UPEI

Union Pétrolière Européenne Indépendante
Union of European Petroleum Independents

Gas Supply Security:
A European Challenge

Introduction to Gas Supply Security

Security of gas supply is on the public agenda. The topic is no longer thought frivolous but pertinent. Both International Energy Agency (IEA) and the European Union try to find proper answers to the challenge and so do various national governments.
With a long track record of promoting the subject of gas supply security, UPEI welcomes the EU's draft directive as a step in the right direction. We also concur with the reasons given why a new directive is needed.

Why the topic has come to the fore

Gas has become the most important primary energy source in the EU second to oil with special importance for electricity generation and household heating. Demand continues to grow on a worldwide scale, accompanied by an increase in demand competition while worldwide supply will continue to concentrate on ever fewer countries.

!

- 56% of world gas reserves lie in Russia, Iran and Qatar
- 1/4 of European gas needs are supplied by Russia
- declining OECD production

The world gas markets are losing their regional character and keep developing towards a global market while domestic arrangements still breathe the old bilateral or national structures and culture. The sufficiency of future investments in the gas value chain has to be seen under a cloud of doubt (also for the LNG value chain after 2010) because of a lack of funds, perceived risks and regulatory uncertainties.
There is more and more of political brinkmanship on the supply side while the argument that "they" need our money as we need their gas does not fly. With a very restricted number of players the name of the game is the capability to endure a crisis. It all comes down to a game of poker at crisis time.

Looming "GasPec"

Commercial stocks rarely exceed two months of supply and are often well below that in most countries at certain times of the year. According to the IEA, commercial stocks in all countries are significantly depleted at any winter's end. The benchmark for gas security of supply systems (as per IEA Gas Market Review 2009) is as follows: "Gas security is measured as the capability to manage for a given time external market influences that cannot be balanced by the market itself" and "energy supply security must be geared to ensuring proper functioning of the economy, the uninterrupted physical availability at affordable prices".

The "n-1" Indicator

!

The "n-1" indicator describes the ability of the gas infrastructure's capacity to supply the gas for maximal demand in the calculated area in case of disruption of the largest infrastructure.
"Calculated area" means a geographical area for which the application of "n-1" indicator is calculated.

(Source: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning measures to safeguard security of gas supply and repealing Directive 2004/67/EC)

Why are we concerned with a possible Gas Supply Crisis?

In today's economies, the social impact of energy interruption is enormous as could be experienced during the
- oil crises of 1973/80,
- collapse of Italian electricity grid in 2004,
- Californian electricity shortage 2001,
- Ukraine gas crisis 2005/2006,
- Belarus gas crisis 2006/2007,
- Ukraine gas crisis 2007/2008,
- Ukraine gas crisis 2008/2009.

There is a strong asymmetry in costs of an energy outage for energy supply entities and the economy at large.

Comments on the EU Regulation Proposal to safeguard Security of Gas Supply

The need to define the role of industry, member states and the community has been rightly recognised.
However, in a liberalised market, the responsibility for security of supply must firmly rest with the public domain, if the market participants are supposed to do what the market dictates. In a liberalised market competitive pressures do not allow to prepare for events of low probability. However, we miss a clear commitment to this important principal especially as the role of the market is seen as a cornerstone of supply security.
In defining the industry's role careful attention should be paid to the new market structures. In the public debate all too often the image of the old monolithic market structures dominated by one or two players prevails.

In today's market with the desired multitude of players which make the market function special attention needs to be paid to the capability of burden carrying by the various players.

National Sovereignty

The Regulation Proposal stresses that sovereign rights are not affected whereas UPEI comments this as a "political fudge". In an integrated gas market – which is strongly encouraged by the proposal – the crisis measures need to be clearly harmonised if a rupture in times of crisis is to be avoided. The proposal foresees a certain bottom-up harmonisation path and allows an intervention by the community under certain circumstances. However, it is not clear to us who at the end of the day has the last word. If an internal market is seen as the best tool to forestall a crisis the final say has to be with the community. This is totally compatible with the principle of subsidiarity. If this is implied by the regulation the wording should be much more straightforward to avoid the impression of "fudge".

The role of market forces

The main emphasis of the regulation to prevent a supply crisis is on market forces. Ideally this envisions a free flow of gas within the EU through a highly flexible logistical system with maximum versatility. UPEI supports this scenario for non external supply crises while we doubt, however, whether the political reality will allow this system to persevere in case of external supply cuts.
Clearly, the market will allocate scarce gas to the highest bidders. Will it be acceptable that rich countries let the poorer countries freeze? Can and will we allow price arbitrage to fully function? What does it mean in practice that the transborder flow should not be unduly restricted?
It is UPEI's opinion that the proposal fails on one of the IEA benchmarks: "Gas security is measured as the capability to manage for a given time external market influences that cannot be balanced by the market itself." On this scenario the proposal is too vague and again the clear definition of the final say is sorely missed.

