## **Senate Standing Committee on Economics**

## ANSWERS TO QUESTIONS ON NOTICE

Innovation, Industry, Science and Research Portfolio Budget Estimates Hearing 2010-11 31 May 2010

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

**TOPIC:** OPAL Reactor

**REFERENCE:** Question on Notice (Hansard 31 May 2010, E14)

**QUESTION No.:** BI-6

**Senator HEFFERNAN**—The cause of the leak of the light water into the heavy water was welding that destroyed a seal; correct?

**Dr Paterson**—No. It was a defect caused by a phenomenon called delayed hydride cracking, which resulted in cracks opening up in the weld itself.

**Senator HEFFERNAN**—It was an adventurous weld. It was a weld that was taken as a precaution but it was not technically the right thing to do.

**Dr Paterson**—I think all of the design reviews showed that the welding was indeed the correct procedure.

**Senator HEFFERNAN**—Did they X-ray it when they did it?

**Dr Paterson**—They did post welding inspections.

**Senator HEFFERNAN**—Did they X-ray it as soon as they had finished it? You may know that if you are doing a gas pipeline you X-ray every weld as you do it.

**Dr Paterson**—I would be very happy to brief you in detail on these matters and the background to them, but I am not certain I can explain all the details of the processes.

**Senator HEFFERNAN**—I will put all the questions of a technical nature on notice.

**Dr Paterson**—Thank you. We will take them on notice.

## **ANSWER**

Refer to BI-7.