

Attachment 2: SOS submission on Renewable Energy Zones -Access Scheme

Mr D Saunders MP
1/18 Talbragar St
Dubbo
NSW 2830

XXXX
SOS Central West NSW
XXXX
Gulgong NSW 2852

Emailed to: dubbo@parliament.nsw.gov.au

3 December 2020

Dear Mr Saunders

Electricity Infrastructure Investment Bill 2020 and claims made

Your website claims that the Renewable Energy Zones and “renewables” have community support does not agree with the facts:

- 100% of submissions were against the Beryl industrial solar works, yet it was constructed anyway
- 435 objections were lodged against the Gulgong industrial solar works proposal, which subsequently was not approved by the WRPP
- Over 1000 objections were lodged against the Burrundulla, Mudgee, industrial solar works proposal
- There was community opposition to the multiple Wellington industrial solar works, but they are being built anyway
- There is community opposition to the proposed Orange industrial solar works.

Despite so many of the communities in your electorate not supporting these industrial developments on the doorsteps of their towns, you voted in favour of the Minister M Kean sponsored "Electricity Infrastructure Investment Bill 2020" (assented: 3/12/20) to transform our productive and beautiful surroundings into a wasteland. Industrial developments that only benefit a handful of 'farmers' but lines the pockets of the overseas companies who import the majority of the so called "investment" in the regions and gleefully take the government provided subsidies using our taxes and benefit from favourable government policies and regulations .

Below is a recent article following the passing of the **Electricity Infrastructure Investment Bill 2020**, in which Minister Kean makes numerous claims that SOS members can demonstrate cannot be realistically substantiated. He also made other comments publicly.

However, we request that you, as our elected representative, respond to each of our points. More detail of some of the issues we raised are dealt with in the attached SOS Research Paper November 2020. We also address below the points we have highlighted in the article.

"NSW energy minister claims coal workers will be unaffected by power station closures

26/11/2020 | 7min skynews.com.au

New South Wales Energy Minister Matt Kean says his renewable energy plan will deliver some of the **cheapest electricity prices in the world, boost investment and create jobs, particularly in regional areas**. The bill – which has passed through the upper house with bipartisan support from Labor and the Greens – aims to help the **private sector build \$32 billion in renewable energy infrastructure across the state**. “We can be not only an **energy superpower** but an **economic superpower**, and that’s too big an opportunity to pass up,” Mr Kean told Sky News. “What this is about is making **decisions based on the engineering and**

the economics, not the ideology and the idiocy.” Under the plan, four out of five of NSW’s existing coal-fired power stations will be closed down as they come to the end of their lives. Probed about how the coal workers will subsequently be impacted, Mr Kean said they would not be affected by the closures. “80 per cent of coal jobs in NSW are for the export of coal, those jobs won’t be affected at all by this plan,” he said. “What we do know is that four of our five existing power stations in NSW are coming to the end of their lives, it’s got nothing to do with climate change. “It’s just the fact that they were built in the 70s and are coming to the end of their lives.”

SOS analysis of the above claims about the renewable energy plan:

