

# SENATE SELECT COMMITTEE ON FUEL AND ENERGY

## Questions on Notice

Melbourne, Friday 25 September 2009

Professor Manfred Lenzen

QoN No.	Hansard Page Reference	Senator	Question	Response
1	32	Cormann	<p><b>CHAIR</b>—This has been very useful and insightful evidence, so thank you for that. One of the other things that I forgot to raise with you before that gets raised with us is the high use of water for nuclear energy; obviously there are environmental issues related to that. Have you looked at that at all?</p> <p><b>Prof. Lenzen</b>—No, I have not looked at that specifically but also I have not come across it in the literature as being presented as a major issue. A nuclear power plant is a thermal plant and in that respect is no different to a coal fired plant, but maybe you know something that I do not know.</p> <p><b>CHAIR</b>—No, I am not an expert at all. We are here to try to learn. Certainly in the political debate, the high use of water is something that gets raised. I was wondering whether you would be able to provide us with any arguments that we might be able to direct in response. Maybe you can take it on notice and have a bit of a look at it and see whether there is something you can provide to the committee.</p> <p><b>Prof. Lenzen</b>—To put power generation in perspective in terms of water, first of all I cannot see any substantial difference between a nuclear thermal plant and a fossil thermal plant in terms of their cooling requirements. Water use for electricity is a small part of Australia's overall water use. Most water in Australia is used for irrigation in agriculture. If you want to address water issues, I do not know whether you should start with electricity. It is not the major usage sector.</p>	<p>I have followed this up and I think there is evidence that a nuclear power plant consumes more water than a fossil-fired power plant. However the comparison with agriculture still holds – overall, agriculture consumes much more water than power generation.</p> <p>The source is</p> <p>ABS, 2006. Water Account for Australia 2004-05. Australian Bureau of Statistics, Canberra, Australia.</p>