Larine:

I show that my comments were sent at 1:19 p.m. PST yesterday. I have copied the basic e-mail that I sent below. I am resending just my basic comments in with this e-mail minus the exhibits. I have correct two typo's from my original submission (add the word "not" after "do" on page 7 and the word "systems" on page 8) and I am hoping these will be accepted. I can resend my exhibits in smaller batch files if needed. An index of the exhibits that were sent is included in with my comments (attached).

Please let me know how to proceed.

Thank you,

Jody McCaffree
(541) 756-0759
mccaffrees@frontier.com

----- Original Message -----
Please accept the following attached reply comments and exhibits concerning the 2012 NERA LNG Export Study. Please acknowledge receipt of submittal.

Sincerely,

Jody McCaffree
In the Matter of:
NERA Economic Consulting Study )
“Macroeconomic Impacts of LNG”) )
Exports from the United States” ) )
December 3, 2012 )
____________________________________)

The following Reply Comments sent by Email to LNGStudy@hq.doe.gov

Jody McCaffree
Individual / Executive Director
Citizens Against LNG Inc
PO Box 1113
North Bend, OR 97459

February 25, 2013

U.S. Department of Energy (FE-34)
Office of Natural Gas Regulatory Activities
Office of Fossil Energy
P.O. Box 44375
Washington, DC 20026–4375

Re: 2012 LNG Export Study Reply Comments

Dear Mr. John Anderson / Mr. Edward Myers:

Please accept the following reply comments to issues raised in initial comments submitted to the U.S. Department of Energy (DOE) Office of Fossil Energy (FE) on or before January 24, 2013, concerning the NERA 2012 LNG Export Study.

1. Responding to comments concerning the DOE allowing Unlimited LNG Exports

On January 25, 2013, one day after initial comments were due to the U.S. Department of Energy (DOE) Office of Fossil Energy (FE) concerning the NERA LNG Export Study, Bloomberg reported on an interview that had occurred with Peter Voser, chief executive officer of Royal Dutch Shell Plc on the sidelines of the World Economic Forum's annual meeting in Davos, Switzerland. The interview between Voser and Bloomberg’s Ryan Chilcote discussed U.S.
shale-gas production and exports, China’s gas reserves and exploration in the Ukraine.  

A Bloomberg article written about the interview stated the following:

“Exports will happen,” said Voser, 54, whose company is the world’s largest LNG supplier. “But I hope that the U.S. will actually keep most of the gas back because it will help them to industrialize parts of the U.S. more.” ...

…Elsewhere in the world, Shell is optimistic about prospects for shale gas production in China and Ukraine. The company signed a production agreement with the eastern European country yesterday.

“In China, it is very encouraging what we find,” Voser said. Shell is exploring for shale gas with China National Petroleum Corp. “If you just look at the reserves it could outnumber the U.S.”  

(Emphasis added)

In response to the concerns raised in initial comments about limiting LNG exports, if the CEO of Royal Dutch Shell Plc, the world’s largest LNG supplier, is saying we should keep back our gas to help us industrialize parts of the U.S., the DOE should seriously take note and consider this in their decision making. Voser also states in the interview that they are already developing and producing natural gas in China and that Shell is contemplating possibly building their own LNG terminal in North America. Shell is interested in multiple LNG projects including projects to turn gas into liquid fuel such as diesel to power trucks and ships and to feed chemicals plants.