- 1. Will deliver cheapest electricity prices in the world:** In December 2019 Australia's average domestic electricity price was **US\$0.246/KWh**, which already puts it in the high end of world prices where the 2019 average was only **US\$0.14**, with China and India only **US\$0.08/KWh** and over 40 countries between US\$0.01 and US\$0.08. NSW was, for average household usage of 3900KWh/year, A\$0.2578/KWh (Oct 2020) to which a fixed supply charge equivalent to A\$0.0376/KWh is added for a total of **A\$0.2954/KWh or US\$0.207/KWh (A\$1 = US\$0.70)**.
The AEMO 2020 Integrated Planning Report Overview, which includes REZs, states a benefit to consumers of only **\$11billion** over **20** years i.e. by 2040. This equates to a potential electricity bill reduction of A\$55 a year sometime well in the future for each of the current 10,000,000 households. In addition, the NSW 2019 Electricity Strategy states *"For households, the Strategy will lead to estimated bill savings of \$40 per year "* by 2040. Not much chance of even reducing electricity costs let alone achieving even **US\$0.08/KWh** under Kean’s plan. **Please explain how NSW will achieve with renewables what no others have been able to do to date.**
- 2. Boost investment/Private sector build \$32 billion in renewable energy infrastructure:** Investments of \$32 billion sounds impressive until one realises that most of this makes our balance of payments worse because most of the amount is the cost of imported solar panels, wind turbines and batteries. Even the profits go overseas as most developers are huge international organisations. Some of the Australian companies that tried the construction of these imported “renewables” became bankrupt (RCR Tomlinson, 2018, loss of 3,400 jobs) or withdrew (Downers EDI, 2019/20). \$1.5 billion in lease payments to farmers sounds impressive. However, only handful of such farmers will benefit and the payments are spread over decades. In addition, some of the “farmers” don’t live in the region (inherited properties). The lease costs will be passed onto the electricity consumers, which increases prices. **Please explain how much Australian content is included in the \$32 billion.**
- 3. Create jobs, particularly in the regional areas:** Experience with Beryl, Wellington and two Gulgong solar works proposals shows there is next to no local employment generated by these industrial developments. Most of the construction workers are backpackers who do the low skilled simply assembly of cross members and solar panel fitting. For example, the media quoted that 560 construction workers at Wellington were mainly backpackers when 13 safety notices were issued. Early September there were no solar panels installed but by late November nearly all the panels were in place and a very much smaller workforce was in attendance. Just three months of the intensive construction. Even a Wellington coffee shop was staffed by backpackers.
Post construction there are zero (a 5MW works), one (an 87MW works) to less than ten (a 400MW works) ongoing operational jobs, and even these can be out of town “flying”

maintenance squads that service multiple sites. Also, few local indirect jobs. Kean's plan stated 2,800 operational jobs in a decade. Using the solar works size (400MW capacity) and quoted operational employees, ten(10), then to achieve the Central West REZ target capacity increase of 3,000MW gives one the equivalent of 7.5 (3000/400MW) 400MW solar works. This yields about 75 (7.5 x 10) ongoing operational jobs.

Using the same approach for the stated goal of 12,000MW capacity increase would at the end of a decade result in up to 300 ongoing operational jobs across NSW. A far cry from the plan's stated 2,800 jobs, which in any case does not even recover the 3,400 jobs lost by the collapse of RCR Tomlinson Ltd in 2018 after its venture into solar works caused its demise.

Please explain where all these net increase in jobs in your electorate and the other REZs will come from, especially given the jobs Mr Kean expects to be lost in the coal fired power generation plants (see point 8).

