29 June 2024
Romilly Madew AO FTSE HonFIEAust EngExec,
Chief Executive Officer,

The Executive Team,

Members of the Board,

Engineers Australia

Cancellation of presentation to be given by Robert Parker on Wednesday, 12 June 2024

Good day Ms Madew, Ladies and Gentlemen,

This letter discusses the cancellation of the EA-hosted webinar to have been given by engineer Mr Robert Parker on Wednesday, 12 June 2024, to present information on nuclear power.

I refer to the article by John Kehoe, Economics Editor of the Australian Financial Review, in that newspaper dated Thursday, 13 June 2024. The article is entitled: "*Simon Holmes a Court silences nuclear speech*". I quote from that article:

"*Engineer and nuclear energy advocate Rob Parker was due to present to more than 400 people registered for an Engineers Australia webinar on Wednesday night, in a scheduled address titled 'Avoiding an energy blunder Down Under'.*

But 24 hours before the talk, Mr Holmes à Court slammed Engineers Australia on social media for hosting Mr Parker.

'Seriously @EngAustralia. You're hosting an anti-renewables event for @NukeForClimate,' he posted on X. 'I would have thought your body was dedicated to improving understand [sic], not muddying the waters!'

'Minutes after his social media post on Tuesday, the Engineers Australia X profile responded: "Thanks Simon. This event has been pulled. This does not meet our guidelines and we are investigating how it was scheduled."'

End of quote.

I also note the Press Release from Engineers Australia (EA), issued on 14 June 2024:

https://www.engineersaustralia.org.au/news-and-media/2024/06/engineers-australia-statement

I note that one of the reasons given in this Press Release for EA's cancellation of the meeting was: "*Engineers Australia must remain a trusted, independent voice for the engineering profession*". However, to remain a trusted independent voice, I suggest that EA must permit a range of views within the profession on engineering-related topics, and wide discussion of those views within the engineering profession.
This attempt at suppression of discussion on nuclear energy, in response, allegedly, to a complaint from a renewables activist, a discussion on what most certainly is an engineering matter, a discussion that was to be presented by an engineer who is superbly qualified to present information on this topic, seriously calls into question, in my view, any claim to independence by EA, any credibility that the EA Executive may have had, as *a trusted, independent voice*, when it comes to matters of energy policy and, nuclear technology in particular.

The timing of this cancellation, on Wednesday 12 June 2024, could not have been more exquisite.

The EA Executive may not be aware that on Thursday, 13 June 2024, the day following the

cancellation, total output from all registered wind generation facilities connected to the Eastern Australian grid, with a total installed capacity of some 11,500 MW, collapsed from a starting value of a pathetic 1361.26 MW at midnight on Wednesday 12 June 2024, to a minimum of a pitiful 88.24 MW at 1.35PM on that same day. By midnight Thursday it had struggled back to some 919.27 MW, still utterly pathetic. As one commentator noted, that figure of 88.2 MW is about "as much power as two diesel generators". If a coal-fired generator had exhibited that kind of performance, its owner would never hear the end of it. For an excellent coverage of this event, see: https://joannenova.com.au/2024/06/20-billion-in-wind-power-across-australia-can-only-guarantee-as-much-power-as-two-diesel-generators/
Or, what about the night of 4-5 June last, where total wind output dropped to a pathetic 369.13 MW at 5.35PM, staying around that value until midnight, and less than a paltry 1000 MW by 6.00 AM on 5 June. Should this have occurred on a grid having only "renewable" generation, as our policymakers desire, the result would have been catastrophic grid collapse. As for solar generation, perhaps EA's Executive needs to be reminded that all night, every night, 365 nights of the year, (and also the Leap Year night!), output from solar generation is zero, zilch, nothing. In a 100-percent renewables scenario grid, such a failure of wind generation at night would have been catastophic.

