

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Nuclear Energy Prohibition

Melbourne—Friday, 26 June 2020

(via videoconference)

MEMBERS

Mr Cesar Melhem—Chair

Mr Clifford Hayes—Deputy Chair

Mr Matthew Bach

Ms Melina Bath

Mr Jeff Bourman

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Dr Samantha Ratnam

Ms Nina Taylor

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PARTICIPATING MEMBERS

Ms Georgie Crozier

Dr Catherine Cumming

Mr David Davis

Mrs Beverley McArthur

Mr Tim Quilty

WITNESS

Mr Mark Zirnsak, Senior Social Justice Advocate, Uniting Church in Australia, Synod of Victoria and Tasmania.

The CHAIR: I declare open the Environment and Planning Committee's public hearing for the Inquiry into Nuclear Prohibition. Please ensure your mobile phone is turned to silent and the background noise is minimised.

I would like to welcome our witness this afternoon, Mr Mark Zirnsak from the Uniting Church. Mark, thank you very much for making yourself available today. I am looking forward to your contribution.

All evidence taken at this hearing is protected by parliamentary privilege, as provided by the *Constitution Act 1975*, and further subject to the provisions of the Legislative Council standing orders. Therefore the information provided today during the hearing is protected by law. However, any comments repeated outside this hearing may not be protected. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament. All evidence is being recorded, and you will be provided with a copy of the proof version of the transcript following the hearing in the next few days. If any amendments are to be made as a result of that, please advise the Secretariat as that transcript will be eventually placed on the committee website.

We have allowed about 5 or 10 minutes for opening remarks. I believe we have received a submission from you in relation to this inquiry and members have read that, so if you want to give us a bit of an overview, and then we will go to some questions.

Mr ZIRNSAK: Sure. Thank you for this opportunity to appear before the committee. As outlined in our submission, the Uniting Church in Australia has had a longstanding opposition to nuclear power, particularly because of the concerns around nuclear weapons. I will admit right up-front we have not done a lot of work around this particular inquiry because a back-of-the-envelope analysis to us suggested that the reasons to pursue nuclear power within Australia did not stack up at all. I mean, if we look at the recent analysis by AEMO, they came back with the costs of generating energy from small modular reactors would be in the range of \$250 to \$300 per megawatt hour. By comparison, firmed renewable sources are at \$100, so it is two and a half to three times the cost—and that is before you start factoring in costs, looking at the Australian Radiation Protection and Nuclear Safety Agency submission, which basically indicated they would need another 200 public servants on the books to regulate. Currently their most recent assessment indicated that Australia's safety standards just around radiation needed further reform and were not up to scratch. That was around emission.

The assessment of both AEMO and the Australian Radiation Protection and Nuclear Safety Agency is that setting up small modular reactors is at least 15 years away—and that is a very optimistic assumption. Both indicate it is likely to be longer. AEMO says probably 20 years is a more realistic outcome. The Australian Radiation Protection and Nuclear Safety Agency indicated that experience from overseas indicates finding a suitable place to deal with nuclear waste can be decades if you cannot use an established facility. Looking at the commonwealth government's own technology investment road map, it indicates likewise that the commonwealth government's view of this is they will keep an eye on how this develops and if nuclear power was to play any role at all it is not out until at least 2030, 2050 is the sort of time frame, with a monitoring role in place.

Our submission does pick up our previous work around uranium exports, but of course Victoria has no known uranium deposits per se, so why there would be any consideration of wanting to open up for uranium mining when we have no known deposits again struck us as a strange thing to do. Concern about also the ability to regulate this industry: if you established an industry like this, the concern would be, based on the experience in other jurisdictions—and again we quote the previous experience in the US, where you end up with regulatory capture potentially, particularly where in this case if it was ever to get up and running you would have a very high-cost producer of electricity trying to compete against lower cost alternatives. That does not provide for strong incentives for them to put a lot of investment into safety, so they would be seeking to minimise costs to try and get the costs down. This is the kind of industry you would want them to be gold plating so that your risks from a safety point of view are lower. The experience of other regulators is you end up often with the regulator being captured by industry. That is not unusual. And in an environment where governments are

struggling for revenue, creating an adequate oversight regulatory body investing in it is unlikely. So the risks increase for those reasons as well.

