

Project name: Shoalhaven Hydro Expansion Project-Main Works
Application number: SSI-10033
Submission by Paul Obern regarding the proposed expansion.

27th November 2022

I reside at 407B Bendeela Road and have done so for over eighteen years, the residence is around 20 years old, being built post construction of Bendeela Power station.

I acknowledge the opportunity to make this submission and confirm that I object and am toatly opposed to the proposed project.

1. Section 1.1 of the NSW Government, Exhibition of Critical State Infastructure Application document states: *'The existing scheme was designed to allow for expansion'*.

Despite Origin Energy claiming this to be the case, NSW Water (the facilities previous owner) and Origin energy have at no time since the construction of the original power station objected to the building of residential dwellings in close proximity to the site.

Indeed NSW Water has profited directly from the sale of the land on which 407A, B and D Bendeela Road now stand.

If proposed expansion were always indeed the case, why were residential dwellings that will be adversely affected by the project allowed to proceed unopposed by either NSW Water, Origin Energy or NSW State Government?

2. Section 2.4.5 of the Environmental Impact Statement (EIS) states that landholdings surrounding the construction site consist of *'isolated dwellings'*, this language is misleading as it suggests nearby residences are scattered sparsley across a wide area, whereas the reality is that at least a 16 residences are within one thousand metres of the site, two of these constructed within the last four years. Scots College Campus is within 500 metres.

3. The NSW Government document: Exhibition of Critical State Infrastructure Application . Section 3 Project Description.

3.1 Overview. Lists 'cost' as a factor in allowing alteration to '*the main elements of the project*', during design or construction.

So any aspect of the project is subject to alteration at any stage if a cheaper alternative that benefits Origin is deemed appropriate by Origin. An example of this is: The EIS no longer mentions use of quieter conveyor belt system to move spoil, obviously this method has been ditched in favour of noisier, polluting but cost reducing trucks.

4. Construction is anticipated to last 5 years.

This time frame assumes no delays but at best means a devaluation to both the amenity and value of local residents properties for at least five years and likely longer. The freedom to sell affected properties at market value usually applicable to Kangaroo Valley will be damaged during construction. For those of us approaching retirement age whose house value forms a large proportion of their retirement fund, this is a disaster.

5. The NSW Government Commonwealth policy context.

under the heading; *The Governments current climate change plan includes..* States one of its aims as: '*Helping expand and protect green spaces*'.

I contend that covering up to 29 hectares both pre existing and regenerated semi-mature (approximately 45 years old) bushland with 420,000 cubic metres , of loose excavated spoil from tunnelling works (7.2.1), neither expands nor protects the green spaces relevant to the Commonwealth Governments stated policy.

6. Biodiversity, EIS 6.1

I question why the biodiversity study goes no further than threatened species, the area to be used for spoil contains far more species than those considered threatened, but the whole ecological community has been ignored in favour of cherry picking only impacts on threatened species.

Considering the severity and extent of the recent bushfires and the deaths of huge numbers of animals and destruction of vast swathes of flora. The studies to establish what are now threatened species as opposed to what were threatened species prior to the fires, are yet to be completed. The optimum opportunity to ensure species survival is when there are greater numbers of them, rather than only to pay attention to them once driven toward extinction.

A statement made to me by the chief project engineer, at the drop in exhibition recently staged by Origin at Kangaroo Valley Golf and Country Resort.

Where the bushland to be destroyed was described as; “just scrubby regrowth, with nothing in it”. Hardly a confidence building declaration in regard to Origins concern for biodiversity impacts.

7. Section 6.8.3.1 of the EIS contains a table of residences that will be adversely affected by construction noise levels above those usually present in the locality. My residence is not included on the list despite being less than 200m from the project.

The only noises at night in the local area apart from an occasional vehicle are natural sounds. This proposal indicates that residents are going to have to put up with construction noise and vibration for at least five years. This is not acceptable, I did not purchase my property to be subjected to building site noise and disturbance.

