulatory requirements. At that time, the Pipeline Safety Act did not provide PHMSA the authority to assess civil penalties for inadequate or non-compliant IMPs. PHMSA did not have that authority until December 2006 when Congress passed the Pipeline Inspection, Protection, Enforcement, and Safety Act (PIPES Act), Pub. L. No. 109-468, (Dec. 29, 2006). Assessing civil penalties for alleged deficiencies identified during an audit conducted before PHMSA had statutory authority to impose such remedies constitutes an impermissible retroactive application of its remedial authority.

Section 60109(c) of the Pipeline Safety Act was enacted in 2002 as part of the Pipeline Safety Improvement Act (PSIA). 116 Stat 2985, 3002-05. Section 14 of the PSIA, entitled "Risk Analysis and Integrity Management Programs," established a new comprehensive regulatory program requiring that gas pipeline operators analyze the risks to their facilities and adopt and implement written IMPs for those facilities to reduce such risks. The PSIA set forth extensive requirements governing the conduct of risk analyses and the content of gas pipeline IMPs, and required that the Secretary of Transportation issue regulations establishing standards consistent with the statute's requirements.

Section 14 of the PSIA included a provision governing the review and enforcement of pipelines' risk analyses and IMPs. This provision was in effect at the time PHMSA conducted its audit of Gulf South's IMP in January 2006 and stated as follows:

"[i]f the Secretary determines that a risk analysis or integrity management program does not comply with the requirements of this subsection or regulations issued . . . or is inadequate for the safe operation of a pipeline facility, the Secretary *shall* act under section 60108(a) to require the operator to revise the risk analysis or integrity management program."

49 U.S.C. § 60109(c)(9)(A)(iii) (Supp. III 2003) (emphasis added). Section 60108(a), in turn, provides that if the Secretary finds that a pipeline's required written inspection and maintenance plans are inadequate for safe pipeline operations, the Secretary "shall require" the pipeline to revise the plan, "only after giving notice and an opportunity for a hearing." 49 U.S.C.A. § 60108(a) (West 2007).

Congress included § 60109(c)'s specific enforcement language in the statutory scheme applicable to IMPs knowing full well that PHMSA already had general authority under 60122 of the Pipeline Safety Act to impose civil penalties and the ability under § 60118(b) to require compliance with regulatory requirements. 49 U.S.C. § 60118(b) (2000) & § 60122(a) (2000, Supp. II 2002 & Supp. III 2003). Reading § 60109(c)(9)(A)(iii) in context with the existing

statutory scheme, it must be interpreted as having created an exception to PHMSA’s broader enforcement authority when evaluating a pipeline’s risk analysis or IMP required under a newly-created regulatory program.

This interpretation of § 60109(c)(9)(A)(iii) is supported by the principle of statutory construction that a later-enacted specific statute addressing a specific subject matter controls over an earlier-enacted general statutory provision. *FDA v. Brown & Williamson*, 529 U.S. 120, 143 (2000); *Am. Airlines v. Remis, Ind., Inc.*, 494 F.2d 196, 200 (2d Cir. 1974) (stating that later language amending a statute will prevail over the statute’s older unchanged language if the two provisions conflict in the overall statutory scheme). In addition, a statute should be construed so that all of its provisions are given effect and so that no provision is rendered “inoperative or superfluous, void or insignificant.” *Fund for Animals, Inc. v. Kempthorne*, 472 F.3d 872, 877–78 (D.C. Cir. 2006) (citations omitted).

These principles apply here and preclude PHMSA from assessing civil penalties for alleged inadequacies in Gulf South’s IMP. In 2002, Congress enacted § 60109(c) establishing a comprehensive, subject-specific program establishing IMP standards and requiring pipeline compliance with them. Congress included within § 60109(c) a specific mandatory enforcement mechanism to be applied if PHMSA found an IMP to be inadequate or non-compliant with the new regulatory requirements. Congress adopted this provision with full knowledge that PHMSA already had authority to assess civil penalties (and presumably to require compliance) under § 60122 of the Pipeline Safety Act and the option of issuing orders directing compliance under § 60118(b). The only way to give full meaning to the January 2006 version of § 60109(c)(9)(A)(iii) so that it is not rendered superfluous or redundant with § 60122 is to interpret it as a mandatory limitation on PHMSA’s more general pre-existing civil penalty authority, and to limit the application of 60122 in the context of applying it to a pipeline’s failure to comply with orders requiring modification of an IMP.

Section 60109(c)(9)(A)(iii)’s previous limitation on PHMSA’s enforcement authority with respect to inadequate or non-compliant IMPs is further demonstrated by the fact that in 2006, Congress amended this provision of the Pipeline Safety Act when it passed the PIPES Act and specifically expanded PHMSA’s remedial authority under § 60109 with respect to IMPs. As amended, § 60109(c)(9)(A)(iii) now states that

[i]f the Secretary determines that a risk analysis or integrity management program does not comply with the requirements of this subsection or regulations issued as described in paragraph (2), has not been adequately implemented, or is inadequate for the safe operation of a pipeline facility, the Secretary *may conduct proceedings under this chapter*.

49 U.S.C.A. § 60109(c)(A)(iii) (West 2007). This amendment would not have been necessary if PHMSA clearly possessed the authority to assess civil penalties for inadequate or non-compliant integrity management programs.¹

¹ In fact PHMSA’s conduct in enforcing its integrity management regulations before the 2006 PIPES Act is consistent with this construction of the statute. PHMSA did not attempt to

Because PHMSA did not have statutory authority to assess civil penalties at the time it conducted the audit of Gulf South's IMP, PHMSA cannot assess civil penalties for an alleged inadequate IMP. Retroactive application of a punitive statute without clear congressional intent generally is disfavored. *Landgraf v. USI Film Products*, 511 U.S. 244, 269-70, 280, 284 (1994) (stating that, absent clear congressional intent, statutes that substantially increase a private party's liability should not apply retroactively to conduct occurring before the statute was enacted). PHMSA's intent to retroactively apply its new enforcement authority can be inferred from the fact that it waited over a year from the date of the audit, until after Congress amended § 60109(c)(9)(A)(iii), before issuing as audit findings, the NOPV proposing civil penalties. This is especially disconcerting given that the timing of issuing the audit report was within PHMSA's sole and exclusive control.

PHMSA's enforcement remedy at the time it conducted the audit was limited to requiring a pipeline to revise an inadequate or non-compliant IMP. Thus, PHMSA lacks authority to assess civil penalties against Gulf South's alleged failures in developing its IMP.

IV. Gulf South's Integrity Management Program Complied with Statutory and Regulatory Requirements.

A. Gulf South's IMP Satisfied PHMSA's Regulatory Requirements.

Gulf South presented evidence at the hearing that it endeavored to develop a complete IMP that addressed all of the required components of PHMSA's new extensive integrity management regulations. Gulf South also retained expert consultants to assist in drafting procedures, conducting an extensive risk analysis, and developing and implementing mechanisms for gathering data across its system. After developing the program, Gulf South retained an expert consultant to perform an audit of the IMP. Based upon those audit findings, Gulf South made any necessary changes to its IMP.