I finally mention that the church itself is currently engaging in our own consultation with our members around our response to climate change. We have been inviting submissions from our own members. We are doing consultations with them about how we should respond, and to date no-one has raised any interest in nuclear playing a role in our future in dealing with climate change as a significant issue. At that point, I am happy to take questions.

Ms BATH: I have one question or two questions now, and if there is something that crops up later on, I am just intently listening there. Thank you for your presentation; it was great to have. We have had such diverse opinions over the last two days and really well-thought-out presentations. The Uniting Church does an amazing job, I think, with the vulnerable of our community. I know this sounds like a sidestep, but I would just like to understand, when dealing with those with housing stress or no housing—low socio-economic members of the community—that would come to the Uniting Church, what are some of the stresses that they talk about? I guess I am seeking whether electricity price feeds into that.

Mr ZIRNSAK: Yes, it does. I also need to talk about the church structure. I am from the church side of the organisation. We have a community service arm, which is called Uniting, so they deal with that side. But we communicate, obviously, across that, and I work with some of the financial counsellors in some of our agencies. The agency that stands out in this space is Kildonan family and children's services particularly, and we have worked with them in the past over issues to do with stresses in dealing with electricity prices—that is certainly the case. I guess our experience in the past has been, though, that retailers in Victoria—and I think that was from this government's own analysis, which was previously done—have been increasing prices beyond what should be the case. There have been reforms that we have obviously seen, and we have welcomed the VDO, which has been introduced in Victoria, and we continue to have direct involvement, both ourselves from the church side and from Uniting, with the department in looking at electricity prices and the regulation of electricity prices. So it is definitely an issue for us. Again, given the cost that nuclear would involve if you were to introduce it into this mix, unless government is going to pour lots of valuable revenue into propping it up, it would actually appear to add to the cost of electricity prices.

Ms BATH: And I guess, too, it goes to the point that in these sorts of hearings we do hear a variety of opinions on what costs come out, and it is incumbent on us, as we sift through all of this evidence, to find out what is maybe the middle ground in terms of most expensive to least expensive and the rationales behind it. I note in your submission that you talked specifically about your concerns around India and the potential, I guess, in relation to the threat of nuclear proliferation or bombs and the like specifically in relation to India. I would like you to elaborate a little bit more on that.

Mr ZIRNSAK: Look, we included it because it was work we had previously done, obviously, around the commonwealth government's decision to allow uranium exports. That was a bipartisan position about uranium exports to India and concern about the regulatory oversight of the Indian nuclear industry, and also the lack of separation between civilian facilities and military in India was of particular concern to us. It is of marginal relevance, probably, to this inquiry, because as I said there are no uranium deposits that I am aware of in Victoria, as I understand it, so it would only be in the very remote possibility that in the future some uranium was discovered and it was actually allowed to be mined that it would become particularly relevant to Victoria and this inquiry. It was simply something extra that we added in, because we thought, well, other submitters would cover it off. And that was part of the reason too—we knew there are other bodies who look at this. I know you have heard from witnesses whose full-time job is to look at this all the time, so they are the people who are across a lot more of the detail. It was an extra contribution we were feeding into the mix for this inquiry.

Ms TAYLOR: Thank you for your submission and dedication to this issue. I was just wondering about that issue of regulation in the nuclear industry, because yesterday it appeared to me that a lot of the emphasis was upon the strength of the regulation internationally—that we have got nothing to worry about because of randomised checks et cetera and that there was perhaps an inflated concern that is not apparent. What would you say to that?

