

**TESTIMONY BEFORE THE
ENERGY AND COMMERCE COMMITTEE
UNITED STATES SENATE FIELD HEARING**

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OPPORTUNITIES FOR WEST VIRGINIA RESULTING FROM MARCELLUS SHALE DRILLING

Good morning, I am Kevin West, Managing Director of External Affairs for EQT. EQT appreciates the opportunity to provide testimony to the Committee this morning.

EQT is truly an Appalachian based natural gas producer. We have been headquartered in Pittsburgh for over 120 years and have been operating in WV for over a century. We have 427 employees in West Virginia and it is estimated we are responsible for almost 500 additional jobs related to our operations. We have 5,288 natural gas wells and 5,100 miles of pipeline in West Virginia and have drilled 27 horizontal wells in West Virginia thus far in 2011, with that number reaching projected to reach 33 by year's end.

It has been conservatively estimated that there are between 98 Tcf and 150 Tcf of Marcellus reserves in West Virginia. This abundant natural resource presents West Virginia with a tremendous economic opportunity. In a time of economic downturn, the natural gas community is actually adding jobs. Studies examining the economic impact of natural gas production in West Virginia estimate that natural gas production in the state accounts for 7,600 jobs and total annual added revenues to the state's economy of a billion dollars. These same studies have projected that with steady growth at least 6,600 new jobs will be created by 2015. Development of the Marcellus Shale has enabled West Virginia to be the only state east of the Mississippi River that is a net exporter of natural gas.

EQT and other West Virginia natural gas producers are keenly aware that, with the opportunities that natural gas provides the state come the responsibility to be dedicated environmental stewards. Just as important as accessing this clean energy resource is making sure we place safety first.

The vast increases in our domestic natural gas supplies over the last few years have been made possible by two technologies that have been improved in recent years to the point where we are now able to tap into deep supplies of natural gas like the Marcellus Shale that were once thought to be inaccessible.

The first of these technologies is horizontal drilling. This process is exactly what it sounds like, a vertical hole is drilled that turns horizontally over a mile below the surface and then extends laterally. EQT's average lateral is approximately 5,000 feet and we have drilled laterals that extend as far as 9,000 feet. This is an important advancement because it allows multiple wells

to be drilled from a single well pad significantly reducing the overall environmental impact of drilling activities by giving access to more of the natural gas formation underground from a lesser amount of surface wells above ground. Thanks to horizontal drilling, today's average well site is just 30 percent of the size of its 1970s counterpart and can access 60 times more below-ground area. Continued technological advancements mean fewer wells are recovering even greater reserves and creating less surface disturbance and waste.

The other improved technique that is allowing natural gas producers to tap into new supplies of natural gas is hydraulic fracturing. Hydraulic fracturing takes place more than a mile below the earth's surface, and several thousand feet below any water sources. EQT has conducted micro-seismic testing, which revealed that from the surface down as deep as 5300 feet there was no impact caused by hydraulic fracturing.

Hydraulic fracturing is minimally invasive and involves drilling a small hole that is lined with three layers of steel encased in cement to protect any fresh water supplies and allow for the safe extraction of natural gas. Then pressurized water, sand and additives (less than one percent of the overall mixture) are used to create small, often millimeter-thick fissures in carefully targeted sections of the shale rock. This releases the natural gas, allowing it to safely rise to the surface within the self-contained system. In addition to ensuring that no water sources are impacted during the drilling and hydraulic fracturing process, EQT and other West Virginia producers have developed comprehensive spill prevention plans to minimize the risk that any water source will be affected by natural gas surface operations.

In the interest of providing the public with all of the facts about hydraulic fracturing, in August, 2010 EQT began posting on its website the contents of the hydraulic fracturing solution for each well we drill. Along with a broad range of industry participants, including America's Natural Gas Alliance, the Independent Petroleum Association of America and the American Petroleum Institute, EQT supports FracFocus.org – a public database of hydraulic fracturing fluids developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. This state-based registry of hydraulic fracturing fluids includes information on a well-by-well basis for operations on government and private lands.

Governor Tomblin, Secretary Huffman, and their staffs have and continue to ensure that natural gas operations are conducted in a safe and environmentally responsible manner. They possess the expertise to ensure that West Virginia's local air, land and water are not damaged by natural gas production. State-level enforcement is considered critical, because drilling practices are customized to the unique geological characteristics of different parts of the country. The geology of natural gas formations can vary greatly from region to region - even well site to well site in some areas. Each shale, and even different parts of the same shale, possesses unique geological characteristics that require specialized approaches to developing the natural gas found there. Well design, location, spacing, operation, water management and disposal, waste management and disposal, wildlife impacts and surface disturbance are all variables that differ and are accounted for by state-led regulation. EQT looks forward to continuing to work with West Virginia's state regulators so that West Virginia can reap the

benefits of natural gas production without any fear that its other abundant natural resources will be disturbed.

West Virginia has also taken a major step toward reducing its dependence on foreign oil by enacting legislation that promotes the use of natural gas vehicles. EQT looks forward to working with the state in providing its citizens with a cheaper, cleaner, American alternative transportation fuel.

Natural gas presents one of the most significant opportunities ever for West Virginia economic development. The state has and will benefit from the jobs natural gas production creates, the ability to attract industry to West Virginia that use natural gas as a fuel source or feedstock, and cheaper energy and fuel costs for its citizens. EQT has been in West Virginia for more than 100 years and is here for the long haul. We look forward to working with the rest of the natural gas community and West Virginians to help the state take advantage of this tremendous opportunity.

Thank you.