

[REDACTED]

Sent: Wednesday, 28 July 2021 8:52 PM
To: IV Enquiries (DTF)
Subject: Regarding your report "Towards 2050 ..."

Dear Infrastructure Vic,

You claim in your report ... Towards 2050: Gas infrastructure in a zero emissions economy that ... batteries are able to provide "firming" capacity to compensate for intermittent renewables like solar (p.4 and elsewhere).

Can you provide an example? No.

It doesn't happen, not anywhere.

There are no grids anywhere where batteries provide enough storage to provide even an hour's worth of electrical energy, let alone the 10 to 15 hours that may be required overnight.

Reading your report, it seems it was written by somebody who didn't understand the difference between power and energy. For example, on page 20 you refer to a "350MW battery". A battery is characterised by at least 2 numbers, the maximum power output ... in this case 350 MW ... but also the duration it can supply this output.

Most grid level batteries can provide perhaps a single hour at full power. They are not intended to firm up intermittent resources, but to provide frequency control. I found no reference to frequency control or inertia in your report. I'm guessing you have no idea about these basic grid concepts.

I also looked through the personnel on your Board and "Our People" pages and it appears you have nobody with any kind of electrical qualifications. There was also no mention of inertia or system strength in your report. Again this indicates a serious lack of expertise in your report authors.

Australia has an Energy Security Board, they are currently looking at the design of the grid post 2025 and have called for consultation ... see <https://esb-post2025-market-design.aemc.gov.au/>

In this document they say very clearly:

"Security is the most concerning and urgent issue in the NEM."

Security isn't "cyber security" but maintenance of the voltage waveform and frequency in the face of faults. This "urgent issue" is a diplomatic way of saying we are in serious trouble.

Many people, and you appear to be among them, are becoming involved in Australia's energy debate without any technical background ... hence the embarrassing mistakes in your report.

Your board and "our people" seems astonishingly light on technical expertise and heavy on people who are experts with money and marketing.

I'd urge you to get some technical expertise, and if you have them, then use them. I can't imagine an engineer putting their name on your report.

Sincerely,

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<http://perfidy.com.au>

<https://www.amazon.com/GreenJacked-derailing-environmental-action-climate-ebook/dp/B00MN7UPH6>