Proposed Shoalhaven Hydro Expansion Project - Main Works

To whom it may concern

Re Proposed expansion of Bendeela Pumped Hydro Power station by Origin

I would like to add to my previous submission regarding this proposal.

This project should not go ahead. The EIS is incomplete and inadequate. I note that no additions or changes were made to the EIS in response to the initial submissions lodged after the first exhibition period.

Due to the lack of detail it seems that this project cannot be costed yet, which is a real shortcoming given that it makes it impossible to show the comparison with more 21st century technological energy storage. This is another reason why no decision should be taken in relation to this project while the EIS is so poor.

In addition to the construction costs, this project needs to have a number of permanent, independent ecologists working together, and independent monitors of the project's construction and compliance, employed by the Environment Protection Authority or our community, 24 hour a day, 7 days a week, whose cost is paid to the EPA by the proponent, not the taxpayer.

The continual costs of the independent professionals must be identified and would be substantial.

<u>Platypus</u>

In 2021 platypus were recorded in the river at the Bendeela Recreation Area, which is immediately downhill from the area identified in the EIS as the place for the dumping of the estimated 420,000 cubic metres of (acid-leaching) spoil. Further platypus sightings have been made just downstream and further downstream from the Bendeela Recreation Area. I am just including the sightings immediately adjacent to the proposed project and its tailings. Please see the map at the Platyproject which is being run by Australian Conservation Foundation and University of NSW here https://platy-project.acf.org.au/





And downstream





Atlas of Living Australia record of those sightings



Downstream



Platypus and echidnas are the oldest mammals on the planet, estimated to be 40 million years old. Platypus experts believe that the platypus populations are plummeting and the species was referred for inclusion in the IUCN Red List in A National Assessment of the Conservation Status of the Platypus at

https://www.unsw.edu.au/content/dam/pdfs/unsw-adobe-websites/science/platypus/2021-10-platypus-1.pdf .

The most detailed study was made of the platypus over 40 years in the Shoalhaven region, and that study is here: <u>https://www.nature.com/articles/srep16073</u>

It would be equivalent to an international environmental crime to approve the proposed project based on this EIS. This project EIS lacks an actual management strategy for the surface water, the ground water and containment of the spoils, and includes no strategies to preventit from leaching and draining into the river. At present there is only a glossy, multi page statement of intent to try to work out strategies to manage these very significant elements in the future.

We are custodians of the world's oldest mammal and money paid to an "offset fund" in exchange for killing these platypus in the only area where they have actually been studied over decades, is not acceptable.

Biodiversity

The Shoalhaven is recognised as the biodiversity hotspot of NSW. Our valley community has recently been exploring ways in which we could become a micro-grid in the electricity system, using household solar and batteries.

This is a much more appropriate form of energy storage and release for this part of the biodiversity hotspot because it has no impact on the biodiversity, and utilises the modern 21st century technology of our times.

The destruction of our wildlife and environment by this project and all its side effects is unbearable to contemplate. Our road kill is already threatening the sustainability of our endemic species, and we are casting about for solutions. However, the roadkill as a result of this project would be outside our community's control and would render our community efforts pointless.

The environmental costs of the proposed project are not given a financial value, but if they were this project would look like the economic disaster that it in fact is.

Sunken valley and the geology

Kangaroo Valley is recognised to be one of the seven sunken valleys of the world. Most valleys were formed by uplift of land, however Kangaroo Valley has sunk and continues to sink, making it one of the rare valleys of the world which are completely surrounded by mountains.

We have layers of different rock, overlaid by layers of soil. These different rock types are not fused together, and as we saw last year, when we have three metres of rain in a short period, the top soil and rock levels become heavy and saturated, and water infiltrates between the rock layers, leading to mass land slippages. We saw mass land slippage last year, on both public and private lands

including in the Barrengarry area which this EIS mentions will be affected by the vibrations caused by the blasting and drilling work, for five years.

That blasting and underground drilling is contemplated for an area with such demonstrably unstable geology is foolish in the extreme.

<u>Roads</u>

Due to our unstable geology, for a few days last year we were completely locked in the valley because all our exit roads had slipped or collapsed, as well as minor local roads. Some repairs have been done, but many of our roads are still under traffic control management to allow each direction to take turns, even on our main road to the coast on Cambewarra Mountain.

Our historic Hampden Bridge does not allow more than one heavy vehicle to cross at a time, and it is a one way bridge. The bridge could not support, or even fit, the oversized trucks for this project. The traffic taking turns could not support the waits that would be caused even by the increase in non-truck traffic that this project would spawn.

Damage to the historic Hampden bridge would cause havoc because the town's water supply crosses the river under that bridge, and it is the only connection between the two ends of the valley.

Local industries

We have a number of dairies which need their milk trucks to be able to come and go from their farms each day. Any interference with the arrival of those trucks would result in interference with the milking, and if cows are not milked adequately each day they will permanently reduce their milk yield. During fires the fire service knows that the milk trucks must be allowed through road blocks for this reason. The anticipated occasional road closures as a result of this Pumped Hydro expansion project would therefore interfere seriously with that industry, in addition to the loss of our tourism and other industries due to this project which I am sure have been covered by other submissions.

Former Federal Environment Minister and lawyer, Peter Garrett, spoke to our community. He said that if he were minister he would send this EIS back and not consider it until it had adequate detail. It is a flawed document and if the minister makes a decision based on it then he is not fit to be in our parliament.

Kind regards Clarissa Watson BA, Grad Dip Ed, LLM (Syd)