Like many other pipelines in the industry gaining experience implementing a new and complex regulatory program, Gulf South designed its IMP procedures to reflect a level of detail that was consistent with the pipeline's prior experience regarding PHMSA's expectations for other procedural manuals required under other regulations. With respect to program elements that Gulf South was not yet implementing, these sections of the IMP were designed initially as "frameworks" as provided under PHMSA's regulations, 49 C.F.R. §§ 192.907 & 192.911 (2006). During the audit and at the hearing, however, it became clear that PHMSA expects a much higher level of procedural detail for those program elements that the pipeline is implementing.

At the hearing, PHMSA personnel also expressed concerns about the organization of Gulf South's IMP. Gulf South acknowledged that its IMP may not be organized in an "audit-friendly" format and that some procedures were not located where inspectors expected to find

impose civil penalties for violations of its gas integrity management regulations prior to passage of the December 2006 statute.

them. However, the regulations do not specify any specific organization or mandatory format that an IMP must follow. The organizational structure of Gulf South's IMP cannot be a legitimate basis for finding that an IMP is inadequate or for imposing civil penalties.

B. PHMSA Should Withdraw the NOPVs and Proposed Civil Penalties.

PHMSA has proposed to assess a total of \$123,000 in civil penalties for alleged deficiencies in Gulf South's IMP. At the hearing, Gulf South presented evidence that its IMP addressed the procedures required by the regulations or contained frameworks for procedures that Gulf South has not yet implemented. In addition, Gulf South demonstrated that it complied with the requirements of PHMSA's integrity management regulations. There is no basis for these proposed civil penalties and they should be withdrawn. If not withdrawn, the factors set forth in § 60122(b) of the Pipeline Safety Act and § 190.225 of the pipeline safety regulations support eliminating or at least substantially reducing them. The proposed compliance orders for each of the following items also should be withdrawn. To the extent PHMSA determines that Gulf South's IMP is inadequate, these NOPVs should be converted into NOAs.

1. NOPV 4: § 192.911 Quality Assurance Process

NOPV 4 alleges that Gulf South's IMP lacks sufficiently comprehensive quality assurance and quality control procedures for threat management and contains inadequate specification for performing and documenting internal and external program reviews. NOPV 4 alleges further that Gulf South's Quality Assurance Plan in the IMP did not adequately address the requirements set forth in Chapter 12 of ASME B31.8S. The NOPV asserts that the inadequacy of these quality assurance process controls was demonstrated by the fact that Gulf South did not run a caliper pig on Index 130 as part of its threat management of that line, resulting in failure to assess for third party damage. Consequently, the NOPV states that Gulf South improperly credited this line in its baseline assessment plan (BAP) without assessing the primary threat of third party damage. The NOPV proposed a \$16,000 civil penalty for this NOPV and a proposed compliance order that would require Gulf South to develop and implement appropriate quality assurance and quality control procedures.

Gulf South presented evidence at the hearing, and sets forth in greater detail in Attachment B-4 to this Supplemental Response, that Section 12 of its IMP contains a Quality Control Plan. The plan meets the requirements of Section 12 of ASME B31.8S. Sections 12.4 and 12.6 of the IMP address internal and external program reviews. Section 12.6.2 of the IMP requires that the IMP be audited annually and that documentation of audit findings and recommendations be retained. Gulf South conducts audits of its IMP in accordance with Section 9.4(e) of ASME B31.8S. *See also* Attachment A at slides 30-33.

Gulf South also provided additional information at the hearing showing that Gulf South's decision not to run a caliper pig on Line 130 did not demonstrate either a failure of its quality assurance procedures or a failure to adequately assess threats on this line. A caliper pig is only one of several acceptable methods for assessing the threat of third party damage. Section 6.2.3 of ASME B31.8S provides that geometry tools also can be used for detecting third party damage. In April 2002, Gulf South ran a gaging pig, followed by a dummy pig. The diameter of the

gaging pig plate was 27.6 inches (95% of the 29-inch internal diameter of the 30-inch pipe with ½ inch wall), and allowed for the detection of dents in excess of 5% of the diameter of the pipeline. In June 2002, Gulf South ran a Magnetic Flux Leakage (MFL)/hardspot in-line-inspection (ILI) tool. Consistent with the requirement of Section 4 of ASME B31.8S that pipelines gather and integrate data for third party damage, Gulf South integrated the results of the gaging tool run with the results of the MFL/hardspot tool (which can locate changes in pipeline hardness that are created as a result of a deformation caused by third party damage) and determined that no third party damage had occurred within an HCA area on this section of the line.

The accuracy of Gulf South's determination was later confirmed when it ran a caliper pig in April 2006, which demonstrated no evidence of third party damage within the HCA. As requested by PHMSA at the hearing, Attachment B-4 includes documentation on the results of the June 2002 MFL/hardspot tool run and the results of the April 2006 caliper pig run.

Gulf South has demonstrated that its IMP contains adequate quality assurance and quality control procedures for threat management and sufficient specification for performing and documenting internal and external program reviews. In addition, Gulf South's Quality Assurance Plan addresses the requirements set forth in Chapter 12 of ASME B31.8S. Gulf South's IMP therefore complies with the requirements of § 192.911(l). In addition, in running a gaging pig and an MFL/hardspot tool on the line, Gulf South adequately assessed the threat of third party damage on Index 130 and properly credited the assessment in the baseline assessment plan. PHMSA should withdraw this NOPV and the proposed civil penalty and compliance order.

2. NOPV 10: § 192.917(b): Data Gathering and Integration

The NOPV alleges that in evaluating and identifying potential threats to each covered pipe segment, Gulf South did not explicitly analyze and review complete data sets specified in Appendix A of ASME B31.8S and the additional seven data sets prescribed in the regulations. The NOPV states that when data elements are ruled out, the pipeline must document the basis for excluding them. The NOPV proposed to assess a civil penalty of \$16,000 for this item and proposed a compliance order that would require Gulf South to develop and implement appropriate data and integration procedures.

Gulf South explained at the hearing that its Integrated Risk Assessment System (IRAS) (developed by Dynamic Risk Assessment Systems, Inc.) assesses risk to the pipeline by considering an exhaustive set of data points in a risk algorithm. (Attachment A at slide 55) IRAS is described in Section 4.4 of Gulf South's IMP. In Attachment B-10, Gulf South provides a detailed description of how IRAS uses all of the data sets listed in ASME B31.8S, Appendix A and the additional seven data sets required in PHMSA's integrity management regulations. In addition, where data elements are ruled out, Gulf South documents the basis for excluding them. As requested by PHMSA at the hearing, Attachment B-10 also contains HCA-specific information demonstrating that all proper data sources were considered.

The risk model in Gulf South's IMP incorporates all of the required data sets in compliance with § 192.917(b). The NOPV, proposed civil penalty and proposed compliance order should be withdrawn.

