

## Chapter 5

### General comments about the site selection process

5.1 This chapter examines some overarching themes about the selection process that were not specifically identified in the terms of reference. In particular, the conduct of the Department of Industry, Innovation and Science (DIIS) in providing information to the communities about the NRWMF and its operation continued to be highlighted, as was the constitution and role of the local consultative committees.

5.2 Further, this chapter examines some of the technical concerns raised by stakeholders in relation to the suitability of the nominated sites, construction and operation of the facility, and types of waste to be stored and disposed at the facility.

#### Conduct of the responsible department

5.3 In assessing the appropriateness and thoroughness of the site selection process, it is important to recognise that, the main role of the DIIS, in this context, is to assist the Minister for Resources and Northern Australia to find a suitable site for a NRWMF. As such, it is unsurprising that DIIS has not been seeking to undermine its objective by proactively facilitating and tacitly endorsing contrary views against a NRWMF.

#### *Information provided by the department*

5.4 As noted above, there are very strongly held views among both Hawker and Kimba residents regarding the potential siting of a NRWMF near these communities. As such, stakeholders were divided as to whether the information provided to the communities by DIIS was comprehensive and balanced.

5.5 Support for the work of DIIS to provide information to the communities was forthcoming in both Hawker and Kimba. In Kimba, Councillor Dean Johnson considered that:

...the independent experts that have come to our community have given us fact based evidence and straight answers to all questions...I do believe the people who have come here have spoken from the heart and given us the information as much as they can.<sup>1</sup>

5.6 It was noted that DIIS has brought industry experts both from Australia and overseas. Mrs Kerri Cliff commented that:

...a turning point for a lot of people was when the French delegation visited Kimba and a lot of questions about the impact of the facility in their community were answered, and questions were able to be asked and answered all evening. That was a big turning point. And also, with respect to how it sits within the Sutherland Shire in New South Wales, we believe that we've had access to all of those people's opinions as well.<sup>2</sup>

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1 Councillor Dean Johnson, District Council of Kimba, *Committee Hansard*, 5 July 2018, p. 4.

2 Kerri Cliff, Working for Kimba's Future Group, *Committee Hansard*, 5 July 2018, p. 32.

5.7 However, some stakeholders noted that the community was being asked to consent to having a NRWMF without the details of such a facility being disclosed. Mrs Toni Scott highlighted that:

Around the world, when they run processes like this, generally when they go to a community they know exactly what they're going to be building and they know who's going to be operating the facility, so they could give the community all of that information the day they get there. So you know exactly what sort of facility you're talking about, what's going to be stored there, who's going to be running it, where the transport routes are going to come through and how it's going to come—boat or train. On all of these things, we've still not been given any information on that sort of stuff.<sup>3</sup>

5.8 That said, DIIS has released a number of factsheets and reports in June and July 2018 related to site characterisation, economic impact, heritage assessment, safety and waste acceptance, employment, agriculture, transport, facility concept design and regulation.<sup>4</sup> Arguably, this information would have served communities better if it had of been provided considerably earlier in the site selection process.

5.9 Mrs Toni Scott also highlighted that DIIS had not facilitated the presentation of views opposing the siting of the NRWMF in the communities nominated:

For three years we have constantly been asking for a fair representation of views from both sides of the argument. One of our major concerns right at the start was that the government weren't providing any opposing experts...We have had outside speakers come into the community once, and that was fully funded by our pockets. The government have not provided any funding or support to access information from the opposing views.<sup>5</sup>

5.10 Similarly, the Flinders Local Action Group raised concerns about the conduct of DIIS in providing a forum for the debate of competing ideas:

...all the information—and I'm not saying DIIS has not provided plenty of information and opportunities for information—is filtered through by the department. It's a one-to-one: 'You come and talk to us if you've got a problem. We'll try and allay your concerns. If you've got any issues, don't hesitate to contact us.' We've never had a public forum where it's moderated and all these things can be put up.<sup>6</sup>

5.11 DIIS contested this and submitted that it had facilitated webinars and face-to-face a number of independent experts known to oppose a NRWMF, including:

- Mr David Sweeney, Australian Conservation Foundation;

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3 Toni Scott, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 40.