2. Responding to comments about LNG Export Terminals and Options not considered in the NERA Study

The list of proposed LNG export terminals continues to grow and as we previously stated in our initial comments to the DOE, the NERA study did not consider the impacts of all the proposed and/or potential LNG export projects that are in the works in North America. In our January 24, 2013, comments we made a list of proposed, potential and already existing LNG terminals on the West Coast. Since that time additional details about proposed and potential LNG terminals and export options for the West Coast have been brought to our attention:

**Alaska**

On February 15, 2013, executives from ExxonMobil, BP, ConocoPhillips and TransCanada submitted a letter to Alaska Governor Sean Parnell outlining the concept for an Alaska LNG project and related pipeline. The facility would be located on the North Slope near Prudhoe Bay and would receive approximately 3 – 3.5 Bcf/d of natural gas and produce 15 - 18 million

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1 [http://www.bloomberg.com/video/shell-may-build-own-u-s-lng-export-terminal-BdUodfh7QpC5XRLD1eD7g.html](http://www.bloomberg.com/video/shell-may-build-own-u-s-lng-export-terminal-BdUodfh7QpC5XRLD1eD7g.html)

tonnes per annum (MTPA) of LNG. This is considerably more than what we had previously listed in our initial comments for this particular LNG proposal. (See Exhibit A for their letter)

Canada

Another proposed Canadian LNG Export project not mentioned in our “initial” comments is currently being proposed by Progress Energy Canada Ltd. (Progress), a wholly owned subsidiary of Petroliam Nasional Berhad (Pertronas). Progress Energy is proposing to construct and operate the **Pacific Northwest LNG Project** on Lelu Island within the lands and waters under the jurisdiction of the Prince Rupert Port Authority, within the District of Port Edward, British Columbia (BC). This project would convert natural gas from northeast BC into LNG for export to Pacific Rim markets in Asia. Two LNG carrier berths would accommodate two 217,000 m³ capacity LNG carriers up to 315 m long. The facility would receive approximately 3 Bcf/d of natural gas and produce up to 18 million tonnes per annum (MTPA) of LNG.³ On February 19, 2013, the Canadian Environmental Assessment Agency (CEAA) started their environmental review of the project. This is yet another example of a North American LNG export project not considered in the NERA economic study and analysis.

Hawaii

The NERA study also did not consider the economic impacts from alternative LNG export options such as what is being proposed by The Gas Company, LLC, out of Hawaii. Despite the fact that the Jordan Cove Energy Project listed Hawaii as a potential receiver of their LNG exported gas, The Gas Company, LLC, submitted to FERC on August 9th an application ⁴ to import LNG via a fleet of up to 20 40-foot cryogenic intermodal containers (also known as “ISO” containers). ⁵ These “ISO” containers would be transported to Hawaii on common carrier cargo vessels utilizing already existing industries and infrastructure. The company anticipates that it will utilize port facilities on the West Coast, such as the ports of Los Angeles and Long Beach, California. The company could potentially also utilize ports on the U.S. Gulf Coast. It would seem that using already existing infrastructure and industries would be far less environmentally impacting and more economical than building additional pipelines and LNG terminals. A properly completed Economic and Environmental Programmatic Analysis would have brought this option to light and is another example as to why it is essential that this type of analysis be completed first before the DOE makes any further decisions with regard to LNG exports.

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⁵ ISO is an international organization for standardization which establishes standards for the construction of these containers. ISO-certified intermodal containers are bulk transport units designed to be shipped from one mode of transportation to another (e.g., from truck to ship) or from one location to another.
3. **Responding to comments concerning Shale Natural Gas Resources and Impacts**

Many initial comments to the DOE including our own expressed concerns with regard to the impacts from hydraulic fracturing of Shale beds and the viability of Shale resources and reserves. The NERA study as we have already stated did not address any of this in its analysis. Several studies have been published since the DOE January 24, 2013, comment deadline which contain information on this issue that should be considered by the DOE.

3.1 **“Shale and Wall Street – Was the Decline in Natural Gas Prices Orchestrated?”**

By Deborah Rogers, February 2013, Energy Policy Forum: (*See Exhibit B*)

As documented in this report listed above, emerging independent information on shale plays in the U.S. confirms the following:

- Wall Street promoted the shale gas drilling frenzy, which resulted in prices lower than the cost of production and thereby profited [enormously] from mergers & acquisitions and other transactional fees.

