Department of Planning, Industry and Environment
Major Projects Team
Attention: Anthony Ko

6 November 2019

Submission on Snowy 2.0 Main Works Environmental Impact Statement

I am strongly opposed to the Snowy 2.0 project as described in the Main Works Environmental Impact Statement.

The scale and intensity of the environmental impact is unacceptable for a sensitive sub-alpine region such as Kosciuszko National Park (KNP). In addition to the catastrophic environmental impact, the cost is excessive, the claims about energy storage potential are dubious, and there is no credible consideration of less expensive, lower impact alternatives. Consequently, in my view the Snowy 2.0 project does not meet the standards required of Environmentally Sustainable Development and therefore the Minister for Planning should refuse the project.

I am particularly concerned about the following issues:

Environmental impacts

The EIS claims that the Snowy 2.0 project will have a minor impact on KNP because the development footprint is assumed to be only 0.25% of the total area of the park. This is not correct for the following reasons:

- The Project Area as depicted in the EIS covers approximately 50 km by 50 km (250,000 hectares), about one third of KNP.
- KNP is 690,000 hectares, but the sub-alpine habitats that will be be destroyed by Snowy 2.0 cover a much smaller area. The sub-alpine area will become increasingly important for alpine species as the climate warms. These rare sub-alpine habitats should be the main consideration in assessing the adverse environmental impacts of Snowy 2.0, not the lower altitude landscapes that cover most of KNP.
- Snowy 2 will be the largest ever proposed loss of critically important habitats in a NSW National Park. The EIS claims that the construction footprint will disturb 1,680 hectares, clear 1,053 hectares of native vegetation, and destroy 992 hectares of threatened species habitat (threatened fauna, threatened flora and Threatened Ecological Communities). The construction footprint stated in the EIS substantially understates the full extent of permanent damage outside the heavy construction zones, including Talbingo and Tantangara Reservoirs, 100 kms of new and upgraded roads, 10 kms of transmission lines with a 120 metre-wide easement, ground water depleted areas above the tunnels, construction camps (for 2,100 workers) and multiple works areas. When all these areas are taken into account, Snowy 2.0 will permanently damage more than 10,000 hectares of KNP, substantially more than the claimed 1,680 hectares.
- A development of this scale and intensity is not appropriate in the sensitive habitats of a conservation reserve, regardless of whether its impacts can be mitigated, offset or otherwise approved under the Environmental Planning and Assessment Act. Such a proposal should be beyond consideration for an internationally renowned conservation reserve.

The project requires tunnelling through 27 kms of rock, large scale quarrying, road building and widening and establishing large accommodation and construction sites. The EIS does not provide a credible account of how 14 million cubic metres of spoil, some of which is heavily contaminated by asbestos and acidic compounds, can be disposed of in KNP without further significant environmental impacts. Much of the excavated materials will be used in landscaping works that will further exacerbate the damage to the Park. More than 8 million cubic metres is to be dumped in the active storage areas of Talbingo and Tantangara Reservoirs, depleting their capacities.

The EIS describes extensive impacts on water dependant habitats and species through disruption to ground water systems by the tunnelling as well as in works beside 8 kms of the Yarrangobilly River.

Watertable drawdown is predicted to be more than 50 m above the tunnel in areas of high hydraulic conductivity (Gooandra Volcanics). The drawdown at 3 km either side of the tunnel is still 0.5 m in the western plateau. This will have a catastrophic impact on the environment along sections of the 27 km tunnel, will dry up existing creeks, impact the local fish and animals and reduce inflows to the reservoirs and hence water releases.

It is remarkable that Snowy Hydro would show such disregard for the protection of water dependant ecosystems not just in alpine areas but at the headwaters of our major waterways. I cannot accept the assertion that such impacts are acceptable. Experience demonstrates that once ground water systems are disrupted by mining activities the damage is irreversible and can become even more extensive over time.

Snowy 2.0 will disperse pest species (including redfin perch, eastern gambusia, wild goldfish, Epizootic Haematopoietic Necrosis Virus (EHNV) and elodea weed) throughout the waterways of KNP and downstream. Redfin is a Class One Noxious Pest, and it is illegal to transfer Redfin between waterways in NSW. Snowy Hydro acknowledges that it is inevitable that these noxious species will be transferred from Talbingo to Tantangara.

It is highly doubtful that the barrier and filtration systems proposed by Snowy Hydro will stop the eventual transfer of these noxious species downstream to the Murrumbidgee River and Lake Eucumbene and thence throughout the rest of the Snowy Scheme and downstream rivers (Snowy, Murrumbidgee and Murray).

The EIS refers many times to mitigating the impacts of Snowy 2.0 through future plans and works in consultation with NPWS or through formal offsetting processes. No appropriate offsets for the habitats that would be destroyed by Snowy 2.0 can be provided, given that all comparable alpine and subalpine areas of NSW are already included in KNP.

Kosciuszko National Park has a wilderness and solitude that is unique to alpine landscapes. This will be seriously diminished by the increases in roads, permanent large structures, and transmission lines. Snowy 2 will not just impact directly on the areas damaged by the project — the overall experience of the Park landscape will be destroyed forever.

Minimal contribution to renewable energy

Snowy Hydro claims that Snowy 2.0 will play a pivotal role in stabilising the national energy market as new renewable generation is added to the grid. This does not justify the extent and severity of environmental destruction that the project will cause to KNP, especially in the absence of a credible assessment of alternative ways of providing this service.

The data provided in the EIS undermines the claimed benefits of the project. Specifically:

- Snowy 2.0 will be a net consumer of electricity, not a generator, with round-trip losses of 30%, plus another 10% for transmission.
- Initially — for 10 years or more — most pumping electricity will come from coal-fired power stations, not renewables.
- The claimed 350 GWh would only be available in the most exceptional of circumstances, requiring the top reservoir (Tantangara) to be full. If the full volume was used, at least one-third of the water couldn't fit within the smaller capacity of the lower reservoir (Talbingo) and would be discharged to Blowering and lost to the Snowy 2.0 system. If Talbingo were not empty (historically it is kept near full to provide for operation of the Tumut 3 hydro station), then most of the water from Tantangara would be discharged to Blowering and lost to Snowy 2.0.
- The practical capacity of Snowy 2.0 is considerably less than the claimed 350 GWh.
- If Snowy 2.0 ever generated its claimed 350 GWh of energy, it would take 500 GWh of pumping energy to re-charge, incurring 150 GWh of losses.

Yours,
Robert Pearson