4 Department of Industry, Innovation and Science, 'Key Documents and FAQs', *National Radioactive Waste Management Facility*, <http://www.radioactivewaste.gov.au/site-selection-process/key-documents-and-faqs> (accessed 7 August 2018).

5 Toni Scott, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 36.

6 Greg Bannon, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, p. 27.

- Dr Peter Karamoskos, Australian Conservation Foundation;
- Dr Margaret Beavis, President of the Medical Association for Prevention of War;
- Dr Victor Gostin presented to the Barndioota Consultative Committee meeting on behalf of Flinders Local Action Group; and
- Dr Jim Green, Friends of the Earth Australia.<sup>7</sup>

***Public access to submissions made through the consultation process***

5.12 In relation to the government renegeing on providing information about the 28 shortlisted sites and the submissions to the consultation process, Mrs Toni Scott expressed her view succinctly:

Things like that—just changing the rules along the way—are a bit frustrating.<sup>8</sup>

5.13 Similar issues regarding transparency were encountered with publication of submissions to the consultation process. For example, Mr Cameron Scott noted that:

It was stated on the Department of Industry Innovation & Science website that Submissions would be made public however they later changed their mind and never made them available for public viewing.<sup>9</sup>

5.14 This point was echoed by Mrs Toni Scott at the hearing in Kimba:

When the process was first announced, the submissions were going to be made public, and then those rules changed and the submissions were kept confidential.<sup>10</sup>

5.15 Mr Peter Woolford provided more detail:

All those submissions were meant to be put up on the consult-industry website. That was quite clear in the submissions. Unless you marked them 'confidential', they were public documents. I have repeatedly asked the department why they weren't publicly available and they said they would have to go back and check on privacy laws and stuff like that. I submitted the form and it showed that it was to be public.

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And, in the next second consultation process, when new guidelines were put up, there was nothing recorded about how submissions would be seen.

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7 Department of Industry, Innovation and Science, *Answers to questions on notice*, 2 August 2018, (received 8 August 2018), p. 7.

8 Toni Scott, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 44.

9 Cameron Scott, *Submission 18*, [p. 2].

10 Toni Scott, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 37.

It was definitely in the first process, but for the second guidelines they didn't have that at all.<sup>11</sup>

5.16 Further, with the re-nomination of sites in Kimba, initial submissions were not considered:

When we were in the first nomination phase, people made submissions and then Kimba was taken off the list. When we were put back on, we had to push with the department that they actually had to advertise that people needed to remake submissions. People who had already written letters assumed that their submission would be counted. However, that wasn't the case; they had to resubmit. Again, the Minister is asking for people to resubmit, but it's not advertised anywhere.<sup>12</sup>

### *Local consultative committees*

5.17 Another area of contention was the establishment and operation of local consultative committees.

5.18 Mr Peter Woolford raised concerns about the issues discussed at the consultative committee meetings:

To me, the consultative committee is supposed to be the conduit between the government and the community. We've been trying to push for more allocation of time at the end for people in the community to raise with members issues that they want to raise. That's one thing that's been lacking...generally, most of the meetings are conducted in a fashion where the government departments will put on the agenda what they want to discuss for the day. To me, the consultative committee has to engage with the community on issues that they have, because that's the reason for it.<sup>13</sup>

5.19 Similar concerns were raised in Hawker:

It's very one-sided...The agenda is filled with what the department wants to tell us.<sup>14</sup>

5.20 Mrs Toni Scott outlined her concerns with the allocation of places to the Kimba Consultative Committee:

Bruce McCleary...informed people at the meeting that the committee would consist of six people opposed, six people supportive and six people who are neutral. That was also again given to members of our group by the Minister—that that's how the makeup of the committee would be. On the day that the committee was announced, we were extremely concerned that there were only four people who had expressed opposition who were

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11 Peter Woolford, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 38.