3. NOPV 11: § 192.917(c): Risk Assessment

NOPV 11 asserts that Gulf South's IMP did not have procedures to address how risk data is used to accomplish the following objectives: (1) assess benefits derived from mitigating action; (2) determine most effective mitigation measures for identified threats; (3) assess integrity impact from modified inspection intervals; (4) assess use of or need for alternative inspection methodologies; (5) effective resource allocation; (6) facilitate decisions to address risks along a pipeline or within a facility. The NOPV further alleges that Gulf South did not perform these objectives. In addition, the NOPV asserts that Sec. 4.1 of Gulf South's IMP does not document how risk values generated by the risk model are used to accomplish these objectives. This NOPV proposes a \$16,000 civil penalty and the proposed compliance order would require that Gulf South develop and implement procedures to address the identified risk assessment issues.

As explained at the hearing and as set forth in greater detail in Attachment B-11, Gulf South uses the results from its risk model to achieve the objectives identified in the regulations. Section 4 of Gulf South's IMP describes a set of objectives that are consistent with objectives identified in Section 5.3 of ASME B31.8S.

To assess the benefits derived from mitigating actions, Gulf South can use the Case Study ("what if") functionality of IRAS which evaluates how mitigating actions affect risk scores for particular segments. IRAS's Case Study functionality enables Gulf South to determine the most effective mitigation measures for identified threats in particular pipeline segments and assess the benefits from specific mitigating actions. The process for determining appropriate mitigating action is described in Section 8 of the IMP. Section 8.8 of the IMP addresses determining the appropriate mitigating action, and Sections 8.7.1, 8.7.3, and 8.9 address determining the most effective mitigation measure for an identified threat.

The integrity impact of modifying inspection intervals for a specific pipeline segment also can be assessed using IRAS's Case Study function. In addition, Gulf South uses risk results to determine whether available inspection methodologies are adequate for the threat being assessed. Gulf South also uses risk results to ensure effective allocation of resources by giving priority for the assessment and implementation of preventive and mitigative (P&M) measures to those parts of the system with the highest risk scores. Finally, Gulf South explained that it prioritizes integrity decisions based on risk scores and the results of the Case Study function of IRAS.

Gulf South has demonstrated that it can use its IRAS risk model to satisfy the objectives identified in PHMSA's integrity management regulations. Gulf South requests that PHMSA withdraw this NOPV, the proposed civil penalty and proposed compliance order.

4. NOPV 13: § 192.919(b): Contents of Baseline Assessment Plan

NOPV 13 asserts that Gulf South did not properly assess for relevant threats or conduct the proper baseline assessments. Specifically, the NOPV states that, although Gulf South credited Index 130 with a prior ILI run, Gulf South could not document that the prior assessment had addressed all applicable threats because the prior assessment did not include a caliper tool run to assess potential third party damage. The NOPV proposes to assess a civil penalty of \$16,000. The proposed compliance order would require that Gulf South review the baseline assessment plan for Index 130 and all other prior assessments and determine and document whether they can be included as prior assessments. Where necessary, Gulf South would be required to address any shortfalls discovered during its review.

As Gulf South explained at the hearing, and as set forth in Attachment B-13 to this Response, Section 6 of Gulf South's IMP addresses the selection of appropriate assessment methods based on applicable threats, in compliance with ASME B31.8S. Section 6 also sets forth the appropriate assessments methodology for each threat type. *See also* Attachment A at slide 77-79.

In addition, as fully explained above in response to NOPV 4, Gulf South adequately assessed the threat of third party damage on Index 130 by first running a gaging pig and a dummy pig in April 2002, and then integrating the results of the gaging pig run with the results of the MFL/hardspot tool run that was run in June 2002. This assessment process complied with the requirement of Section 4 of ASME B31.8S that pipelines gather and integrate data for third party damage. In addition, Section 8.2 of the IMP requires the integration of data from the pipeline to determine whether additional P&M measures are required to address the threat of third party damage.

As requested by PHMSA at the hearing, Gulf South has provided documentation on the results of the June 2002 MFL/hardspot tool run and the results of the April 2006 caliper pig run. This data is contained in Attachment B-4.

Gulf South's IMP addresses the selection of appropriate assessment methods based on applicable threats. In addition, Gulf South properly assessed Index 130 for the threat of third party damage and properly included this assessment in the BAP, in compliance with § 192.919(b) of PHMSA's regulations. PHMSA should withdraw this NOPV, the proposed civil penalty and proposed compliance order.

5. NOPV 14: § 192.921(a)(1): Conducting a Baseline Assessment Plan: Assessment Methods.

NOPV 14 asserts that Gulf South's IMP contained no procedures or programmatic requirements describing the process for analyzing and documenting ILI tool selection and that Gulf South failed to perform rule-required actions on Index 130 "as described in both items 4 and 13." The NOPV asserts further that although Gulf South recognized that ILI tools have an average 80% accuracy confidence, Gulf South's processes do not specify the use of a tool tolerance to compensate for potential tool and grading inaccuracies for ILI results. In addition,

the NOPV asserts that Gulf South's IMP contained no procedures or programmatic requirements for quality assurance and vendor personnel qualifications for evaluating ILI results and contained no documented procedure or process for recording information regarding decisions on assessment methods to address identified threats for each covered segment. This NOPV recommends a civil penalty of \$16,000 and the proposed compliance order would require Gulf South to develop and implement appropriate procedures to cover the identified issues regarding assessment methods.

At the hearing, Gulf South explained that it selects ILI tools pursuant to Section 6.2 of its IMP and Evaluation and Remediation (E&R) Practice #4. As explained further in Attachment B-14, Section 6.2 and E&R Practice #4 incorporate the requirements of several international consensus standards and address tool selection, preparing the pipeline for pigging, operation of ILI tools, and log analysis and confirmation. In addition, Section 7.5 of the IMP directs the consideration of tool tolerance when considering tools for remediation activities. Gulf South also performs validation digs to ensure that stated tool accuracy limits are met. If validation results are unacceptable, ILI data is returned to the tool vendor for further analysis and possible regrading.

Gulf South followed these procedures when it assessed Index 130 for the threat of third party damage. As fully explained in response to NOPVs 4 and 13, Gulf South's assessment of Index 130 for the threat of third party damage was thorough and proper.

Gulf South maintains quality control and ensures vendor personnel qualification by using only reputable, experienced ILI vendors and by following Section 12 of its IMP addressing Vendor Supplied Services. ILI vendors also must satisfy the requirements of the Workmanship and Warranty provision of Gulf South's Intermittent Service Agreement addressing the expectations of the quality of services to be rendered. This provision requires compliance with API Standard 1163 and ASNT ILI-PQ-2004 which address qualification and certification standards of ILI personnel. In addition, Tuboscope has developed and implemented a quality manual.

In addition, Section 6.1, Table 6.1-1 (Threats and Associated Assessment Methods) identifies the types of threats and the tools that can be used to assess them. This table also identifies the limitations of these assessment methods.

Gulf South's procedures for analyzing and documenting ILI tool selection and its mechanisms for ensuring that vendor personnel meet quality assurance standards and applicable qualifications satisfy the requirements of § 192.921(a)(1). Gulf South did not fail to "perform rule-required actions on Index 130." This NOPV, the proposed civil penalty and proposed compliance order should be withdrawn.

