Principles for considering Marcellus Shale Drilling: An ethical analysis

Pennsylvania Interfaith Power & Light (PA IPL) is a community of congregations, faith-based organizations, and individuals of faith responding to climate change as a moral issue. We believe that decisions about whether or not to drill, and if so under what circumstances, must be set within four broad ethical contexts: the overall impacts of global climate change, the impacts of the full “life-cycle” of a given energy source from extraction through waste disposal, socio-economic impacts, and political impacts. This is in keeping both with our faiths and with the Constitution of the Commonwealth of Pennsylvania, which reads: “The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.” (Article 1, Section 27)

1) Global Climate Change

Our various faith traditions share a belief that the earth is good and precious in God’s sight. Human-caused global climate change is a corruption of that goodness. Indeed, it is potentially one of the most catastrophic trespasses against God’s good creation that humankind has made. To have any chance of staving off the worst consequences of global climate change, the transition away from fossil fuels must begin now and proceed swiftly. To that end, any energy source that helps with this transition must be seriously considered.

Natural gas (methane) is a fossil fuel, and thus its use contributes to climate change and must in the long term be eliminated. However, because it produces more useful energy per ton of CO₂ released than does coal, it is preferable as an energy source to coal. The process of extracting methane from the Marcellus Shale, however, makes this comparison less clear, especially since it appears that some methane, which is itself a very potent greenhouse gas, leaks into the atmosphere during extraction.

What may be at least as important as the extraction method, however, is how the methane will be used and taxed. Two very different scenarios might emerge. On the one hand, the use of natural gas could be a component of an overall strategy to move as quickly as possible away from coal in particular and fossil fuels in general, with substantial investment from a proportion of impact taxes going into the development of clean, sustainable energy sources that are the only viable long-term solution to climate change.
On the other hand, natural gas might be used simply to prolong our dependence on fossil fuels, even to the point of discouraging investment in sustainable energy sources. Income might go only to companies and landowners without any impact fees or taxes, or with such funds directed only toward the mitigation only of short-term, local impacts. Such a scenario would not be morally acceptable.

Therefore, PA IPL reiterates its opposition to coal as an energy source and opposes Marcellus Shale drilling as currently practiced, because it is not part of a strategy for making a rapid transition away from fossil fuel use. However, PA IPL would consider supporting drilling that was part of such a strategy, including provisions to direct portions of any fees or taxes collected to a) increase the use and development of sustainable energy solutions and b) increase energy efficiency and reduce overall energy consumption.

2) Life-cycle analysis

“There is the type of man whose speech about this world’s life may dazzle thee, calling God to bear witness what is in his heart: yet is he the fiercest of opponents. When he turns his back, his aim is to spread mischief through the earth, destroying crops and cattle. But God does not love mischief.”

(Qur’an 2: 204-205)

Our faith traditions teach us to be mindful of the consequences of our actions and to oppose those who pursue their own interests at the expense of the wellbeing of others. Coal causes severe health and environmental damage every step along the way, from mining through burning and ultimately disposal of the remaining ash. The lives not just of miners but of whole communities have been ruined through the relentless pursuit of coal, while ecosystems, mountaintops and even entire watersheds have been devastated. Pennsylvania offers abundant testimony to the fact that coal produces a wide variety of pollutants when burned, including carbon dioxide, smog, particulate matter, and toxins such as arsenic and mercury. Indeed, as of July 2011, Pennsylvania has the second-most toxic air pollution from power plants of any state in the country.

There are important, unresolved questions about the environmental consequences of the extraction of natural gas from the Marcellus Shale, including pollution of surface and ground water from either the “fracking” process or from methane itself. It seems likely, however, that despite the known and potential risks from “fracking”, methane can still be extracted, transported, and used with overall lower levels of environmental and health damages than from coal. Thus, if indeed natural gas is used to help move our nation away from the use of coal, there appears to be the potential for a reduction in overall environmental and health problems. However, if coal use is not diminished, it is difficult to justify the consequences of fracking. Furthermore, it is apparent that additional public disclosures and impact studies are needed to identify risks more clearly and avoid potential problems. Current loopholes preventing more stringent oversight of the fracking process need to be eliminated, and protective regulations governing shale development must be put in place and fully enforced. We need to provide a
climate in which all fracking companies are motivated to work at the highest standard of responsibility and care.

