Confusion about Natural Gas Supplies for Poland

Polish imports of natural gas, almost all from Russia's Gazprom, has been a topic of unusual debate and public confusion in Poland for over a year: since the Fall of 2000. At that time, the Polish government under Prime Minister Jerzy Buzek set a high priority on reducing Poland's dependency on Russian gas. They accelerated negotiations with Norway for a long term supply of natural gas.

In the September 2001 the Buzek government signed a long term gas supply agreement with Norwegian suppliers for 5 billion cubic meters of gas ("bcm")[1] per year starting in 2008. According to press reports, the contract was to be on a take-or-pay basis, was to run for 16 years, and was reported to have a total value of about $11 billion. A bridge contract was negotiated with the Danish company DONG for a supply of 2 bcm per year starting in 2003.

These actions puzzled us for a number of reasons.

First, the straight math bothered us. It works out to an average value for the gas of around $140 per thousand cubic meters, which is significantly more than Poland is reputedly paying Gazprom at the moment. Since the existing price regime for gas is too high in comparison to the domestic prices of coal and electricity, it seemed not to make commercial sense. Poland is already paying too much for gas.

Second, the volume didn't make sense. Poland already has a contract with Gazprom that requires it to take or pay for about 10 bcm per year that will run for 25 years from 1995. Since Poland presently imports at most 8 bcm per year from all suppliers (almost all from Gazprom), it also seemed not to make commercial sense. Poland is already over-committed.

In fact, the two elements taken together seemed to bode ill for the Polish energy sector, consumers, and taxpayers considering that the government would be guaranteeing the take-or-pay features of the Norwegian contract in addition to the take-or-pay provisions of the 1995 Gazprom contract.

The government responded to such criticism with two lines of argument. On price, they argued that "no price" was too high to pay for energy independence. Furthermore, they said, EU policies required Poland to diversify its sources of gas, so the government had no choice.

As regards volume, the government said that Poland would grow into those volumes, that they were needed. They based their arguments on a number of forecasts, dating back to the early 1990s, that forecast substantial increases in the use of natural gas in Poland after 2000.

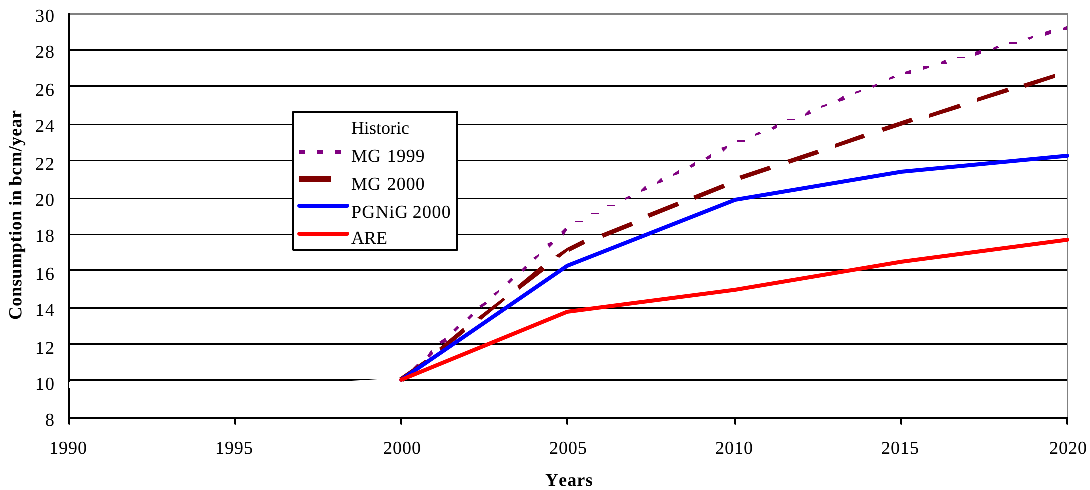
Again, we were puzzled. The use of natural gas in Poland throughout the decade of the 1990s showed a slight decline for the first five years, and then a recovery to the 1990 level by 2000. It certainly could not be called a dynamically growing market, although from press reports one would have thought it was. The lack of growth in gas use in the 1990s was hardly a harbinger of rapid growth in the 2000s.

The "acid test" for us in such matters has always been to look for "bricks and mortar." It generally takes 3 to 5 years from the time a new power generation facility based on using oil or gas is announced to the time it actually starts generating electricity for sale. Any forecast of fuel, therefore, with a five year horizon can be verified by checking for new capacity under construction. The new capacity plans we were aware of did not support the five year portion of the long term forecasts upon which the government seemed to be relying.

[1] One cubic meter = 35.29 cubic feet

In hindsight, it is helpful to look at the various forecasts that have been published over the last few years, upon which government planners were relying. They show us two things. First, there was a general view that gas consumption would rise substantially during the period 2000 to 2010. Second, as that time frame came closer and closer, the perspective began to change. We have assembled below four different forecasts that have been published in Poland, and upon which we must presume the government has relied in formulating its gas supply strategy.

Comparison of Polish Gas Use Forecasts



The latest forecast predicts the lowest growth rate; the oldest forecast predicts the highest growth rate. MG stands for the Ministry of the Economy, which is responsible for developing energy policy in Poland and for supervision of the sector. We show two versions of MG forecasts, one developed in the Fall of 1999, the second in the Winter of 2000. Later in 2000, Polish Oil & Gas Company ("PGNiG") prepared its own forecasts which agreed substantially with the MG forecasts up until 2010, but after that predicted much slower growth.

