Please accept the following comments regarding the Department of Energy (DOE) report titled "Effect of Increased Natural Gas Exports on Domestic Energy Markets."

Unfortunately the DOE study fails to consider the full scope of economic impacts associated with the potential export of Liquefied Natural Gas (LNG), thereby drawing faulty conclusions which threaten the economy of our nation and well-being of Americans. The exporting of LNG would dramatically intensify the pace of domestic shale gas extraction and processing. Therefore any credible economic study -- particularly one purporting to be an analysis of "cumulative impacts" -- must evaluate the considerable direct and indirect ramifications of this increased level of gas development. The consultants who performed the DOE study at issue have significant ties to the industry, which puts their credibility into question. Failing to consider external costs, the DOE analysis is inadequate and recklessly simplistic. Much more needs to be considered before an informed decision on exporting natural gas can be made.

DEPLETION OF DOMESTIC GAS RESERVES

The most recent estimates of economically recoverable shale gas reserves indicate that there is approximately 20 to 40 years of supply at current rates of domestic consumption. This means that the hundreds of billions of dollars invested in transforming this country’s energy infrastructure into one dependent on shale gas will quickly be lost as domestic gas supplies dwindle. After depleting its reserves in only a few decades, the United States will be faced with the need for an abrupt, expensive shift to other energy sources and corresponding infrastructure. This 20 to 40 year timeline will be shortened further if LNG exports occur.

It should also be noted that the pipelines which transport gas from current import terminals to end users in the United States were built using eminent domain. Eminent domain is only intended for purposes that serve the public interest, not for the financial benefit of private industry and economies overseas. Therefore, using existing pipelines or building new ones for the primary purpose of transporting gas for foreign consumption is legally questionable.

NEGATIVE IMPACTS ON LOCAL ECONOMIES

The prevailing method of gas extraction now in use is High Volume Slickwater Hydraulic Fracturing, otherwise known as "fracking". It is a complex and inherently dangerous process that, unlike other forms of industrial development which are concentrated in areas zoned for industry, takes place in communities -- near homes, schools, hospitals -- and on farms, in parks, and within forests or other environmentally sensitive areas. Imposing costs on communities include the devaluation of property, damage to infrastructure such as roads, loss of community cohesion, unaffordable rental rates, and reduced quality of life. These negative effects were ignored in the DOE report. Likewise, the impacts on existing local business such as agriculture, tourism, and outdoor recreation that would be displaced or adversely affected by intense gas development were not considered.

Like other extractive industries, shale gas development will follow a boom-bust cycle of investment followed by rapid decline. The negative long-term effects of this type of unsustainable activity is well documented throughout history. Although a small group of outside investors may profit from the exploitation of local resources, ultimately community are left with poor health and a broken economy when the resource is depleted. Any legitimate economic analysis of impacts should consider these temporal and long-range dynamics.

ECONOMIC CONSEQUENCES OF HARM TO THE ENVIRONMENT AND HUMAN HEALTH
It is not apparent that environmental integrity can be sustained in the wake the extensive fracking already underway, let alone the unbridled, unmitigated demand for fracking that would occur if LNG exports are permitted. Shale gas development threatens drinking water, air quality, food supplies, and public health -- equating to a high economic burden to the U.S. economy and taxpayer. Again, a credible assessment would have considered such impacts.

Fracking and related infrastructure has caused significant environmental harm, especially where it has become widespread. Domestic wells, ground water, and surface waters have been contaminated with methane and the cancer-causing chemicals, which are used in fracking or produced as flowback. Furthermore the massive volume of water necessary for fracking adversely impacts streams, aquatic life, wetlands and riparian areas. Air quality is negatively affected by not only drilling rigs, but also the network of compressor stations, processing plants, and pipelines that perpetually leak gas and chemicals into the atmosphere--leading to conditions in some rural areas that are worse that downtown Los Angeles. Fracking and related infrastructure permanently scars the landscape, causing forest fragmentation, habitat loss, loss of biodiversity, and the introduction of invasive species. In addition, land impacts can cause erosion and increase the potential for flooding. Spills or improper dumping of fracking waste have contaminate soils, resulting in the die off of vegetation and wildlife poisoning. The collective emissions of thousands of diesel trucks per fracking event also pollutes the air and contributes to global warming. Sand used in the fracking process is a silicosis risk, both to workers at the drilling site and to communities where it is mined. Fracking and the disposal of flowback waste using injection wells have even been linked to earthquakes.

Due to the notorious "Halliburton loophole", rules written by lobbyists, and lax oversight, the industry is poorly regulation at both federal and state levels. Monitoring is almost non-existent, so even rules on the books are often not enforced. Although public health impacts are widespread, problems are under-reported and government agencies fail to adequately investigate.

The bottom line is that all of these negative impacts to the environment and human health are borne by communities, the government, and taxpayers who must pay for cleanup, chronic sickness, and medical care. These translate to substantial economic costs, all of which will be magnified if LNG exporting is permitted. None of these domestic impacts upon America and our nation's economy were considered by the DOE's inadequate study.

CLIMATE CHANGE

Scientific research indicates that shale gas development when combined with LNG export is a net greenhouse gas polluter as potent as coal. To the extent that permitting LNG export will induce more shale gas development and thus generate more methane and carbon emissions which exacerbate climate change, it will also increase the costs associated with responding to, and rebuilding from, the extreme weather events that will inevitably result. The examination of these costs were absent from DOE's study. Furthermore liquefying, transporting, and regasifying fossil fuels for end users in other countries is an incredibly energy intensive process that can not be justified, especially considering that the world is already far behind in meeting the challenge of climate change and reducing energy consumption.

SUSTAINABLE ALTERNATIVES

NASA scientist James Hansen has said that if we are to have any chance of avoiding the climate change impacts that threaten civilization, the fossil fuels that are still in the ground must stay there. We should be encouraging the development of renewable energy, rather than extracting every last drop or bubble of fossil fuel. If our nation focuses on gas development for exports, it will not be making critical robust investments in sustainable energy and related infrastructure, in technological advancements necessary to ensure U.S. leadership in renewable energy, and in the wise use of taxpayer dollars for achieving other high priority job creation and economic advancement goals.

It is incumbent upon DOE to thoroughly evaluate all of the above economic and environmental costs in
determining whether the export of LNG to non-free trade agreement nations fulfills the public interest standard established by the Natural Gas Act. This has not been done, therefore natural gas exports should not be expanded.

Sincerely,

Keith Schue