## Response to Written Questions Submitted by Hon. John Thune to Jack Gerard

Question 1. In December 2014, President Obama observed that, at times, "the regulatory agencies treat every problem like a nail and only have a hammer, and aren't engaging with industry enough to think, all right, here is the problem we're trying to solve, is there a smarter way of solving it." How effective have regulators been in working with industry and incorporating their perspectives?

Answer. Unfortunately, we often find that regulators impose requirements that are either not achievable, not cost-effective, or that will not achieve the intended results. This often leads industry to litigate such flawed final rules to obtain the necessary relief from agency actions.

Technological innovations and industry leadership have propelled the oil and gas industry forward despite the unprecedented onslaught of 145 new and pending federal regulatory and other administrative actions targeting our industry. The oil and natural gas industry remains committed to regulatory structures that promote safety, environmental protection, and responsible operations and it continues to look for ways to collaborate with regulators.

API has long supported and continues to support reducing the regulatory burdens on industry and urges Congress and the Administration to take measures to lower the cost to businesses while protecting workers, consumers, communities and the environment. We have also urged OMB to ensure that existing and future regulations are consistent with their authorizing statutes.

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Wood Mackenzie evaluated the impact on the US economy of various pro-development policies and regulatory constraints in the oil and natural gas sectors. See http://www.api.org/news-policy-and-issues/american-jobs/comparison-of-us-oil-and-gas-policies

- API requested Wood Mackenzie investigate the impact of potential changes to various oil and natural gas-related policies at both a federal and state level
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- The impacts are characterized in terms of jobs, GDP, government revenues, and household income and energy expenditure
- Both upside and downside scenarios were compared to a Baseline forecast that excludes the listed pro-development policies and the regulatory constraints

The table below highlights key differences that pro-development approach could bring.

As is clear, pro-development policies could lead to more production, more jobs, more government revenue and reduced household energy expenses.

Question 2. It is critically important that our energy products get to market safely and efficiently. Last Congress, this Committee approved several safety improvements to crude-by-rail transportation in the bipartisan FAST act, signed into law in December 2015. What is the status of industry compliance with those new requirements, and how you expect them to improve safety?

Answer. Safety is our industry's number one priority. API has been a proponent of a thoughtful, comprehensive and data-driven safety approach in order to improve on the 99.997 percent safety record of freight rail to reach our goal of zero accidents. Over the past several years, we've been working collaboratively with regulators, railroads, tank car builders, and other shippers to improve the safety of crude-by-rail transportation. Those efforts were furthered by the finalization of the tank car standards laid out in the FAST Act which included requirements for thermal insulation for DOT 117 and 117R cars and top fittings protection for retrofitted cars.

API has also supported the upgrading of the tank car fleet and would like to see these upgrades completed as quickly and as realistically possible. The industry is progressing with the retrofits and replacements of older tank cars. According to data from the Railway Supply Institute (RSI), the new DOT 117 standard now represents 14% of the crude oil fleet, up from 4% last year. At the same time, DOT 111's now represent only 3% of the fleet.

(<a href="http://www.tankcarresourcecenter.com/wp-content/uploads/2014/07/FASTAct\_ImplementationUpdate.pdf">http://www.tankcarresourcecenter.com/wp-content/uploads/2014/07/FASTAct\_ImplementationUpdate.pdf</a>)

Question 3. Apart from those discussed in your testimony and at the hearing, are there any other examples of areas in which we can reform our transportation regulations to help get our goods to market more efficiently without compromising safety.

Answer. As an industry, we are committed to delivering 100 percent of our product to its destination without incident, and that is why we have been in agreement with the Pipeline and Hazardous Material Safety Administration and supported the development of effective and efficient natural gas and liquid pipeline rules to address pipeline safety. Unfortunately, the agency's proposed pipeline rules in some instances undermines the very safety efforts we are trying to bolster by applying a prescriptive one-size-fits-all approach that requires the shift of valuable industry resources away from potentially higher to low consequence, low risk areas. So, I would re- emphasize the point that it makes little sense to advance rules that will weaken and water down safety. In the case of the hazardous liquid and natural gas pipeline safety rules, we look forward to working with PHMSA in further analyzing and improving both rules to more effectively help guide the industry's attention and resources to those safety areas that can truly advance safety.