Finally, we have a forecast prepared by the Energy Market Agency ("ARE") in 2001. Although this forecast also predicts substantial growth up to 2005, the growth predicted in later years is far slower than the other three forecasts. We think that the ARE forecast is more in line with reality, but still may overstate the near term demand for gas.

The change in expectations over a three year period explains some of the evident confusion in government planning. They simply don't know what to expect.

The basic question remains, however. How can Poland obtain the gas it needs in the future? We are somewhat sympathetic to the Polish government's predicament.

The gas balance at the moment is the following. Annual consumption is about 10.5 bcm per year, of which domestic sources supply a little over 3 bcm (high methane equivalent, since much of Poland's domestic gas has high nitrogen content). This leaves a need for around 7 bcm per year of imported gas, over 90% of which is supplied by Gazprom under the 1995 contract.

It is also clear that Poland's needs for gas (and oil) will increase over the years for a number of reasons:

- The economics of coal mining in Poland are not favored by the geology, so in order for Polish industry and the cost of living to remain competitive in Europe, alternate fuels will need to be found at advantageous prices;
- The widespread use of coal for domestic heating as well as for industrial space heating and process energy will be reduced for environmental reasons;
- Numerous municipal district heating plants, now using coal in city centers, will switch to gas (or oil), also for environmental reasons.

The government knows all this, so it worries about where future supplies will come from. The prospects for increasing domestic gas production are rather slim; the challenge is to maintain the present level of production. That means, all future growth in gas consumption will need to be supplied by foreign sources.

Setting aside any elements of Russophobia that may have influenced the Buzek administration, there are good reasons to seek diversity. The problem, though, is how?

Western Europe's gas industry is not especially open or competitive. Turning to the west for competitive sources of gas proves as difficult, or more so, than turning to the east. While there are grand plans in Brussels for the liberalization of gas markets, and the introduction of cross-border third party access ("TPA"), the realization of those plans has been somewhat disappointing.

Those who thought the Energy Charter Treaty would help in this regard have been disappointed as well. While the Treaty seeks to assure transit rights on fair and equal terms, it does nothing to open up internal markets. No help for Poland there.

Certainly there are eager western European firms, notably German and French, which would gladly bid on the privatization of parts or all of PGNiG. But this alone would not advance the cause of an open and competitive market. Acquisition by one or more of western Europe's oligopolies might only lock Poland into the same high priced energy structures as the rest of continental western Europe. They want, and need, better.

The alternatives to the east, in our view, offer better long term prospects. But realization of those prospects will mean:

- The monopolistic position of Gazprom will have to be disassembled, creating many separated and competing transportation and production companies;
- A corollary to the break-up of Gazprom will be the entry of a number of Russian sources, including brokers and exchanges, into the European markets, if those markets open up;
- Economic transportation into EU markets, including Central Europe, of gas from the Caspian region will need to be established (another possible benefit from the restructuring of Gazprom);
- The situation in Ukraine, a promising source of gas on Poland's doorstep, will need to stabilize and become much more transparent, open, and reliable;

- Cross border TPA in an expanded EU will need to be established despite opposition from a number of "national champions." This will create an open and competitive market that will encourage growth and diversity of gas supply for Europe, including Poland, from the east and the south.[a]

We can easily imagine that the prospects of any, let alone, all of the foregoing coming to pass in the near term do not look bright to the Polish government. Indeed, the position of the Polish government in coming up with any kind of strategy for long term gas supply is a very difficult one.

The new government, elected after September's parliamentary elections, has taken a step back. It seems likely that they will resign from the Norwegian contract, and possibly from the short term Danish contract. They have, instead, focused on opening contract renegotiation discussions with Gazprom. In these discussions they hope for a more flexible supply structure (including reduction or elimination of take-or-pay provisions) and perhaps a better price regime (including a lower base price and discontinuation of indexation to world oil prices). These are difficult, but not impossible, objectives.

Gazprom itself is under new management. The new director of Gazprom, Alexei Miller, has been appointed by President Putin with the evident mission of making Gazprom a more transparent and commercially responsive organization. The early signals coming from Gazprom and its new management board are encouraging. This, at least, seems to open the door for Poland to have sensible discussions.

In the past, Gazprom had little incentive to drop the price of gas or reduce the take-or-pay provisions from current levels since there was no competitive source immediately available to which Poland could turn. But, Caspian region suppliers are knocking at the door and competition is not far off. Gazprom could take the view that keeping a happy customer, rather than trying to confine an unhappy one, would be better for long term relations. A new management at Gazprom, looking at its prospects after restructuring, might indeed favor such a course. It's worth a try.

In conclusion, the confusion that seems to dominate Poland's gas supply arrangements at the moment is understandable. In the long run, with clever and patient guidance, the present confusion could congeal into a competitive and flexible gas supply scenario that would enhance Poland's competitive position in Europe and benefit domestic economics. But, for the moment, Poland is at the mercy of both western and eastern factors, with limited influence on either.

[a] For another look at this prospect, we recommend the "Interstate Oil & Gas Transport to Europe" web site: www.inogate.org. It presents two maps. One shows present oil and gas pipeline systems in Europe, including Russia. The other, entitled "Perspectives – June 2001," contemplates a potential diversity of sources that could bring to Europe competition and security of supplies for the long term. It is a most encouraging perspective. But, the markets must truly be opened up for this to happen.