12 Toni Scott, No Radioactive Waste on Agricultural Land in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 38.

13 Peter Woolford, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 35.

14 Dr Susan Andersson, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, p. 29.

actually on that committee...Bruce Wilson took my concerns on board and told me that the makeup of the committee didn't really matter because it's a non-voting body.<sup>15</sup>

5.21 However, it does appear that the Kimba Consultative Committee (KCC) has been asked to make at least one significant decision:

We were told by Bruce McCleary that the KCC would be a non-decision making body. However, our concerns probably came to light a bit in the May meeting, when the KCC was asked to vote on whether we should request that the Minister consider altering the boundaries for the ballot.<sup>16</sup>

5.22 By contrast, Dr Susan Andersson explained how the Barndioota Consultative Committee had effectively been sidelined by DIIS and the Minister in relation to defining the boundaries of the community vote:

...we spent hours deciding what community is and who will get the vote and whether that includes Quorn, whether outback areas get in and how broad this should be. We had an expert there to help us define community for two sessions. Plus it was on the agenda two or three times: you will get a vote; BCC will be inputting into what area gets a vote. Then Minister Canavan arrived on his surprise visit and said, 'The area will be this.' At a BCC meeting we said, 'Hang on, we haven't had our vote yet.' 'Oh, haven't you? You can still have your vote; we'll listen to it.' But he'd already made media and public announcements as to what the area was. The BCC had been working towards contributing to what defined the community.<sup>17</sup>

### ***Other matters relating to the conduct of the department***

5.23 A number of other matters were raised by stakeholders in relation to the conduct of DIIS.

5.24 Mr Peter Woolford implied there was a lack of respect from DIIS staff in discussing concerns of those opposed to the facility:

...if you have a view and it's not their view or the government's view, there's no respect for it. That's the issue I've found the hardest throughout all this process.<sup>18</sup>

5.25 The Flinders Local Action Group expressed frustration at the turnover in staff working for DIIS:

Since 2015 there have been four ministers responsible, there have been three task force managers and we can tally 14 other staff, including three team leaders, who no longer visit here. In terms of continuity, and the people we talk to on their visits, we're not always talking to the same

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15 Toni Scott, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 35.

16 Kellie Hunt, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 35.

17 Dr Susan Andersson, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, p. 32.

18 Peter Woolford, No Radioactive Waste in Kimba or SA, *Committee Hansard*, 5 July 2018, p. 36.

people. You think you've developed a relationship and explained some of the issues but then those people turn out not to be working there any longer.<sup>19</sup>

5.26 Ms Julia Henderson noted that, while the department encouraged the community to undertake tours of the Australian Nuclear Science and Technology Organisation (ANSTO), no opportunity had been afforded for the community to visit the proposed site at Wallerberdina:

We've actually asked as BCC [Barndioota Consultative Committee] members if we could go out to the proposed sites on Wallaberdina. We've actually been told, 'No, the traditional owners have said no,' and the DIIS has said that it's a security issue to go out and observe the site that we're discussing this proposed project to be on. So it's that balance of, 'We want you all to go to ANSTO to see how clean, shiny and professional we are,' but we're not allowed to see the site that the development is proposed to be on. I think that's a bit of a contrary point of view.<sup>20</sup>

5.27 As noted in the previous chapter, similar concerns were voiced by Indigenous groups over the inability of community members to visit CSIRO's legacy waste stored at Woomera.

5.28 While a number of stakeholders have questioned whether DIIS has conducted the site selection is consistent with world's best practice, the department itself noted the inherent difficulties associated with such a unique process:

There is no handbook on this process. There's no international handbook, but we know from countries such as Canada, France, Britain and Spain that what we're doing is now consistent with international best practice, and that is really centred around volunteerism and seeking community support.<sup>21</sup>

5.29 ANSTO concurred with the assessment by DIIS:

In ANSTO's view, the NRWMF site selection process is meeting or exceeding current international best practice across all aspects. ANSTO is confident that upon completion, the NRWMF process will be looked upon by the international community as an example of best practice for community consultation, public education and the development of social licence for the siting of radioactive waste facilities and other major nuclear projects.<sup>22</sup>

### ***Committee view***

5.30 The selection process and information about the NRWMF has been evolving over time. Many of the concerns about the information provided to the communities—

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19 Greg Bannon, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, pp. 26–27.