Should the veracity of the generator output values quoted above be in doubt, you may perform an independent check of the relevant generation data, as it is publicly available at the AEMO's website. Further, lest you think I am cherry-picking the data, you might also like to have a look at the performance of wind generation through the months of April and May this year. The stand-out descriptor is "pathetic". You may remember that this period, commonly called Autumn in temperate-zone Australia, was this year characterised by long periods of fine, warm, sunny weather with very little wind. Note the latter: very little wind – indeed little or no wind anywhere. Perhaps you are unaware that such weather results directly from the passage across southern Australia of a long series during Autumn, of very large, that is, geographically widespread, high-pressure systems, that characterise this period of the calendar year.
This is the result of a phenomenon that is well-known to meteorologists: it is the passage northwards of what is called the "Southern Hemisphere Sub-Tropical Ridge". This passage happens every year at this time. These systems are characterised by calms: no wind anywhere within them.

The resulting "wind droughts" while predominant during this time of the year, are by no means restricted to this time; they occur frequently throughout the calendar year. All the while, wind generation is highly variable and highly unpredictable. The result is that these inherent characteristics of extreme variability and intermittency place enormous pressure on grid operational stability and hence its operational reliability.

Exactly the same impacts result from solar generation, with the added layer from that form of generation of failure all night, every night, of the year.

Battery storage, proposed as a panecea to deal with the variability and intermittency of both these forms of generation, is a non-starter: simply because the amount of such storage required is mind-boggingly huge. To even begin to address the requirement would bankrupt the nation.

Permitting our policymakers to continue to close coal-fired and other fully-dispatchable generation and to think to replace them with so-called renewable generation is a recipe for disaster. That is not idle speculation, it is a professional opinion, based on many years of analysis of the operation of the Eastern Australian grid. Should you doubt this, I suggest that you read a scholarly paper that I had published more than 10 years ago. You may find it, free to download, at the publisher's website: https://journals.sagepub.com/doi/epdf/10.1260/0958-305X.23.8.1233. You may care to note that discussion of both the meteorology and the likely impacts, impacts which continue to occur at the present time as described and predicted therein, is laid out in detail in that paper.

As it is the peak body for engineering matters in Australia, I suggest that EA has a responsibility to provide advice on such engineering realities to policymakers, particularly when the outcome of continuing to pursue those policies, as in this situation, would result in dire consequences.

To be quite clear: the engineering realities show unequivocally that the continued pursuit of so-called “NetZero” policies, with the stated aim of closing down all fossil-fuelled electricity generation in Australia, and its replacement with renewables, will result, inevitably, in frequent, unpredictable, widespread blackouts, with the ever-present scenario of a complete grid collapse looming at all times. It is encumbent on EA to provide this advice, fearlessly and robustly, to government policymakers.

EA’s continued silence in these matters is both deafening, and completely mysifying.

Turning now to EA’s cancellation of Mr Parker’s presentation, the first thing to note is that, in the light of the virtually complete failure of wind generation as described above, the title of his presentation: *‘Avoiding an energy blunder Down Under’* is not at all wide of the mark. Indeed, one might suggest that it demonstrates remarkable prescience on his part.

Mr Parker is a professional engineer of long-term standing within the engineering community. He is also a member of the Australian Nuclear Association and a former vice-president of that organisation. The ANA is devoted to the search for excellence in all matters related to nuclear science and engineering. Mr Parker has obtained academic qualifications in nuclear science and engineering. What does a professional engineer have to do in order to obtain standing before EA to be suitably qualified in this category of engineering expertise?

In my view, a public, unconditional, apology to Mr Parker is required from the EA Executive.

Should the EA Executive wish to do so, then do continue to suppress discussion of nuclear energy and energy policy among the engineering community; continue to insist on remaining silent. But, by remaining silent, how can EA’s peak body hope to be seen as *a trusted, independent voice*?

EA’s attempt at silencing Mr Parker has had entirely the opposite effect. A summary of his presentation, including a description of the events leading to, and including, its cancelling by EA, have since been published by The Australian Financial Review newspaper, freely available at:

https://www.afr.com/policy/energy-and-climate/climate-200-cancelled-my-talk-here-is-my-case-for-nuclear-20240623-p5jnyb?utm

In my view, the damage to EA’s reputation as a result of this attempt to silence discussion on such an important topic as the introduction of nuclear power to Australia, is incalculable.

I trust that EA will now address its responsibilities to advise government policymakers on these engineering realities inherent in solar and wind generation, and the resulting impacts on grid stability and operational reliability should they be ignored, as a matter of the utmost urgency.

Thanking you,

Paul Miskelly
E: paul.miskelly@aapt.net.au