Solidarity

The proposal builds on voluntary measures and peer review to create solidarity in times of crisis. As already indicated above UPEI feels that this will not fly in the face of national interests in times of crisis or furthermore in an integrated market where gas in one country (be it in storage or transit) is destined for another market and where gas might have been forward sold to parties outside of the country.
Clear and centrally agreed or approved rules are needed to enhance solidarity. We agree that if these measures are to be effective they must be consistent and prepared well in advance. They need to be co-ordinated at community level and should be tested prior to any crisis.
To be able to lose the biggest supply source without curtailing customers is standard practice in electricity production. We applaud that this concept is introduced into the security of gas supply equation. However, we regret that this concept is not followed through to the end: Why is "n-1" foreseen only for infrastructure failings for 60 days (2014) and not for the whole supply chain? The capability to cope with "n-1" is to be demonstrated on national level only! To exclude the possible effects of the internal market debases the value of the exercise. What does it mean that national plans should include at least a planning for "n-1"?
Harmonised measures should be set to cope at least with the January 2009 crisis. This exemplifies the big gap between the ambition of the regulation and its actual effect.

Crisis measures

In a crisis the Regulation puts main emphasis on "maintenance of supply to protected customers". In UPEI's opinion this lacks ambition and fails the second IEA benchmark: "Energy supply security must be geared to ensuring proper functioning of the economy, the uninterrupted physical availability at affordable prices."
According to the IEA for the January 2009 crisis – which is set as a minimum benchmark by the proposed regulation – rapid stock draw was the solution of choice. Not surprisingly we see the same phenomenon in oil crises. The Regulation stipulates that minimum stocks to cope with coldest winters of the past 20 years need to be kept. However, there is no provision for any sort of security stocks for crises which

A word of caution: The existence of "sufficient" storage facility and the sufficient ullage do not guarantee security.
In a liberated market we cannot take for granted that gas is stored for domestic consumption any more than that it is owned by domestic companies and has not been sold forward.

!

are externally induced. UPEI sees this as a considerable shortcoming of the Regulation Proposal.
The EU's internal market directive gas postulates the encouragement of interruptible contracts.
As the aim in the security of supply equation is to maintain the flow of energy interruptible contracts should be obliged to partake in the security system of the alternative fuel – at least to some degree. (Swiss model) Beggar-thy-neighbour-policies should not be tolerated.

Gas Security Stocks

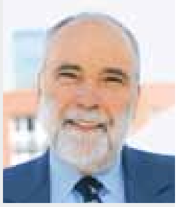
Yes, gas stocks are more expensive than oil stocks.
Yes, they depend on pipes for market access.
Yes, they are no panacea against all risks and
Yes, they have a longer lead time to reach the market.

But these reasons are not sufficient to exclude security stocks from the public armoury against crises. In evaluating gas security stocks it needs to be reiterated that in a competitive market commercial entities will not be willing and able to incur inventory carrying costs beyond their operational needs. As shown before commercial stocks rarely exceed two months of consumption.
Security stocks afford policy makers time to react – probably the scarcest commodity in times of crisis. And only security stocks can bring additional energy to the market in an external crisis on a guaranteed base.
In our opinion it can be discussed how many additional days of crisis stocks are needed but to forego the option of some security stocks weakens our armoury considerably.

!

A word on cost: Gas prices follow oil – thus the gas prices charged to consumers include implicitly the cost of crisis protection for oil. In many price formulas (such as used along the Rhine valley) gas price formulas explicitly include the cost of excise tax and security stocks. If we follow the argument that gas storage costs exceed oil storage by a factor 4 the consumer pays at least for 20 days of security stocks (since many years).
Is it out of order to ask where these security stocks are held?

About the Author



Hellmuth Weisser has been extensively exposed to Security of Supply Questions in the oil industry and looks at the gas industry as an interested outsider.
He was elected President of UPEI in 1996 and has been President of AFM+E Aussenhandelsverband für Mineralöl und Energie e.V. since 1988. Weisser is Member of the IEA Industry Advisory Board as well as Vice-Chairman of the German Petroleum Stockholding Association (EBV). He is Chairman of the Supervisory Board of Marquard & Bahls AG, Hamburg.

There are various arguments against security stocks such as "we don't have enough facilities" and then again "we do have enough facilities" – somewhere there is a lack of consistency: only the one or the other can be true. If there are not enough facilities we have a real problem. If there are enough facilities a crisis mechanism can be easily designed.

To sum up

- We welcome the overhaul of the present gas directive. The prime responsibility for security-of-supply-needs to be more firmly anchored in the public domain. The primacy of the EU in applying the crisis management needs to be strengthened or formulated less ambiguously. And in addition the role of the internal market has to be more clearly defined and/or safeguarded.
- We question whether full price arbitrage in times of crisis is politically sustainable? The reliance on voluntary solidarity will fail in times of crisis. We regret that the "n-1" principle is not thoroughly adhered to over the whole gas supply value chain.
- We feel that the regulation puts not enough emphasis on maintaining the full gas supply scheme and regret that security stocks for gas are not firmly imbedded in the armoury of anti-crises-measures while the costs are already partly paid by the consumers. The encouragement of interruptible contracts must be coupled with the security regime of the alternative fuel.

For further information also read our brochure "Gas stockpiling in Europe – Security risk?" available in our offices and on www.upei.org.

Published by:
Union Pétrolière Européenne Indépendante
Union of European Petroleum Independents
info@upei.org
www.upei.org

Hamburg office:
c/o AFM+E
Grosse Theaterstrasse 1
D-20354 Hamburg
Phone ++49 40 34 08 58
Fax ++49 40 34 42 00

Brussels office:
Avenue Michel Ange 68
B-1000 Bruxelles
Phone ++32 2 739 62 66
Fax ++32 2 739 62 73

October 2009; Photos: UPEI, WEG e.V.