Therefore, PA IPL could only support drilling if overall environmental and health impacts are sharply reduced. As noted above, natural gas development must be made part of a strategy to reduce fossil fuel use, increase development of sustainable energy solutions, and increase energy efficiency. Further, we urge: a) full and immediate public disclosure of chemicals used in the fracking process; b) the timely completion of studies about water pollution, depletion, and other possible impacts from the drilling and fracking process; and c) national regulations to monitor and reduce all such impacts to the fullest extent possible.

3) **Effects on poverty and social injustice**

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<th>One is forbidden from gaining a livelihood at the expense of another’s health.</th>
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<td>Rabbi Isaac ben Sheshet, Responsa #196</td>
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We believe that we serve God through establishing justice – and economic gains that come at the expense of harming others are unjust. Many towns in Pennsylvania have already gone through one or more cycles of boom and bust from oil and coal production. Typically, these cycles have brought riches to few but lasting economic and social problems to many, ranging from depressed economies to scarred and infertile lands. So far, the Marcellus Shale developments, especially without taxes or impact fees in place, seem more likely to continue this destructive pattern than to break from it. In addition, illegal or ethically questionable practices by drilling companies have set neighbor against neighbor.

This needs to change. Strong state or even national level regulation could help prevent a “race to the bottom” by either smaller units of government or private citizens. It would also help prevent a “not in my backyard” mentality, whereby local groups oppose drilling in their area while still using natural gas extracted from other areas without concern.

A fee or tax system on current and future operations is imperative, and it should take into account not only short-term costs to communities, but the broader, longer-term issues such as mitigating climate change by investing in clean, sustainable energy technologies and long-term sustainable community economic development. Knowing what we do about the history of extractive industries in Pennsylvania, we believe that it would be unethical to move forward without trying our utmost to ensure that past mistakes are not repeated.

Therefore, PA IPL can support drilling only when a state-level system is in place to prevent the repetition of such “boom and bust” cycles and to encourage long-term, sustainable economic development in communities where drilling takes place. Furthermore, PA IPL supports efforts to help communities cooperatively resolve conflicts engendered by decisions about drilling.
4) **Distortions to our political system**

You shall show no partiality; you shall not take bribes, for bribes blind the eyes of the discerning and upset the plea of the just.

*Deuteronomy 16:19*

One important reason why our nation has moved so slowly to address the increasingly urgent crisis of global climate change is that fossil fuel companies have spent millions and millions of dollars trying to convince politicians to look the other way. It is clear that many companies involved in developing the Marcellus Shale are behaving in a similar fashion. This creates a system that is the exact opposite of what our faith traditions teach. Instead of valuing the “least of these,” instead of protecting the most vulnerable, instead of listening to the voices of the people, our system is following the lure of money. While this problem is obviously not limited to Marcellus Shale drilling, it is clear that a difficult situation is made much worse by this abuse of the public trust.

Therefore, we call on elected officials throughout Pennsylvania, whether serving in local, state, or national capacities, to refrain voluntarily from accepting any contributions from companies involved in the exploration, drilling, production, transportation and sale of natural gas.

5) **Leadership in Faith Communities**

You are the light of the world. A town built on a hill cannot be hidden. Neither do people light a lamp and put it under a bowl. Instead they put it on its stand, and it gives light to everyone in the house.

*Matthew 5:14-15*

Because global climate change is as much a moral challenge as a technical or scientific one, it is imperative that communities of faith take leadership roles in addressing this challenge. One important way to do so is to lead by example, to demonstrate the choices that can be made right now, without waiting for any additional laws, regulations, or other governmental programs. Pennsylvania currently gets more than one-half of its electricity from coal-fired power plants and another quarter from natural gas. If we stop fracking in Pennsylvania but do not switch to buying clean electricity, the overall effect will be to support a coal-based economy and ensure that drilling for natural gas will continue outside of Pennsylvania. That would not be moral leadership.

Therefore we call on congregations and all faith-based institutions, to reduce their energy usage, switch to sustainable energy sources such as solar and wind energy, and speak with their constituencies about these choices. We also call on faith-based institutions to refrain from entering into financial agreements with natural gas exploration or extraction companies until the issues highlighted here are adequately addressed.
SIGNED,

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