Mr ZIRNSAK: Well, I mean, I am looking at Gregory Jaczko's book. He talks about the complacency that occurs within the industry and how the industry always wants to argue that whatever incident has happened is the last one that is ever going to happen. His conclusion as the chairman of the US Nuclear Regulatory Commission was that you have to accept that accidents are going to happen in the nuclear industry and that the gap between when they happen will vary and where they happen will vary. He also expressed concern that with this kind of system you cannot always predict what is going to go wrong, so you are learning afterwards, but he also argued, in the US at least, that the industry was highly resistant to learning from the mistakes and the accidents that had happened and was slow to correct problems as well. For example, he talked about how at one stage the early reactors had alloy 600 involved in them and that was being corroded within the systems. It was alerted to them by the Nuclear Regulatory Commission and facilities were very slow. There was one plant he talks about particularly where a disaster was narrowly avoided by the fact that the NRC actually forced the plant to be shut down, and investigation of the corrosion indicated that if the plant had been operating at the time, you would have seen a major accident occur. So it was narrowly avoided from that point of view.

So this is our concern about the dangers. If something goes wrong, you are talking significant impact. I mean, the Fukushima example saw 160 000 people needing to be evacuated. That is the significant impact of something going wrong. If a blade falls off a wind turbine, if you are underneath it, yes, it is a significant risk, but you are not talking about having to evacuate 160 000 people around a wind farm, right? It is quite a different scale if things go wrong. The argument from the person who was the chair of the US Nuclear Regulatory Commission was, 'You have to accept that accidents are going to happen', and that was why he concluded, as we quote in our submission, that 'nuclear is a failed technology'. That was his view.

Mr LIMBRICK: Thank you, Mr Zirnsak, for appearing today and your submission. I note from reading through the submission—and I would just like to follow up from something Ms Bath brought up—that there was a lot of focus on India and the issues there. It is my understanding that there is an international think tank called the Nuclear Threat Initiative that looks at proliferation safeguards throughout the world, and Australia is consistently at the top of that in terms of our proliferation safeguards. It is my understanding that Australia has excellent safeguards against proliferation because neither of us want more countries obtaining access to nuclear weapons. Are you saying that with the Indian example or maybe other examples Australia maybe is not as good as these organisations are saying? Or are you saying that that is a possibility, like maybe we have failed somehow, or that it is more a risk of possible failure in the future?

Mr ZIRNSAK: I think I have indicated that Australia's uranium exports to India do contain a risk and basically it was Australia and what they have agreed to do in the agreement that was set up. This is not just my analysis, it is the analysis of experts who critiqued the agreement that was signed. It was an erosion of the previous safeguards and the level of standard that we have applied to other uranium exports. There seemed to be a deep desire to export uranium in order to generate that export profit back to Australia and in the process erode some of the previous safeguards that we would have had in place. To even export to a country that has not signed the nuclear non-proliferation treaty is a deep disappointment, and it was a standard that we had not previously breached.

Mr LIMBRICK: And on India as well there is a tension here, isn't there? On the one hand we have concerns about proliferation and some of these other issues, but then on the other hand India is a very poor country. They want energy to develop their country and raise their prosperity and standard of living and all of this sort of thing and so they have got to look at options. There has been a lot of talk about coal going to India through this new Adani mine. What would you say to a country like India that wants to raise its standard of living? They have different choices, right? And I do not envy the choices that they have to make. What do you say on that tension of choosing something like nuclear energy or coal or some other energy to raise the standard of living in a country like India? There is a deep moral question here, isn't there? It is not clear cut.

Mr ZIRNSAK: Yes, sure. So India has high levels of poverty. We have direct partnership relationships with the church in North India and the church at South India, so we have direct communication with the churches on the ground there. Also, we are very aware—we have looked at this in the past—of the reports by the International Energy Agency around India. Our understanding would be those in energy poverty are largely in rural and in more remote areas; they tend to be the majority of that group. From memory I think it is around 400 million. But I have not checked the figure before coming here, so I am thinking it is around that sort of number. The evidence seemed to be distributed energy sources were probably the fastest and cheapest way to allow those people access to electricity, and renewables would therefore make the greatest sense in doing that,

firmed up by battery storage. It seemed to be by far the most sensible and logical way. Developing large, centralised power plants and having to run distribution infrastructure out to them, transmission infrastructure out to them, did not seem to stack up for most of the people who have energy poverty in India. So we are concerned about energy poverty in India, absolutely, but at the moment I think the majority of those would be best served by distributed energy sources, largely renewables, out in the areas where they need them.

