## Workshop on "Power Generation Investment in Liberalised Electricity Markets"[1]

### Introduction

1. This note provides summary of the workshop, jointly organised by the IEA and NEA, held 25-26 March at the IEA.

### Programme

2. There were over 80 registered participants from 21 countries, including 4 nonmember countries (China, Morocco, Poland and Romania). The bulk of attendees were from governments with about 10 participants from energy regulatory bodies. The secretariat opened the meeting to industry participation, and industry participants constituted nearly one-third of the total.

3. The meeting was opened by Claude Mandil and Luis Echávari and closed by Bill Ramsay. Led by a very effective chair, Professor David Newbery from Cambridge University, we had a total of 14 papers presented (there were 3 late cancellations). The 14 presentations covered the investment situation and market liberalisation, the views of investors on power generation investment, the impact of liberalisation on investment in different technologies, investment in developing countries, and implications for government policies. The presenters were successful in stimulating quite interesting discussions about power generation investment, both inside and outside the meeting room. The main points:

- **Drivers for investment in the liberalised markets:** Investment decisions are being made based on long-term fundamentals rather than spot or forward electricity markets. Gas CCGT remains predominant in many markets for this reason. Finland's investment in a nuclear plant is exceptional, with large pulp and paper producers willing to undertake the risks regarding nuclear plant investment because they expect to be around to obtain the long-term financial benefits.
- **"New" paradigm for investment has already lost favour:** Financing a power project based on expected market prices for electricity has lost its charm for investment bankers after they lost 100 USD billion in the US power markets. They are now favouring strong companies with stable revenue flows and customer bases for future investments.
- **Governments remain influential:** Government policies inevitably affect power generation investment through e.g. market reforms, support of renewables or through policies on emissions. Renewables support in particular needs to be shaped so as to be compatible with markets and also recognise the limitations of these markets to signal new construction. A greater risk to the future development of markets is government response to an episode of high prices. When governments move in and cap prices, the efficiency gains of competition are either lost or greatly diminished as the trust of investors is lost. Doug Cooke gave good examples in his presentation on the Australian experience.
- **Gas markets and investments matter:** the importance of CCGT means that gas markets assume a greater importance than ever for power generation development. For governments this means moving forward on liberalisation, and monitoring investment in both gas and electric infrastructure.
- **Addressing security of supply is central to investment signals:** Professor Newbery, in his closing remarks, suggested that as electricity is very valuable finding the finance should not in principle be very difficult in a market, at least in the OECD countries. The difficulty is really finding a model that properly values the security of the electricity supply. The old monopoly system worked but at a large cost of inefficiency. A new system based on bilateral contracts between producers and consumers can also work, but consumers need to value their security of supply. For large consumers, this is not a problem, but retaining a franchise for small consumers should be considered. For developing countries, an even more cautious approach is warranted.

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[1] This paper was circulated by the IEA as Room Document No.6, for the SLT meeting, 1-2 April 2003.

4. The workshop presentations and papers, including a discussion paper prepared by the secretariat, have been posted at the IEA and NEA websites. The NEA has indicated they will publish proceedings. The output of the workshop should be useful to future IEA initiatives, namely:

- *WEO 2003* book on energy investment to be published this fall
- Book on “Power generation investment in liberalised electricity markets” to be published by the end of 2003.
- An update of the *Projected Costs of Generating Electricity* study, to be done with the NEA and published in 2004.
- A follow up workshop, to discuss Power Generation and Security of Supply, to be held in 2004.

5. The opportunity to participate was much appreciated by industry members as shown by their involvement in the discussions. The significant power industry interest in this meeting should help build stronger links between the Agency and industry. These links will be useful in pursuing the initiatives listed above.

6. Feedback from the meeting participants was very positive. The outcomes of the meeting will be presented at the SLT meeting next week.

7. Costs of the meeting amounted to approximately €4000, far less than budgeted.