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Submission uploaded to : [www.planningportal.nsw.gov.au/major-projects/Shoalhaven Hydro Expansion Project - Main Works | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](http://www.planningportal.nsw.gov.au/major-projects/Shoalhaven-Hydro-Expansion-Project-Main-Works)

From: saveoursurroundings@outlook.com

Dear Contact Planner, Iwan Davies
SOS objects to SSI-10033

The Project

Development of a new 235 MW underground pumped hydro power station, tunnels, underground and overground water pipelines, surge tanks, intake and outlet structures and ancillary infrastructure, between Fitzroy Falls Reservoir and Lake Yarrunga. The Project is expected to have a nominal capacity of approximately 235 MW and be capable of generation for over 13 hours in parallel with the Existing Scheme operation or 24 hours where the Existing Scheme is not operating or if directed by AEMO in response to critical needs of the NEM.

SOS objections

SOS requires the Proponent to respond in detail to our concerns and issues and the DPE to satisfy itself that all responses are accurate and adequately address the matters raised by SOS. Generalised responses and/or amalgamated answers or yes/no answers are unacceptable.

SOS objects to this proposed project because:

The main justification, reduction of CO2e reducing global warming, for the project is unproven

1. The Proponent stated: *"As increasing concentrations of GHGs in the atmosphere are known to contribute to global warming, being able to reduce these emissions across the life cycle will reduce the potential impact of the Project on global warming."*

In September 2022, Senator Malcolm Roberts made an 82-page submission to Labour's 2022 Climate Change Bill, of which the most important points were:

- CSIRO admitted that it has never stated that carbon dioxide from human activity is a danger. Statements of danger came from politicians;
- CSIRO has never quantified any specific impact of carbon dioxide from human activity on any climate or weather variables, such as temperature, rainfall, droughts, floods, storms, ocean alkalinity. Yet this is fundamental for climate and energy policy. There's no scientific basis for climate policies;
- CSIRO admits to not doing due diligence on data or reports it relied upon from external agencies;
- CSIRO admitted that today's temperatures are not unprecedented. They've occurred before;
- CSIRO then claimed unprecedented rate of temperature rise, which we destroyed using the papers CSIRO itself cited;
- CSIRO has failed to provide statistically significant evidence of change in any climate factor. It's just normal, natural cyclical variability.

1.

2. It is estimated from IPCC data that carbon dioxide (CO₂) from all human-induced sources, not just electricity generation, is 3% of the 0.04% of CO₂ in the atmosphere. 97% of greenhouse gases (GHG) are naturally occurring, with water vapour being the major greenhouse gas. Australia is responsible for about 0.036% (i.e. 1.2% of the 3%) of human induced amount of total global emissions of carbon dioxide equivalents (generally stated as the main driver of global warming) and by signing the Paris Climate Agreement has undertaken to reduce its human related carbon dioxide emissions over time.
3. In various Senate hearings the Chief Scientist, CSIRO and the Bureau of Metrology could not produce evidence of human induced global warming or effects on climate. Australia's Chief Scientist of Australia, Dr Finkel, told a Senate inquiry in June 2017 that if Australia reduced its total carbon emissions to zero, that it would do virtually nothing to reduce global temperatures. Likewise the CSIRO could not produce to a senate enquiry any scientific evidence that CO₂ drives climate change. None of the over 100 climate models based on this "theory" have proven to be accurate and all have estimated higher global temperature increases than actually recorded over recent decades.
When SOS, one of 32 witnesses called, pointed out at the House of Representatives hearing into MP Zali Steggall's Climate Change Bills that CO₂ is not proven to be a dial for climate change, Ms Steggall disagreed. SOS offered to apologise if she could provide scientific proof that CO₂ causes climate change. SOS is still waiting. Thus, Australia's policies on emissions reductions should be based on logic and practicality. For Australia, electricity consumption is about 33% of our total energy consumption, i.e. a third of our total CO₂e emissions. Restructuring our electricity system can have no affect on our climate, but is significantly negatively impacting our environments and electricity costs.
4. CO₂ emissions reductions have become an end in themselves and so the negative impacts of weather dependent renewables on the environment and on electricity prices, reliability and security are being ignored. Professor Steven Koonin, former New York University professor and former undersecretary for science in the Department of Energy in the President Obama administration, in his recently released book "Unsettled" highlights the lack of evidence to support claims of human induced climate change that is an "existential threat, climate emergency, disaster, crisis, but in fact, when you actually read the literature, there is no support for that kind of hysteria at all". This is in addition to two long-time, well known environmentalists, Michael Moore (documentary "Planet of the Humans" YouTube 21/04/20) and Michael Shellenberger (book "Apocalypse Never: Why Environmental Alarmism Hurts Us All" 30/06/2020) highlighting the environmental damage being caused by the obsession many countries have for weather-dependent renewables
5. Every country, such as Australia, Germany and Denmark or state, such as California, Texas and South Australia, that have significantly introduced solar and wind technologies into their electricity generation mix have not only significantly increased their electricity prices but also destabilised their electricity grids, which leads to more expenditure on 100% backup, extension of transmission infrastructure, more difficult electricity grid management and more ad hoc unproven "solutions" being pursued, such as the failed geothermal, wave generation and carbon capture experiments already tried.

