



ENGINEERS
AUSTRALIA

24 July 2015

Committee Secretary
Senate Standing Committee on Community Affairs
PO Box 6100
Parliament House
CANBERRA ACT 2600

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– BY EMAIL –

Dear Sir/Madam

**Re: Submission – Australian Radiation Protection and Nuclear Safety
Amendment Bill 2015**

Engineers Australia is the peak body for the engineering profession in Australia. With about 100,000 members across Australia, we represent all disciplines and branches of engineering. Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers provide critical advice for decision-makers who are transforming the economy. The Sydney branch of Engineers Australia established a Nuclear Engineering Panel of eminent engineers and advisers in 1975 to provide advice and information in the area of nuclear engineering and science.

The Nuclear Engineering Panel has reviewed the ARPANSA Amendment Bill 2015 and would like to make the following comments.

The ARPANS Act

Since the passing of the ARPANS Act in 1998, there have been a number of improvements in international best practice in regulation.

International Atomic Energy Agency (IAEA)

The IAEA issued a new Safety Standard *Governmental, Legal and Regulatory Framework for Safety* GSR Part 1 in October 2010. This establishes the responsibilities of the Government and the Regulatory Body in respect of the regulatory framework for safety. It emphasises the importance of an independent regulator with the competences, resources and authority to fulfil its statutory obligations.

The Safety Standard listed requirements that are not fully covered in the 1998 ARPANSA Act:

Requirement 9	Protective action to reduce risks from legacy activities
Requirement 10	Management of Spent Fuel
Requirement 26	Adoption of a risk-based approach
Requirement 31	Requirements for corrective action

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IAEA Integrated Regulatory Review Service (IRRS)

In 2007, an International Regulatory Review Team from the IAEA reviewed ARPANSA's activities and made a number of recommendations. There was a follow up mission in 2011.

These reviews identified the need for strengthening the ARPANS ACT.

ARPANSA

In March 2010, Dr Carl-Magnus Larsson was appointed as the CEO of ARPANSA. He has extensive nuclear regulatory experience from his management positions at the Swedish Radiation Safety Authority and has been able to identify areas for improvements.

The ARPANSA Amendment Bill

The Amendment Bill draws on the recommendations of the IAEA and the IRRS and makes changes to the legislation which provide:

- greater clarity regarding application of the legislation to contractors
- adoption of a risk-based approach
- requirement for a licence holder to provide information
- power to issue improvement licences
- power to issue time limited licences
- power to regulate activities on legacy sites

These changes to the ARPANS Act strengthen the powers of ARPANSA without imposing unnecessary additional burdens on licence holders and are in accordance with international best practice in regulation.

The ARPANS Amendment Bill addresses some of the changes required to the ARPANS ACT and Engineers Australia recommends that the ARPANS Amendment Bill is passed.

However, there are two areas that the Committee may want to examine.

ARPANS ACT Section 10 – Prohibition on certain nuclear installations

Section 10 of the Act prohibits the authorisation of the construction and operation of any of the following nuclear installations:

- a) a nuclear fuel fabrication plant;
- b) a nuclear power plant;
- c) an enrichment plant;
- d) a reprocessing facility

Section 10 was introduced before Australia had adopted all the international conventions on nuclear safety and before there was an understanding of the importance of reducing greenhouse gas emissions and the part that nuclear power plays internationally in the reduction of emissions.

One of the Energy White Paper key themes is technology neutrality. This is not possible if one of the main low emissions technologies is prohibited.

Engineers Australia recommends that consideration is given to removing Section 10 of the ARPANS Act.

The Management of ARPANSA

The committee may wish to examine current international practices in the management structure of nuclear regulators.

The latest country to start a nuclear power program is the United Arab Emirates (UAE). They have established the *Federal Authority for Nuclear Regulation (FANR)* which has a Director General and a board with nine members.

The UK has one of the most experienced nuclear regulators in the world (established 1959). In 2011, they became the *Office for Nuclear Regulation (ONR)* and increased the scope to include safeguards, security and transport which were previously the responsibilities of other government departments. They also changed the structure to a CEO and Board of Directors and established a Public Corporation in 2014.

There are management structures that may provide better support to the CEO of ARPANSA.

Engineers Australia recommends that consideration is given to examining the management structure of ARPANSA.

Should you have any questions about the above comments and recommendations from the Nuclear Engineering Panel, or Engineers Australia's position more broadly, please do not hesitate to contact Engineers Australia Policy Team at policy@engineersaustralia.org.au.

Thank you for consideration of this submission, and please note that the Chair of the Nuclear Panel Tony Irwin, would be willing to appear before the Senate Inquiry if requested.

Yours faithfully

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