## **Senate Standing Committee on Economics**

## ANSWERS TO QUESTIONS ON NOTICE

Innovation, Industry, Science and Research Portfolio Supplementary Budget Estimates Hearing 2009-10 21 October 2009

**AGENCY/DEPARTMENT:** AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION

**TOPIC**: Nuclear Power

**REFERENCE:** Question on Notice (Hansard 21 October 2009, E11)

**QUESTION No.:** SI-19

Senator BARNETT— In this new carbon constrained world since the Switkowski report, can you provide evidence or reports which highlight the improvements in technology with respect to health, safety and the environment? Secondly, in the carbon constrained world that we are heading into, I am interested in the cost differential. The Switkowski report referred to the 20 per cent-plus cost differential regarding nuclear power. Of course, that is all about to change and it is obviously going to be more advantageous for nuclear. I was wondering if you can point to the latest research, the latest reports, since the Switkowski report to assist me and the parliament in determining the merit of nuclear power as an option, which is certainly something that I would strongly support. I am happy for you to take that on notice.

## **ANSWER**

Since the Uranium, Mining, Processing and Nuclear Energy (UMPNER) Review, which was chaired by Dr Switkowski in December 2006, at the request of the former Government, there have been a number of overseas studies relevant to this question.

The *Nuclear Energy Outlook 2008*, published by the OECD Nuclear Energy Agency, contains detailed information on the health, safety, environmental performance and economics of nuclear power reactors located in OECD Member States.

In relation to cost differential, the most recent US analysis comes from the Massachusetts Institute of Technology (MIT) (<a href="http://web.mit.edu/nuclearpower/pdf/nuclearpower-update2009.pdf">http://web.mit.edu/nuclearpower/pdf/nuclearpower-update2009.pdf</a>). The MIT study is widely referenced as an academically sound independent study.