Submission – George Thomas

Snowy 2.0 Exploratory Works – Mod 1 to Infrastructure Approval SSI 18_9208

The issues below incorporate observations and questions regarding the adequacy of this Mod 1 EIS. While I recognise the value of Snowy 2.0 in a general sense, I remain very concerned that the project does not recognise the National Park values to the extent that is appropriate and the very nature of combining Energy and Environment in a single government department has the potential for at least the perception of significant conflict of interest.

Issue 1

Envirodiversity Credits

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Mod 1 attracts a net 96 additional Envirocredits. This is a 27% increase to 346. This would suggest Mod 1 involves a significant increase in impact on the overall EIS as previously envisaged.

Issue 2

Definitions

Chapter 10 – Glossary

The definitions of "Lower Lobs Hole Ravine Road" and "Upper Lobs Hole Ravine Road" are transposed.

This is evident by reference to the terrain and by referencing the map notations on Figure 2.2.

Issue 3

Bush Fire Risk

Vol 1 Para 6.5.4 and Vol 2 5.3.1 recognises the 2003 ACT bush fires had significant impact at Tantangra but makes no mention of the impact in the Lobs Hole area. The actuality was the whole of the Lobs Hole/Ravine area was significantly impacted.

The potential for uncontrolled fire in this area must be considered high and the ability to respond to it, especially when the construction phase is complete, will be constrained.

Post project completion, above ground facilities such as the sub-station would not be immune from significant impact, even with buffer zones the fire intensity may be catastrophic. The structure of bunds should anticipate catastrophic failure and have capacity to contain oils and other contaminates that would be released by failing transformers and/ or circuit breakers.

While recognising the EIS requires the issue of APZ to be assessed, it must be expected that the fire protection responses will be limited to aerial, and smoke may preclude even this, so that a worst case scenario must be contemplated.

Issue 4

Utilities – Feeder Powerlines and Communications.

Para 3.4.2 ii, regarding power sub-station and distribution power lines states: "will be reticulated by either overhead or underground cabling".

As the probability is that Snowy 2.0 will proceed to completion in some form the initial installation of distribution power lines should require they are installed underground.

This is essential to preserve, as much as is possible, the unique visual environment of the Lobs Hole valley and provides both short and long term benefits to the project.

The view that underground installation is more appropriate is reflected by NPWS comments noted in Para 5.4.2 dot point 5. While their view is recorded as a preference I contend it should be a requirement.

The Snowy 2.0 project should be seeking to inflict the absolute minimum impact on the environment of this very special place. If this is not demonstrably discernible during development, the level of objection to Snowy 2.0 will become far more evident.

The initial EIS and Mod 1 are both silent on the means of installation of the optic fibre network between the Talbingo intake, the work village, the sub-station and the proposed power station. It seems self-evident that this should be installed concurrently with the distribution power lines in an underground manner.

This concurrent installation would minimise cost and environmental impact while minimising the risk of future damage to either utilities from nature (storms or bushfires) or by damage from equipment impacting on either utility by eliminating the more vulnerable overhead mode. The underground option is consistent with ensuring the visual impact on the National Park environment is a long term benefit. This expectation is consistent with the views expressed in Vol 1 Para 6.5.5

Placement of the transmission line from the power station to the distribution network is an equally important issue that will arise in the Final stage EIS.

Issue 5

Unique landforms

Fossil Beds

The Ravine Fossil Beds are shown in Fig 3.8a Sec D & E.

6.5.1 i a and 6.5.1. ii a – acknowledges the unique place of the fossil beds within KNP but then categorises it as having a considerably lower level of value in the nationwide context.

Vol 2 Chapter B

This chapter includes the report on the Fossil beds by Dr Ian Percival. The chapter includes recommendations which are not reflected in the EIS Mod 1 Volume 1.

The site visit by Dr Percival when he gathered the information for the updated report in Chapter B included representatives from EMM and Snowy Hydro but seems to have excluded KNP personnel. In view of the NPWS efforts in the past to protect the fossil bed site this seems very unfortunate as their input regarding the proposed changes has been constrained and or excluded.

While the distribution of samples from the proposed excavations to the three nominated parties is not inappropriate, the remainder of excavated material should be provided to NPWS at some appropriate secure location. This material could be used for distribution to other educational institutions including primary, secondary and tertiary and even distributed/sold by NPWS as "items of curiosity" which seems far more appropriate than being dumped as fill in some work site.

The development of viewing laybys and signage, as recommended by Dr Neville, should be a responsibility of Snowy 2.0 under guidance of NPWS.

