

Cathryn Pell
535B Jacks Corner Road
Kangaroo Valley
NSW. 2577

TO WHOM IT MAY CONCERN

I am writing in regards to the proposed Bendeela Hydro Expansion project that Origin P/L is planning to build, along with NSW state funding. For the following reasons I DO NOT support this project.

I, like most people in the area have been through a torrid time over the last 6 years or more. Beginning with years of drought, culminating with the 'Black Saturday' fires, then two weeks later, flooding rain, followed closely by COVID-19, followed by more torrential rain that triggered major landslides and a horrid time trying to get to work and in the end the failure of my business.

So with the effects of human induced climate change already felt so immediately, I was at first rather sympathetic to the proposed Bendeela hydro expansion; even though I live just a bit over 5 kilometres from the proposed works area and would be majorly effected by this long term project. I believe it to be a time where we all have to forsake a little for the greater benefit of the planet as a whole.

I then began to read the Environmental Impact statement (EIS) SSI-10033 prepared by Jacobs Group P/L for Origin Energy Eraring Pty Ltd. As I read the 272 pages of the EIS, I realised just how out of touch this document was. Pumped hydro is non-sensical. It takes more energy than that it provides. It's details were nothing but out dated, unsupported, unclear, pro-economic (rather than pro-environmental), destructive, cheap and obviously environmentally unsound. Information charts that only went to 2014 (pg. 12 for example) and no soil samples taken from the site. There are many aspects of this EIS that are not correct and researched sufficiently. If Origin can not get these initial stages original correct with all the relevant details, how can this project survive, let alone begin?

The first disturbing fact is that fossil fuels will be used to pump the water up to the holding area at Fitzroy Falls. The pumping up, will take 16-18 hours with the release of the water providing 13 hours of electricity to the grid. Now is the time where energy suppliers should be researching and developing non-fossil fuel options for creating power. It may be many years until the grid is fully powered by sustainable green energy supplies, so it appears this project will be run majorly by fossil fuels and is not at all a sustainable, environmental option.

Secondly, Origin has chosen the blast their ways through the escarpment to create the tunnel/s rather than the safer option of drilling. It is very obvious that blasting is the cheaper option and also more destabilising for the escarpment; leading to disturbance of an existing fault line, let alone the risk of further slip and landslide to the still damaged roads of the region.

Thirdly, the proposed system draws up and flows back water, **directly** to and from the Kangaroo River. This is hardly environmental or sensible, in relation to the purity of not only the local inhabitants but also the water supply for the whole population of Sydney that the Tallowa dam supplies. The disturbance to drinking water quality along with sediment disturbance could majorly impact the rivers ecosystem, effecting tourism and the survival of many businesses in the 'Valley'.

Fourthly the description and rational of using previously disturbed areas (associated with the original works from approximately 1974), of nearly 30 hectares of bushland is deceiving. The previously

disturbed land below the poundage is now well on its way to becoming old growth forest; at 50 years of undisturbed growth. It is well known that to classify bushland as 'old growth forest' it must be over 75-100 years old. Therefore this vegetation should be left alone. Old growth forest not only supports the sequestration of CO₂ and the lives of countless species of flora and fauna, but also is less likely to burn hot in a bush fire situation.

This proposed project will directly and indirectly be detrimental to the biodiversity of the region. The area will also have to contend with the transportation of weeds, breeding cycles, impacts to water quality at receiving waterways and increased vehicle strikes on resident fauna during construction. The direct removal of about 29.5 ha of native vegetation which includes about 0.23 ha of a threatened ecological community (TEC) which is listed under both the Biodiversity Conservation Act 2018 (BC Act) and Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). The removal of this vegetation would also have direct impacts on 10 threatened species. This scenario is not logical in any way.

The fifth reason to dispute this proposed project is that the EIS continually mentions 'management strategies' or 'offset', to meet their obligations to fix, repair and support the damage done throughout the projects life, but these strategies are never clearly explained. The idea that one tree is planted for every tree lost is ludicrous. As is the idea that every endangered species killed will eventually reproduce and somehow magically be taken off the endangered list. Endangered means there must be care to provide and ensure safe places to live and reproduce and survive. Now is a time to protect rather than demolish. Now is the time to think clearly and logically to protect future generations. Now is the time for big energy companies to take responsibility to develop new energy systems that don't add more fuel to the fire of climate change.

Then there's the direct payments to the Biodiversity Conservation Trust Fund and seeking like-for-like credits from the offset market. This sounds suspiciously like Origin is trying to buy its way into a 'yes vote' rather than actively developing energy supplies that have minimal impact.

The EIS clearly states that..... "the Project risks to water quality, hydrology and geomorphology include standard construction risks of erosion and sedimentation of waterways, as well as acid run-off from potential acid generating material excavation and emplacement, tunnel process water discharge, dewatering and increased risk of bank erosion in existing reservoirs. With the implementation of proposed mitigation measures it was determined that risk of these impacts occurring were low and the Project would be designed, constructed and operated to reduce this risk."

It is preposterous to engage in a project that in any way puts at risk (no matter how low) the drinking water of Kangaroo Valley and Sydney. Any risk to drinking water is not a risk worth taking.

Sixthly, the spoil management for the proposed project is estimated to generate 420,000 cubic m of spoil, some of which may be potentially acid forming (PAF). Surplus spoil would require emplacement on site and a spoil management strategy has been developed to manage land and water risks. Origin already admits that water protection and quality is at risk. So many thousands of tonnes of soil cannot just be dumped nearby and expected to not have huge environmental impacts into the future.....let alone all the wombats that would be buried alive!

My seventh major concern are the hundreds of trucks and buses needed for delivering the tonnes of steel, cement, supplies, equipment and workers. The detrimental effects of the already very dangerous roads; whether it be Camberwarra or Barrengrry mountains is of great worry. There is ongoing danger due to the massive land slides and slips, so the increase in major trucks and buses are bound to lead to horrific incidents, whether it be traffic accidents, wildlife road kill and even the loss of human life. The Kangaroo Valley is an area that imbibes peace, quiet, tranquility, lush

bushland, abundant wildlife and clear water ways. This proposed upped hydro system is in no way safe or in keeping with the original atmosphere and nature of this area.

There are more and more concerns that have arisen from reading the EIS, including disruption to local businesses, wildlife habitat, noise factors, OSOM traffic, and a general sense that this project is not smart or up to date with projected climate change factors. Increased dramatic rain events and droughts mean this project could easily be prolonged due to severe weather impacts and I worry for the stability of the escarpment.

So in wrapping up my reasons of ***objection to this proposed pumped hydro project***; Kangaroo Valley is an incredibly beautiful region, with a thriving community and an economy that relies on peace, beauty, wildlife and nature. Kangaroo Valley is not an industrial site!
It is clear that humans will need to find smarter, cleaner, sustainable forms of energy and pumped hydro is neither smart or environmental.

Kind regards

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