

To whom it may concern

Re Proposed expansion of Bendeela Power station by Origin

I write to ask for extended time for submissions about this project.

The reason for this is because there needs to be much more detailed consideration and consultation with experts by our community. We have not had sufficient time for this.

Also, my computer is about to be replaced because it is frequently freezing, making this submission difficult to prepare.

I give a brief summary of some of my concerns which are raised by the Environmental Impact Statement (EIS) relating to this project.

There is no reason to fast track this project. A project of this size and potential impact, in an area where a number of endangered species are surviving, requires somber and serious preparation. Extinction is forever.

Christmas time is a not good time to find experts who are available for this sort of assessment.

While there may have been plans in place in the 1970's to expand this project, at that time the local species were not endangered as they are now.

I am a person who is strongly in favour of green energy initiatives, but the green credentials of a project must outweigh its negative environmental impacts. In this case that is not clear because the EIS is flawed.

Expert consultants should assist with the preparation of a revised EIS, taking into account the fragile circumstances of the many endangered species that the Atlas of Living Australia and Bionet show are surviving in the project site.

Concerns about the EIS include:

- Consideration of irrelevant data in the recommendations
- Failure to consider relevant matters in the recommendations
- The presentation of glossy "management plans" which are not plans but are simply statement of intent that a plan be made at a later stage eg at construction stage for the Spoils Management Plan, and at the Detailed Planning Stage for the Surface Water Management Plan.

Irrelevant considerations

There are many but I have time to only include a couple.

Irrelevant data includes water samples taken at Oakdale, which is in a different river system, and no evaluation of why that data is being considered nor any indication of the weight it is given in the recommendation.

Soil samples taken in Nowra on the other side of the mountains does not appear to be relevant.

Relevant considerations which have not been included.

Local information and details about our recent major structural events in the valley have not been sought nor considered. There is a clear unfamiliarity with the events or circumstances of the project site.

For instance,

The 40 year Shoalhaven River platypus study was conducted all along the Kangaroo River and Shoalhaven River. <https://www.ecosystem.unsw.edu.au/content/rivers-and-wetlands/platypus-conservation-initiative/life-history-and-dynamics-of-a-platypus-population-four-decades-of-mark-recapture-surveys>

Nowhere else in Australia has a platypus population been studied in such detail over such a long period. I see no consultation has been made with the University of NSW whose academics conducted that study, to ask advice about management of sediment arising from the project in relation to the very populations they have studied downstream from this project site.

The “Surface Water Management Plan” document refers vaguely to drainage to be put into place at the spoils dumping site, but there is no indication of where or how that drained water will be prevented from eventually entering the river, along with its sediment. Platypus feed on invertebrates in the floor of rivers. (Diet and dietary selectivity of the platypus in relation to season, sex and macroinvertebrate assemblages T. A. McLachlan-Troup¹, C. R. Dickman¹ & T. R. Grant²) Sediment covers the floor of rivers and invertebrates die, and so do platypus when they can’t eat. Sediment also changes the river flow, also impacting platypus survival.

In addition there has been no assessment of the impact this year of the landslip on the mountain and the collapse of a very large portion of the riverflat land into Kangaroo River at the property belonging to the Sydney Bushwalkers. That land is directly opposite the Bendeela Recreation Area, at a narrow part of the river, so it is very close.

No assessment has been made of possible similar river front collapses caused by drilling and blasting vibrations and the extreme climate events we are continuing to experience. There is no assessment of whether the Bendeela Recreation Area is equally unstable and will collapse if there are underground vibrations for years.

No assessment has been made of the effect of underground vibrations on the stability of the land of other riverside properties in the project area.

It would be ironic if the “green” project was to cause the demise of the platypus which were studied. Given world interest in these 40 million year old monotremes this could cause international outrage.

The Mitigation Strategy document of the EIS says:

A Biodiversity Management Plan (BMP) will be prepared and implemented. The BMP will be prepared by a qualified ecologist and include a plan for implementing, evaluating and reporting on the effectiveness of all mitigation measures outlined in this BDAR, but not be limited to these measures.

That is not sufficient detail for an EIS to be the basis of an evaluation of the viability of the project.

Detailed plans of management and mitigation strategies must be prepared before the project is put to tender and must be included with this EIS at this stage of the assessment of the viability of this project. These detailed plans are relevant considerations and are not included. The delays and considerations required to protect the endangered species will add to the costs and time of this project, and the tenderers need to know these costs ahead of the tender process.

If the detailed planning is left to the successful tenderer, it is highly doubtful that many of the motherhood statements of *possible* strategies in the EIS "Mitigation Strategies" document will be observed.

Eg at page 5 of

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SI-10033%2120221101T021401.362%20GMT>

Specific measures to mitigate the impact to individual breeding pairs of Gang-gang cockatoo (*Callocephalon fimbriatum*) and Glossy Black-cockatoo (*Calyptorhynchus lathami*) (adults, chicks and eggs) will be confirmed.

