



# Oregon

Theodore R. Kulongoski, Governor



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DEPARTMENT OF  
ENERGY

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May 7, 2008

Governor Ted Kulongoski  
Room 254 State Capitol  
900 Court Street  
Salem, OR 97301-4047

Dear Governor Kulongoski:

On February 14, 2008, you wrote the Federal Energy Regulatory Commission (FERC), insisting that the Commission's review of liquefied natural gas facilities (LNG) in Oregon stop until the Commission conducts a comprehensive review of all alternatives to supplying natural gas in the region. You also directed the Oregon Department of Energy to do the following:

1) to conduct an evaluation of the demand for future natural gas in Oregon; 2) to conduct an evaluation of alternatives to providing natural gas to the region; and 3) to conduct an assessment of the life cycle carbon emissions of liquefied natural gas, compared to coal and to non-LNG sources of natural gas.

We have completed our assessment of these issues. In summary, we believe that Oregon will continue to need increased supplies of natural gas for the foreseeable future. We also believe that natural gas pipelines from the Rocky Mountains are likely to provide less expensive natural gas than Liquefied Natural Gas terminals (LNG) and to produce significantly less life-cycle carbon dioxide impacts than gas from LNG facilities.

We have reached the following conclusions to the three questions you asked us to examine:

### **1. The Demand for Future Natural Gas**

1. Natural gas is an important fuel for industry, for home heating and for other direct uses in Oregon. It is also an important source of electricity for Oregon.
2. Natural gas will continue to be needed in Oregon for the foreseeable future. It will continue to serve as a fuel which is cleaner than other fossil fuels, as we transition toward a more permanently sustainable energy future.

## **2. Alternatives for Natural Gas Supply in Oregon**

1. While natural gas will continue to be needed, the three LNG terminals proposed in Oregon are not the only viable option to assure needed natural gas supplies are available. At least three new pipelines from the Rocky Mountain gas fields have been recently proposed which could provide natural gas more economically for the same Oregon and California markets which the three LNG terminals would serve.
2. Natural gas from North America, including Canada and the Rocky Mountains in the near term, and Alaska in the long term, can likely provide adequate natural gas to meet Oregon needs for the foreseeable future, assuming no disruption of pipeline service.
3. Liquefied natural gas supplied to Oregon would likely cost substantially more than natural gas produced in North America, although there may be some economic benefit from shorter pipeline transmission of gas from LNG terminals located in Oregon. However, this advantage of shorter pipeline transmission costs would not offset the current difference in price of North American natural gas and LNG. To be a significant factor, LNG costs would need to be the same as North American natural gas prices, which is unlikely for the foreseeable future.
4. There is an over-capacity of existing LNG facilities in the United States. Existing facilities cannot acquire natural gas anywhere near their capacity because of international competition from Japan and other Asian countries. Those countries, which have very little local natural gas, are willing to pay as much as double the price of North American gas for LNG in order to replace higher-priced oil as much as possible. The world price of oil would need to collapse to half of its current price, to a price of about \$60 a barrel, for the price of Pacific Basin LNG to approach the price of North American natural gas. However, the pressure on the price of oil is likely to continue upward, as China, India, Russia and other countries are increasing their use of oil and increasing the worldwide demand for oil.
5. It is questionable whether the capacity of any LNG facilities located in Oregon would be substantially utilized, especially with the presence of the new LNG facility in Baja California, Mexico. That LNG facility will initially be the same capacity as one of the proposed LNG terminals in Oregon and by 2010 could be expanded to nearly the same capacity as all three of the LNG terminals proposed in Oregon.

### 3. LNG and Life-Cycle Greenhouse Gas Emissions

1. Liquefied natural gas supplied to Oregon would have significantly more life cycle CO2 costs than North American natural gas, because of the large transportation distances involved in shipping LNG to Oregon and because of the processes used to liquefy and to re-gasify the natural gas. The new LNG facility in Baja California in Mexico will largely serve the same West Coast market as the LNG sites proposed in Oregon with less CO2 impact than the Oregon sites because it is closer to the likely sources of LNG than any of the LNG terminals proposed in Oregon.
2. It is likely that CO2 emissions from regasification at an LNG terminal in Oregon would be included in a regional or national cap-and-trade system. This could adversely affect Oregon's ability to meet its CO2 reduction targets under state law passed in 2007 (House Bill 3543) and under the Western Climate Initiative. It is possible that liquefaction and transport emissions of LNG will be included in future international agreements as well.
3. Pipelines present their own environmental impacts which can be challenging and significant. However, in general the pipelines proposed for supplying Rocky Mountain natural gas to Oregon and California appear likely to have less environmental impact on Oregon and less life cycle greenhouse gas emissions than the three LNG facilities proposed for Oregon to serve the same markets. The Sunstone Pipeline, which would serve Oregon as well as California, would go primarily through existing right-of-way, reducing its environmental impact. The Ruby Pipeline would cross Oregon for less distance than the Jordan Cove pipeline, which would serve largely the same markets in southern Oregon and California.

Our review included direct research and evaluation of the natural gas market in the western United States, as well as examination of nearly 40 sources of information, including federal agencies, natural gas industry sources, information from other state agencies, national laboratories and other national organizations, independent energy experts and other sources.

The energy situation in the United States is volatile and is subject to sudden change. Decisions made which commit major financial and environmental resources may prove wise or imprudent in the future, based on totally unforeseen and unpredictable circumstances.

At a minimum, our findings in response to your questions emphasize the need for FERC to undertake the comprehensive review of all alternatives you called for in your letter of February 14, 2008. Without such a comprehensive review which fully weighs the economic and environmental costs and benefits of all the competing proposals, we believe that a finding can not be made at this time that a new LNG facility in Oregon would be in the public interest or of benefit to Oregonians.

A copy of our assessment is attached. Please contact me if you need additional information.

Sincerely,



Michael W. Grainey  
Director