

From: [Iris Marie Bloom](#)
To: [LNGStudy](#); [FERGAS](#)
Subject: Comment on Liquefied Natural Gas Export Terminal Permit Request
Date: Thursday, January 24, 2013 2:32:01 PM

Dear Department of Energy:

Thank you for this opportunity to comment. I urge the DOE to deny the permits to change any of the 19 LNG terminals not permitted for import, to export.

Climate Change: DOE study excludes GHG footprint of shale gas exports, avoiding reality of incalculable economic damage from climate impacts

Shale gas is a fossil fuel which would, if exports are allowed, shoot us closer to climate catastrophe because:

1. The latest study (in Utah) of actual life-cycle emissions of methane throughout the process of drilling, fracturing, flowback treatment, gas processing, compression, pipelines and distribution, shows a stunning 9% leakage rate of methane, and
2. Methane is, according to NASA scientist Drew Shindell, and Cornell climate experts Bob Howarth and Anthony Ingraffea, 105 times more potent a greenhouse gas than CO₂ in the 20-year time frame. The IPCC affirms that methane is at least 72 times more potent than CO₂ on the twenty-year time frame. Whichever number you choose of these two authoritative numbers, the methane leakage from shale gas development is both disastrous and unacceptable. It is even worse than the climate impacts from coal.

Yet you, as the Department of Energy, have allowed expert consultants with ties to the industry to conduct a study which is so narrow in scope as to completely disregard the relationship of shale gas LNG exports and the economic catastrophe which is climate change.

If the price tag for superstorm Sandy alone is in the neighborhood of \$50 billion -- granted that it is scientifically impossible to separate out the portion of that which was due to climate change: warm sea temperatures, Arctic ice melt, sea level rise and associated factors -- is any indication, climate change is disastrously expensive. Add to the predicted storms' increased severity and frequency, the cost of droughts, fires, heat waves and all the associated costs of climate change, and the economic costs of climate change are incalculable.

Yet, the shale gas greenhouse gas footprint, and especially the increased GHG footprint from shale gas developed and distributed for export, are left out of the DOE "economic" study of "cumulative impacts" altogether. Therefore, on those grounds alone, this study is bankrupt and must be completely redone.

Renewable Energy: Opportunity Cost

I would like to invite you to listen to three energy experts regarding what we should be doing instead of developing shale gas. Please watch this fifteen-minute video and enter its content into the record of comments regarding LNG exports:

<http://protectingourwaters.wordpress.com/2013/01/17/gas-rush-stories-part-13-renewable-energy-experts/>

The link between your DOE study regarding economic benefits for LNG exports is that the study completely excluded the opportunity cost, a very real cost, for the renewable energy and energy efficiency industries. These industries, as these experts show, can provide many more jobs than the fossil fuel industries. However, due to unfair and upside down priorities of the federal government, the fossil fuel industries have received approximately 1.8 billion in U.S. federal subsidies compared to .4 billion for the renewable energy industry.

Permitting LNG exports would, as you know, increase induced fracking in shale and other tight formations in the U.S. because it would raise the price and profitability of unconventional gas drilling. It would, therefore, further push back against the production of renewable energy. It would, in fact, be another subsidy for the gas industry.

Instead of continuing the backwards, 20th-century policies of subsidizing Big Gas, it is time to switch to providing support for renewable energy, reduced consumption, efficiency and demand response measures.

The study must be completely redone to look at the opportunity cost for renewable energy and other technologies which would support a sustainable future.

The permits for LNG export must be denied.

Explosions, Accidents, and Terror Risks

As you may know, thirty (30) workers were killed just a few months ago in Reynosa, Mexico at a state of the art natural gas pipeline facility. Massive explosions are not infrequent when it comes to transporting methane, an extremely explosive gas. One person standing on a bridge over the Delaware River, for example, industry insiders say, could blow up an LNG tanker and kill every person within a ten mile radius. The recent takeover of a natural gas facility in Algeria is a case in point.

