

ENERGY AND SECURITY PROBLEMS OF THE CASPIAN SEA'S REGION

The legal status of the Caspian Sea – whether it is a ‘sea’ or an ‘inland lake’ – has been the subject of much debate¹. The significance is that if it is a ‘sea’, then the littoral states have their own designated offshore territory where they can operate as they please. If it is a ‘lake’, then all the littoral states must agree before any one state can take action, for example by allocating exploration acreage. Leaving aside that debate, it is clear that geographically the Caspian is a lake in the sense that there is no access to the high seas. Exports of oil or gas in any volume will require transit pipelines.

Many gas markets have in the past been constrained by regulatory and institutional factors. Thus if the former Soviet Union is excluded from the data, the share of gas in commercial primary energy has changed relatively little since 1965. Between 1969 and 1991, its share in primary energy remained flat at around 20%.

In recent years, these constraints have been eroded. A potential ‘dash for gas’ is being reinforced in many areas by a combination of factors: gas sector reform, creating gas-to-gas competition; electricity sector reform, leading to strong demand for combined-cycle gas turbine (CCGT) generation; and concerns about the environmental damage caused by the consumption of other hydrocarbons. After 1991, excluding the former Soviet Union, gas’s share began to rise slowly, but by 2007 it had still reached only 21%. However, the IEA’s *World Energy Outlook*, 2008 Reference Case, projects an increase in natural gas demand between 2006 and 2030 of 150 bcm in Western Europe, 160 bcm in Eastern Europe and Eurasia, and 380 bcm in Asia².

Many of the proposed projects are in effect a series of joint ventures including a mix of private companies, government and state-owned enterprises.³ The Nabucco project began in February 2002 on the basis of discussions between OMV of Austria and Botas of Turkey and with the active support of the European Commission, which saw the project as means of reducing dependence upon gas from Russia. The line will be connected with the Tabriz-Erzurum line and the South Caucasus pipelines, thus linking it to the proposed Trans-Caspian Gas Pipeline. The 3,300 km pipeline will run from Erzurum in Turkey to Austria. There has been discussion of a further link to Poland. Total eventual capacity is

¹ Sergei, Leiden, Cambridge University Press 1996, P. 87

² International Energy Agency, *World energy executive summary outlook 2008*, Paris P. 6

³ ESMAP Energy Sector Management Assistance Programme, *Cross Border Oil and Gas Pipelines / World Bank* Washington, June 2003 P. 22

expected to be 31 bcm/y. Similarly, the Greece–Italy pipeline was created in 2006 as an inter governmental project between Italy and Greece with the support of Turkey to carry Caspian gas (8–10 bcm/y) via Turkey to Greece and Italy. This joint-venture approach in part reflects a desire to spread the risks inherent in such projects but also provides a degree of political protection.

The really big potential gas producers of the Persian Gulf – Iran and Qatar, which have around 30% of global proven gas reserves are only on the fringe of new plans. Continued bad relations between Iran and the US mean that many of the proposed export routes from Iran face serious barriers as the US pressures both markets and transit countries not to take Iranian gas. This is particularly relevant in the context of the Nabucco pipeline. In September 2008, the CEO of Hungary's oil and gas company MOL stated that securing Iranian gas supplies was vital for the development of the 31 bcm/year Nabucco line⁴. Meanwhile, Iran has also warned OMV (Austria) that Nabucco cannot wait forever in deciding whether or not to include Iran. One Iranian export pipeline which is likely to go ahead is a proposal to export gas to Armenia in exchange for electricity.

The plan is to export 1.1 bcm/y of gas, rising to 2.3 bcm/y by 2019, in return for 3.3 billion kWh. This plan was developed in response to Russia's curtailing of current price subsidies and fears over the reliability of the present gas supplies to Armenia through the North–South Gas Pipeline via South Ossetia and Georgia. In the recent conflict, Georgia cut the throughput on this line by 30%. Economic sources of conflict revolve around the terms of transit plus profit- and 'rent'-sharing in the context of the obsolescing bargain⁵. Here, some definitions are required.

There are two components to a return on any project. The first is the economist's 'normal profit', which is the amount that the project must earn to be justified and to remain in business. In effect this is the required rate of return on the project. Anything above that return would be classed as 'super-normal profit'. Another definition might be 'economic rent', where 'rent' is defined as the difference between the full costs of the project (including 'normal profit') and the market price earned by the project.

Rent arises because of a monopoly position and/or as the result of a gift of nature where natural resources offer below-average costs of production. In the case of oil and gas prices this rent can be considerable because of huge variations in the costs of producing the oil and gas and also, for oil, because oil producing exporting countries, OPEC restrains supply to secure higher prices. For pipelines the 'rent' might also reflect a monopoly position for the transit country.

⁴ Asia – Pacific, World News, New on line 21 November 2009

⁵ Vernon, R Sovereignty at bay, multinationals Spread enterprise New york, 1970

As already noted, the transit agreement determines the transit fee to be paid to the transit government and also (in many cases) the terms on which the transit country can lift oil and gas from the line. A major problem associated with analysing such terms is that until recently the terms of many transit agreements have been treated as commercially (or indeed strategically) confidential.

Thus histories of such agreements tend to present relatively sketchy data on what the terms actually are, often drawn from a mixture of trade press reports and rumour. However, transparency of 'transit terms', while helping analysts, can also be a double-edged sword if revealing the terms of one agreement creates dissatisfaction over another.