- U.S. shale gas and shale oil reserves have been overestimated by a minimum of 100% and by as much as 400-500% by operators according to actual well production data filed in various states.

- Shale oil wells are following the same steep decline rates and poor recovery efficiency observed in shale gas wells.

- The price of natural gas has been driven down largely due to severe overproduction in meeting financial analysts’ targets of production growth for share appreciation coupled and exacerbated by imprudent leverage and thus a concomitant need to produce to meet debt service.

- Due to extreme levels of debt, stated proved undeveloped reserves (PUDs) may not have been in compliance with SEC rules at some shale companies because of the threat of collateral default for those operators.

- Industry is demonstrating reticence to engage in further shale investment, abandoning pipeline projects, IPOs and joint venture projects in spite of public rhetoric proclaiming shales to be a panacea for U.S. energy policy.

- Exportation is being pursued for the differential between the domestic and international prices in an effort to shore up ailing balance sheets invested in shale assets.

It is imperative that shale be examined thoroughly and independently to assess the true value of shale assets, particularly since policy on both the state and national level is being
implemented based on production projections that are overtly optimistic (and thereby unrealistic) and wells that are significantly underperforming original projections.”

(Emphasis added)

3.2 “Drill Baby Drill - Can Unconventional Fuels Usher in a New ERA of Energy Abundance” By J. David Hughes, February 2013, Post Carbon Institute

J. David Hughes, the author of the report noted above, is a geoscientist who has studied the energy resources of Canada for nearly four decades, including 32 years with the Geological Survey of Canada as a scientist and research manager. He developed the National Coal Inventory to determine the availability and environmental constraints associated with Canada’s coal resources. The Report spells out the details and concludes the following:

“The U.S. is a mature exploration and development province for oil and gas. New technologies of large scale, multistage, hydraulic fracturing of horizontal wells have allowed previously inaccessible shale gas and tight oil to reverse the long-standing decline of U.S. oil and gas production. This production growth is important and has provided some breathing room. Nevertheless, the projections by pundits and some government agencies that these technologies can provide endless growth heralding a new era of “energy independence,” in which the U.S. will become a substantial net exporter of energy, are entirely unwarranted based on the fundamentals. At the end of the day, fossil fuels are finite and these exuberant forecasts will prove to be extremely difficult or impossible to achieve.

“A new energy dialogue is needed in the U.S. with an understanding of the true potential, limitations, and costs—both financial and environmental—of the various fossil fuel energy panaceas being touted by industry and government proponents. The U.S. cannot drill and frack its way to “energy independence.” At best, shale gas, tight oil, tar sands, and other unconventional resources provide a temporary reprieve from having to deal with the real problems: fossil fuels are finite, and production of new fossil fuel resources tends to be increasingly expensive and environmentally damaging. Fossil fuels are the foundation of our modern global economy, but continued reliance on them creates increasing risks for society that transcend our economic, environmental, and geopolitical challenges. The best responses to this conundrum will entail a rethink of our current energy trajectory.

“Unfortunately, the “drill, baby, drill” rhetoric in recent U.S. elections belies any understanding of the real energy problems facing society. The risks of ignoring these energy challenges are immense. Developed nations like the United States consume (on a per capita basis) four times as much energy as China and seventeen times as much as India. Most of the future growth in energy consumption is projected to occur in the

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6 “Drill Baby Drill - Can Unconventional Fuels Usher in a New ERA of Energy Abundance” By J. David Hughes, February 2013, Post Carbon Institute - http://shalebubble.org/drill-baby-drill/ [NOTE: The file size of this report was over 30 MB which made it too large to send and include as an official exhibit by e-mail. ].
developing world. Constraints in energy supply are certain to strain future international relations in unpredictable ways and threaten U.S. and global economic and political stability. The sooner the real problems are recognized by political leaders, the sooner real solutions to our long term energy problem can be implemented.” (Emphasis added)


On February 19, 2013, an assessment of the state of the science of endocrine disruptors prepared by a group of experts for the United Nations Environment Programme and the World Health Organization was released. Many synthetic chemicals, untested for their disrupting effects on the hormone system, could have significant health implications according to this “State of the Science of Endocrine Disrupting Chemicals” report. The document provides the global status of scientific knowledge on exposure to and effects of endocrine disrupting chemicals (EDCs).