20 Julia Henderson, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, p. 35.

21 Bruce Wilson, Department of Industry, Innovation and Science, *Committee Hansard*, 2 August 2018, p. 28.

22 Australian Nuclear Science and Technology Organisation, *Submission 58*, p. 8.

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for example, regarding the types of waste and number of jobs—have indeed been changing with new developments or further consideration.

5.31 For example, it was originally anticipated that the intermediate-level waste from previous reactor fuels would be encased in concrete. However, as that intermediate-level waste was returned to Australia in a much smaller volume as vitrified (glass), it is now anticipated that all future intermediate-level waste of a similar nature will be returned in this form requiring less storage space and possibly different final containment. As such, both the volume of intermediate-level waste and its ability to be transported has meant that it is more feasible to consider storing this waste at a NRWMF while a permanent disposal solution is found.

5.32 Similarly, as planning for the NRWMF has progressed, greater attention has been devoted to operational aspects, including how the facility could operate and the staffing levels might be required. In addition, it appears that government officials have not articulated well whether staffing levels have referred to just technical staff or overall operational staff. The committee notes that DIIS has released a factsheet which explains how the total full time equivalent (FTE) staffing requirement of 45 has been derived and what has changed since the previous estimate of 15 FTE.

5.33 The committee notes that DIIS's response to many of the communities' concerns regarding the details of the NRWMF proposal (including structure, transport routes, site characterisation, economic impact and Aboriginal heritage) have only been released in the two months leading up to the community sentiment vote which begins on 20 August 2018. Given that the site characterisation reports are around 500 pages each, it is not clear whether the timing of these reports has given community members sufficient time to analyse and comprehend all the information contained in these documents.

5.34 The committee is concerned that DIIS has not made publicly available the individual submissions to the consultation process and considers that the publication of submissions from those who originally intended to have their submissions made public would improve transparency and public trust in the site selection process.

#### **Recommendation 4**

**5.35 The committee recommends that the Department of Industry, Innovation and Science make submissions received during the consultation process publicly available in the circumstances where the authors originally intended for their submission to be made public.**

5.36 As it is anticipated that a similar process will be undertaken to identify and select a site for an intermediate-level waste disposal facility (and, if the current process is unsuccessful, a NRWMF), the committee believes that any future process would benefit from a greater understanding of the current process. To this end, the committee recommends that the Office of the Chief Economist within the DIIS undertake a policy evaluation of the first two phases of the current site selection process.

## Recommendation 5

**5.37 The committee recommends that the Office of the Chief Economist within the Department of Industry, Innovation and Science undertake a policy evaluation of the first two phases of the site selection process for a National Radioactive Waste Management Facility.**

### Technical concerns

5.38 Stakeholder raised a number of technical concerns regarding the suitability of the potential sites, construction and operation of a NRWMF, and types of waste to be stored and disposed at a NRWMF. The committee believes that it is important to ensure that these issues are addressed for the benefit of all stakeholders.