Periglacial Stream beds

Impact of additional road widening is suggested to be limited so that "this additional encroachment will result in only minimal removal of boulders". No plan is evident to protect flora or fauna activity that is functioning in conjunction with or beneath the Periglacial Stream Block. The separation of management issues in relation to this further extension to "Other Matters" does not instil confidence regarding a high level of concern with the Mod 1 impacts on the environment.

Issue 6

Ravine Village site

Fig 3.9 shows area within Ravine Village indicated as being approved in EIS and proposed extension. The area in proximity to river crossing was not shown on maps provided on the original EIS proposal on the Major Projects website. The map in that document only displayed two small footprints assumed to represent pylon sites for bridge. When was this area extended to the river bank intruding well into the 50m buffer zone ?

Proposed changes exacerbate impact on village site. Vol 2 Para 8.3.1 i. Conservation provides for minimal Protection of Heritage elements. The initial EIS footprint results in obliteration of police site and indicates no protection of 1910-1921 school site.

Mod 1 has further impact on Ravine village store sites by the triangular extension of the worksite footprint.

While official classification does not allocate particular significance to these sites the destruction of them, where not unavoidable is wilful. The areas identified should have a "no go without authorisation " status so that impact is minimised.

Realignment of Lobs Hole Road to follow the road proposed for the Sub Station (Fig 3.7) mitigate impact on all of these. Duplication of main road and sub-station road seems difficult to justify.

Issue 7

Sewerage systems

Para 3.4.2 iii f. states the Sub Station Septic System will be a pump out system.

It is presumed any toilet facilities during construction of the power station tunnel will also be pump out with waste being treated at the accommodation camp sewerage system. The EIS does not indicate how the pump out process can be sustained after the Accommodation Camp is de-commissioned. Given the nearest alternative sewerage treatment facility is Selwyn or Cabramurra this process needs to be addressed within the Mod 1 EIS. **Issue 8**

Recreation and engagement.

Para 8.3.2 ii reports that no additional impact to recreational users arises from Mod 1.

As all long standing and frequent users of the Lobs Hole locality are totally denied access to the whole area of Lobs Hole/ Ravine for a significant number of years the statement, while true, does not give the recognition the current total deprivation of access warrants.

Similarly the report in Para 5.3 evidences the exclusion of the Community as Stakeholders of any significance.

This indicates the EIS has been prepared with no regard for the possibility that the Community has a valuable contribution to make nor any recognition of the cost the project is imposing on the community.

Issue 9

Buffer Zones

Vol 2 Para 7.1 notes a buffer zone of 50M from river is required. The maps showing sites adjacent to the proposed bridges on Yarrangobilly River and Wallace Creek have increased the area without this protection. Documented measures to minimise activity in these zones are deficient.

Issue 10

The potential for adverse impact on the Smokey Mouse population is a major risk arising from the project. Vol 1 5.4.3 notes this is a matter of concern to Dept Environment & Energy.

There appears to be inconsistency in the degree of habitat impact. Vol 1 Para 1.2 dot point 1 dash 1, Vol 1 Para 1.3 and Vol 2 Para 2.2 dot point one dash one report 1.33 Ha of Smokey Mouse habitat while Vol 1 Para 6.1.2 ii Residual Impact dot point 6 and Vol 2 7.3.2 Bio diversity both report an area of 1.57Ha. The inconsistency does not instil confidence regarding the co-ordination and control being developed to protect this vulnerable species.

Vol 2 Para 7.2.3 notes that no there is no additional impact to Smokey Mouse habitat on Lobs Hole Ravine Rd arising from boundary changes in Mod 1. I am currently overseas and do not have access to my initial EIS notes but have no recollection of identification of extent nor proposals for minimising impact on Smokey Mouse habitat in the initial EIS. What is the total area of Smokey Mouse habitat impacted within Lobs Hole and Marcia proposed by original and Mod 1 EIS ? This data would be more appropriate in evaluating the potential impact of an amended EIS incorporating the Mod 1 proposal.

Issue 11

De-commission Chapter 3.10

Fig 3.11 provides for transport of reactive rock/ soil remaining on land storage to be removed off site within 5 years of completing of exploratory works should Snowy 2.0 not proceed. It makes no mention regarding removal of non-reactive waste dumped in Lick Hole Creek and that stockpiled downstream of Flying Fox Creek. Difficulty in managing this amount of waste will seem insignificant compared with that to be generated if the project proceeds and failure to identify a satisfactory management plan for the Exploratory phase waste bodes ill for the greater challenge that will be involved in the cavern and tunnel construction. The EIS must identify removal of all waste and it is my contention that a period for removal of 5 years is excessive. I would suspect that such a delay would see Recreation access delayed for up to 5 years after cessation of work in Lobs Hole.