Endocrine disruptors are chemical compounds that interfere with the proper function of endocrine systems in humans and other organisms. Substances grouped together as Endocrine Disruptors, and often called EDCs.

The endocrine system includes glands — such as the thyroid, pituitary, pancreas, testes or ovaries — that secrete natural chemicals to regulate growth, behavior, reproduction, metabolism, etc. EDCs may interfere with the amount of natural hormones (such as estrogen or adrenaline) the body makes, block the way they are made, or mimic a hormone and give a “wrong” chemical signal. Endocrine systems are very similar across vertebrate species. Effects shown in wildlife or experimental animals may also occur in humans if they are exposed to EDCs at a vulnerable time and at concentrations leading to alterations of endocrine regulation. Of special concern are effects on early development of both humans and wildlife, as these effects are often irreversible and may not become evident until later in life. The WHO Press Release for their report states the following:

“We urgently need more research to obtain a fuller picture of the health and environment impacts of endocrine disruptors,” said Dr Maria Neira, WHO’s Director for Public Health and Environment. “The latest science shows that communities across the globe are being exposed to EDCs, and their associated risks. WHO will work with partners to establish research priorities to investigate links to EDCs and human health impacts in order to mitigate the risks. We all have a responsibility to protect future generations.” 8 (Emphasis added)

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8 Effects of human exposure to hormone-disrupting chemicals examined in landmark UN report
News release - 19 February 2013 | GENEVA;
Human exposure to EDCs occurs via ingestion of food, dust and water, via inhalation of gases and particles in the air and through dermal uptake. Several Research Reports have linked EDC’s to natural gas development and impacts from hydraulic fracturing of Shale beds. Selected polycyclic aromatic hydrocarbons (PAHs) were found near Shale development sites at concentrations greater than those at which prenatally exposed children in urban studies had lower developmental and IQ scores. The human and environmental health impacts of the non-methane hydrocarbons (NMHCs), which are ozone precursors, should be examined further given that the natural gas industry is now operating in close proximity to human residences and public lands.

You would think that if the United Nations Environment Programme and the World Health Organization are having significant concerns about these issues that the DOE and/or the FERC would be showing some concerns about them too. Unfortunately as we have already indicated in initial comments, the environmental and health impacts of hydraulic fracturing of Shale beds is not being analyzed or considered by either the DOE or FERC despite research showing a clear link to these compounds and other health impacts from this type of gas production. (See Exhibits C, D and E)

4. Responding to Public Official Comments

In response to comments submitted on January 24, 2013, by Rick Wetherell of North Bend, Oregon, and Roger Craddock of Coos Bay, Oregon, we have attached the following petitions and would like to point out links to petition sheets that have previously been submitted to FERC.9 Thousands of Citizens in the North Bend and Coos Bay area have signed petitions stating they do not believe a LNG terminal in our Port is a well conceived or appropriate industry for our Port and would present an unacceptable risk to the citizens living here. Citizens in the Coos Bay Port District have never been allowed to vote on this issue and are no match to the seemingly endless dollars handed out and promised to local elected officials by the Jordan Cove Energy Project.

I would also like to point out that despite the fact the Jordan Cove Energy Project expressed problems in their comments with the Department of Energy’s NERA Study, both Mayor Wetherell and Mr. Craddock praised the Report and its findings. Since the NERA Study itself noted its own shortcomings, we hope that the DOE will seriously take those notations and our comments previously made about them into account before making any decisions concerning proposed LNG Export projects including the Jordan Cove Energy LNG Project.

