

SOS objections to this proposed Pumped Hydro scheme.

Save Our Surroundings (SOS) objects to this pumped hydro scheme [[Oven Mountain Pumped Hydro Energy Storage | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](#) ]

because:

1. It will create enormous amount of up front Greenhouse Gas (GHG) emissions, which the IPPC states will last at least 50 to 200 years and beyond.

**What will be the additional negative impact be on our climate? How much greenhouse gases will be embedded in the project by the time of commissioning?**

2. It will require even more upfront Greenhouse Gas emissions to be created as it will require wind and solar generation to be available to be a "green" energy storage system. It will also cause more transmission and related infrastructure requirements. But wind and solar works and additional infrastructure have huge GHG deficits on commissioning, which will take years to offset, if ever.

**What will be the additional negative impact be on our climate? How much additional greenhouse gases will be attributable to the project by the time of commissioning?**

3. CO2 emissions reductions have become an end in themselves and so the negative impacts of weather dependent, intermittent and often unavailable wind and solar works on the environment and on electricity prices, reliability and security are being ignored. They should not be ignored as they are significant!

**Won't this project exacerbate these problems?**

4. The pumped hydro scheme will not only be dependent on weather dependent wind and solar works, so will the pumped hydro scheme also be weather dependent. Our biggest dam has dropped to 30% of capacity in the past. Even the hydro-electric power plants in Tasmania, NSW and California have been unable to maintain generation in recent times. We can have prolonged droughts. The scheme will have periods of insufficient water levels to operate at full capacity or even at all.

**What impact will this have on electricity supply for both availability and cost?**

5. The stated objective of the AEMO design is for 95% of electricity to be generated by wind and solar works. The pumped hydro scheme will be no more reliable then these generating sources. With wind and solar works capacity factors below 30% then the other 70% of the time has to be provided from stored energy.

**How would this be possible? Can the Proponent please explain in detail how their project will operate under circumstances of insufficient energy to pump water uphill and still supply the predicted output in times of high demand?**

6. Pumped hydro requires huge amounts of energy to pump water up-hill. At least 30% of this input energy is lost when feeding energy back into the grid. Additional energy is lost over the transmission lines to where it will be consumed in the densely populated areas. Not very efficient!  
Does the Proponent accept that its project will create greater demand for expansion of intermittent and unreliable wind and solar electricity generation and the inherent negatives such expansion will cause?
7. A pumped hydro scheme is very expensive to build and operate. Turbines are both generators and pumps and so life-span is short and maintenance is high.  
Excluding subsidies, what will be the extra cost per kilowatt hour to the end consumer?
8. Apart from the negative impact the project may have on climate it also certainly has an impact on the local environment.  
How does the destruction of wild-life habitat on the scale proposed be justified by the Proponent?
9. The 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?
10. There is little transparency of extent benefits to the Proponent from subsidies, favourable loans, favourable power purchase agreements, favourable legislation and regulations, valuable free large-scale generation certificates, guaranteed minimum wholesale prices, "research & development" grants and the exclusion of better generation alternatives, which hobbles competition.  
Exactly what are all the benefits that will be applicable to the project? Would the project be viable without these benefits? Does the Proponent agree that all such benefits are paid for by all Australian citizens through higher prices for electricity and goods and from the taxes raised by state and federal governments?
11. 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 2029. All these newer plants and the SMRs produce considerably less (up to 90%) or virtually no CO<sub>2</sub> (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 eventually adopt reliable methods of electricity generation, that will limit or make obsolete wind and solar penetration, and that its project will therefore become uncompetitive and economically unviable?

**Conclusion:** The project does not justify approval.

Yours sincerely

Save Our Surroundings (SOS)