Mrs McARTHUR: Thank you very much for your presentation today. Would you accept that a country like Australia and indeed a state like Victoria, which has a large rural component, needs reliable, affordable and accessible power?

Mr ZIRNSAK: Sure.

Mrs McARTHUR: So would you accept that once we did have the cheapest power in the world and we now have the most expensive?

Mr ZIRNSAK: No. I would not accept that proposition.

Mrs McARTHUR: And then having cut off about 25 per cent of our baseload power when we decommissioned Hazelwood, and we are looking to decommission other coal-fired power plants in the future, what are you suggesting is going to be replaced in the form of baseload power?

Mr ZIRNSAK: Well, I mean, if you look at the analysis of AEMO in terms of the pathway we are on in terms of energy transmission, the analysis seems to be, overwhelmingly, renewables will be the cheaper option. They will be firmed up with storage systems which are developing technologically, and the prices are coming down. The analysis from other bodies—it is not my analysis. These are reputable sources. You can question AEMO about their work if you like. Obviously the commonwealth government is also looking at gas as being potentially within there; we probably have some concerns from a greenhouse emission point of view around to what degree you include gas in that. Hydrogen is the other fuel that is now up for discussion, and obviously there is new interest in that sort of space as well. I look at the work by PricewaterhouseCoopers, so PwC, and Jacobs. They found it would actually make more sense to move to renewables as a reliable energy source—a lower price and a better impact on GDP—than if you attempted to introduce new low-emission coal-fired power stations as the alternative. Again, they are not an environment group. I mean, PwC you could hardly argue are some sort of environmental organisation per se. There was also work done under ClimateWorks that they got a consultant to also do, which came back with very similar findings from that point of view. So I think the independent analysis would suggest that the pathway is largely renewables.

Mrs McARTHUR: Well, currently—can I help you out?—in my electorate of Western Victoria there are engineering plants, there are dairy plants that have to run on diesel generators because there is not a reliable, accessible, forget about affordable, power supply. At the moment there is no way that battery storage, even if we had all the renewables online that we could possibly get, can actually produce reliable, accessible power. Because it cannot be intermittent; it has to be consistent. So at the moment we are using diesel to do a lot of our production. There are of course industries that cannot use electricity; they have to have gas. I am glad that you seem to be accommodating. We just lifted the other day in the Parliament the moratorium on onshore conventional gas exploration in Victoria. It will not come onstream for about a year, but that will be essential for many industries in my electorate. We need a type of power that is consistent and that is reliable and that is accessible. Currently that is not the case and not looking to be so in the future, unless we can get significant amounts of baseload power.

Mr ZIRNSAK: I am going to suggest to you that your constituents probably do not want to wait 15 to 20 years for the possibility of small modular reactors that are likely to run at costs that are two and a half to three times what they could get power for otherwise through alternative—

Mrs McARTHUR: No. You are absolutely right. They need it now.

Mr ZIRNSAK: So I do not think nuclear power is your solution for your constituents' problem, and I will actually check with my members out in western Victoria. I will be interested to see what their feedback around this issue is in that space as well.

Mrs McARTHUR: Good. Anyway, just bear in mind that the industries actually need a form of power that is not intermittent, and currently that is what they have unfortunately.

The CHAIR: Thank you, Mr Zirnsak, for your contribution. It is much appreciated. Good luck with your next paper and feedback from your members.

Mr LIMBRICK: Thanks very much for appearing.

Mr ZIRNSAK: Thank you. Thanks for your time. Appreciate it.

Committee adjourned.