Gassing on some more

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Tags: algeria, gtl, lng, natural gas, qatar [list all tags]

In the last two posts I have quoted some of the statistics relating to the current state of natural gas production in the US. The picture looking ahead is a bit grim, for domestic production. As a result, as with oil, we will need to look abroad for additional supplies. Unfortunately, apart from our immediate neighbors, it is not economic to move gas in its original form, rather it has to be turned into a liquid at a high pressure and low temperature, and then this liquefied natural gas (LNG) can be shipped in specially build vessels and brought from a facility that was built abroad to do the liquefying, to the United States and a special facility that can regasify the fluid and inject it into the gas pipelines. Which means that if we are to ensure gas supplies we have to have liquefaction plants, LNG carriers and gasification plants. While some of these exist, Platts points out that a fair amount of the ultimate supply will depend on facilities that are still being built or ordered. Quoting an LNG terminal developer

> The world' liquefaction capacity is projected to reach 41 Bcf/d in 2010 from 2004's total of 17 Bcf/d, he said. There are already firm commitments to build 35 Bcf/d in liquefaction capacity by 2009, he added. LNG produced in the Atlantic Basin would mostly be shipped to the US and Europe, while LNG produced in the Pacific Basin would primarily be shipped to Asia, he said. The growing amount of production in the Middle East will help develop a global LNG swing market because the area is positioned between Atlantic and Pacific markets, he said.

However the Asian market is already heavily into LNG that market is anticipated to grow only 6-7 Bcf by 2010. Europe will continue to get most of its supply by pipeline so that demand may go from 4 Bcf to 6 - 8 Bcf in that time. This would leave around 16-19 Bcf for the United States. However the article cautions that demand is seasonal, and European winters can be harsh, so that the supply will more likely be 10 Bcf in the winter and 20 Bcf in the summer. Existing and permitted regasification plants (including 2 in Canada and 1 in Mexico) could just about handle this, on an average basis. The article then goes on to discuss the economics of the operation, and the fact that in total this will not satisfy the US demand, (at current estimates of price) so that this will lead to an increase in price.

In an adjacent article Platts also notes that of the import potential there will be 1 Bcf coming from Qatar in 2008 that will fill the needs of a regasification plant that ExxonMobil currently plans to build in Sabine, Texas.

The IEA in their recent MENA Outlook report estimates that it will take an investment of something on the order of $16 billion per year, if the infrastructure is to be emplaced that will

meet world needs for LNG from that region over the next 25 years. (Which will treble gas production from the region during that time frame). The greatest increases in production are projected, by them, to come from Qatar, Iran, Algeria and Saudi Arabia. (Remember that the 5 rigs that Aramco were borrowing from GOMEX were going after deepwater gas). To give a comparison, the IEA anticipates that the oil investment required will be $23 billion a year, which is more than twice the average annual investment over the past decade.

The most significant resource for the increase, providing 33% of it, will be from the super-giant North Field/South Pars which is shared between Qatar and Iran, while the Hassi R'Mel field in Algeria is anticipated, by the IEA, to provide another 13%, and they go on to comment that no new gas will need to be discovered to attain projected gas outputs up to the year 2030.

It is, however, anticipated that some of the Qatari gas will be used in GTL translation. The first plant to do this will come on stream next year, with a capacity of 34 kbd, while Shell have a 140 kbd plant and ExxonMobil have a 154 kbd plant, both in the advanced planning stage, which will all combine (if on time) to give a total production of around 330 kbd in 2011. In contrast Algeria is anticipated to only have a single 36 kbd GTL plant in operation by 2010, and Iran won't have any until later in time.

While the IEA comments that the world as a whole has 66 years of natural gas reserves, at current rates of consumption, MENA, under those same bounds, has 211 years worth. With which cosy outlook,, and having for the second night of the season, just thrown more wood into the tile stove, its time to crawl under the winter covers - with the thought that the predictions for the winter seeming to get a little worse as it approaches.