

## ‘Summary’

The fact that the NSW Government (DPE) has designated this a “Critical State Significant Infrastructure” Project and they consider it critically important to the State. – So, your submission needs to be concise, strongly worded and reasoned.

**The below Summary of major issues is suggested for those who do not wish to get into the details:**

### Summary of major issues: - As seen by SOMR:

1. **Public Consultation and Community engagement**, including and specifically First Nations. – SOMR has observed; ‘Consultations’ have been ‘drop-in-sessions’ and shop-front; where questions are answered. There has never a physical “Presentation of the Project” to the broader community. Importantly; formal written questions from SOMR’s Forum were twice sent; with no response. The only ‘Project presentation’ hosted by OMPS has been to engage ‘Contractor’/‘Worker’) support and this before DA/EIS Lodgement or Approval. - Is this adequate and appropriate for such a project?
2. **The Project is extremely large scale**; in such an isolated natural area; with environmentally intrusive engineering works, involving; massive earth-works for roading, tunnels, reservoirs, bridges across the Macleay and transmission lines; in such an isolated and significant natural area, 100km from Kempsey via public road with major access issues.
3. **Antimony and Arsenic and heavy metals**; are naturally present in the geology of the area. Should even in small quantities be disturbed and exposed to weathering, such as used for the reservoir walls; The scale of the rock’s Antimony & Arsenic etc. exposure would likely contaminate the Macleay River with serious adverse impact on all downstream water users, including Kempsey Shire’s town River supplies. Expert independent assessment of the Geological and Hydrogeology test material and results is vital, as the stakes are high. – If these health damaging elements are present; this should be a ‘Show-Stopper’ and an immediate decline of DA Approval.
4. **The cost of ‘The Project;’** is preliminarily stated as \$1.8 billion; with unknown amounts works Off-Site for public road and transmission upgrades perhaps, at least in part, funded by the Taxpayer.
5. **Power:** 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 smaller scale battery/storage alternatives.
6. **Alternatives** Addressed in the EIS are confined to ‘Site selection’ and alternative design options. It does not address ‘Alternative’ technologies such as: a) Large-scale batteries (such as the proposed ‘Rangebank’ project by Shell and Mornington BESS battery by Maoneng) 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 may have shorter (20year) life-span, but with battery technology advance rates this is likely an asset as technologies advance?*) b) 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.

**NOTE:** The assessment of alternative technologies/projects is left to State Govt as this is not part of the proposal. So; this needs to be put to the Minister in any Submission, to investigate alternative economic and viability options.

7. **Roads and Bridge(s) for Site Access:** To access the Site for construction there is proposed to be a low level bridge across the Macleay River, over 11km of new road, off-site, on the south side of the Macleay River as well as stated upgrades of the Kempsey to Armidale Road (*100km from Kempsey to the Site*) and Carrai Road. These will need to be able to cater for transport of massive turbines, concrete batching plants as well as many smaller more frequent traffic of workers, machinery, delivery of fuel and explosives, daily provisions and materials for the 600 workers during construction. - Are the Environmental, Social and Cultural impacts and OMPS/Taxpayer cost apportionments for these works adequately addressed and acceptable?

Main traffic issues and impacts from the average increase in traffic of 250 vehicles/day on most sections, highlighted in the EIS include: 1) Urban areas of Frederickton & Kempsey, school zone, intersections, railway crossing etc. 2) The Armidale Rd between Greenhill and Pee Dee, sealed section with 2 villages and school zones and 3) the 40km of unsealed section which is narrow, winding, prone to slips, has low weight limited bridges and will require significant upgrade beyond the current improvement works by Councils funded by the taxpayer. The further upgrades are stated as being done by Councils and paid for by the Project, but relay the costs have not been budgeted for. – So how can the cost/benefit of the project be fully/holistically assessed?

The EIS defers address of these impacts to a Construction Traffic Management Plan (CTMP) to be developed at detail design stage. – Should this be addressed now, before Approval to consider Project impacts holistically?

8. **Armidale Kempsey Road; potential alternative route for part of the public road:** The Project's access feasibility studies and now 'Proposed,' is the 11 km Eastern Access Road (EAR) to the Site on the south side of the Macleay, mostly along 'stock-routes'. This avoids the difficult and costly to maintain land slips of Flying Fox and Jobs cuttings both sides of Lower Creek but involves the construction of two bridges across the Macleay River. This, independently of the OMPS Project, is possible a cost benefit. As relayed below... (Except that the landslip stabilisation works has been commenced!)

Recently, there has been \$227 million allocated by the State to upgrade 46km of the Kempsey Armidale Road. (Not including OMPS requirements?) It is estimated the 12km of Flying Fox and Jobs Cuttings will cost about \$129 million of this but likely still have less frequent slips.

Using RMS 2017 figures for new Class 3 road, the 11 km of OMPS proposed access route construction and estimates for the cost of 2 bridges; it is estimated a new Kempsey Armidale Road on this alignment south of the Macleay River would cost about \$45 to \$50 million; saving \$180+m!

This; with or without (and independent of) the OMPHS Project, may be one of the few real positives in cost/benefit analysis to come out of the Project's feasibility studies - in the long term!