

Sustainable Energy Now Inc. PO Box 341 West Perth WA 6872

13 September 2022

Hon Bill Johnston MLA
Minister for Mines and Petroleum; Energy; Corrective Services; Industrial
Relations
9th Floor, Dumas House,
2 Havelock Street,
WEST PERTH WA 6005

Dear Minister,

SWIS Generation Capacity

We are writing to you concerning the matter of the SWIS generation fleet being able to meet system peak power demand during this coming summer season.

As you no doubt will be aware, at the end of 2021 and early 2022 there were a number of periods of concern for the SWIS power system generation adequacy due to high ambient temperatures, particularly leading up to the Christmas and Boxing Day holiday period.

At that time, according to publicly available data from AEMO, there were a number of completed planned outages which were then followed by a large increase in the number of forced (unplanned) outages after December 15th and through the holiday period.

It was concerning for SEN to learn that during the particularly high ambient temperature days on the 25th and 26th December 2021 there were periods of peak demand when every available certified generator on the SWIS was dispatched. It was fortunate that the system peak demand was met with the available generation fleet – our understanding is that the margin of available generation was perilously close to system peak demand with very little headroom. It was therefore most fortunate that the system held up without load shedding or worse: cascading outages leading to a potential system wide black.

Given that the forthcoming coal closures and in particular the closure of Muja Unit #6 on October 1st 2022, as well as the retirement of 100MW Gas Turbine at Kwinana, there is concern that in the event of a repeat of the high temperatures of 2021/22 summer as well as a high incidence of forced outages, that there will be inadequate generation capacity to meet system peak demand.

It is appreciated that the 100MW battery being installed at Kwinana will help to compensate, but it appears there will still be a shortfall of around ~200MW of persistent capacity due to the aforementioned closures.

Whilst various government agencies will be undertaking capacity reviews, our concerns are also the wider energy transition risk and the impact on community perception of renewables in the event of any system shortfall.

Can you advise what measures are being taken to secure on-going adequate generation capacity under these circumstances.

Yours faithfully,

Ian Porter

Special Advisor - Technical Sustainable Energy Now Inc

On lots

Fraser Maywood

Acting chair Sustainable Energy Now Inc

Sustainable Energy Now Inc. (SEN) is a not-for-profit incorporated association advocating for the utilization of sustainable energy sources within Western Australia.

SEN's membership consists of volunteers whose backgrounds include professionals in science, business, education and the environment and who are focused on transitioning WA's energy sources from fossil fuels to renewables for the good of humanity, the economy and the environment, as a way for WA to play its part in the global transition to a sustainable future.

We acknowledge the Wadjuk Noongar people and we acknowledge this Country always has and forever will be Wadjuk Noongar Country. We acknowledge their families to the North, the East and the South and recognise their continuing connection to land, waters and sky. We pay our respects to their ancestors and Elders past and present.

We are listening, observing and learning.