

Comments received via website as of 10-26-2012 for Draft Report: "Studies for the Requirements of Automatic and Remotely Controlled Shutoff Valves on Hazardous Liquids and Natural Gas Pipelines with Respect to Public and Environmental Safety"

Date	Name	Organization	Comments
10/17/12	Daniel Scarberry	Dominion East Ohio	Has PHMSA considered in their study the fact that many gas pipeline operators have experienced inadvertent ASV closures, without a plausible event? Operators are concerned with service disruptions from an inadvertent ASV closure.
10/18/12	Terry DeLong	Kinder Morgan	I wanted to make some comments regarding Case Studies 7 and 8 (hazardous liquids release without ignition) as I do not believe the numbers presented are an accurate reflection of reality for a crude oil system. The issue is primarily with the calculation of release volumes. Assuming a constant flow velocity was maintained during a rupture (ie. not considering pressure) the volume released during, the 5 min release phase would be approx 5,670 BBL. Pressure would have a significant effect on this volume of course, but the amount would depend on the pump curve of the upstream pump station. So the pump would run out on it's curve but there would be a limit of flow as it would, at some point, start to lose suction pressure. So the assumptions were not stated but the volumes given for this phase in all cases may be too conservative, especially in the 8C and 8D cases. I believe there are larger errors present in the calculation of block valve closure times. The report seems to assume that the line stays at full pressure after detection and pumping has ceased - this is not the case for a crude oil line. After the initial detection and shut down phase the line would unpack relatively quickly. The estimate of 345,536 BBL being released in the 90 min following system shut-down (Case 8A) is not a realistic number. That would mean almost 52 miles of line fill has drained out in 90 minutes, yet the pumps are shut off and the drain down length is only stated as 3 miles. The issue is even more magnified for the higher volumes - case Study 8c and 8D. For 8D this would be 140 miles of pipe draining out. The resulting "Avoided damage costs" are much too high in the case studies. This is supported by the fact that the Gulf oil spill clean-up costs are currently at about \$3 billion while the Enbridge Kalamazoo incident is at \$800 Million. A 90 minute to 3 minute closure time resulting in a cost avoidance of \$26.6 Billion is not realistic. Besides the volume calculation the spill clean-up costs used should be reviewed - is it appropriate to use a worst case scenario (ie, oil from a rupture needs to enter a stream) for this analysis? A land based spill would have a much smaller clean-up cost. Perhaps there are 2 scenarios worth considering, which would highlight the importance streams and rivers have with respect to EFRD considerations. The final point I would like to make about the study is the valve closure times considered in the report. Most automated valves in the oil pipeline industry would have a closure time between 2 and 15 minutes. I assume that the 30, 60 and 90 minute closure times are meant to reflect response time to close manual block valves in the event of a rupture. If this is the case I believe longer response times

			should be considered - these may be several hours depending on time of day, time of year, weather,etc.. As a result we do not take credit for manual valves in our EFRD studies. After the initial detection, response and valve closure phases, the majority of volume draining out of the pipeline is due to gravity drain out, so the effectiveness of EFRDs is very much subject to local topography. In conclusion I believe the studies for hazardous liquid pipeline release has made erroneous assumptions regarding theoretical maximum spill size in the event of a release resulting in unrealistic avoided damage costs numbers. The study as presented does not provide valuable guidance with respect to selection and placement of EFRDs on liquid pipeline systems. Thank you for the opportunity to comment on this study.
10/24/12	Richard Kuprewicz	Accufacts	Comments submitted by email. See separate document uploaded to website.
10/26/12	Mark Stephens	C-FER Technologies	Comments submitted by email. See separate document uploaded to website.
10/26/12	Dan Regan	INGAA	Comments submitted by email. See separate document uploaded to website.
10/26/12	Philip Bennett	AGA	Comments submitted by email. See separate document uploaded to website.
10/26/12	Peter Lidiak	API	Joint API-AOPL Comments submitted by email. See separate document uploaded to website.