

Response to the Tentative Findings of the Nuclear Fuel Cycle Royal Commission as published in February 2016

I would like to congratulate the Royal Commission team members on producing a very comprehensive and professional report on their findings.

Even though I was happy that the Royal Commission have investigated the options available in SA there are a few points I would like to bring up.

Tentative Finding # 38 - # 61: Electricity Generation

The Tentative Report concluded that there is no immediate requirement to consider the establishment of a nuclear capability for the generation of electricity. It is my opinion that this is a mistake and that a positive action should be forthcoming, even if it is focussing on the medium to long term. It is well know that the development of a nuclear power plant is a lengthy process but there are many activities that could be started while we wait for a suitable commercially available solution to present itself.

49g Relative to other regions of the NEM, South Australia has one of the highest average wholesale prices and some of the greatest price volatility.

This is exactly the reason why the availability of cheaper electricity in SA could stimulate the local economy and provide a stable source of employment. The availability of cheaper power will allow industries elsewhere (Australia and International) that are struggling to cope with rising power costs to consider moving their base of operations to SA. This may be ambitious but it makes sense.

The recent closure of various major players in the motor industry has had a significant impact in the power demand in SA and this is now reduced the immediate requirement for additional power generation. As a result, there is no great incentive for the major power generation industry players to spend large amounts of their capital to upgrade the existing power stations to be able to reduce their carbon footprint. This places SA at the mercy of wind, sun and the NEM. It is know that the existing supply of power from wind and solar is mainly contributing to the low end of the power demand cycle (#49) leaving the State reliant on interstate generation from coal during periods of high demand. This comes at a huge price that is being reflected in everybody's power bills.

With the announcements that the existing SA coal fired power stations will soon be switched off it had made SA more likely to experience significant power costs increases due to the requirement to import even more power from interstate.

It is my opinion that SA would be wise to invest now to break this cycle. It may take many years to implement but the sooner we start preparing the sooner we will be able to bring safe and cost effective nuclear power online when it becomes available.

It is also my opinion that SA should do everything that it can to reduce our reliance on coal, oil and gas based electricity generation. It is not a morally defensible position to reduce our own local carbon footprint and then to shift it to other states that are just too happy to sell us everything we need from their own dirty supply chain.

Tentative Finding # 103 - # 115: Community Consent

The current process (from the perspective of a typical member of the community) involves the State (or the Royal Commission team) identifying suitable sites that may be able to support a nuclear storage facility and then asking the specific community for their approval. This process might fail to find a suitable site where the community supports the undertaking. Perhaps the wider community could be asked to evaluate their willingness to offer their land/area/region to be assessed for the development of nuclear storage (or other infrastructure). A simple guide could be prepared that the community group can use to understand the basic requirements for such infrastructure.

This would mean that community consent comes first, followed by the local communities to nominate their land as a possible location for the development of a long term storage facility. These areas can then be investigated to determine if it meets the strict geological and other conditions for the location of long term storage.

The current process of identifying a number of ideal areas and then trying to get the support of the local community is quite optimistic in its nature. It might be more effective to provide an opportunity for communities that are open to this type of development to participate in the site selection process.

Tentative Finding # 152 - # 154: Education and Skills Development

The requirement for the development of skills is not restricted to engineering and technical workforce. It also includes the development of skills in the following areas:

- Engineering / Science / Technology; including storage, generation, processing
- Construction and related trades
- Nuclear facility operation and management
- Risk, safety and security management in nuclear industries
- Regulatory development and management
- Compliance management
- Political and Social engagement.

Ownership

The Tentative Findings document is light on the way that a future nuclear industry would be owned and managed. As we have seen in Japan and elsewhere, the professional and responsible operation and management of any nuclear facility requires strong regulations and strict oversight.

I believe that ownership of any nuclear infrastructure should remain with the SA State Government with no future option to sell off the asset. A state-owned enterprise that can never be sold could build, operate and manage the nuclear facilities with support from commercial entities who could be engaged to assist with technical expertise, finance, technology management /research and operation.

An Independent Nuclear Industry Regulator should be responsible for monitoring and managing compliance to safety standards, licencing, security, etc.

Further Opportunities for SA

South Australia (and the rest of Australia) is currently struggling to find ways to make headway in the international markets. A large number of industries are in trouble or have closed already leaving thousands of workers without an income. We have to start thinking about how we are going to be able to get ourselves out of our current dilemma instead of waiting for the Federal Government to help us. To do this we have to think outside of the box.

The production of food is going to become a critical industry that Australia is able to focus on in order to guarantee our ability to feed ourselves but also to supply food to our friends overseas. The Australian continent is huge and the only thing that is holding us back is the lack of an abundant supply of water.

I believe that the co-location of small modular nuclear reactors and desalination plants along our long dry coast lines would be able to provide a constant supply of fresh water that can be delivered to a regional agricultural area with a network of pipes and channels. This regional area could become a new growth area that is focussed on using the latest agricultural technologies and techniques to produce crops for the local and overseas markets. Agriculture used to be one of the main industries in Australia and we can make it strong again by creating opportunities for new farmers to develop their business with a stable and affordable supply of electricity and water.

South Australia is a dry state. It's large with a very long coast line. It's very beautiful in its own special way. The only thing stopping us from developing it is the supply of work opportunities, power and water. If we think big enough and have a clear vision we could create something special here....

We could create a future for our children.

Thank you for the opportunity to comment on the Tentative Findings and to express my expectations from the Commission.

Regards,

Theo Pistorius

6 March 2016