From:	Michael Skelly
To:	LNGStudy
Subject:	2012 LNG Export Study
Date:	Thursday, January 24, 2013 12:39:39 PM
Attachments:	image006.png Clean Line Energy Comments.pdf

Please find Clean Line Energy's comments attached.

Thanks,

Michael Skelly

CLEAN LINE ENERGY PARTNERS LLC
1001 MCKINNEY, SUITE 700
HOUSTON, TX 77002

CELL 713-870-5501
TEL 832-319-6333
FAX 832-319-6311
mskelly@cleanlineenergy.com
CLEANLINEENERGY.COM

CLEAN LINE
ENERGY PARTNERS

The Honorable Steven Chu
Secretary, Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Dear Secretary Chu:

Our company, Clean Line Energy, is developing a series of high voltage direct current (HVDC) transmission lines that will deliver thousands of megawatts of renewable power from the windiest areas of the United States to communities and cities that have a strong demand for clean, reliable energy but lack access to clean energy resources. We write to ask that, while shaping liquefied natural gas (LNG) policy, you consider the role that renewable energy can play in mitigating the impact of volatile natural gas prices on the electric power sector and American consumers.

The NERA report correctly states that natural gas is "an important fuel for electricity generation" and that "in many regions and times of the year natural gas-fired generation sets the price of electricity so that increases in natural gas prices can impact electricity." However, NERA's analysis assumes an incomplete model of the electric sector that consideres only natural gas, coal, and oil-fired generation. In fact, wind energy increasingly comprises a larger and larger part of the energy mix.

- **In many regions, a large portion of electricity is sourced from wind energy.** Although only about 3.2% of electric demand in the US is met by wind,[1] many states utilize wind to meet a much larger portion of their electricity needs. 22.3% of South Dakota's electric demand was met with generation in 2011. Iowa derived 18.8% of its electricity from wind in 2011. In addition, during the windiest hours, many transmission systems reach even higher wind penetration levels. On November 23, 2012, the Midwest Independent Transmission System Operator (MISO) set a new record with a wind peak that represented more than 25% of the generation on the system at the time.[2] On November 10, 2012, wind generated 26% of total electricity used in the Electric Reliability Council of Texas (ERCOT) at 10:21 am.[3] On the evening of December 2, Southwest Power Pool (SPP) met 30.2% of its

[1] *Annual Energy Review*. U.S. Energy Information, http://www.eia.gov/totalenergy/data/annual/showtext.cfm?t=ptb0802c (September 2012).
[2] *Peak Wind Output Tops 10 GW in MISO*. MISO, https://www.midwestiso.org/AboutUs/MediaCenter/PressReleases/Pages/WindOutputSurpasses10GW.aspx (November 2012).
[3] *ERCOT Grid Operations*. ERCOT, http://www.ercot.com/content/gridinfo/generation/windintegration/2012/11/ERCOT%20Wind%20Integration%20Report%2011-10-12.pdf (November 2012).

load with wind generation. [4]

- **Renewable Portfolio Standards will drive increased demand for wind in the timeframe that liquefied natural gas terminals are licensed and brought online.** 29 states plus Washington DC have Renewable Portfolio Standards (RPS), many of which mandate that 15-33% of the state's electricity be generated from renewable sources. Many of these requirements will fully ramp up during the time frame that liquefied natural gas terminals will likely reach commercial operations.

- **Wind generation is a low cost way to meet domestic electricity demand.** Even outside of RPS requirements, many utilities are buying wind power because it is a clean and affordable option. In 2012, Alabama Power signed contracts with wind farms in Oklahoma and Kansas to deliver low-cost wind energy to customers in the southeast, a region that has no RPS requirements. In the past three years, the cost of wind generation has plummeted. Wind turbines are now cheaper and produce more energy than ever before. Capacity factors continue to improve; in 2010, many operational projects had capacity factors above 40% and one reported a capacity factor of 53%.[5] There is vast untapped potential for wind farm development that can provide low-cost power ranging from $25/megawatt-hour (MWh) to $50/MWh, depending on the wind resource and whether federal tax credits are extended.

The NERA report suggests that allowing LNG exports will not trigger large increases in domestic natural gas prices. Many LNG critics are concerned about the uncertainty inherent in these results – they fear that the US might experience higher than projected domestic natural gas prices if LNG terminals are permitted. It is impossible to remove all uncertainty about the future of natural gas prices, but wind can play a role in limiting exposure to natural gas price volatility. Because wind energy has no fuel costs, it can protect consumers from fossil fuel price uncertainty. In this way, wind and natural gas are complementary parts of the US energy mix.

Sincerely,

Michael Skelly
President, Clean Line Energy Partners

[4] *Southwest Power Pool Achieves Wind Penetration Record*, American Wind Energy Association, http://awea.org/newsroom/pressreleases/Southwest-Power-Pool-achieves-wind-penetration-record.cfm (December 2012).
[5] *2011 Wind Technologies Market Report*. Department of Energy, http://www1.eere.energy.gov/wind/pdfs/2011_wind_technologies_market_report.pdf 2011 (August 2012).