

Testimony of Darren Smith, Environmental Policy Manager, Devon Energy Corporation

Before the Oversight Subcommittee of the Environment and Public Works Committee; Washington, D.C. November 5, 2013.

Chairman Whitehouse, Ranking Member Inhofe, members of the Subcommittee: good afternoon and thank you for the opportunity to testify on such an important issue.

My name is Darren Smith and I am Devon Energy's Environmental Policy Manager.

Devon Energy Corporation is a leading independent oil and natural gas exploration and production company, with operations focused onshore in the United States and Canada, in several of the major U.S. shale basins.

Devon has been actively engaged for the last several years in efforts to demonstrate to EPA that its method of estimating methane emissions from oil and gas operations is fundamentally flawed, resulting in gross overestimates. I testified to that effect in June of last year, and extensively described how this faulty data has been contaminating critical public policy research and considerations.

Since that time, Devon has continued to engage EPA in constructive dialogue, providing methodological suggestions and data — some of it from EPA's own greenhouse gas reporting program — to encourage EPA to revise the factor that it uses to represent methane emissions from hydraulically fractured natural gas wells.

This work is ongoing and Devon remains encouraged that EPA will act swiftly to revise its data. The UT-EDF Fugitive Methane Study that we are discussing today — one that EPA, environmental groups and industry hold in high regard — confirms what Devon has been telling EPA for more than two years: that its emission estimate for hydraulically fractured gas wells is an order of magnitude too high. The Study confirms that this EPA estimate is in fact around *50 times too high*.

The time for EPA to *finally* revise this erroneous emissions data is now. There is both consensus and confidence in the data that industry has provided, in the data reported

to EPA under its own greenhouse gas reporting rule, and in this new peer-reviewed scientific study.

Immediate action is vital because the EPA estimates have been relied upon by researchers, financial analysts and various policy makers as a basis for critical public policy considerations. In fact, a recently finalized EPA regulation on the oil and gas sector was justified using this inaccurate data. Equally troubling, a group of North Eastern states is threatening to sue EPA if it doesn't propose additional emissions regulations on the sector, in light of the Agency's use of flawed data. EPA must immediately revise its data to more accurately reflect emissions associated with this source category, before further harm is done.

Devon applauds the researchers and companies that participated in the UT-EDF Study, for their efforts to shed a necessary scientific light on the topic of fugitive methane emissions from oil and gas operations. Importantly, while some of the headlines and discussion surrounding the release of this study suggest that the low emission performance by the oil and gas industry is due solely to recent EPA regulations that force industry to use emission control equipment, this is misleading. The Study fails to recognize that in fact the industry was already voluntarily using many of these controls prior to the EPA mandate. I might add, that this mandate was actually justified in part using the flawed emissions estimate that we are discussing today.

Despite the Study's finding that emissions from hydraulically fractured wells are 50 times lower than what EPA previously estimated, the Study concludes that when other methane emission sources are added, methane emissions from overall gas operations are about the same as EPA previously reported in their inventory.

One source, pneumatic controllers — devices that use gas pressure from the well to maintain fluid levels and pressures at a well-site when no electricity is available — were found by the Study to emit more than EPA's prior estimate, thus offsetting the significant decline in emissions from completions with hydraulic fracturing. The end result is that the overall estimates of methane emissions from the entire system are about 10% lower than EPA's.

Many in the industry question whether conclusions about methane emissions from these pneumatic devices are premature since it is known that they will be analyzed further in Phase Two of the Study and the researchers have admitted on page 31 of the appendix: " There was significant geographical variability in the emissions rate from pneumatic controllers between production regions" and further, that: "Emissions per controller from the Gulf Coast are highest and are statistically different than emissions from controllers in the Rocky Mountain and Appalachian regions," and further "The difference in average values is more than a factor of 10 between Rocky Mountain and Gulf Coast regions."

The bottom line is that the researchers admittedly cannot explain this variability and have therefore correctly concluded that more study is needed in order to correctly establish what representative emissions are from these devices. We're confident that Phase Two of the Study will ultimately show that a few high emission measurements in one part of the country are not indicative of the nation-wide average. In fact, it's likely that Phase Two will lead to a downward revision of the emissions estimates from Phase One, as we understand that three out of the four regions already studied have demonstrated low emissions from these devices.

This would then mean that the overall methane emissions from gas production would fall even further below the Study's current estimate of 0.42 % of gross production and remain less than one-third to one-sixth of what critics believe is necessary for natural gas to benefit the climate.

One cannot lose sight of the fact that natural gas producers are in the business of selling methane and the industry will continue to make important innovations to improve efficiency and further reduce emissions. Not only is this a reflection of a strong commitment to environmental stewardship, but it is in companies' best interest to do so, because methane leaks represent lost revenue. I'm confident that future studies like the one we're discussing today will continue to reinforce this business fundamental.

This concludes my testimony. Thank you.