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The Secretariat,
Nuclear Fuel Cycle Royal Commission
South Australia

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Response to the Tentative Findings of Nuclear Fuel Cycle Royal Commission

The Australian ITER Forum is a network of over 170 scientists, engineers, research administrators and policy specialists advocating sustainable Australian engagement in ITER, the experimental fusion reactor that is now being built in France. Fusion is process that powers the Sun and the stars. If realised on earth, fusion energy offers millions of years of baseload energy generation, with almost no greenhouse gas emissions and very little radioactive waste compared to nuclear fission energy and coal.

The Forum is pleased to have this opportunity to respond to the tentative findings of the Royal Commission. Our response (enclosed below) complements our submission to the Commission on 31 July 2015.

Yours Sincerely,

A.Prof. Matthew Hole
Chair, Australian ITER Forum.

Response:

The tentative findings do not identify the importance of a capacity / research activity in next generation nuclear power. Instead, the general tenet of the document is that nuclear power is a mature technology (recommendation 43) and the role of a University (for instance) is to provide education and skills in nuclear engineering should a new facility be constructed or a new activity be undertaken (recommendations 152, 153).

While recommendation 43 does recognise that “new designs continue to developed and deployed”, it does not comment on whether Australia should play in the international development of next generation nuclear power. International programs to further develop (uranium based) nuclear power are driven by the quest to make nuclear power safer, less costly, and with much lower radioactive waste. Unlike uranium based power, fusion power has not been realised. Accordingly, the role of the University and research sector is to advance the science and realise this disruptive technology, not only be a provider of education and nuclear engineering skills.

In an era of anthropogenic climate change, the driver for global, sustainable and acceptable energy technologies has never been stronger, and is a responsibility of all nations. We respectfully suggest that a recommendation be added that identifies it is in Australia’s long term strategic interests to participate in international next step nuclear power research programs. In addition to the intrinsic value of these programs, involvement of Australians would help ensure education and skills are at the cutting edge. In the case of fusion power, involvement in programs such as ITER is required for the nation to retain capacity in the underlying science.