

## **Editorial**

### **Security of energy supply for today and tomorrow**

Security of energy supply is a recurrent concept in national energy policies and also at the European and worldwide levels. In the European Commission's view, security of energy supply is one of the three pillars of a common energy policy with competitiveness and the reduction of greenhouse gas emissions.

The concern for security of energy supply was usually related, for a given country, to its dependence over energy imports and the possible disruption of flows, mainly for geopolitical reasons. The first time the question was raised was in 1911, when Winston Churchill, then First Lord of the Admiralty made a historic decision: to shift the power source of the British navy's ships from coal to oil. He intended to make the fleet faster than its German counterpart. But the switch also meant that the Royal Navy would rely not on coal from Wales but on insecure oil supply from what was then Persia. Energy security thus became a question of national strategy. Churchill's answer was: "Safety and certainty in oil lie in variety and variety alone."<sup>1</sup> Variety and diversity remain today the key strategic principles for dealing with security of energy supply.

Today, security of energy supply is still concerned by geopolitical matters but a number of new elements have to be taken into account. In recent years, storms and hurricanes have seriously disrupted oil, gas and electricity supply. Climate change may increase the occurrence of extreme weather situations. On a more technical ground, the growing interconnection of energy networks may have opposite consequences. It may enhance security of supply because it offers opportunities for substitutions in case of disruption. On the other hand, it might create new fragility. The blackout of November 4, 2006, which affected major part of Europe, resulted from the shutdown of a local high voltage line in Germany.

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<sup>1</sup> Daniel Yergin: « Ensuring Energy Security », *Foreign Affairs*, Vol. 85 N° 2, March/April 2006.

A Standard definition of security of supply is a flow of energy supply to meet demand in a manner and at a price level that does not disrupt the course of the economy in an environmental sustainable manner. The concept is vast and multiform. It concerns the various energy value chains from the upstream production of primary energy to the downstream delivery to end users. Disruption may come from geopolitical turmoil, accidents, and natural catastrophes. It has an important time dimension. In the short term a sudden unexpected disruption may happen in the supply of electricity, natural gas, oil or coal. It can be caused by a variety of reasons: accident, sabotage, strike and other social demonstration, unusual climatic event. In the medium and long term, security of supply may be threatened by long lasting political or social turmoil, lack of available resources but also, more prosaically, because the needed investments in productive capacity, transmission and storage were not made or delayed.

This special issue of the European Review of Energy Markets brings together a series of contributions on security of energy supply. It confirms the various dimensions of the concept. It shows also that security of energy supply does not have the same meaning for each country because history, the structure of national energy balances and national energy priorities are not similar. For the European Union, it means that the definition of a commonly accepted policy of security of energy supply is not an easy task. However, there is a consensus on key major issues: reinforcing the gas and power interconnections, building new gas routes, watching carefully that power investments for peak generation are made. The idea of “speaking the same voice” with large suppliers is also an important element, while keeping in mind that oil and gas suppliers are more and more concerned with the question of “security of energy demand” .

The question of climate change is now heavily present in all energy issues. In 2006, the first warning came from the first sentence of the World Energy Outlook of the International Energy Agency: “The energy future which we are creating is unsustainable.” The Stern Review and other studies have crystallized the dual energy-environment issue. The question of security of energy supply is now directly related to the three 20 percent targets for 2020: reducing greenhouse gas emissions by 20 percent from 1990 levels, enhancing energy efficiency by 20 percent, increasing the share of renewable energy to 20 percent in energy balances.

All these elements comfort the idea that security of energy supply still has a national and regional dimension but that the global dimension can no longer

be ignored. There is a need for reinforcing world regulation on global issues. Europe, which is well in advance for building a sustainable energy future, might have an important role to play.

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