6. NOPV 17: § 192.933(c): Schedule for Evaluation and Remediation

NOPV 17 asserts that Gulf South did not develop a prioritized schedule for remediation as required under § 192.933(c) and Section 7.5 of Gulf South's IMP. The NOPV recommends a \$16,000 civil penalty. The proposed compliance order would require that Gulf South be required

to develop and implement appropriate schedules to cover the issues addressed with respect to Evaluation and Remediation Schedules.

Gulf South explained at the hearing that at the time of the January 2006 PHMSA inspection, Gulf South did not have any immediate or scheduled anomalies located in HCAs. Gulf South, therefore, did not have a prioritized response schedule for addressing these types of anomalies in HCAs. Gulf South demonstrated, however, that if immediate or scheduled anomalies are discovered in an HCA, Section 7.5 of the IMP describes how response activities would be scheduled. Attachment B-17 to this Response provides additional information and sets forth those sections of Gulf South's IMP addressing Gulf South's procedure for prioritizing and scheduling response activities for anomalies discovered in HCAs. *See also* Attachment A at slide 98.

Gulf South has demonstrated compliance with § 192.933(c). This NOPV, the proposed civil penalty and proposed compliance order should be withdrawn.

7. NOPV 19: § 192.935(a): Additional Preventive and Mitigative Measures

NOPV 19 asserts that Gulf South has completed baseline assessments for several HCA segments, but has not evaluated them to identify appropriate and required P&M measures. The NOPV proposes an \$11,000 civil penalty and the proposed compliance order would require Gulf South to develop and implement appropriate evaluations to cover the P&M measures issues identified.

Section 8, in particular, Figure 8.2-3, of Gulf South's IMP addresses the selection of P&M measures. Attachment B-19 to this Supplemental Response provides a detailed list of the activities involved in that process. This process considers overall risk (probability and consequence) of a pipeline segment when determining the appropriate P&M measures.

In addition, Gulf South explained at the hearing that it has implemented P&M measures throughout its system, regardless of whether such areas were located in HCAs. These global P&M measures provide a higher level of safety to the public along the entire pipeline. These measures include improved cathodic protection systems and monitoring methods, additional internal cleaning programs, increased public awareness programs, increased signage, increased pipeline patrol frequency, recoating pipeline sections; management of atmospheric corrosion through a process management tool. *See* Attachment A at slide 104. PHMSA acknowledged at the hearing that implementing P&M measures would improve pipeline safety, but stated that the regulations require HCA-specific documentation of such measures.

Gulf South's IMP contains a process for selecting P&M measures. Moreover, Gulf South's practice of implementing P&M measures throughout its system is consistent with the regulatory objectives underlying this regulatory requirement, and as acknowledged by PHMSA at the hearing, improve pipeline safety. This NOPV is not warranted and the proposed civil penalty and compliance order should be withdrawn.

8. NOPV 22: § 192.937(b): Continual Process for Evaluation and Assessment to Maintain Integrity

NOPV asserts that Gulf South has failed to conduct periodic evaluations for completed baseline assessments, as provided in Sec. 6.5.2 of Gulf South's IMP, which specifies that required evaluations will be conducted annually. The NOPV proposes a \$22,000 civil penalty. The proposed compliance order would require Gulf South to develop and implement appropriate procedures and evaluations to address the issues identified with respect to periodic evaluations.

At the hearing Gulf South explained that Section 6.5.1 of its IMP contains the process for performing periodic evaluations for covered segments. The purpose of these periodic evaluations is to ensure that the assessed threats and risk magnitudes assigned to all covered segments is consistent with latest available data. As explained in Attachment B-22, Gulf South integrates data to reassess risk for the entire pipeline system and requires that the risk assessment model be run on a yearly basis. In addition, Section 4.7 of the IMP requires that the risk database be refreshed on a regular basis. Risk results are used to determine the appropriateness of reassessment intervals, assessment methods, remediation decisions, and additional P&M actions. Section 6.5.2 contains procedures outlining reassessment methods and schedules. If the annual review of risk results and other information demonstrate the need for a different reassessment interval, Gulf South makes adjustments accordingly.

In addition, Gulf South explained that its integrity management team convenes meetings at least annually to review the IMP and quality assurance process. Attachment B-22 describes the topics that are discussed at these meetings. *See also* Attachment A at slide 113.

The processes described in Gulf South's IMP comply with § 192.937(b)'s requirement for conducting periodic evaluations. The NOPV is not warranted and the proposed civil penalty and compliance order should be withdrawn.

C. Consideration of Civil Penalty Factors Support Elimination or Substantial

Section 60122(b) of the Pipeline Safety Act and § 190.225 of the pipeline safety regulations provide that PHMSA must consider the following factors when determining the amount of a civil penalty: (1) nature, circumstances and gravity of the violation, including adverse impact on the environment; (2) degree of the respondent's culpability; (3) respondent's history of prior offenses; (4) respondent's ability to pay; (5) any good faith by the respondent in attempting to achieve compliance; and (6) effect on the respondent's ability to continue in business. In addition PHMSA may consider the economic benefit gained from violation, if readily ascertainable, without any reduction because of subsequent damages; and such other matters as justice may require.

To the extent that PHMSA finds that Gulf South did not comply with PHMSA's integrity management regulations, consideration of these factors support eliminating or substantially reducing the proposed civil penalties.

Gulf South demonstrated good faith effort to develop a complete and comprehensive IMP that complies with all of PHMSA's extensive regulatory requirements for integrity management. When developing its IMP, Gulf South retained outside experts to assist in drafting procedures, identifying threats and performing extensive risk analyses, and developing mechanisms for continually gathering information across the pipeline system. Gulf South also retained an expert to audit the IMP and then revised the program to incorporate audit recommendations. Gulf South continues to modify its integrity management program to develop more detailed procedures based on operational experience and new data. Gulf South therefore, has no "culpability" with respect to its IMP. In addition, the relatively narrow range of alleged inadequacies identified in the NOPV and the fact that the alleged violations concerned the implementation of new regulations and were identified during PHMSA's initial audit of the IMP reflects the substantial effort Gulf South undertook in developing its IMP and to ensure its compliance with PHMSA's regulations.

Consideration of the nature, circumstances, and gravity of the alleged deficiencies also supports eliminating or substantially reducing the proposed civil penalties. With respect to NOPV items 4, 13, 14, Gulf South demonstrated that it adequately addressed the threat of third party damage on Index 130 by using acceptable assessment methods and by integrating the results of multiple tools. Gulf South, therefore, properly credited Index 130 in the BAP.

More specifically, with respect to NOPV 4, Gulf South demonstrated that its IMP (1) includes adequate quality assurance and quality control procedures for threat management; (2) contains adequate specification for performing and documenting internal and external program reviews; and (3) contains a Quality Assurance Plan that addresses ASME B31.8S requirements. The IMP therefore complies with § 192.911(l). With respect to NOPV 13, Gulf South's IMP contains processes for selecting appropriate assessment methods, based on applicable threats, in compliance with § 192.919(b). Regarding NOPV 14, Gulf South's procedures for analyzing and documenting ILI tool selection and ensuring that vendors meet quality assurance standards and applicable qualification requirements satisfied the requirements of § 192.921(a)(1). With respect to NOPVs 4, 13, and 14, Gulf South has demonstrated that assessing any civil penalty, let alone multiple civil penalties, simply is not warranted.