#### *Hydrological and geological suitability*

5.39 A number of stakeholders raised concerns about the suitability of the nominated site near Hawker from a hydrological and geological perspective. For example, the Flinders Local Action Group cited research by seven eminent scientists who concluded that the Hookina Plain is not a suitable place to dispose of or store radioactive waste as it is one of the most active earthquake zones in Australia and major climatic changes, including severe winds and massive floods, have left their mark on the Lake Torrens alluvial plain.<sup>23</sup>

5.40 In response to analysis provided by the Flinders Local Action Group in their submissions to the inquiry, AECOM stated that:

To date, no significant environmental hazards have been identified during the Site Characterisation studies within any of the study areas at each of the three nominated sites which should preclude them from further technical consideration from potential siting of the NRWMF. It is noted that this contention is based on the data currently available and that the investigations proposed in subsequent stages of the site selection process will assist with more detailed evaluation.<sup>24</sup>

5.41 AECOM's assessment was supported by Geoscience Australia:

Australia is what is known as a stable continental region. In general, the seismic activity we experience in Australia is probably 100 to 1,000 times less than plate boundary regions such as New Zealand and California... There are [radioactive waste management] facilities in Washington State, Utah and Japan as well. Relative to those sites, Hawker is probably a lower seismic hazard site.<sup>25</sup>

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23 Flinders Local Action Group, *Supplementary Submission 73.1*, p. 3.

24 AECOM letter to the Department of Industry, Innovation and Science, *Supplementary Submission 40.1*, Attachment C, [p. 2].

25 Dr Trevor Allen, Geoscience Australia, *Committee Hansard*, 2 August 2018, p. 8.



### ***Types of waste to be stored***

5.42 Stakeholders expressed concerns about the types of waste that would be stored at the facility and the potential for that waste to affect the surrounding environment. In particular, the Flinders Local Action Group expressed concerns about the 'temporary' storage of intermediate-level waste:

There's a very real concern that intermediate-level waste could become stranded as temporary storage on an unsuitable site.<sup>26</sup>

5.43 Other stakeholders questioned the value of double-handling intermediate radioactive waste which would ultimately need to be disposed of in a purpose built facility.

5.44 Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) commented that, depending on the licencing arrangements for a NRWMF, intermediate-level waste could be stored for up to 100 years but ultimately a disposal option would be required. According to Dr Adi Paterson from ANSTO, however, a disposal option for intermediate-level waste could be found well before then:

While the outer boundary of 100 years is well understood and is safe, it would make sense to come up with disposal options short of that time. I would say that, once we have the waste forms like Synroc and the vitrified waste well understood and characterised, 30 to 50 years would be well within Australian capabilities if we had a well organised program, funded it appropriately and looked at those pathways in a serious way.<sup>27</sup>

5.45 ARPANSA also noted that other countries—such as the Netherlands, Switzerland, Spain, Japan and Romania—have opted to consolidate their intermediate-level waste into an interim storage facility prior to potentially moving it to a final disposal facility.<sup>28</sup>

5.46 DIIS noted that all waste, both low- and intermediate-level waste, would have to conform to waste acceptance criteria which will require that the waste is physically and chemically stable, solid and non-dispersible, and not reactive or flammable.<sup>29</sup>

### ***Transport***

5.47 Some stakeholders considered that people living in potential transport corridors should also be consulted.<sup>30</sup> For example, the Australian Nuclear Free Alliance considered that:

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26 Greg Bannon, Flinders Local Action Group, *Committee Hansard*, 6 July 2018, p. 26.

27 Dr Adi Paterson, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 2 August 2018, p. 20.

28 Australian Radiation Protection and Nuclear Safety Agency, *Answers to questions on notice*, 2 August 2018, (received 8 August 2018), [p. 4].

29 Department of Industry, Innovation and Science, 'NRWMF Transport', National Radioactive Waste Management Facility Factsheet, <http://www.radioactivewaste.gov.au/site-selection-process/key-documents-and-faqs> (accessed 8 August 2018).