5. Responding to issues raised about China and Coal Imports

I would like to clarify a statement made in our January 24, 2013, comments to the DOE concerning China and their switch from coal exports to coal imports. Historically China has


Petition Filing 2) http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20070906-0013 (4.7MB)
been a net coal exporter but in 2009 the global coal market witnessed a dramatic realignment as China burst onto the scene importing coal from as far away as Colombia and the United States. With 182 million tons (Mt) of coal sourced from overseas suppliers in 2011, China has overtaken Japan as the world’s top coal importer. Moreover, as the world’s top coal consumer, China’s imports are predicted to rise significantly again by 2015. Prior to 2009, China was a net coal exporter. Coal is a cornerstone of the Chinese economy, representing 77 percent of China’s primary energy production and fueling almost 80 percent of its electricity. Moreover, China is the world’s top coal consumer, accounting for nearly half of global consumption in 2010. Despite the fact that China is home to the world’s second largest proven coal reserves after the United States, those reserves are not necessarily being mined. According to a Carnegie Policy Outlook Report, “Understanding China’s Rising Coal Imports,” several factors could be contributing to this and China’s sudden entrance into coal import markets including transportation bottlenecks, environmental and safety considerations, economic factors, and concerns about depleting coking coal reserves.

For comments made by those accusing the U.S. of violating its World Trade Organization commitments if it should limit LNG exports, if that was the case, why wouldn’t it also apply to China and their not developing and/or exporting their own coal reserves?

7. Responding to initial comments concerning Renewable Energy Options

As Erin Crump and several others have pointed out in their initial comments to the DOE, the real solution to our energy problems is to develop alternative energy systems such as wind, solar, geothermal and other sustainable renewable energy solutions and options. The following attachment on Renewable Energy Alternative Solutions (See Exhibit F) clearly shows how this can be and is already being done in some parts of the country. Renewable energy solutions can meet our energy needs not only in the United States but essentially across the entire world. It would make far more economic sense for us to be exporting renewable energy products and solutions over environmentally impacting and difficult to obtain fossil fuels. This would also be more in line with the public interest. As referenced above from the recent report by J. David Hughes, fossil fuels are finite and the exuberant forecasts of natural gas from shale beds will prove to be extremely difficult or impossible to achieve. The sooner the real problems are recognized by political leaders, the sooner real solutions to our long term energy problem can be implemented.

We stand with Industries and Associations who commented to the DOE such as Alcoa, American Forest & Paper Association, American Iron and Steel Institute, American Public Gas

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We also stand with the concerns and issues raised with the NERA LNG Export Study by citizen and environmental groups who commented such as the Catskill Citizens for Safe Energy, Citizen Power, Clean Line Energy Partners Inc, Clean Ocean Action, Credo Action, Keep Tap Water Safe, Landowners United, New York Climate Action, Pepacton Institute LLC, Save our Supplies (SOS), The Natural Resources Defense Council (NRDC) – Clean Energy Council, Cascadia Wildlands, Environmental Working Group, Civil Society Institute, Food and Water Watch, Oregon Shores, Oregon Wild, Sierra Club, Joseph Patrick Quinn of Umpqua Watersheds, and the Delaware Riverkeeper Network along with 87 other Organizations and thousands of citizens.

We continue to request that the complete Economic and Environmental Impacts of LNG Exports be fully considered in a Programmatic Review and that the National Environmental Policy Act be followed and adhered to first by the U.S. Department of Energy, Office of Fossil Energy before any decisions regarding LNG Exports are made.

Sincerely,

/s/ Jody McCaffree

Jody McCaffree

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Index Reference for Exhibits

**Exhibit A:**

**Exhibit B:**

**Exhibit C:**

**Exhibit D:**

**Exhibit E:**

**Exhibit F:**
**Renewable Energy Alternative Options** – Studies, News Articles and Information compiled by Jody McCaffree

**Petition Exhibit:**
Current Citizens Against LNG Petition sheets