



BOOK REVIEWS

Security of Energy Supply in Europe: natural gas, nuclear and hydrogen, edited by FRANÇOIS LÉVEQUE, JEAN-MICHEL GLACHANT, JULIÁN BARQUIN, CHRISTIAN VON HIRSCHHAUSEN, FRANZISKA HOLZ, and WILLIAM J. NUTTAL (Cheltenham and Northampton: Edward Elgar, 2010) Hardbound 314 pages, ISBN 978-84980-032-7.

This book reports the principal ideas and recommendations arising from an EU-funded project entitled “Co-ordinating Energy Security in Supply Activities” (CESSA) which had the objective of working “towards a consensus on critical issues in supply security of the EU”. The work program included five major conferences in EU cities during 2007 and 2008. It appears that the chapters in the book were written no later than 2008, so inevitably some of them have dated, especially those relating to natural gas, which is a market once again in the process of considerable change because of recent developments in extraction technology. An exception is an informative review of the US and European gas pipeline systems by Jeff Makhholm. The rest of the book deals only with nuclear power and hydrogen, so it is by no means a comprehensive account of security issues relating to the energy market: in particular, the amount of space (about one third) devoted to hydrogen might seem rather odd to most energy economists, given that a “hydrogen economy” seems such a distant prospect. Moreover, in many of the chapters, the authors stray well away from security of supply issues to deal with general matters relating to the sector of the energy market with which they are concerned.

A clearer focus on underlying energy-security issues would have been helpful. According to the Introduction, the contributors “. . . share the conviction that energy security is an important issue that should be addressed through economic analysis to yield policy-relevant conclusions.” However, the editors seem determined not to define the issue with which they are dealing because “A single, universal definition of supply security does not exist.” Whatever one thinks about such definitions, it is certainly necessary to clarify the economic characteristics of energy security. None of the contributors to the book does so. The editors spread some confusion on this critical issue. In their Introduction, they characterize energy security as a public good but, both in the Introduction and in their first chapter, they stress the importance of markets in providing security (as do many of the authors). So evidently, they do not regard energy security as a pure public good (which the market would not supply in any quantity) but as a good with some public-good characteristics. But what are those public good characteristics? Unless they are identified, it is hard to see how governments can deal

with them. A book that, at times, argues for an EU-wide approach to security should surely have addressed this issue. Otherwise, the principles on which the EU authorities should act are entirely unclear.

Indeed, the more one considers energy security, the weaker seems the case for describing it as a quasi-public good. It is not like national defence. Security is supplied by energy markets as part of the normal interactions of producers and consumers, and its value is generally incorporated in prices because security is a valuable attribute of an energy product for which consumers are prepared to pay. It is true that, as the editors say, security will not be “optimal” in the neo-classical sense, but only if Nirvana economics is optimality an achievable state. In the real world, it will never occur except by chance.

Moreover, the remedies offered by those who believe that enhanced security can be achieved by government or supranational intervention may well have severe side effects, as both theory and experience demonstrate. There is a serious risk that government attempts to improve security will have perverse effects by reducing security, as British governments have done in the past when they have supported indigenous industries such as coal and nuclear power and are now doing by supporting renewables. Such attempts remove responsibility from market participants, increase political uncertainty, and blunt commercial incentives to provide security.

There seem to be three critical issues that a book about energy security might be expected to address:

1. What, if anything, are the security problems that are likely to arise if provision is left entirely to the energy market?
2. If there are any such problems, what are the options for governments that wish to deal with them (for example, government-promoted storage or diversification of supply sources)? and
3. Will pursuit of one or more of these options improve or reduce security after taking into account the consequences of the government action?

This book, like many contributions on energy security, only deals with the second issue, plunging in to a discussion of what governments or supranational bodies might do without first considering whether they need to do anything and failing to follow up by considering the consequences of their actions. Of course, many of those consequences may well be unintended, which is all the more reason to be wary of centralized measures aimed at “improving” security.

Colin Robinson
University of Surrey, UK

Russian and CIS Gas Markets and their Impact on Europe, edited by SIMON PIRANI (Oxford: Oxford University Press for the Oxford Institute for Energy Studies 2009) Hardbound, 487 pages, ISBN 978-0-9-955454-6.

Following its 2008 review of Asian gas, the Oxford Institute for Energy studies produced the survey under review here of natural gas in the components of the former Soviet Union (CIS). The book starts with an editor's introduction. Then Tatiana Mitrova of the Russian Academy of Science provides an excellent overview of the history, policy issues, and prospects. A key here that permeates all the subsequent chapters is that the policies to raise natural-gas prices to their export value necessitate major adjustments throughout the CIS. Each of the next ten chapters then examines the situation the situation in the individual states. The authors range from people at the Institute including Jonathan Stern on Russia and Pirani on the Ukraine to experts within the CIS. Three key differences—country size, whether or not it produces natural gas, and data availability—lead to predictable differences in the nature of and broad interest in these chapters. In every case, the authors manage to provide a good overview of key matters such as production prospects in producing countries, public policy, and what firms are involved in producing, transporting, and delivering gas. Turkmenistan proves the outlier. No author is indicated for the chapter; endnotes credit the introduction to a Russian Academy member but only note that the other sections rely on materials whose source cannot be disclosed. Mitrova, Pirani, and Stern then well survey prospects; it is only here that the impact on Europe is covered. Pirani provides conclusions. This is a solid, careful survey, but the subjects covered are extremely specialized. Thus, it is a valuable resource for those closely concerned about CIS gas.

Richard L. Gordon
The Pennsylvania State University

ERRATUM

On p. 58 of the paper by Bréchet, Gerard and Tulkens, “Efficiency vs. Stability in Climate Coalitions: A Conceptual and Computational Appraisal”, *The Energy Journal* 32(1): 49–75, lines 4 and 5 including the mathematical expressions should have appeared as follows:

- for the insiders, $\max W_S = \sum_{i \in S} \sum_{t=0}^T \frac{Z_{it}}{(1+\rho)^t}$
- for the outsiders, *i.e.* $\forall i \in N \setminus S$, $\max W_i = \sum_{t=0}^T \frac{Z_{it}}{(1+\rho)^t}$

