Geoff Wallage 251 Willi Willi Road Turners Flat 2440 Postal address- PO Box 583 Kempsey 2440 Email- geoffwallage@gmail.com Mobile- 0432636838

Attention: The Honourable Paul Scully MP, Minister for Planning and Public Spaces. C/- Anthony Ko, Project Contact Planner, DPE Department of Planning and Environment

Dear Minister, Re: Submission of Objection by Geoff Wallage to the Proposed Oven Mountain Pumped Hydro Storage Proposal: Application Number SSI-12422997, EPBC ID Number 2020/8850, Assessment Type; Critical State Significant Infrastructure. Exhibited as: EXH-62250958

I am a resident of the Macleay catchment concerned with the above proposal with regard to ensuring high water quality for the Macleay Catchment and endeavouring to protect downstream communities from any past, present and potential impacts.

I thank you and appreciate your making available and exhibiting the DA, EIS and accompanying documents to the Proposed Oven Mountain Pumped Hydro Development Application. From review of the Development Application submission, EIS my main concerns are :

## 1. <u>There are better alternatives for power</u> storage

Large-scale batteries; (e.g., the proposed 'Rangebank' project by Shell and Mornington BESS battery by Maoneng which can store 200MW (400MWh) for some \$200 - \$400 million. These, switchable in series & parallel, would require 4 units to provide 800MW over 8 hours (4 hours short of OPMS' proposal) at a cost of \$1.2 billion.) Batteries can be located close to substations and green energy supplies anywhere, with minimal environmental disturbance, less hydraulic, mechanical and transmission losses; and can be recycled and upgraded as technology improves. (They have shorter (20-30year) lifespan, but with the rate of battery technology advance this is likely a benefit.

The project is stated to generate 900MW worth of electricity from water stored the upper reservoir before needing to pump it back up, using 20-25% more power than generated. This is significantly less efficient than many large-scale battery/storage alternatives.

Use of 'Brown-field' sites for Pumped Hydro, such as, coal mines in the Hunter Valley, would not require massive disturbance in this natural area and be closer to existing Grid infrastructure.

2 Effect on the water uptake from the Macleay River

It is a significant concern both for initial filling of the lower reservoir and for top-up in an increasingly unreliable river flow. The EIS states uptake will only be at "high flows" but makes no measurement of this, say in megalitres/hour. This is needed. Prolonged dry periods, expected with climate change, may impact on available water and thus energy storage/generation. Or alternatively the lower dam may need to be even larger to buffer for extended low-flow periods.

Thank you for the opportunity to provide this Submission and I look forward to working with all involved to achieve a good result for the Community, economy, environment and water in which I live.

Yours sincerely Geoff Wallage geoffwallage@gmail.com 0432636838