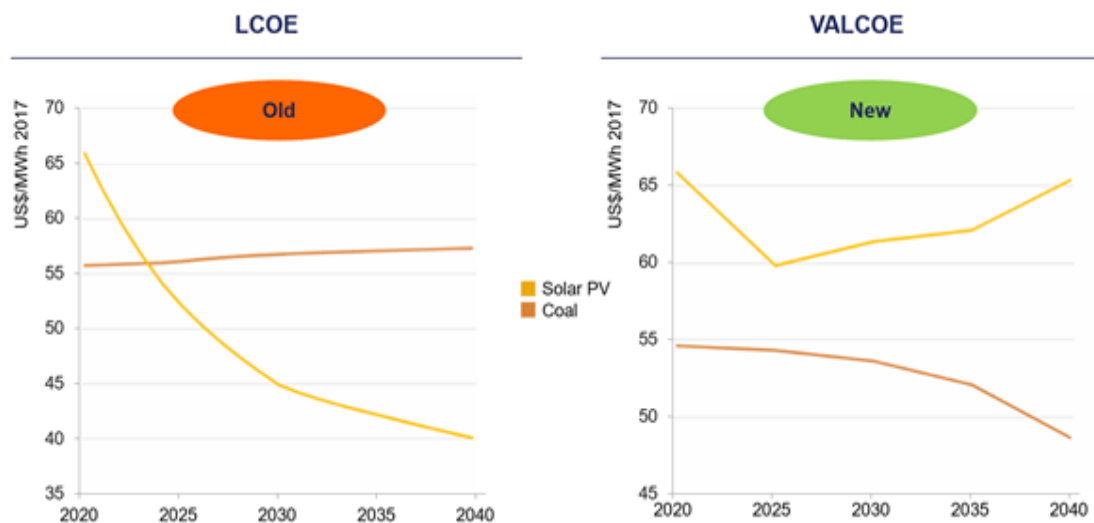
Will the Proponent provide proof that any claimed reduction in CO₂e as a result of the project has any basis for justification that the project should be approved on the grounds the project *"will reduce the potential impact of the Project on global warming."* ? Will the Proponent advise the amount of global temperature rise the project could be expected to limit? Even if it was proven that human induced CO₂e did cause increasing global

temperatures, does the Proponent agree that its project will make no difference to Australia's 0.036% total contribution to GHG in the atmosphere and therefore global temperature rises?

Claimed benefits not proven to date

The claim that the project would "provide long-term benefits for business, industry and domestic energy customers across NSW through improved energy security and reliability of supply to the NEM during periods of high demand." is doubtful. It would certainly increase the overall costs of the system and therefore the cost of electricity to all consumers. The project is only required to help prop up an unreliable, weather dependent, weather vulnerable, intermittent wind and solar electricity design, which has already failed globally and is well on the way to failing in Australia, especially once the base-load 24/7 Liddell power plant closes in April 2023. Expensive electricity damages businesses, industry and domestic households. For instance:

The Levelised Cost of Electricity (LCOE) measure used in the popular press and by most governments is misleading. The still incomplete but better Value-Adjusted LCOE (VALCOE) from the IEA was first published in 2019. In January 2020 the prestigious Institute of Energy Economics Japan (IEEJ) published its 280-page 'IEEJ Energy Outlook 2020' and raised concerns about renewables' rising unaccounted-for integration costs, concluding that LCOE is not capable of capturing the true cost of wind and solar. Comparisons of alternate costs using VALCOE helps explain why electricity systems that have significant weather-dependent renewables in their mix always result in higher electricity prices than those that don't.



IEA chart

In South Australia, Wholesale Electricity prices increased from an average of \$52.60 to \$109.80/MWh when the Northern power plant was closed in 2015 and, in Victoria, on the closure of Hazelwood power plant in 2017 from \$51.50 to \$97.90/MWh. After the coal-fired Liddell Power station in NSW closed just one of its four turbines in 2022 wholesale electricity prices rose sharply. Liddell is scheduled to close operation completely during 2023. If coal-fired power stations are claimed to be more expensive than solar and wind why do average wholesale prices rise when they are closed down or policies applied that reduce their efficiency?

Does the Proponent agree that their proposed project will use considerably more electricity (e.g. possibly up 30% or more) to pump water uphill than what it will generate? Does the Proponent

agree that it will draw electricity from the wind and solar dominated grid and that will increase demand on the NEM, and, when it does so, possibly when there is little wind power and little solar power being produced, it will increase the wholesale price during that time? In such circumstances will the project cannibalise the Battery Energy Storage Systems (BESSs) energy or limit their recharging ability?

There are better alternatives than the proposed pumped hydro project.

Other countries such as China, Japan and India are building High Efficiency Low Emissions (HELE), Combined Cycle Gas Turbine (CCGT), and nuclear reactor plants. Orders have already been placed for the various under development Small Nuclear Reactors (SMR), the first of which is expected to be operational by 2030. All these newer plants and the SMRs produce considerably less (up to 90%) or no CO2 (nuclear) at a much lower overall cost to the existing electricity system. They can operate 24/7, connect to the existing network near where the electricity is in most demand, have longer lives and require manyfold less space than wind and solar plants. Also they all have a very much smaller impact on local and global environments

Does the Proponent agree that when Australia has to adopt reliable methods of electricity generation, that will limit or make obsolete wind and solar penetration, that its project will become uncompetitive and economically unviable?

Conclusion

The Proponent's justifications for the project are faulty and unsubstantiated. It is also environmentally damaging and results in even more loss of local wildlife and indeed several threatened species. Therefore **SSI-10033 must be rejected!**

Regards

Save Our Surroundings (SOS)

Save Our Surroundings (SOS) is part of a network of community groups across multiple states that share their experiences about, and research into, industrial wind, solar, BESS and pumped hydro proposed and developed projects and their impacts on affected individuals and regional communities and other parties.