Similarly, with respect to NOPV 10, Gulf South's IRAS risk model incorporates and evaluates a comprehensive set of data points including all the data elements required in ASME B31.8S Appendix A and PHMSA's integrity management regulations. In addition, with respect to NOPV 11, Gulf South explained how it uses its risk model to accomplish PHMSA's regulatory objectives, in compliance with § 192.917(c). Assessing civil penalties for these NOPVs is not warranted, when the nature, circumstances, and gravity of the alleged deficiencies is considered.

Consideration of mitigation factors also warrants eliminating the proposed civil penalty for NOPV 17. The reason Gulf South did not have a schedule for addressing immediate or scheduled anomalies located in HCAs is because at the time of the audit, no such anomalies had been identified in any HCA. Gulf South, therefore, was not out of compliance with § 192.933(c) and the proposed penalty should be withdrawn.

With respect to NOPVs 19 and 22, Gulf South's IMP does address the selection of P&M measures. Moreover, Gulf South implements P&M measures globally on its system and performs periodic evaluations across its entire system. These measures are not limited to HCA areas. Again, when the nature and gravity of these "violations" is considered, the proposed civil penalty should be eliminated or reduced significantly.

Application of other considerations also supports eliminating or substantially reducing the proposed civil penalties. None of the alleged deficiencies has resulted in an accident, leak, or has otherwise adversely affected the environment. In addition, Gulf South has received no economic benefit from the alleged inadequacies in its IMP.

Gulf South also requests that PHMSA consider the fact that Gulf South is a publicly traded company and the imposition of civil penalties for the types of issues raised in this proceeding could create additional reporting obligations to its board of directors, shareholders and regulators. The assessment of civil penalties could trigger disclosure requirements to the Securities and Exchange Commission, trigger disclosure provisions under loan covenants, and require disclosures to underwriter's counsel, if the company is offering additional equity or debt to the market. These potential ramifications are excessive given the good faith at achieving overall compliance demonstrated by Gulf South in developing its IMP.

V. PHMSA Should Withdraw Other NOPVs and Proposed Compliance Orders.

As explained above in Section IV, Gulf South developed its IMP with a level of detail that was consistent with what the agency required in other procedural manuals. At the hearing, Gulf South presented evidence that its IMP contains provisions consistent with this approach that address each of the topics identified in the NOPVs. It has become apparent, however, that PHMSA expects a much higher level of detail in IMP procedures.

Gulf South demonstrates below that its IMP, which was developed with the assistance of expert consultants, reflects a good faith effort to address the requirements of PHMSA's integrity management regulations. In addition, Gulf South has complied with the regulatory requirements. Accordingly, Gulf South requests that PHMSA withdraw each NOPV and the proposed compliance order. Alternatively, if PHMSA finds that Gulf South's IMP is inadequate or incomplete, Gulf South submits that the same considerations that support mitigating or eliminating the proposed civil penalties (described above) also justify converting the NOPV into an NOA that directs a specific amendment to Gulf South's IMP.

NOPV 2: § 192.909(a) Documenting Changes to IMP and Reasons for Changes Before Implementation.

NOPV 2 alleges that (1) Gulf South's IMP had no procedures or documentation requirements for addressing changes to its IMP and that the IMP contains only a process flow description that is reflected in Fig. 14.1-1; (2) Gulf South modified its IMP without complying with the process and documentation requirements outlined in Figure 14.1-1; and (3) Gulf South's IMP did not include procedures and documentation for the Management of Change process to address technical, physical, procedural, and organizational changes and could not verify that it

had executed Management of Change activities according to regulatory requirements. PHMSA's proposed compliance order would require that Gulf South develop and implement appropriate Management of Change procedures to cover the issues addressed.

Section 14 of Gulf South's IMP addresses Management of Change. Gulf South explained at the hearing, and describes more fully in Attachment B-2, that it tracks changes to the IMP through a Document History Log and by indicating revision dates on individual pages of the IMP. Gulf South uses this approach in tracking changes to other programs and manuals, and has mechanisms in place, such as its "Distribution and Verification" memo, to ensure that all persons with responsibilities for the IMP and other procedures are kept current on the applicable requirements.

An audit of Gulf South's IMP performed in 2005 by an outside expert, Process Performance Improvement Consultants (P-PIC) reflects how Gulf South implemented change to the IMP in a manner consistent with Section 14. As reflected in the Summary Report prepared by the consultant that is included as part of Attachment B-2 to this Supplemental Response, the consultant recommended numerous modifications to the IMP and reviewed them with Gulf South personnel. The consultant also verified that Gulf South incorporated all of the changes affecting the substance of the IMP. These changes were documented in the Document History Log and the affected sections of the IMP were noted with a revised "effective date." At the hearing, PHMSA indicated that, while Gulf South's Management of Change process resulted in some evidence showing how the IMP had been updated, the IMP lacked a procedure to track the work completed.

Gulf South has documented changes to its IMP. To reflect the expectations of PHMSA as communicated during the audit and at the time of the hearing, with respect to the level of procedural detail required, Gulf South is revising this section of its IMP. Gulf South requests that PHMSA withdraw the NOPV, or alternatively, convert the NOPV into an NOA that directs Gulf South to amend its IMP.

NOPV 3: § 192.911(k): Management of Change Process

NOPV 3 asserts that Gulf South had (1) no procedure for keeping its BAP current with new information that could require changes to segment prioritization or assessment methods; (2) no detailed procedures to ensure compliance with section IMP Section 5.1's requirement that changes to the BAP have a reason, receive approval by proper authority, be analyzed for implications, and be properly communicated to involved individuals; and (3) no documentation to show that changes made to BAP since December 17, 2004 complied with these Section 5.1 requirements. The PHMSA's proposed compliance order would require that Gulf South develop and implement appropriate BAP procedures to cover issues addressed.

Gulf South's BAP is contained in Section 5 of the IMP. As explained in Attachment B-3 to this Supplemental Response and as described at the hearing, Gulf South reviews the BAP annually, and incorporates changes to it, pursuant to Sections 1.2.2 and 6.5.1 of the IMP. The need for changes to the BAP is determined according to the procedures set forth in Section 4.7, which describes how Gulf South annually recalculates the risk assessment by incorporating new

and revised data into the database and re-evaluating risk to pipe segments. This recalculation provides information on which Gulf South determines whether changes to the BAP are needed. Gulf South also uses these risk results to determine reassessment intervals and assessment methods and to make decisions regarding remediation. Gulf South retains a permanent record of risk results and supporting in a software program called RiskAnalyst. Updates to the BAP are tracked by reflecting revised “effective dates” on the document’s individual pages.

