Inquiry into the prerequisites for nuclear energy in Australia Submission 264

Minister for Primary Industries and Water Minister for Energy Minister for Resources Minister for Veterans' Affairs



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Mr Ted O'Brien MP Chair The House of Representatives Standing Committee on the Environment and Energy Parliament House CANBERRA ACT 2600

Dear Mr O'Brien

I welcome the opportunity to provide input to the Inquiry into the prerequisites for nuclear power in Australia, currently being conducted by the House of Representatives Standing Committee on Environment and Energy.

As Tasmanian Minister for Energy, I seek to address you primarily in relation to the fourth term of reference, namely 'energy affordability and reliability'. These twin aspects of meeting Australia's energy needs impact on households, businesses, industry, and the economy as a whole. Addressing these twin objectives is a significant challenge facing the National Electricity Market (NEM) as we transition to a lower carbon economy.

While nuclear energy is a lower emissions technology, with the capacity to provide baseload electricity generation, there are other options for emissions-free electricity generation that:

- can provide firm supply (if not alone, then in combination with complementary generation sources)
- are low cost
- provide storage capacity (both hydro and pumped hydro)
- do not give rise to some of the complications, not least of which is the significant lack of social licence.

There is no one single technology that will adequately meet Australia's energy needs; however, by harnessing the different technologies, supported by strong interconnection across diverse time and climatic zones, a range of complementary sources of generation could meet the nation's needs.

While individual sources of variable renewable electricity do not individually meet the important criterion of 'reliable' electricity, the development of a suite of renewable energy resources that are geographically, temporally and technologically diverse can ensure that a robust interconnected grid can meet the nation's need for an electricity supply that is affordable and reliable.

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Tasmania is an example of how a diversity of generation sources can be harnessed to supply firm, renewable, low cost electricity.

Tasmania is blessed with an abundance of renewable energy resources and in turn currently generates, stores, and dispatches significant amounts of low-emission energy through our renewable sources, i.e. hydro generation resources and world-class wind.

Tasmania currently has even greater potential for additional wind and pumped hydro. We have the potential to meet electricity demand well in excess of on-island demand.

Enhanced interconnection via Marinus Link would unlock our significant latent wind resources, and together with firming provided by existing hydro generation and proposed pumped hydro, Tasmania could indeed become the Battery of the Nation. This significant increase in renewable energy will enable Tasmania to support reliability in the NEM, while also assisting in overall emissions reduction. Importantly, both wind and pumped hydro are mature, proven technologies. Importantly, they are also competitively priced. The Committee has already been provided with submissions on the comparative price disadvantages of nuclear energy when compared with renewables.

The Tasmanian and Australian Governments are currently progressing Project Marinus and the Battery of the Nation projects to the next stages. These projects have the potential to provide a significant investment in a reliable, affordable, and emissions free future, not just for Tasmania, but for the rest of the grid.

Tasmania will not pursue nuclear energy as an option to meet Tasmania's energy needs, and considers that Australia's energy needs are best met by pursuing renewable energy options, such as pumped hydro, with additional firming capacity supported through greater grid interconnection.

Yours sincerely



Hon Guy Barnett MP Minister for Energy