4. **An Energy superpower:** Germany and Denmark are regarded as world leaders in transitioning to renewable energy electricity generation, yet in 2019 Germany had the highest electricity prices (**US\$0.381/kWh**) in the world with Denmark second (**US\$0.361/kWh**), despite their massive shift to renewables at **46.5%** and **63%** respectively. After 20 years and expenditure of A\$870 billion, Germany is facing the massive cost of disposal of 5,700 wind turbines of its about 30,000 turbines and the loss of over 4,500 MW of capacity. Fortunately, Germany can call on France to provide electricity backup when the wind is not favourable. France generates 70% of its power from nuclear reactors at about half the cost of Germany. **Please state which Energy Super Power should NSW aspire to be.**
5. **An economic superpower:** With no meaningful (at least 40-50%) reduction in electricity costs, NSW/Australia will not keep its existing manufacturing let alone attract real job creating investment. Germany have experimented with renewables but only achieved the most expensive electricity prices in the world, become dependent on other countries for power and created an unstable electricity system. **Please explain how NSW intends to bring energy intensive industries back to NSW.**
6. **Decisions based on the engineering and the economics:** Wind and solar electricity generation are incapable of supplying 24/7 electricity supply without backup of a reliable base-load power source. Wind may not blow for days and the sun could also be very limited for several days due to cloud cover. From an engineering and economic viewpoint consider AGL's proposed 250MW combined closed gas turbine(CCGT) power plant proposal. At a cost of \$400 million all up (plant, transmission lines, ancillary plant) and a tiny land footprint, just ten (10) such CCGT power plants located close to existing transmission/substation infrastructure (e.g. near existing coal-fired power plants) will provide the same output (MWh) as the proposed 12,000MW of renewables. The proposed CCGT is rated at 90% capacity factor, whereas wind (35%) and solar (25%) are considerably less. The cost of 10 CCGT power plants is just \$4 billion. Nowhere near the \$32 billion the Kean's plan requires. The added advantage is that the CCGT power plants (or fewer nuclear plants) can be used as peaking plants or full-time base-load plants. **Please provide the engineering and economic analysis that supports this statement by Mr Kean.**
7. **Not the ideology and the idiocy:** Minister Kean's plan is based on ideology and if it had any chance of even partial success would be a first in the world. Suggesting people are idiots for pointing out the flaws in his plan is a very poor form of debate. The Bill's Division 1, 12(1) "energy security target" only refers to megawatts (MW), which is a capacity measure not an electricity production or consumption measure. The latter are measured in megawatt hours (MWh) of electricity.

The bill is therefore fundamentally flawed in our opinion. The 3,000MW extra capacity proposed using only weather-dependent intermittent renewables produces only about a third of the total electricity output of equivalent total capacity reliable HELE, CCGT or nuclear power plants. See Appendix A of the SOS Research Paper for detailed definitions of MW, MWh and capacity factor. Thus, the security targets to prevent 1 in 10 years major power failures is not based on a technically correct basis. **Please prove our assessment of this flaw is incorrect.**

8. **80 per cent of coal jobs ... won't be affected at all by this plan:** At the end of 2017 NSW coal mines had up to 20,872 mine workers (full-time equivalent workers), but excludes those employed in fossil fuel power plants. If 80% of coal jobs are unaffected by Kean's plan then 20% or 5,218 jobs are affected. That is, they would be lost coal industry jobs. Even if the plan's suggested 2,800 operations jobs were created the loss of 5,218 coal industry jobs leaves a net loss of 2,418 jobs for an investment of \$32 billion, which is a very poor result. In addition, the number of indirect jobs that will be lost could be thousands more based on the decline of Rylstone, Kandos and surrounding areas when the coal-mine expansion in Bylong Valley was not approved last year. **Please explain where all these net increase in jobs in your electorate and the other REZs will come from, especially given the jobs Mr Kean expects will be lost in the coal fired power generation plants (see point 3 also).**
9. **It's got nothing to do with climate change:** As Australia cannot do anything that effects the global temperatures and therefore climate, it is pleasing that Minister Kean at least acknowledges that fact. However, as studies have shown the life-cycle impact of renewables (wind, solar, batteries) over the equivalent 60 year life-cycle of a HELE coal-fired power plant or nuclear reactor uses up to ten times more resources than the alternatives. That's a lot of mining, processing, manufacturing, transport, construction, decommissioning and disposal as well as creation of toxic waste. Globally, the toxic waste already produced from mining for and processing of rare earths metals, cobalt, silver, lithium, etc. for use in wind and solar systems, including backup batteries, is causing substantially increased pollution of land and soil, serious health conditions in residents, workers, animals and crops and the exploitation of children in cobalt mines.
For 3,000MW increase in capacity requires over 30,000 hectares or 300km² (assuming 70% solar, 30% wind) of agricultural land in your electorate, which is equivalent to the size of **THIRTY-FIVE (35) SYDNEY AIRPORTS**. **Please explain why you support all the fire and contamination risks and other impacts to your constituents, let alone the damage being caused to the environments globally.**

We look forward to your responses in the near future.

Your sincerely

SOS Central West NSW member
email [REDACTED]