

Title:

Nuclear Desalination In Australia

Word Count:

529

Summary:

Australia needs to consider Nuclear Desalination as a part of the Nuclear Energy Debate

Australia can decide to become energy, and financially, rich due to the use of its abundant supply of uranium that can be either used locally in home grown Nuclear power plants or sold as a refined product on the world market. The decision is in the hands of the Australian people through their elected representatives. There are additional issues that need to be addressed in parallel wi...

Keywords:

Nuclear Power Plants Desalination Australia Debate uranium

Article Body:

Australia needs to consider Nuclear Desalination as a part of the Nuclear Energy Debate

Australia can decide to become energy, and financially, rich due to the use of its abundant supply of uranium that can be either used locally in home grown Nuclear power plants or sold as a refined product on the world market. The decision is in the hands of the Australian people through their elected representatives. There are additional issues that need to be addressed in parallel with the above issues. The Desalination of Seawater using Nuclear Power and its benefits need to be considered in any discussion of Nuclear Power in Australia.

Large areas of Australia have been in moderate to severe drought conditions for fifteen of the last twenty years.[1] It seems possible that Australia will join the African region, Latin America and South East Asia as an area suffering moderate to sever water shortages.[2]

Desalination is a possible solution to these shortages in Australia. In the past it has not been seen as an economical solution to local water shortages. However, given, the, potential, change in public opinion, attitude and the

necessary economic consideration of Nuclear Energy and Uranium mining and refinement, desalination of seawater using Nuclear Energy must be considered at the same time.

By 2025, about two thirds of the world population may suffer severe water shortages. Fresh, potable, water will become an internationally marketable product.[3]

Desalination of seawater using Nuclear Power is not new and currently there are 13 reactors operating, in 4 countries, with a combined 247 reactor-years experience.[4] The cost of nuclear desalinated water is about 40 cents per kiloliter[5] and while this is 20 to 30 times as much as we are already paying, these costs could be lower for Australia as we have our own uranium. Even given the costs as shown, it is only a matter of time until it becomes cost effective.

The International Atomic Energy Agency is currently conducting research into Nuclear Desalination and the International Nuclear Desalination Advisory Group advises that another 13 countries are conducting research and feasibility studies. These countries are Argentina, Canada, China, Egypt, France, India, Israel, South Korea, Libya, Morocco, Pakistan, Russian Federation and United States. There is also major International Collaboration underway between Indonesia and Korea, Rep of, Tanzania and France, Pakistan and Various International Bodies, Morocco and France, Russia and Canada and lastly Eurodesal.[6]

It is evident Nuclear Desalination is being considered world wide. Australia has 38% of the world's known Uranium resources and is about to make a national decision regarding its use. Public awareness that the potential of Nuclear Desalination can solve all of Australia's future water requirements as well as, allowing Australia to convert large amounts of inhospitable land into an arable and profitable resource will ease the resistance currently being shown by a percentage of the population.

The public must be apprised of the benefits of Nuclear Desalination, while considering the Nuclear Energy issue.

Submission Prepared by:

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[1] The Australian Bureau of Meteorology

[2] International Atomic Energy Agency <http://www.iaea.org/nucleardesalination/>

[3] International Atomic Energy Agency

[4] International Desalination Advisory Group

[5] Uranium Information Center <http://www.uic.com.au/nip74.htm>

[6] International Desalination Advisory Group