Gulf South’s procedures for incorporating new data into its risk model, recalculating its risk assessment, and updating its BAP ensure that the BAP is current and reviewed annually. Gulf South accepts the revised BAP annually as part of a process that also verifies that the risk results are appropriate. In addition, updates to the BAP are performed in accordance with Gulf South’s Management of Change procedure and updates are tracked on the BAP spreadsheet. Gulf South complies with § 192.911(k)’s requirement to maintain and follow Management of Change procedures with respect to its BAP. At the hearing, PHMSA expressed concern that Gulf South did not have procedures needed to ensure complete compliance with this regulation and indicated that a framework of procedures was not adequate for IMP tasks the company currently perform. In response to PHMSA’s expectations regarding the level of detail required, Gulf South is revising its IMP. Gulf South requests that PHMSA withdraw the NOPV, or alternatively, convert the NOPV into an NOA that directs Gulf South to amend its IMP.

NOPV 5: § 192.911(l) Quality Assurance Process

NOPV 5 asserts that Gulf South provided no evidence that it took recommended corrective measures following an external review of its IMP and had no process for tracking corrective measures to completion. In addition, this NOPV alleged that Gulf South had no procedures to ensure that contractors are required to have appropriate QA/QC controls. The proposed compliance order would require Gulf South to detail its plans for each of the findings in the third party review of its IMP and develop and implement appropriate QA/QC procedures for contractors.

As described above in Gulf South’s response to NOPV 2, Gulf South retained P-PIC, an expert consultant, to perform an audit of its IMP in 2005. As indicated in P-PIC’s Summary Report, P-PIC’s detailed written report recommended a number of changes to the IMP. The Summary Report states that Gulf South incorporated all the recommended substantive changes in the presence of P-PIC. The consultant’s summary report stated that all corrections to the IMP had been handled properly. As noted above in Gulf South’s response to NOPV 2, Gulf South noted the changes resulting from the audit in the Document History Log of its IMP and by updating the effective date of individual pages of the IMP. Attachment B-5 of this Supplemental Response provides further description of this audit and includes P-PIC’s summary report.

With respect to QA/QC controls for contractors, Gulf South uses several mechanisms to ensure quality control of vendor services. As described more fully in Attachment B-5, Gulf South (1) requires contractors to provide assurance of appropriate QA/QC controls in contracts; (2) includes a section relating to control of vendor-supplied services in Section 12.8 of its IMP; and (3) requires that vendors agree that their personnel satisfy Qualification Standards for personnel performing in-line inspections established by API and ASNT. In addition, Gulf South

explained that Tuboscope adopted a Quality Management Manual in 2002. Attachment B-5 includes documentation of compliance with these measures and standards.

Gulf South implemented and documented the recommended corrective actions resulting from the 2005 audit of its IMP, in compliance with § 192.911(l). In addition, Gulf South has adequate mechanisms in place to ensure vendor compliance with quality control requirements and applicable industry-established qualification standards. To conform with the expectations expressed by PHMSA at the hearing, however, Gulf South is developing more detailed procedures with respect to vendor QA/QC requirements. PHMSA should withdraw the NOPV and proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 6: § 192.911(m) Communication Plan

NOPV 6 asserts that Gulf South has no procedures addressing how it will regularly and routinely communicate and document IMP issues internally or facilitate broad internal understanding and buy-in to the IMP. In addition, the NOPV states that the IMP has no procedures describing how Gulf South will address concerns raised by PHMSA and state/local officials, and that Gulf South did not produce the Integrity Management Awareness Program referenced in IMP Sec. 11.1. The proposed compliance order would require that Gulf South develop and implement appropriate procedures addressing internal and external communications.

Section 11 of Gulf South's IMP addresses how Gulf South communicates information regarding its IMP internally and with external stakeholders. Specifically, Section 11 describes how its Public Awareness Program governs how Gulf South communicates with various stakeholder audiences. With respect to internal communications, Section 11.3 requires that the IMP be distributed internally to those who are actively engaged in conducting or monitoring integrity management activities. In addition, Attachment B-6 to this Supplemental Response describes the numerous employee meetings Gulf South has conducted to inform personnel regarding the IMP and its requirements.

Section 11.2.2 of the IMP states that Gulf South's Public Awareness Program addresses how Gulf South responds to concerns raised by PHMSA and other public officials and identifies the Gulf South personnel responsible for such communications. At the time of the January 2006 audit, no Gulf South-specific concerns had been raised by PHMSA or any state or local officials.

Gulf South's IMP addresses internal and external communications with respect to IMP issues. In response to the expectations of PHMSA, communicated during the audit and the hearing, Gulf South is revising its procedures specifying how it communicates with employees regarding IMP requirements and how it will communicate with PHMSA. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 7: § 192.915(b)&(c) Personnel Knowledge and Training

NOPV 7 states that Gulf South had no procedures or program qualification requirements documented in the IMP for personnel who perform assessments and review assessment results or for other personnel who perform IMP activities. The proposed compliance order would require that Gulf South develop and implement appropriate training procedures to cover the issues addressed.

Gulf South explained at the hearing that Section 1.2.1 of the IMP describes the Roles and Responsibilities of personnel involved in integrity management activities. Section 13 of the IMP states that the training, qualification, and evaluation requirements applicable to individuals who conduct these activities are set forth in Gulf South's Operator Qualification (OQ) program. Section 13 then provides an overview of these OQ provisions. In addition, to ensure that personnel holding integrity management positions are qualified to perform them, Gulf South has developed job descriptions for these positions specifying the skills and qualifications an applicant for the position must have. Hiring decisions for these positions are based on an assessment of whether an applicant satisfies these requirements.

The IMP and Gulf South's practice of ensuring that all personnel who perform integrity management-related tasks meet specified skills and qualification requirements demonstrate compliance with § 192.915(b) & (c)'s requirement for procedures or program qualification requirements applicable to personnel who engage in integrity management-related activities. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP accordingly.

NOPV 8: § 192.917(a) Threat Identification

NOPV 8 asserts that Gulf South had no procedure to properly evaluate and/or eliminate threats. Specifically, the NOPV states that "no systematic process is described or implemented that demonstrates how threats are evaluated for specific segments and their applicability or nonapplicability documented for use in of the elements of the program." In addition, the NOPV asserts that Gulf South eliminated threats improperly. In particular, the NOPV states that Gulf South's documentation did not justify why cyclic fatigue or other loading conditions were eliminated as a threat for all pipeline segments. Finally, the NOPV states that Gulf South had no procedure for analyzing in the risk model or program documentation interacting threats, such as corrosion related to LF-ERW pipe or accelerated by third-party or outside force damage. The proposed compliance order would require Gulf South to develop and implement appropriate threat assessment procedures to cover the issues addressed.

As described at the hearing and as set forth in Attachment B-8 to this Supplemental Response, Section 4.2 of Gulf South's IMP describes how Gulf South identifies and evaluates threats to the pipeline system. Section 4.4 of the IMP describes Gulf South's risk assessment methodology and the comprehensive risk algorithm Gulf South uses to assess risk associated with those threats across its entire pipeline system. The risk database incorporates a comprehensive list of data elements, and Gulf South did not arbitrarily eliminate any threats to

the pipeline. Specifically, as detailed in sections 4.5.5 and 4.5.6, the risk algorithm considers the potential for cyclic fatigue when it calculates defect scores for threats that are associated with seam defects and joining defects. In addition, Gulf South explained that, although operating conditions contributing to fatigue are not common on its system, Gulf South monitors for such conditions by reviewing operating pressure information generated from SCADA records.

