

## **Ratepayers for Affordable Clean Energy – Briefing**

### **Natural Gas Supply and Price Scenarios Senate Hearing on LNG Permitting, 27 October 2005 State Capitol Building, Room 4203**

This briefing paper was prepared by the citizens' coalition Ratepayers for Affordable Clean Energy. It addresses the impacts that importing Liquefied Natural Gas (LNG) will have on our economy, and in particular on the future price of energy. There is substantial confusion over this issue which this paper will address.

#### **A. There is no natural gas shortage in North America.**

1. The U.S. Department of Energy has consistently reported that North America has enough gas supplies to last 60 years. Domestic gas production is expected to rise from 19.4 Trillion cubic feet (Tcf) in 2001 to 26.4 Tcf in 2025. Meanwhile, demand for natural gas in California has decreased by about 20 percent since 2000, a result of conservation and increased renewable development. Only modest increases in natural gas demand are predicted by the California Energy Commission over the next 20 years, and demand levels are not expected to reach the highs seen in 2000 in that time period. There is a good balance between supply and demand, increasing production, higher rig counts, and robust storage.

2. One source of the widely held belief that there is an impending domestic natural gas shortage comes from LNG suppliers. These companies clearly have a vested interest in creating this climate of scarcity. Detailed data from the Department of Energy on natural gas supplies are available from their website. Sempra Energy and other LNG companies refuse to divulge how they arrived at their "doomsday" gas scenarios.

3. The recent Gulf coast hurricanes do not pose a short term supply problem for California. The hurricanes did interrupt natural gas production. But natural gas storage levels are very high, at 3,100 billion cubic feet (Bcf). That is enough supply for the winter.

4. LNG will make us more vulnerable in the event of a natural disaster. Currently, California's natural gas comes from dispersed sources around the Western U.S. and Canada. About 7.5 percent of our nationwide natural gas production was temporarily interrupted by 2005 hurricane damage. However, one LNG terminal will supply 15 to 20 percent of California's gas supply. California's coast is not immune to devastating disasters, including earthquakes, tsunamis, and intense storms. Political instability at the foreign source of LNG is also a concern.

#### **B. LNG will not lower energy costs.**

1. LNG terminals are not "free market investor takes the risk" facilities. The CPUC authorized gas utilities to enter into LNG supply contracts in 2004. These contracts will be offered to insure investors they will make money on LNG, not to protect ratepayers from high prices. This decision is being challenged in court by RACE.

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2. The current high price of natural gas is not due to a shortage of supply. From the 1930s through the 1970s Congress set the price of gas as it was pulled from the ground. The goal was to prevent pipeline operators from using their regional monopolies to exert excess power over pricing. Lack of effective regulation of natural gas markets may be a major factor in the otherwise inexplicable and rapid rise in natural gas prices. Another factor in the recent run-up of natural gas prices, as reported in *Natural Gas Intelligence*, is political and industry hype.

3. LNG will not be cheaper than domestic natural gas. The average production cost of domestic gas resources is well under \$3 per Mmbtu (Million British Thermal Unit). The cost to land LNG on the West Coast is at least \$3.50 per Mmbtu to over \$4 per Mmbtu. In a rational market responding to the laws of supply and demand, the market price of natural gas should be much lower. Industry analysts agree that we are experiencing an irrational run-up in gas prices.

4. LNG is subject to more unpredictable market forces than our domestic natural gas supply. Australian gas company Woodside chief executive Don Volete recently warned Pacific Rim governments that Australian LNG prices to Japan will rise dramatically in coming years. In addition, LNG-supplying countries have recently made moves towards creating an OPEC-like natural gas cartel which would control world LNG prices.

5. Despite the Federal Government's calls for energy independence, the U.S. Department of Energy recently announced that it is ending all research and development activities for oil and gas. This will favor the multi-national LNG providers over domestic suppliers of natural gas, which tend to be smaller, independent companies. This will greatly reduce our domestic gas production potential, and should be opposed.

**Recommendation:** The construction of LNG terminals is not an urgent state need. As such, the state should implement a transparent process which will allow a thorough and public evaluation of our state's energy future. At the center of this discussion should be an honest analysis of our domestic gas supply, realistic demand scenarios, and the potentially high costs of LNG to ratepayers and businesses.

We have called on the California Public Utilities Commission to conduct public, evidentiary hearings to give these issues a proper hearing, an issue that is now before the courts. We also support the passage of SB426, the "Informed Choices on LNG" bill. We call on lawmakers to support both of these initiatives.

In addition, the best way to bring energy prices under control is to reduce our dependence on fossil fuels. California's Energy Action Plan (EAP) includes a forward-thinking loading order which provides a roadmap for our energy future. It prioritizes aggressive efficiency measures as well as an accelerated Renewable Portfolio standard. If the goals of this plan are met, the state will save 1,500 million cubic feet of gas a day, which is roughly equivalent to the throughput of two large LNG import terminals.

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## Appendix

### What the Experts are Saying—Quotes From the Industry Press

#### **Oil & Gas Journal, July 4, 2005:**

Natural Gas demand in the U.S. will increase 1.5% this year, boosted by strong summer cooling. Last year gas consumption growth was nearly negligible at just 0.2%.