Question 1. Mr. Gerard, you mentioned concerns with PHMSA's proposed natural gas transmission rulemaking, particularly as it relates to the agency's cost-benefit analysis and industry stakeholder estimates that found the rule would cost \$33.4 billion to implement. How do you think that PHMSA and other agencies could strengthen their cost-benefit analysis to better analyze the impact of regulations?

Answer. Reflecting on recent cost-benefit analyses done by PHMSA, there are a number of items federal agencies can do better to analyze the costs and benefits of regulations. One of the first steps should be to ensure that proposed rules are drafted as clearly as possible. Ambiguity is the enemy of accurate analysis. When a rule is written in a manner that allows vastly different interpretations, it is impossible to conduct a cost-benefit analysis that all parties will agree upon. In a similar vein, agencies should endeavor to fully understand how industry operates and how changes in regulations would change these operations. Failing to do this would result in incorrect baseline assumptions that doom the analysis from the start. The impact is compounded when the activity being regulated is already governed by an industry standard. The impact of forcing a change in how the industry operates can reverberate through the supply chain in unexpected ways.

There are a number of more specific suggestions inspired by the PHMSA analyses. First, agencies should be skeptical of cost estimates provided by vendors for new technologies. Regulations routinely call for the deployment of novel and commercially untested technologies. Few vendors have real world estimates of how much these technologies will actually cost. Agencies should also recognize that vendors likely have an incentive to underestimate these costs and should account for that in their analysis. Second, agencies should base benefit estimates on actual incident rates. When a catastrophic event occurs, there appears to be a tendency to assume that accidents of that magnitude are now more likely without presenting compelling analysis to support that claim. Third, agencies need to abide by OMB Circular A-4 in applying the same range of interest rates to costs and to benefits. Currently agencies, including PHMSA, are estimating benefits using the Social Cost of Carbon/Methane (which is calculated at 5%) and comparing those benefits against costs that have been discounted at 7%. Fourth, agencies should consider the impact of the proposed regulation on small entities. Even if the overall costs of a provision do not appear excessive, the costs at the company-level can be well beyond the operating capacity of many small businesses. As an example, according to ICF's analysis on the natural gas transmission and gathering line rule, small gathering line operators are disproportionately disadvantaged. The estimated annual compliance costs for small companies nearly equals estimated annual revenues from gathering fees. Lastly, agencies should be encouraged to perform cost-effectiveness analysis, per the direction provided in OMB Circular A-4, in conjunction with cost-benefit analysis to determine if there are less costly ways of achieving the same outcome.

Question 2. Mr. Gerard, in your written testimony you commented that the Pipelines and Hazardous Materials Safety Administration (PHMSA) has "strayed from a risk based approach" as it relates to the proposed natural gas transmission rule. As you are aware, in 2016, Congress passed the PIPES Act, bipartisan legislation I authored to strengthen risk management at PHMSA. The bill

included a GAO assessment of the risk-based integrity management programs at PHMSA. Would you please provide more details about your concerns about PHMSA's risk based approach? How can Congress work to strengthen this approach at PHMSA?

Answer. API members are dedicated to a risk-based approach to pipeline safety—one that strives for continuous improvement through addressing known, quantifiable issues. Importantly, that is the same approach that Congress has used over the decades in its directives to the Department of Transportation (DOT) and PHMSA for regulating pipeline safety. However, API believes that the proposals in the natural gas transmission and gathering lines NPRM do not reflect a risk management approach, as directed by Congress, targeted toward eliminating the most significant risks posed to public safety and the environment.

With regards to integrity management, the natural gas transmission and gathering rule sets forth prescriptive repair criteria requirements following pipeline inspections. According to the NPRM, if an operator discovers an anomaly in their pipeline, the operator is not allowed to holistically assess the conditions of their pipeline and operate conservatively based on available data. The operator is instead forced to repair all discovered anomalies despite the level of risk posed to the pipeline. As such, the proposal is not based on risk but is instead based on a misguided principle that more is better without grounding that determination in potential pipeline safety improvements and benefits to the public and the environment.

