## **Senate Standing Committee on Economics**

## ANSWERS TO QUESTIONS ON NOTICE Innovation, Industry, Science and Research Portfolio Additional Estimates Hearing 2010-11

23 February 2011

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

**TOPIC:** Generation IV International Forum

**REFERENCE:** Question on Notice (Hansard, 23 February 2011, E21)

**QUESTION No.:** AI-9

**Senator LUDLAM**—Is it possible to tell us how much of your budget is spent on Gen IV research? **Dr Paterson**—We can take that on notice and provide you with information.

## **ANSWER**

The answer to this question depends on what is meant by "Gen IV research". If it is defined as research explicitly linked to the work of the Generation IV International Forum (GIF), in the current financial year ANSTO is making an in-kind contribution of \$50,000 to the EU Framework 7 MATTER (MATerials TEsting and Rules) Project, which is part of the 2010 – 2012 European Sustainable Nuclear Industrial Initiative (ESNII). This contribution enhances our knowledge of the design and operation of all high temperature generation systems, and assists ANSTO with its surveillance program for the OPAL reactor. No other ANSTO research is explicitly linked to the work of the GIF.

More broadly, ANSTO's Materials Engineering Research focuses on the behaviour of materials operating in extreme environments (radiation, temperature and pressure) for application in next generation energy systems and on the management of radioactive waste arising from the operation of current and next generation reactors. This research has broader applications apart from the GIF, but areas of this research may have indirect research and technology transfer implications for the GIF. The behaviour of materials operating in extreme environments is relevant to fusion-based reactor systems and advanced non-nuclear high temperature generation systems, as well as the advanced fission reactor research being undertaken by the GIF. The total annual budget for research in these broad areas is approximately \$5.5 million – that is, around 4% of ANSTO's total budget.