A combination of plentiful inventories, relatively tepid demand, and higher gas prices has been the status quo in the natural gas market for the past 2 years. Despite an abundance of available gas in the U.S., the commodity's apparent tie to the price of oil and some supply disruptions have joined forces to put a floor under its prices.

#### **Natural Gas Intelligence, February 18, 2005. *Analysts Assail Hyped Gas Market, See Prices Falling.***

High oil prices, political hype, lack of adequate market information on either the supply or demand side and “bullish” media influence are among the key factors that have been propping up the price of natural gas....(According to a report by James R. Choukas-Bradley, a principal with the firm Miller, Balis & O’Neill), “What is propping up current prices is...current prices,” the report states, explaining that the natural gas future on Nymex “continues to be dominated by technical trading, with the result that in a period of stability in market fundamentals, the market will tend to see prices remain at high levels if they start at high levels, just as they would remain at moderate levels if they started at moderate levels.”

The technical dominance occurs because producers are risk-takers and tend not to hedge, preferring to capture the upside. That leaves the futures market to speculative traders with an incentive to support price volatility and volume liquidity, and it means that when prices fall they will fall hard....

Another prop for high prices has been the media, with the trade press ‘dominated by the interests of producers, with a bias in favor of higher prices that can support development of incremental supply for growth in consumer demand.’....

It’s not actual costs that have pushed up the gas prices, the report maintains. Costs are way below current prices. For the most expensive domestic production, deep water Gulf of Mexico, the full-cycle replacement costs may be as high as \$3.25-3.50/MMBtu, the report says. Imported LNG falls near that range also at \$2.75-3.75. Other North American full-cycle production costs are: overall Gulf of Mexico \$2.75-3.00/MMBtu; onshore Gulf Coast \$2.50-2.75; Canadian \$2.25-2.75; and Rockies \$2.00-2.25....

Meanwhile, “projections of increasing demand are overstated,” with electricity generation being ‘the elephant in the room’ that no one can measure.”....

For the long term, however, the authors are concerned over the behavior of the majors and large independents in investing some of their “windfall” profits from domestic production in overseas projects, “largely owned by foreign national oil companies that they believe offer

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better investment opportunities, perhaps with payout in two-three years. In contrast companies would see a lower, longer-term return from incremental domestic production.... This means “the American consuming public is financing international projects,” and the lack of investment at home is driving up domestic prices. The report also notes that the multinational companies have an interest in developing the LNG market for their foreign-produced gas.

### **Andrew D. Weissman, Energy Ventures Group, LLC. Report: *Where Will the Gas Come From?* Published Summer, 2005**

...even if a number of these proposed new (LNG) mega-projects are completed, other countries may outbid the U.S. for all or most of the available output from some or all of the projects that come on line in the next 5 or 10 years.

Notwithstanding these obvious risk factors, the feasibility and potential costs, benefits and risks of a strategy for meeting future U.S. energy needs that depends heavily on being able to massively increase net imports of LNG have never been carefully examined by any federal or state agency and has not been the subject of extended discussion or debate at the federal level.

Instead, a major shift in U.S. energy policy that is likely to have major impacts on the U.S. economy for decades and could cost hundreds of thousands of Americans their jobs has occurred largely in a vacuum....

A heavily LNG-dependent strategy for meeting future U.S. energy needs presents at least four fundamental risks:

- The LNG supplies available to the U.S. market over the next 10 to 15 years are virtually certain to fall below the levels currently being assumed in EIA’s forecasts....
- While LNG initially was held out as a potential low cost fuel that would help constrain natural gas prices in the U.S., in the current, supply-constrained global energy market, there is little reason to expect LNG to remain a low cost alternative....
- A heavily LNG-dependent strategy virtually guarantees that U.S. manufacturers will be at a competitive disadvantage in attempting to compete in global markets....
- Just as significantly, even if a heavily LNG-dependent strategy is successful in obtaining targeted levels of supply (which is extremely doubtful), it would massively increase U.S. dependence on imported fuels and have a major adverse impact on the U.S. balance of payments deficit....
- Further, since a lead time of 5 to 7 years is required to significantly expand LNG supplies, and maintaining “spare” LNG production capacity is prohibitively expensive, a heavily LNG-dependent strategy for satisfying U.S. natural gas requirements, without developing other new sources of supply, would leave the U.S. vulnerable to severe natural gas and electricity price spikes and supply shortages in any year in which demand for natural gas significantly exceeds expected levels.

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**Dr. Rich Ferguson, Research Director, CEERT. *Emergency Investment Program.*  
California Energy Circuit, October 7, 2005.**

Gas prices have been climbing more or less steadily since 1998, and the reason is straightforward. North American gas supplies have been essentially flat during this time. Consumption has been flat, too, since we can't burn what we don't have. We have been busily bidding up the price of gas to keep a share of the pie, which isn't growing any more. The recent hurricanes have exacerbated the problem but are by no means the cause.

California can't do much about the *price* of gas, but it could reduce the *cost* by aggressively investing in technology to reduce consumption. Electric generation is responsible for half of California's natural gas consumption. Thus, the electricity sector is an obvious place to start. The state should be recommending an emergency investment program to retire, within a few years, all the old, inefficient equipment that remains plugged into the grid. It should also condemn the glacial pace of renewable energy development—the convoluted renewables portfolio standard has proved to be a regulatory quagmire.