

This issue of Forum turns its attention to two aspects of energy investment, LNG and Power Generation. Both are necessary, but both face structural problems – LNG mainly in the USA and Power Generation mainly in the EU. Our articles address the factors that tend to restrain the investment that, it could be argued, ought to be taking place with greater urgency than it is.

We start with LNG. David Ledesma describes the changing trading environment that is developing in the Atlantic Basin. This seems likely to encourage changes in the traditional supply chain which in the past has been largely dependent on long-term supply contracts. The USA is now the largest potential market for LNG (since its own production and Canadian imports have peaked) but not only major problems of planning controls have prevented the desired expansion of terminals, but also the nature of the liberalised US gas market, since the future expected market price for gas is a crucial input into the investment decisions. The UK is also a potential LNG importer, particularly with its direct link into the rest of the EU and its own liberalised gas market. Atlantic Basin trading and arbitrage seems likely to develop, but, with long-term supply contracts still tending to be the norm, it may be a slower progress than some market participants would prefer.

Ben Smith looks further into the scope for a future of spot, or short-term, markets in LNG, particularly in the Far East where, until now, the major LNG development has taken place. He describes the changes in the industry since the mid-90s, many of which would seem to provide an environment in which a spot market should develop. In practice it has not occurred, and this seems attributable to the nature of the Far Eastern market, where the large gas and electricity providers have so far shown little interest in changing their ways. This type of market development may have to take place in the USA or Europe rather than the Far East.

Julia Richardson and John Burnes look specifically at the US gas market, where LNG currently supplies about 2–3 per cent but could supply up to 10 per cent within a few years if new terminal capacity were constructed. There are plenty of proposals, but only four have been approved and none are yet under

CONTENTS

Investment in LNG

David Ledesma
Ben Smith
Julia Richardson and John Burnes, Jr – page 3

Investment in Power Generation

Lindsay Tuthill
John Bower
Mark Lijesen and Gijsbert Zwart – page 10

Personal Commentary

Philip J. Carroll – page 18

Asinus Muses – page 20



construction. Local opposition has frequently been successful. Meanwhile the four existing terminals are being expanded. Whether this activity will lead to a new market trading system remains uncertain. Many of the new proposals are based on long-term supply arrangements and there is the additional problem of interchangeability of LNG supply with domestic supplies due to specification differences. Nevertheless, there is an increase in spot market activity, in particular from Trinidad, and the logic of the situation seems to indicate that this will develop further.

Our second investment subject deals with power generation. Lindsay Tuthill describes the theoretical model that underlies the problem of whether to invest in 'clean' or 'dirty' generating capacity given the uncertainty of government policy and regulations on CO₂ emissions. For the purpose of her example a dirty plant is defined as coal-fired and a clean one as gas-fired, but the principle can be extended to other plant types. The variable in the models is the price at which CO₂ permits can be traded and, of course, the timing of their assumed introduction. The conclusion, which should surely be of some importance to governments, is that any delay in setting policy will delay investment, as will the perceived uncertainty about future policy change.

Tuthill deals in economic theory, and John Bower describes what is happening currently to power generation investment in the EU. It is the precise practical form of the theory. Gas-fired investment is being postponed and coal-fired generation being used to its utmost capacity. Although the first phase of the Emissions Trading Scheme is imminent, the second phase (2008 and beyond), which is relevant for investment decisions of today, remains in limbo. Bower goes on to describe the further complications introduced by the Large Combustion Plant directive which is designed to reduce emissions of oxides of nitrogen and sulphide and particulates. This simply gives further encouragement to generators to postpone their investment decisions.

Mark Lijesen and Gijsbert Zwart accept the current lack of investment but ask whether this yet constitutes a problem. They discuss the elements

of an efficient market, the definition of reliability and demand response. They do not specifically deal with the CO₂ emissions trading problems but accept that one of the impediments to investment is uncertainty over future policy affecting prices. Their conclusion is not as uncompromisingly gloomy as that of Bower (or, by inference, of Tuthill) but the conditions they require for a soft landing certainly seem to limit the case for optimism.

Personal Commentary in this issue is by Philip Carroll who has described for us his involvement in the administration of the oil sector in Iraq as the first Director of the Office of Oil Policy in the Coalition Provisional Authority. Although much has changed since his departure, this account will, we are sure, be of considerable interest to our readers.

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