

EDF Energy: a utility view of commodities risk

EDF ENERGY'S DIRECTOR OF STRATEGY AND CORPORATE AFFAIRS, PAUL SPENCE EXPLAINS HOW AN INTEGRATED ENERGY COMPANY MANAGES RISK, BALANCES SUPPLY AND DEMAND, AND MEETS CONSUMER REQUIREMENTS

Electricity is a peculiar form of energy. We have become dependent on it for all aspects of our daily lives, yet often pay scant attention to its characteristics. It is difficult to store or transport long distances; it is the ultimate local and ephemeral form of power. Yet the commodities on which it depends are exactly the opposite – the coal, gas, oil and nuclear fuel markets are fundamentally global and long term in nature. They are subject to some of the fiercest environmental, geopolitical and macroeconomic forces imaginable. Will the wind blow? Will conflict disrupt oil supplies from the Gulf? How will gas markets be affected by political events in Russia?

These are the factors that any energy company has to negotiate on a daily basis. When one considers the expectations that consumers in most of the Western world have of the reliability and predictability of their electricity supply, the scale of the issue becomes clear. Once the fluctuating demand between different times of day, different days of the week and different seasons of the year are factored in, the gargantuan task of managing risk and balancing supply and demand is cast into even sharper relief. Customers rightly do not want to be exposed to this risk. Our job is to make sure we have the right capacity, the right plant flexibility and the right risk management techniques to deal with it for them.

The UK consumes 50 million tonnes of coal a year and 1,000 TWh of gas, while managing the output of more than 4,000 wind turbines. We also depend on large amounts of nuclear fuel, biomass and other fuel sources. Our job is to manage all the associated risks. We must look to both the short and long terms to deliver the consistency and benefits our customers require as well being able to shield them from the price volatility in wholesale markets. We must also do so profitably and sustainably so we can manage our own business for the long term. As an integrated energy company supplying both domestic and business customers and generating power for the grid, this takes two separate but closely correlated activities.

When we sell power to a domestic or business customer for a particular period, we must then buy the



Hartlepool nuclear power station

corresponding electricity to fulfil that contract. That period may be as long as three years, so we need to take a view on how all the different markets will look over that period and how each will contribute to the supply we need. To protect ourselves from fluctuations in those calculations, we then need to buy financial products, or hedges, to make sure our own risk is managed.

Conversely, when we plan our own generation, we need to judge whether the demand will be there to purchase our own output. This is even more important when drawing up plans to build new power stations, which will have a generating life of 60 years or more. These massive infrastructure projects, such as Flamanville in France or Hinkley Point in the UK, require even more risk assessment. We need to allow for raw material price changes, movements in carbon markets and the variable exchange rates in play. Risk management is a key skill for integrated utilities.

Functioning and efficient markets – both physical and virtual – are therefore essential for the management of our business and ultimately for our consumers. It is only by ensuring the broadest participation in the energy market, and its proper organisation, that we can hope to harness the challenges of commodity risk and ultimately deliver a positive societal impact for all our stakeholders. ■