In addition, Section 4.4 of the IMP provides that the risk algorithm also considers how threats interact. Sections 4.5.5 and 6.3.1 of the IMP provide for modification of assessment plans for interacting threats that could adversely affect the stability of residual manufacturing and construction defects.

Gulf South has demonstrated that its risk model and risk algorithm reflect a comprehensive approach to evaluating threats and assessing risk on its system in compliance with § 192.917(a). Gulf South did not eliminate any threats, including cyclic fatigue, without justification. In addition, the risk model evaluates the risk associated with interacting threats. To address PHMSA's expectations with respect to the level of procedural detail required, however, Gulf South is undertaking to revise these portions of its IMP. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 9: § 192.917(b) Data Gathering and Integration

NOPV 9 asserts that Gulf South did not have procedures for gathering and integrating data, no process/procedures describing the requirements to gather or integrate data, and no QA/QC procedures to ensure data quality. In addition, NOPV 9 asserts that Gulf South had no procedures or program controls to ensure that the IMP uses the data sources listed in ASME B31.8S, Table 2 and had no procedures or program requirements to address the basis for IMP assumptions made when data is missing or suspect. In particular, the NOPV stated that Gulf South did not address the following: (1) all threats must be assumed to apply; a lack of data does not justify excluding the threat; (2) conservative assumptions must apply in assessing risk for that threat or segment, or the segment requires a higher priority; (3) records explaining use of unsubstantiated data are required so that GS can consider impact on variability and accuracy of assessment results; and (4) additional inspection actions or field data collections efforts may be required. PHMSA's proposed compliance order would require Gulf South to develop and implement appropriate procedures to cover the data gathering and integration issues addressed.

Section 4.3 of Gulf South's IMP describes how Gulf South gathers and integrates data. As Gulf South explained at the hearing, and describes more fully in Attachment B-9, numerous procedures and activities performed on the pipeline generate data across the system. This data is integrated into the risk database and incorporated into Gulf South's risk model. IRAS, which calculates risk along pipeline segments and determines relative risk rankings. Section 4.7 of the IMP provides that the risk database is refreshed on a regular basis, and that if new data affects risk to a particular segment, Gulf South will recalculate the risk assessment. Section 4.3.5 states that Gulf South ensures data quality through data validation methods.

IRAS assesses risk to the pipeline by considering an exhaustive set of data points that correspond to the data elements required in ASME B31.8S. As fully described in Attachment B-9, when data is not available or its quality is unknown, Gulf South uses conservative defaults and worst case scenarios. Further, the IMP states that when information is unknown, missing, or defaulted, a higher risk score is calculated by the risk algorithm. No threat is excluded. Sections 4.5 and 4.6 of the IMP set forth the conventions used for assigning default data. Gulf South personnel continually gather data to ensure quality and accuracy.

Gulf South has demonstrated that it utilizes a thorough approach to gathering and integrating data in its risk model and to using that data to properly assess risk to the pipeline in compliance with § 192.917(b). All threats are assumed to apply and conservative assumptions are used when data is unknown or questionable. Nevertheless, to reflect PHMSA's expectations, Gulf South is revising its procedures explaining how Gulf South executes these tasks. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 12: § 192.917(e)(3) Risk assessment – Actions to Address Manufacturing and Construction Defects

NOPV 12 asserts that Gulf South had no defined processes or procedures to address manufacturing and construction defects. Specifically, the NOPV states that the IMP did not include defined processes or procedures for monitoring operating pressure increases above maximum operating pressure during the preceding five years, MAOP increases, or the stresses leading to increased cyclic fatigue that may have occurred on covered segments. The proposed compliance order would require that Gulf South develop and implement appropriate procedures to cover these manufacturing and construction defects issues.

Gulf South evaluates manufacturing and construction defects through the annual risk assessment performed by IRAS. Sections 4.5.5 and 4.5.6 of the IMP specifically address manufacturing and construction defects. In addition, as Gulf South explained at the hearing and more fully describes in Attachment B-12, Sections 6.3.1 and 8.5 address monitoring operating pressures on pipe segments. In addition, although operating conditions resulting in fatigue are not a characteristic on Gulf South's system, Gulf South monitors operating pressures by reviewing SCADA data for operating conditions that might increase the potential for fatigue. Gulf South's risk algorithm evaluates the potential for cyclic fatigue when calculating defect scores for threats associated with seam and joining defects.

Gulf South's process of evaluating manufacturing and construction defects through its IRAS risk model which considers an exhaustive amount of data, and its process of monitoring operating pressures and conditions that might give rise to cyclic fatigue are consistent with the requirement of § 192.917(e)(3). However, to reflect the expectations of PHMSA expressed during the audit and at the hearing regarding the level of procedural detail required, Gulf South is revising its procedures addressing how these tasks are accomplished. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 15: § 192.921(f) & (g) Newly Identified Areas and Newly Installed Pipe

NOPV 15 asserts that Gulf South did not have procedures or programmatic requirements for completing a BAP for segments containing newly identified HCAs and newly installed segments within 10 years. Such procedures and process descriptions must describe how a BAP is updated to reflect the required assessment schedule. The proposed compliance order would require that Gulf South develop and implement appropriate procedures to cover the issues addressed with respect to Baseline Assessments for Newly Identified HCA areas.

Gulf South explained at the hearing that Section 3 of the IMP requires that new HCAs and newly installed pipe be included in the BAP within required timelines on an ongoing basis. With respect to incorporating new HCAs into the BAP, Section 3.1.1 states that HCA's are incorporated into the BAP within one year of being identified. They also are assessed within seven years, which is less than the 10 years mandated by the regulations. When Gulf South performs its annual risk assessment, new HCAs are considered and incorporated into the Baseline Assessment schedule. The new BAP is communicated internally as required.

Gulf South incorporates new HCAs into the BAP as required under the regulations and in compliance with the requirements of § 192.921(f) & (g). To reflect PHMSA's expectation regarding the required level of detail, Gulf South is revising its procedures addressing how new HCA's are included in the BAP and how the BAP is updated. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 16: § 192.933(c) Required Actions to Address Integrity Issues

NOPV 16 asserts that Gulf South had no procedures defining the process used to justify² why a remediation schedule cannot be met and why a changed schedule will not jeopardize public safety. The NOPV states that the IMP does not specify who develops the justification, its contents, or where the record is maintained. The NOPV stated that although Gulf South indicated that such justifications would be placed in dig packets, the pipeline had no procedure for developing dig packets. PHMSA's proposed compliance order would require that Gulf South develop and implement appropriate procedures to cover the issues addressed with respect to evaluation and remediation schedules.