All communities along potential transport routes should be informed and consulted, particularly First Nations peoples.<sup>31</sup>

5.48 According to DIIS, all transport methods and routes for radioactive materials have to meet ARPANSA's *Code for the Safe Transport of Radioactive Material*. DIIS also advises that consultation is undertaken instances where there is significant public interest.<sup>32</sup>

5.49 Dr Adi Paterson from ANSTO characterised the transport of low-level waste as safe and routine with a very low level of radioactivity:

...we make shipments to 225 hospitals and clinics every week in Australia at the moment. Those are radioactive transport events. They take place safely and with public support and understanding. I think that these types of low-level waste shipments would be no different...I think the low-level transport should not be contested on scientific, technical and engineering grounds as being anything different to moving fuel around our country in tankers.<sup>33</sup>

### ***Construction and operation of the facility***

5.50 The site selection process is only the beginning of a number of regulatory and oversight mechanisms required for the approval, construction and operation of a NRWMF, including:

- ARPANSA licencing approval;
- environmental approval; and
- Parliamentary Standing Committee on Public Works oversight.

5.51 Mr Jim Scott from ARPANSA highlighted that a further round of consultation would be necessary before a NRWMF was given a licence for a nuclear installation:

We have a requirement that, when the chief executive of ARPANSA receives a licence application for a nuclear installation, which could be a research reactor, a waste disposal facility or a waste storage facility, he must undertake a public consultation—that is a requirement under our legislation—and invite the public to make submissions.<sup>34</sup>

5.52 The licencing assessment would look at a host of factors including geology, hydrology, demography, population, seismicity and appropriateness of the location:

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30 See, for example, Environmental Defenders Office (SA), *Submission 43*; and Katrina Bohr, *Submission 59*.

31 Australian Nuclear Free Alliance, *Submission 7*, [p. 6].

32 Department of Industry, Innovation and Science, 'NRWMF Transport', National Radioactive Waste Management Facility Factsheet, <http://www.radioactivewaste.gov.au/site-selection-process/key-documents-and-faqs> (accessed 8 August 2018).

33 Dr Adi Paterson, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 2 August 2018, p. 23.

34 Jim Scott, Australian Radiation Protection and Nuclear Safety Agency, *Committee Hansard*, 2 August 2018, p. 13.

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Once a site licence application is submitted by the proponent, ARPANSA will assess the application against the ARPANS Act, regulations and published regulatory guides, including relevant international treaties and norms. ARPANSA would also expect the proponent, as part of the application, to provide evidence there are no heritage or cultural issues and that there is support among the impacted Aboriginal communities.<sup>35</sup>

5.53 In addition, the *Environmental Protection and Biodiversity Conservation Act 1999* also requires an environmental impact statement which covers issues including flora and fauna, cultural and heritage parameters.<sup>36</sup> ARPANSA noted that:

As part the licensing process, ARPANSA will consider the environmental impact statement (EIS) and consult with the Department of Environment and Energy (DoEE) who would assess the EIS which includes consideration of heritage and cultural impacts of the facility under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). ARPANSA will consider the DoEEs assessment as part of the decision making process.<sup>37</sup>

5.54 Jim Scott also noted that the ARPANSA licencing process is open and transparent:

At all stages, we will engage openly with the public with transparency. We also have a public consultation requirement in our Act and Regulations. We must seek public consultation before any licence can be issued. We invite the public to make submissions to us. Those submissions are open to anyone, not just the local community. Anyone in the Australian public can make a submission. When we receive that, we need to address those concerns and we will basically publish our responses to their concerns on our website. So, for transparency purposes, we don't ignore anyone's concerns.<sup>38</sup>

5.55 Similarly, inquiries undertaken by the Parliamentary Standing Committee on Public Works will provide opportunities for interested stakeholders to make public submissions on proposed public works, which would include a NRWMF.

## **Senator Chris Ketter**

### **Chair**

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35 Australian Radiation Protection and Nuclear Safety Agency, *Answers to questions on notice*, 2 August 2018, (received 8 August 2018), [p. 3].

36 Jim Scott, Australian Radiation Protection and Nuclear Safety Agency, *Committee Hansard*, 2 August 2018, p. 10.

37 Australian Radiation Protection and Nuclear Safety Agency, *Answers to questions on notice*, 2 August 2018, (received 8 August 2018), [p. 3].

38 Jim Scott, Australian Radiation Protection and Nuclear Safety Agency, *Committee Hansard*, 2 August 2018, p. 10.