By investing instead in renewable energy technology and concentrating on becoming a sustainable society, we not only reduce our GHG (greenhouse gas) footprint, averting climate change. We also save lives in the short term, by not creating more explosions, fires, accidents and targets for those who mean to do intentional harm.

The economic costs of accidents and the potential for intentional violence against natural gas facilities was completely excluded from the study. The study must be redone, and the permits denied.

Economic Cost of Environmental and Health Harms from Induced Fracking

LNG exports would raise the price of fracked gas, making it more profitable for fracking corporations to continue, and escalate, shale gas drilling. This **induced fracking**, and the compressor stations, pipelines and other infrastructure fracking requires, damages air, water, animal and human health, and our communities' quality of life.

Industry Ties: Scope Unacceptably Narrow

The **consultants who did the study have strong industry ties** that puts their credibility into question. Their analysis was narrow and simplistic, without

considering the external costs. The exporting of LNG would **intensify the pace of shale gas extraction and processing**. The current pace of unwelcome, unexpected extraction is already more than the people who are unfortunate enough to find themselves living above gas infused shale can bear.

A dispersed industry with dispersed impacts: "externalities" must be considered

High volume slickwater hydraulic fracturing (HVSWHF), colloquially known as 'fracking' - the process that has made retrieval of shale gas possible - is different from other industrial processes, which are concentrated in areas set aside for that purpose and zoned industrial. HVSWHF takes place in communities - near homes, schools, hospitals - in farms, parks, forests and ecologically sensitive areas. External costs are thus imposed upon the community - such as property devaluation, infrastructure damage, community cohesion dissolution, skyrocketing rental costs, and corruption of the political process by the money and power of the industry. Public health impacts are wide spread and well known, yet under-reported and unstudied.

Ecological breakdown: real cumulative impacts

We do not have the scientific studies to show whether the natural environment is able to maintain its integrity amidst the current extensive extraction processes, let alone an increased, unmitigated further rush. HVSWHF is extremely complex, inherently risky, and inadequately studied for its environmental impacts. It is poorly regulated - at both the state and federal level - and the regulations are often not enforced. **Monitoring is sorely lacking**, since there are thousands of wells everywhere, in various stages of development.

Shale gas water footprint

Water withdrawals impact streams, aquatic life, wetlands and riparian areas. Water wells, ground water, ponds and the land itself have been contaminated. Forests may never recover from their fragmentation, loss of large trees (and their carbon sequestration), loss of animal habitat, the introduction of invasive species and the loss of biodiversity.

Air quality is negatively affected not only by the actual drilling but by the many processing stations. The diesel pollution from thousands of trucks is both a public health risk and a global warming contributor. The sand used in the process is a silicosis risk for the communities where it is mined and processed and for the workers.

The negative long-term economic effects of a boom - bust cycle on communities by extractive industries is well documented throughout history. Ultimately the community ends up less healthy and wealthy after the resource is depleted and the industry leaves.

Economic impacts from shale gas development induced by exports:

The negative impacts on other industries such as agriculture, tourism, outdoor recreation, etc. must be taken into consideration in an economic analysis.

The pipelines that were built to take the gas from the current IMPORT terminals to the end users in the U.S. were built where ever the gas companies wanted them irrespective of property rights - with the use of **eminent domain**. Eminent domain is only granted for the purpose of the public good - not for the financial benefit of private industry. Therefore, it should be illegal to use those pipelines to transmit gas from the fields to the terminal for EXPORT - which **benefits only the industry**.

Liquifying, transporting, regassifying and then transporting gas to end users in other countries is an energy intensive process that **makes no sense** whatsoever in a world that needs to address climate change YESTERDAY.

NASA Climate Scientist James Hansen has said that if we have any chance of avoiding the civilization threatening effects of climate change that are heading our way, the fossil fuels that are still in the ground must stay there. We should be encouraging the development of renewable energy, not the use of every last drop of fossil fuel.

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You may never know what results come of your action, but if you do nothing there will be no result.

--Mahatma Gandhi