Recently the NSW Water yard between 307A/B and 307D Bendeela Road was used to store and load road base for use repairing landslide damage to Kangaroo Valley routes. This involved loading trucks and truck movements into the night. My wife lodged a noise complaint with Shoalhaven Council, only to be informed that it was nothing to do with them as the yard belonged to NSW Water. An emailed complaint to NSW Water gained acknowledgement by email of receipt, but other than that

the complaint was completely ignored with no further contact. The proposed project is far larger, requiring far more frequent vehicle movements. This level of noise may be acceptable in a built up area but not in a rural community.

8.

The Environmental Impact Statement uses wind monitoring statistics from Nowra, Albion Park and Moss Vale all of which have totally different topography to Kangaroo Valley. If the data is not collected in Kangaroo Valley then any conclusions drawn from it will be flawed.

My house and that of my immediate neighbours are reliant on tank water for all of our water needs, I believe this to be the same for all residents of Jack's Corner Road. Any dust from construction work will cause a deterioration in the quality and safety of water which is collected from our roofs.

It is unclear from the EIS whether concrete will be mixed at the batching plant, if this is to be the case dust generated during the process appears to have been omitted from air quality calculations.

9. Greenhouse Gas emissions

Production and use of concrete is a major contributor to greenhouse gas emissions, the EIS assumes 97,500 tCO₂-e.

This huge addition to greenhouse gas emissions will contribute to climate change.

In fact operation of the completed plant will result in net carbon emissions due to drawdown of power from the National Electricity Market, (NEM)

At the recent information day the chief engineer stated that carbon emissions will fall over time as battery storage from wind and solar contributions to the NEM are used to power the plant. Why available power generated by wind and solar and stored in batteries would not be pushed directly into the grid, rather than diverted to a facility that is so inefficient to run that it loses 20% of the energy it produces.

More energy is used pumping water up hill than is generated during its flow down to the turbine. The Australian Parliament website quotes from an Australian University study that '*20% of pumped hydro power is lost*'.

13% of CO₂ that will be released during construction is caused by the destruction of a large 29 hectare area of vegetation being cleared. No calculation appears to have been made detailing the net loss of yearly carbon capture capacity due this vegetation removal and destruction.

The carbon capture and storage, at no cost, being performed at the proposed clearance site has in some areas taken since the late 1970s to regenerate, this important resource is now to be destroyed to enable Origin Energy to make profits.

The *Australian Chief Scientist website*, gives a figure of 0.5 - 2 tonnes carbon capture per hectare per annum for tree covered areas and grassland. Not a huge amount but at least a net reduction in carbon at this time rather than the net increase promised in even the best case scenario by Origins power station, and that best case scenario only to be achieved by 2050.

A study at the Australian National University, published in *The Conversation* 11th November 2022. Identifies over 3000 low cost potential sites around Australia, where installation of pumped hydro facilities are an option. Capable of providing 300 times more supply than required in Australia. Of these sites there must be many that can be developed without the huge environmental and social drawbacks inherent in the Shoalhaven scheme.

10. Appendix Q of the EIS 6.13.4.5 Business and industry.

Claims that the project is expected to have positive impacts for local businesses, then goes on to state:

Potential amenity changes (including traffic noise, dust and visual amenity) are most likely to affect businesses that rely on a quieter business environment, such as visitor accommodation, cafes and restaurants, wedding and function venues, and wellness retreats.

This statement is a direct contradiction of previous EIS contentions that dust and noise will not be an issue to local residences.

Hardly any mention has been made of the negative effect on tourist numbers at Bendeela Recreation Ground. Thousands of people each year visit and camp at this site, the contribution to the local economy has not been quantified but is likely to be immense. Far greater than any contributions made by contractors working on the project.

The loss of the positive image of Kangaroo Valley as a scenic rural haven away from the trauma of the outside world will likely be damaged for years beyond the completion of construction.

11. Conclusion.

The proposed Shoalhaven Hydro Expansion is an ill conceived, badly planned project, the EIS for which is littered with contradictions and totally biased toward the profit driven rationale of Origin Energy.

It illustrates completely that: The primary purpose of new infrastructure is to enrich the people who commission or build it.

Thank you for reading this submission.