DON'T NUKE THE WEST

The Federal Liberal National Coalition are now proposing nuclear power reactors in Collie and at 6 other sites across Australia where there are coal power sites due to be closed. Dutton has said reactor would be operating by 2030 - this is fanciful and unachievable. The Coalition have not disclosed how many reactors at each site or what type of reactors. It is expected any proposal would only account for 10% of Australia's energy and wouldn't deliver energy until at least 2040 with a price tag in the billions.

"In the time it would likely take to build one nuclear power station... the whole grid can be nearly completely decarbonised."

Giles Parkinson - founder and editor of Renew Economy.



MYTHBUSTING

Nuclear accidents are rare, aren't they?

There have been over 200 nuclear power accidents and many more acts of nuclear theft, smuggling and deliberate attacks on nuclear reactors. In recent years we have seen military attacks on a reactor in Ukraine and concerns over military attacks are reactors in Israel and Iran as conflict escalates in the Middle East.

Doesn't nuclear power have zero emissions?

The nuclear power life cycle generates between 10–103 grams of CO2 equivalent per kWh, which is far lower than fossil fuels – but as uranium ore grades decline emissions would increase to as much as 248 gCO2e/kWh. As well as emissions from mining and milling uranium ore there are emissions associated with the transport and processing of fuel.

Isn't nuclear power cheaper?

Nuclear power is far more expensive than renewable energy sources. It costs 3-4 times as much as renewable alternatives.



Cost \$ per MWh of energy



How much water does a nuclear reactor use?

A single nuclear power reactor operating for a single day typically consumes 36–65 million litres of water. The water requirements for a nuclear power station can vary between 20 to 83 per cent more than for other power stations.

MYTHBUSTING

Isn't nuclear power better than coal?

Renewable power has doubled over the past decade and now accounts for 30% of global electricity generation while nuclear's contribution is 9% and continues to fall. Nuclear power plants are vulnerable to threats which are being exacerbated by climate change.

What about small modular reactors?

Of the small modular reactors (SMRs) under construction most are over-budget and behind schedule; there are also disturbing connections between weapons proliferation and militarism more generally; and about half of the SMRs under construction are intended to be used to facilitate the exploitation of fossil fuel reserves. SMRs are not commercially available and are unlikely to be in the next decade.

Radioactive Racism....

In Australia First Nations communities have been and continue to be impacted and targeted by the nuclear industry. Beginning with uranium mining and the British nuclear weapons tests at Maralinga in South Australia. There have been devastating health impacts from radiation exposure in communities from the weapons tests and at some uranium sites.

Over the last 40 years First Nations communities in South Australia, Northern Territory and WA have fought off nuclear waste dump proposals and uranium mines.

In WA communities have been able to stop uranium mining but there is always the threat - communities at Mulga Rock, Yeelirrie, Wiluna and Kintyre continue to fight off uranium mine projects.

There are now also plans for radioactive waste storage and nuclear submarines on Whadjuk country in Derbal Nara (Cockburn Sound).



Dirty: Reactors produce high level radioactive waste in the form of spent nuclear fuel. No country has established a repository for high level nuclear waste from nuclear power. Australia's own battle to store low and intermediate level waste has been ongoing for 30 years and there is still no agreed solution in site.

Dangerous: In addition to the very real danger of a nuclear reactor meltdown – as the world has witnessed at Fukushima, Chernobyl and Three Mile Island. Nuclear power has repeatedly been linked to a nuclear weapons programs. Nuclear reactors not only become military targets but produce millions of tonnes of nuclear waste (in the form of spent fuel) containing enough plutonium to build over one million nuclear weapons.

Slow: The industry does not have the capacity to rapidly expand production. In Australia, it would take 5-10 years of planning before reactor construction could begin, then 10 years to build a reactor, then another 6 or so years to pay back the energy debt from construction. It would take at least 20 years before nuclear power could even begin to help reduce emissions. Globally nuclear reactors are notorious for being behind schedule and over budget.

Expensive: According to the World Nuclear Industry Status Report the cost of generating solar power ranges from \$36 to \$44 per megawatt hour (MWh), onshore wind power comes in at \$29 - \$56 per MWh. Nuclear energy costs between \$112 and \$189. The 2020 Lazards analysis found capital costs for nuclear power are higher than almost any other energy source.

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