As explained above, in response to NOPV 17, at the time of the January 2006 inspection, Gulf South did not have any immediate or scheduled anomalies located in any HCAs. Gulf South, therefore, did not have a schedule record for such anomalies in HCAs. Gulf South explained further, that if it were to discover an immediate or scheduled anomaly in an HCA, it would schedule response activities according to the procedures outlined in Sections 7.5 of the IMP.

² Federal pipeline safety regulations no longer require operators to "justify" why a remediation schedule cannot be met. Rather, an operator is required to "explain the reasons why it cannot meet the schedule and how the changed schedule will not jeopardize public safety." 72 Fed. Reg. 39,012 (July 17, 2007).

Section 7.6 of Gulf South's IMP defines a four-step process used to justify why a remediation schedule cannot be met and why a changed schedule will not jeopardize public safety. As Gulf South explains in Attachment B-16, any such justification would be based on an Engineering Assessment. There have been no circumstances where Gulf South has been unable to meet a remediation schedule.

Gulf South's IMP contains the processes required under § 192.933(c). As explained during the audit and at the hearing, at the time of the audit, Gulf South had no scheduled or immediate anomalies located in any HCAs. PHMSA should withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 18: § 192.935(a) Additional Preventive and Mitigative Measures

NOPV 18 states that Gulf South did not have formal procedures or documentation to identify required additional P&M measures to be selected or implemented that also would consider both the likelihood and consequences of a failure. The proposed compliance order would require that Gulf South develop and implement appropriate procedures to cover the issues addressed with respect to P&M measures.

At the hearing, Gulf South identified numerous provisions in its IMP addressing the process for selecting P&M measures. Gulf South also identified key activities involved in process of selecting and optimizing P&M actions. This process of determining appropriate P&M measures considers the overall risk (probability and consequence) of a pipeline segment. In addition, as explained above in response to NOPV 17, Gulf South implements a number of P&M measures globally on its system. These measures, which PHMSA acknowledged at the hearing enhance public safety, are more fully described in Attachment B-18 to this Supplemental Response.

Gulf South complies with the requirements of § 192.935(a). However, so that its IMP reflects the expectations of PHMSA, as expressed during the audit and at the hearing, Gulf South is revising its procedures addressing the selection of P&M measures for HCA segments. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 20: § 192.935(c) P&M Measures: Automatic Shut-off Valves or Remote Control Valves

NOPV 20 states that Gulf South had no documented risk-analysis-based procedure for determining if Gulf South should install automatic shut-off valves (ASV) or remote control valves (RCV). The proposed compliance order would require Gulf South to must develop and implement appropriate procedures to cover the issues addressed with respect to ASVs and RCVs.

At the hearing, Gulf South explained that Section 8.1 of its IMP contains the criteria that would be considered to determine if ASVs or RCVs should be installed on the system. Gulf

South noted, however, that reports prepared by the Gas Research Institute and PRCI have analyzed Department of Transportation incident data and have concluded that no relationship has been shown between reducing injuries or fatalities and implementing shorter valve spacing or rapid closing main line valves.

Gulf South explains in Attachment B-20 to this Supplemental Response that Gulf South's approach to mitigating risk has been to preemptively identify threats and prevent failures that might result from such threats rather than trying to achieve shorter isolation times through installation of ASVs and RCVs. This is the approach reflected in Gulf South's IMP provisions addressing Risk Assessment, Assessment Plan, and Remediation of Anomalous Conditions. Specifically, Section 8.7 of the IMP provides that if the risk assessment identifies a significant risk of third party damage, outside force, manufacturing defects, welding/fabrication defects, equipment failure, and incorrect operations, an assessment is performed to determine how to best mitigate the risk. This assessment and the potential means for reducing the threat consider both likelihood of failure and consequence of failure.

As explained above, Gulf South's approach to mitigating risk focuses on preemptively identifying threats and potential failures that could result from them. Gulf South's IMP also contains a specific provision addressing how Gulf South responds if it discovers a significant risk. These provisions of Gulf South's IMP satisfy the requirements of § 192.935(c). Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

NOPV 21: § 192.937(b) Continual Process for Evaluation and Assessment to Maintain Integrity

NOPV 23: § 192.937(b) Continual Process for Evaluation and Assessment to Maintain Integrity

NOPV 21 asserts that Gulf South did not have procedures or documentation requirements for performing periodic evaluations based on data integration and risk assessment of the entire pipeline, and did not perform the evaluations consistent with rule requirements. The NOPV also stated that Gulf South did not have procedures or documentation requirements for performing periodic evaluations to establish reassessment methods and schedules. The proposed compliance order would require that Gulf South develop and implement appropriate procedures and evaluations to cover the issues addressed with respect to Periodic Evaluations.

NOPV 23 asserts that Gulf South did not have procedures and documentation requirements for reviewing results of completed periodic evaluations to determine if new information warrants changes to either reassessment intervals or methods. The proposed compliance order would require that Gulf South develop and implement appropriate procedures to cover the issues addressed regarding periodic evaluations.

Gulf South explained at the hearing that Sections 6.5.1 and 6.5.2 of its IMP address periodic evaluations for covered segments by integrating data from the entire pipeline system, refreshing the database regularly, and requiring that the risk assessment model be run on a yearly

basis. In addition, Section 4.7 of the IMP describes how the risk database is refreshed. Risk results generated by IRAS are used to determine the appropriateness of reassessment intervals, assessment methods, remediation decisions, and additional P&M actions. If the annual review of risk results and other information demonstrate the need for a different reassessment interval, Gulf South makes adjustments accordingly.

These provisions of Gulf South's IMP comply with the requirements of § 192.937(b) for periodic evaluations. To reflect the expectations of PHMSA as expressed during the audit and at the hearing, however, Gulf South is revising its procedures addressing how it conducts periodic evaluations. Gulf South requests that PHMSA withdraw this NOPV and the proposed compliance order. Alternatively, PHMSA should convert the NOPV into an NOA and direct Gulf South to amend its IMP.

VI. Conclusion

For the reasons stated above, Gulf South requests that PHMSA withdraw NOPVs 1A and 1B, including their proposed civil penalties and proposed compliance orders.

PHMSA also should withdraw the NOPVs and eliminate the proposed civil penalties and proposed compliance orders relating to Gulf South's IMP. With respect to IMP items in this case, PHMSA does not have the legal authority to assess civil penalties, because its remedial authority is limited to the regulatory authority it had when it conducted the audit in January 2006, which did not include the authority to impose civil penalties. Gulf South also demonstrated at the hearing, and herein, that the NOPVs should be withdrawn because the IMP addresses the requirements of PHMSA's regulations and Gulf South complies with those requirements. Nevertheless, to the extent PHMSA finds that Gulf South's IMP was inadequate, the criteria set forth in 49 C.F.R. § 192.225 warrant elimination or reduction of the proposed civil penalties. Alternatively, PHMSA should convert these NOPVs into Notices of Amendment. Those same considerations also support withdrawal of NOPV items that do not propose civil penalties. Gulf South made a good faith effort to address each regulatory requirement and demonstrated that it has complied with each regulatory requirement. Alternatively, PHMSA should convert those NOPVs into Notices of Amendments.

Respectfully submitted,



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