



## Short-term supplies of natural gas

Posted by <u>Heading Out</u> on April 2, 2008 - 10:00am Topic: <u>Alternative energy</u> Tags: <u>barnett shale</u>, <u>canada</u>, <u>Ing</u>, <u>natural gas</u>, <u>new england</u>, <u>ottawa</u>, <u>rockies</u> <u>express pipeline [list all tags]</u>

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My worry is that there seems to be a lack of understanding about what we are really talking about when we talk about post-peak oil. I started this thread back with an article on <u>Botswana</u> that began

The habit of bargaining has become so engrained that statements of shortage are quite commonly read as bargaining positions leading to a price hike, rather than that you literally can't have any. But we are now in a time when the The Oil Drum | Short-term supplies of natural gas

reality of growing shortages, and in more than just crude oil, is going to start imposing such a disconcerting awareness.

The pre-supposition that underlies many of the articles, we see about the need to change the sources for our fuel supply, such as that in Salon, is that we have plenty of time in which to make those decisions. The reality is that we do not.

When I <u>quoted from "Cape Wind</u>" I mentioned that one way that New England coped with the natural gas shortage of 2004 was to close the schools. This was also one of the ways of coping back when we had the energy shortages of the 1970's. But it is not a permanent solution to anything, The hope is that we might have learned some of the lessons from those experiences. However, the problem is that we may not have learned enough, and there is enough supply, in the short term to slip discussion just long enough that other remedial measures won't be taken.

Natural gas usage in the United States went up 6.2% in 2007, with residential consumption going up 8% and electrical power use rising 9.9%. (Natural Gas –Year in Review 2007 (pdf)). At the same time the production of natural gas from the Gulf dropped 4.5%, while the increase in supply came from the Barnett Shale and the Rocky Mountain region. However it has been noted that the life of wells in the former is likely to be less than four years, with production per well halving after the first. In the very short term the relief in supply will come from the natural gas surplus from the West will make its way through the Rockies Express pipeline to needy customers in the East, even though it is currently held up by bats. The pipeline should reach full delivery capacity as far East as Missouri this year, and then, shortly thereafter be able to deliver some 1.6 Bcf/day out to Clarington, Ohio freeing up supplies to go all the way up into New England. In the process it is driving up the prices of natural gas in the West, which until now did not have sufficient market for the gas they were producing.

A survey by The Associated Press found that households across the Rocky Mountains buying natural gas from major utilities pay as little as \$6.36 a decatherm, a heat value roughly equal to 1,000 cubic feet of gas, depending on the quality.

In other parts of the continent, notably Georgia and South Carolina, natural gas can top \$25 a decatherm. Hawaii has the country's highest average prices at more than \$34, according to the U.S. Energy Information Administration.

As those fields are now able to more easily supply the nation one wonders how long the available supply will last. Current estimates of sufficient supply to meet national needs for ten years may shorten as demand continues to increase, and questions of storage have not completely gone away.

Increasingly the Western supply will look to the development of unconventional gas supplies, such as coal bed methane. And it must be remembered that as the fields decline so the number of wells that must be drilled each year must go up. Over a period of ten years, for example, the number of wells required to sustain production from Canadian fields increased threefold. And now there are increasing concerns with the supply from Canada, because of increased costs and continued lower well productivity.

The increasing demand for natural gas offset by the short-term increase in availability is going to lead to more comments that we cry "Wolf" when we look at the energy supply situation. After all

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we are increasingly able to get LNG from different sources. In the past year we have increased supply and drawn it from a wider resource base, with supplies now coming from Trinidad and Tobago, Egypt, Nigeria, Algeria, Qatar and Equatorial Guinea.

But this abundance is very transient and will unfortunately in that short period sap the strength from the message of concern over longer-term supply. And, it occurs as other nations in need are also competing to purchase supply not only for the short-term, but with longer-term contracts. If, in the short-term we do not need that much, by the time the longer term rolls around the option to purchase may have gone away. We also tend to neglect the growing needs of the economies of the producing nations. There is already evidence that the Export Land Model will apply to natural gas supplies from the Middle East, with Leanan drawing our attention to the <u>developing shortages</u> of natural gas supply among the nations of the Middle East.

Unable to gain access to gas from Qatar or Iran, the northern emirates of Ras al Khaymah and Al Fujayrah have been obliged to import diesel and coal to meet their power generation needs, said Simon Williams, a senior economist with HSBC in Dubai.

"Demand has accelerated more quickly than anticipated and additions to supply have fallen behind," he said. "They've had little option but to look to alternative sources of energy supply. The irony of the Gulf importing hydrocarbon energy is not lost on anyone."

There is also the continuing lack of success in <u>finding natural gas in Saudi Arabia</u> again, from Monday's Drumbeat.

New discoveries have fallen far short of expectations.

Meanwhile, Saudi Arabia is seeing a huge increase in domestic demand for the fuel as a feedstock for everything from desalination plants to heavy industry and power generation.

With the interesting comment from Sadad al-Husseini, former head of exploration and production:

"It is just unfortunate that so much money has been spent to confirm what we knew already,"

The Hirsch report noted that it would take around 20-years to find and develop new technologies and supplies and to put them into place. We do not have the sense of urgency to impel us to do so. The message of "Sorry, there is none," when it comes will mean that the years of grace are over. And as the scale of the problem then becomes evident we will probably, again, blame the fuel companies, rather than those politicians who fail to recognize and address the underlying problems.

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