## 'Summary'

Works in Progress update as of: 9th October 2023

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:

- 1. Public Consultation and Community engagement, including and specifically First Nations. SOMR has observed; 'Consultations' have been 'drop-in-sessions' and shop-front and promotions such as at shows; where questions are answered. As far as is known locally, OMPHS have never instigated 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 known 'Project presentations' hosted by OMPHS have been to engage 'Contractor'/ 'Worker' support and this even before, DA/EIS lodgement, exhibition or Approval to garner support. - Is this appropriate for such a project? - The recent EDO challenge to Woodside Hub decision demonstrates not.
- 2. Dept of Planning and Environment EIS Public Exhibition for comment/submissions: The DA and EIS were lodged at the end of March 2023, while it was advised more works/information was requested, the DA and EIS (a massive 9000+ page document) was finally placed on Public Exhibition by DPE for review & comment 19<sup>th</sup> September until 16<sup>th</sup> October, a 28day period.

Not only were there problems down-loading the large documents from the Portal by a few; the period coincided with School holidays, the October long-week-end and the distraction of the Voice referendum. – Requests for an extension of time were denied, though submissions can be addedto for another 28days. Additionally, advice that documents were available at Kempsey and Armidale Libraries, was only received (by two known people) arrived in the last 9 days. - *This, intentionally or not, has restricted the review, liaison with experts, coordination and preparation of well-considered submissions. It is trusted advice of 'additions to existing submissions will be accepted up to 4 weeks after closing will be accepted?* 

- **3. Strategic Policy issues:** It appears the proposed Project, in a few instances, has influenced Government policies, rather than the Project complying with established Government policies and strategies. Two significant examples include; The extension of the New England Renewable Energy Zone extension and incorporation into the North Coast Water Strategy to accommodate the Proposal, well before the Scoping Study and SEARs were issued. *Does this appear like 'the tail is wagging the dog' and Approval is a foregone conclusion?*?
- 4. Deferral of matters for assessment: The Proposal's DA/EIS defers address of many important issues to the 'detail design stage;' many of which should at least be resolved at this DA stage to ensure all matters are addressed for over-all feasibility and holistic cost/benefit analysis in the Assessment process for Determination. (*E.g., Construction Traffic Management Plan; Aboriginal Cultural Heritage Management Plan; additional Geology/Geochemical testing; Erosion and Sediment Control Plan, River level/flow to permit uptake, Social Impacts (Medical, Policing, School zones), Waste Management Plan, Project costings, Decommissioning Plan at end of construction and 'End of Life.' Etc...)*
- 5. 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, steep and erosive and significant natural 'Gorge Country' area with high 'experience values.' 100km from Kempsey via public road with major access issues. Is this acceptable to you?
- 6. Social Impact: The main areas of concern for further address include Accommodation during Preconstruction (site establishment) and Construction for the 600 & up to some 820 workers and overloading the Kempsey & Armidale infrastructure of housing, medical and hospital facilities and roads. These need further assessment, management plans to understand the impacts prior to DA Assessment and Determination. *Is this acceptable to you?*
- 7. 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, extensive roading and site disturbance; the scale of the Antimony & Arsenic etc. exposure could further contaminate the Macleay River increasing adverse impact on all downstream water users, including Kempsey Shire's town/villages river water supplies. Expert independent assessment of the Geo chemistry tests, relay there is very low concentrations in the rock. – If these health damaging elements are present; this should be a 'Show-Stopper' and an immediate decline of DA Approval.

- 8. Land, soils and erosion: The EIS and experts agree the soils are highly erosive and due to soil type and slope, have a high potential to discharge turbid (muddy) run-off into the Macleay which would seriously impact the Macleay River. Further soil assessments essential to investigate the extent of dispersive clays and other erodible soils and whether soil stability constraints are a major issue for the proposal. The potential impact is so great that this issue needs address before Assessment/Approval; not later. (A show stopper?) Also: If approved, who monitors and rectifies impacts. Do you feel this needs address before Approval or commencing earthworks? This should also be a 'Show-Stopper' and an immediate decline of DA Approval.
- **9.** Water uptake from the Macleay River: 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. - *Do you feel this needs address before Approval?* 

**10.** 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.

The Economics assessment (Appendix Z) focuses on benefits to the region. It does not give details of the Project costs, due to 'commercial in confidence' reasons. It does not include costings, tangible or loss of amenity. – This assessment is at best biased 'economic spin' and does not provide a holistic economic assessment of pros and cons for DA Assessment and Determination.

- **11.** 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 large-scale battery/storage alternatives.
- 12. Alternatives: Alternatives addressed in the EIS are confined to 'Site selection' and 'alternative design' options. The only alternative offered is a "Do nothing" option. It does not address 'Alternative' technologies for power storage, such as:
  - a) 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) life-span, but with the rate of battery technology advance this is likely a benefit. Or:
  - 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 perhaps likely not the responsibility of 'the Proposal' DA. - This Renewables Strategy is up to State Govt. and needs to be put to the Minister in any Submission, to assess broader strategic alternative economic and viability options.

**13. Roads and Bridge(s) for Site Access:** To access the Site for construction there is proposed to be one low-level bridge across the Macleay River off-site, at Carrolls Creek and over 11km of new road 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 on Over-Size Over-Mass (OSOM) vehicles 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/or 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 from Pee Dee to Carrolls Creek 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 needed above that, are stated as 'being done by Councils and paid for by 'the Project,' and relays these costs have not been included in the budget \$1.8billion (or \$1.96b elsewhere). – 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 not be addressed now, before Approval to consider Project impacts holistically?

14. 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. As a public road; it 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 serious 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 \$80+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!