The pre-clearing protocol of breeding habitat for cockatoos needs to comprise:

- Hollow-bearing potential nest tree(s) is to be clearly identified on construction planning maps
- Hollow bearing tree(s) are to be removed outside the breeding season where practicable (April to August and Oct to Jan). ...
- A pre-clearing protocol will include inspection of the tree to determine if live cockatoos are present and potentially nesting. If nesting cockatoos are present, additional mitigation is to be implemented and could include clearing of identified potential habitat trees outside the breeding season and installation of nest boxes by a suitably qualified and experienced ecologist.

Where nesting is identified as occurring at the proposed time of clearing, the subject trees are to be clearly marked as no-go zones and removal delayed until the chicks have fledged. There is to be no disturbance within 100 m of the tree, and disturbance between 100 -200 m is to be minimised. The removal of the tree must allow time for fauna to vacate the habitat.

If a nesting Gang-gang pair is found by the company's ecologist, work is unlikely to be stopped at that 100 metre site for the three or four weeks that it takes for the fledglings to fledge. Maybe they would do it once, with a lot of publicity. But when the next pair is found would another three weeks be allowed? And the next? I suspect that any ecologist employed by the construction company will be under pressure by the company for them to "not find" the nesting pairs so that costs, time and supply lines will not be delayed.

I saw it happen in the clearing of the 200 year old trees, including huge, native fig trees with masses of crevices and hollows in Centennial Park in Sydney, after the route of the light rail was suddenly changed

to go through that part of the park. That was just before Christmas some years ago, and the construction company's ecologist found only one animal in the 80 trees, so the tree removal went ahead 24 hours a day over the Christmas week.

WIRES volunteers and staff had seen masses of creatures in those trees for years, but had never thought to document them, and it was too late to do so after the fences were put up after the announcement, which excluded access to those trees, and the trees were very quickly removed. Centennial Park staff were also banned from accessing the trees after the announcement of the changed route.

The only way to be sure that such mitigation measures are observed is to prepare the details at this stage of the project, in consultation with experts, and to thus allow the companies to be aware of the possible cost and time blowouts, so that genuine mitigation might be implemented.

This detailed plan information is also necessary to be able to weigh up the viability of the project and its costs, both economic and environmental.

We need actual field studies now, by independent experts, to locate and document hollow bearing trees and their occupants, and to include those findings as considerations to weigh in the EIS evaluation. These should also be included in the tender process to allow the costs and alternatives to be clear for the tenderers. Again, if this is left to the construction companies, there would be strong incentive for construction company's employees not to find the hollows.

It would also be a help if any ecologists working on the project are independently employed and paid.

Lack of expert consultation

The lack of expert advice is apparent in many parts of the EIS, eg when it suggests that before clearing an ecologist and a wildlife "handler" could go through the trees and find and relocate species found therein. There is no acknowledgement that most of our species are territorial, and relocating them is likely to kill them unless there is at least a six weeks of support, housing, and feeding and monitoring for each animal, which is unlikely to be achieved by a "handler".

Another example is in the suggested strategies that might be considered by the successful tendering company in relation to the removal of hollow bearing trees. It says that an ecologist or wildlife carers should be present when hollow bearing and habitat trees are removed. The valley has only a handful of wildlife carers who are unpaid volunteers, many of whom have work commitments.

The mitigation strategy also suggests notifying vets that hollow bearing trees will be felled, ahead of time. We have one vet in the valley on two afternoons a week, with a consultancy rather than a fully equipped clinic. These are comforting ideas but not based in reality.

These are endangered species and there will need to be professional wildlife carers employed, perhaps from Taronga Zoo, to be present when any habitat or hollow bearing trees are to be removed. The cost of the wild creatures' care and the complex process of relocation of each animal would be added costs for the tender process to reflect.

And clearly, when revegetation is suggested as a remedy for removing hollow bearing trees, it is clear that the EIS writer was unaware that tree hollows large enough for a possum or glider take at least 220 years to form (Tree Hollows and Wildlife Conservation in Australia, P Gibbons and D Lindenmayer).

Alternative plans to avoid removing the 200 year old trees should be made. Revegetation will not replace the felled hollows, and paying money to the government offset fund will certainly not replace the habitat that the endangered species rely on.

Causing or significantly contributing to extinction of any of our endangered species cannot be "off set". 40 million years of evolution are worth more than having a green project ready in time for one state election.

I will not be directly affected by this project other than by traffic and as a wildlife carer, but I am alarmed by the flaws in the EIS. The project will have unacceptable impact unless there is some genuine evaluation of impact on the environment, the species and the community.

Please extend the time for submissions, consult experts to make the EIS a genuine EIS and allow time for it to be properly prepared because it was clearly prepared in haste, and consider all relevant matters.

Thank you

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