PHMSA also proposes to regulate small-diameter rural gathering lines without regard to congressional mandates that required adequate data collection, appropriate risk-based analysis completion, and demonstrated increase to public safety or the environment. PHMSA did not conduct a thorough analysis of the existing rules as required by the 2011 PSA. Nor did they provide any qualitative or quantitative data demonstrating that such gathering lines pose a direct risk to the public. API requests that PHMSA allow operators to focus resources on the highest risks to their pipelines and maintain the flexibility to apply these requirements to operating pipeline systems.

Further, PHMSA should develop regulations based on comprehensive data and corresponding risk analyses.

Question 3. As it relates to regulatory reform, I've been a strong proponent of transparency, better cost-benefit analysis, and more stakeholder participation in the process. As chair of the Surface Transportation Subcommittee, I've convened hearings on performance-based regulations, whereby agencies set goals or benchmarks and allow flexibility in achieving those goals. From your perspectives, what are the benefits of moving away from prescriptive regulations towards more goal-oriented regulations?

Answer. PHMSA's integrity management regulations are built on the performance-based regulatory model which allows operators a variety of options to apply minimum safety standards to the specific characteristics of their pipeline systems. These regulations have been extremely successful in improving pipeline safety since their implementation in 2004. Pipeline systems are complex and vary greatly from operator to operator and system to system. Each pipeline operates

uniquely; therefore, companies need flexibility to manage their assets appropriately and safely. For example, one operator may have a pipeline located in rocky soil that requires specific protective measures from dents. Alternatively, an operator may have a pipeline in sandy soil, where dents are not a concern; however, measures must be taken to address subsidence. Again, current Integrity Management regulations provide operators with that flexibility to determine which methods are appropriate to meet minimum pipeline safety standards, while encouraging technological advancements. It would be impossible for one agency to provide prescriptive criteria for any situation that may be encountered in pipeline operation. API and its members strongly support continued reliance on the current performance-based regulatory scheme because it is essential to improving pipeline safety and advancing pipeline technologies.

## Response to Written Question Submitted by Hon. Dean Heller to Jack Gerard

*Question*. Over the past few weeks, I have been traveling through some of Nevada's eastern rural counties, like Elko, Eureka, and White Pine. Many of our local elected officials have been trying to provide their constituents access to natural gas.

Many of these rural communities rely on propane, which as you know is significantly more expensive for the consumer. It is beginning to be a hindrance to economic development. For example, Wells and West Wendover, Nevada have attracted the interest from some significant manufacturing companies that could bring jobs and economic development to the communities that need it the most. Unfortunately, the lack of natural gas infrastructure is proving to be a deal breaker.

The President has called for legislation that would make significant investments in infrastructure, both transportation and energy development.

Should this type of legislation occur, what type of regulatory reform would make the investment in rural communities more attractive? What are some of the government deterrents that prohibit some of your member companies from making these types of investments?

Answer. Investments in pipeline infrastructure are typically funded by long-term precedent agreements between pipelines and private companies. As such, certainty in the regulatory process is critical to incentivize these types of investments in all areas, be it rural, urban, or suburban. We often find that regulators impose requirements that are either not achievable, not cost-effective, or that will not achieve the intended results. This often leads industry to litigate such flawed final rules to obtain the necessary relief from agency actions.

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## Key findings: Potential impacts of US oil and natural gas regulatory policies

Impact on US*	Pro-development Policies		Regulatory Constraints	
	2025	2035	2025	2035
Oil and Natural Gas Production	+2.8 MMboed**	+8.0 MMboed	-2.6 MMboed	-3.4 MMboed
Total Jobs Supported	+1.0 million	+2.3 million	-800 thousand	-830 thousand
GDP / Year***	+\$163 billion	+\$443 billion	-\$138 billion	-\$133 billion
Total Government Revenue / Year	+\$38 billion	+\$122 billion	-\$33 billion	-\$18 billion
Cumulative Gov't Revenue (2016 - 2035)	+\$111 billion	+\$1078 billion	-\$260 billion	-\$500 billion
Total Household Income / Year	+\$52 billion	+\$118 billion	-\$40 billion	-\$43 billion
Average Household Energy Expense	-\$169/year	-\$360/year	+\$255/year	+\$242/year

<sup>\*</sup>Incremental impacts assessed versus a Baseline scenario

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<sup>\*\*</sup>MMboed is million barrel oil equivalent per day \*\*\*All dollar numbers are in 2015 real US dollars