Public Health Association of Australia: Policy-at-a-glance – Nuclear energy as a response to global Warming Policy

Key messages:

1. ***The nuclear fuel process is unsafe, there are direct health and environmental consequences from radioactive leaks, and there is potential contamination at all stages of the process.***

2. ***Without government subsidy and in comparison to gas and even coal, nuclear power is not cost effective. Renewable energy systems are becoming cost comparative and, with further investment and increased production, will become cheaper. Energy use reduction is an immediate strategy that would be more cost effective.***

3. ***There are significant opportunity costs associated with expansion of the nuclear industry. Such expansion could divert much needed resources away from energy use reduction and from renewable energy system development and deployment.***

4. ***In addition, the nuclear industry does not have the capacity to expand rapidly enough over the next decade to meet the projected needs, and it generates substantial greenhouse gas emissions through-out the full power generation cycle.***

5. ***Nuclear power is not the answer to reducing global warming.***

Summary: PHAA's view is that there is clear evidence that nuclear power is not the answer to reducing global warming and it will advocate against the adoption of nuclear power as a viable option to help mitigate global warming.

Audience: Australian, State and Territory Governments, policy makers and program managers.

Responsibility: PHAA's Environmental Health Special Interest Group (SIG)

Date policy adopted: September 2014

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NUCLEAR ENERGY AS A RESPONSE TO GLOBAL WARMING POLICY

The Public Health Association of Australia affirms its current Safe Climate and Nuclear Industry Policies.

The Public Health Association of Australia notes:

1. The nuclear fuel process is unsafe, there are direct health and environmental consequences from radioactive leaks, there is potential contamination at all stages of the process and natural and industrial incidents occurring at nuclear reactor sites result in massive releases of radioactivity.[1,2,3,4,5,6] Since the terrorist attack on the World Trade Centre in New York on September 11, 2001, the risk of threats of terrorist attacks on nuclear facilities cannot be regarded as negligible.[5] Since the tsunami at Fukushima on March 11 2011,[6] the risk of reactor accidents due to natural disasters and changed weather events must be recognised as an ongoing, and due to global warming itself an, increasing threat. [7]

2. Safe storage of nuclear waste is as yet unsolved and the industry is struggling to cope with existing waste; expansion of the industry will further compound waste problems.[8]

3. Given the poorly controlled link between nuclear power and nuclear weapons, any expansion of nuclear power could result in the potential for the proliferation of nuclear weapons.[2,5]

4. Without government subsidy and in comparison to gas and even coal, nuclear power is not cost effective.[2,9] When the full economic costs of operating nuclear plants are factored in, including decommissioning and waste storage, accident risk and capital set-up costs, nuclear becomes even less viable as an affordable option to address climate change. [6] Renewable energy systems are becoming cost comparative and, with further investment and increased production, will become cheaper without the long term waste and decommissioning costs associated with nuclear. [5] Energy use reduction is an immediate strategy that would be more cost effective.[8]

5. There are significant opportunity costs associated with expansion of the nuclear industry. Such expansion would divert much needed resources away from energy use reduction and from renewable energy system research and development and deployment.[7,9]

6. Proponents of nuclear energy as a solution to global warming support a continued resource consumption growth model that undermines the need for greater energy efficiency and a reduction in energy consumption. [6,9] This scenario can cause an increased dependency on coal fired power generation technology to act as a back-up system for nuclear power generation, either directly to power stations or as a peak load back-up to nuclear generated base load. (Verbruggen 2008, ASUKA et al) Thus contributing to a discourse of denial of the underlying causality of global warming.

7. The nuclear industry does not have the capacity to expand rapidly enough over the next decade to meet the projected needs. Even if it were to adopt best practice, when 'front end' aspects of nuclear power generation are included the mining, processing and building of reactors

would contribute significantly to the use of fossil fuels and greenhouse gas (GHG) emissions,[1,5,11] and may increase local effects, such as water warming from reactor cooling discharge.[7] Because reactors have a limited life span, back-end aspects the decommissioning of plants, add to the problems of energy utilisation as do extreme long term waste storage issues.[11,12] Even advocates for nuclear energy note the lack of inherent economic, political and social attraction of nuclear energy, and thus need to call for consistent government incentives to promote nuclear energy.[13]

Therefore, the Public Health Association of Australia resolves to undertake the following actions:

8. Argue against the adoption of nuclear power as a viable option to help mitigate global warming

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REVISED AND RE-ENDORSED IN 2014

First adopted at the Public Health Association of Australia's Annual General Meeting in 2005 and has been revised and reindorsed in 2008, 2011 & 2014