The setting of transit fees to allow oil and gas pipelines through another's territory has always been a difficult and controversial area. As will be developed below, there is no 'objective' or 'fair' way of setting such fees⁶. Thus the outcome, in the form of the transit agreement, depends upon relative bargaining power and the skill with which that power is used in the negotiations between the transit government and the transit pipeline company. The latter may be private or may include involvement by the producing or consuming country's government at either end of the line.

Making the 'transit terms' dependent upon the outcome of bargaining power is undesirable since it makes any transit agreement signed vulnerable to pressure for renegotiation as the relative bargaining power changes – i.e. the 'obsolescing bargain' becomes operable.

The changes may come about because of the situation between the signatories – for example once the investment in the pipeline is sunk the pipeline company becomes a hostage to fortune – or simply because changes to oil and gas prices have materially changed the value of the pipeline project. It is these changes which generate much of the conflict associated with transit pipelines. In order to determine whether there is an objective basis to determine transit fees, it is necessary to consider the actual purpose of the transit fee.

Normally the land used to construct the line – i.e. the right of way – is paid for as the result of negotiations between the pipeline company and the landowner, which may or may not be the government.

It is thus quite separate from issues related to transit. Landowners clearly deserve some form of compensation for their loss, but this is normally covered by negotiated purchases. Such purchases can often prove to be problematical since in most contexts there must be some form of rights of 'eminent domain' or 'compulsory purchase' which prevents a landowner from holding the project to

⁶ Wald, Thomas, Ogel (oil, gas and Energy Law), Volume 5 December 2004, Netherlands

ransom by refusing to sell. This may result in aggrieved landowners but it is not part of the transit issue affecting government-to-government relations.

There may also be environmental externalities associated with the building and operation of the pipeline, but these can be covered by well-known techniques to internalize the externalities⁷.

Finally, disruptions to local communities from the pipeline are normally dealt with directly by the pipeline company, often through some form of Corporate Social Responsibility (CSR) spending within the community, or indeed by employing locals to assist in protecting the security of the line. Thus in general such negative impacts should not be considered part of any transit package, since mechanisms for their management already exist.

During the Cold War, military strategists developed the concept of Mutual Assured Destruction (MAD). The idea was simple. If both sides had the capability to destroy each other by virtue of a nuclear exchange but did not have the capability to prevent a retaliatory strike after a first strike, then, assuming rational actors were in charge, this would keep the peace. If both sides were assured of being destroyed, neither would launch a first strike. This argument was frequently used to justify maintaining a nuclear capability.

On a less dramatic scale, the concept of developing mutual dependence in the context of transit pipelines might prove to be a fruitful option.

If a situation could be contrived whereby 'bad' transit behaviour could be met by action from either the producing or the consuming country (or both), this would encourage better behaviour by the transit country. To some extent this was the logic behind making the transit country an offtaker from the pipeline. If the transit country is dependent upon oil or gas from the pipeline, it might be less willing to risk a cessation of throughput. However, as explained earlier, experience suggests this may simply create a double-edged sword since the terms of the offtake are part of the general 'transit terms'.

Therefore some other lever might be needed. The Iran-Pakistan-India gas pipeline (IPI) provides a good example. Clearly, leaving aside issues related to 'transit terms', political relations between India and Pakistan have hardly been congenial, most recently following the terrorist attacks in Mumbai in November 2008. This history of poor relations has been a major reason for the very slow development of a project first proposed in 1989. One option would be for India to build gas-fired power generation near the Pakistani border to supply Pakistan with electricity⁸.

Any cessation of the gas throughput as a result of unilateral action by Pakistan over 'transit terms' would obviously threaten electricity supplies in

⁷ Markandya, A. and Barbier, Edward, *Blue Print for a Green Economy*, London, U.K. 1989, p. 95

⁸ Chaudhary, N. *Iran to India: Natural gas pipeline* Hindustan Times, 7 July 2000

Pakistan. While it is legitimate to ask why Pakistan should put itself at risk in this way, to justify the economics of the whole project a link into India might be necessary.

Thus exposing itself to the risk of an electricity cut-off might be the price Pakistan has to pay to secure its own gas supplies and transit fees from the project.

In this perspective, one can call Caspian Zone as one of the few strategic energy centers of the world. The subject of economical importance comes with its security importance and has a close relation with security goals of the west.

Կասպյան տարածաշրջանի էներգետիկ և անվտանգության հիմնահարցերը

Յոդվածը նվիրված է Կասպից ծովի ավազանի էներգետիկ ռեսուրսների և տարածաշրջանային պետությունների քաղաքական, տնտեսական հարաբերությունների բացահայտմանը: Մասնավորապես, հեղինակը առաջ է քաշում այն տեսակետը, որ Կասպյան տարածաշրջանի երկրների փոխրահարաբերություններում առանցքային է համարվում Կասպից ծովի կարգավիճակի հիմնահարցը, որի շուրջ դեռ չկա կոնսենսուս:

Յոդվածում քննարկվում են նաև տարածաշրջանային մի շարք էներգետիկ նախագծերի աշխարհաքաղաքական, տնտեսական և անվտանգային հարցերը, որոնք բացահայտում են ինչպես Արևմտյան, այնպես էլ տարածաշրջանային երկրների էներգետիկ ռեսուրսների օգտագործման և դրանց նկատմամբ վերահսկողության սահմանման համար մղվող սրցակցային շահերը: