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**RE: 2024 Forecasting Assumptions Update Consultation**

*About the ETU*

The Electrical Trades Union of Australia ('the ETU') is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

Our members are involved in the construction, operation and maintenance of power generation throughout Australia, including in the declining fossil fuel sectors and the ever-expanding renewable industry sector. Due to the disruption caused by the energy transition, processes such as GenCost are a critical element in the careful and proper planning of the energy transition and ensuring that Australia achieves maximum economic and social benefits from the transformation occurring in our energy sector.

The ETU welcomes the 2023-24 GenCost report and appreciates the opportunity to make this short submission in response to the details contained within the report.

*Acknowledgement*

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

*Nuclear*

The ETU recognises that some effort has been applied to providing a more accurate and granular assessment of the levelised cost of electricity associated with nuclear technology. However, we are concerned that the final values published in the report do not reflect the actual evidence base cited in the report, particularly as it relates to Small Modular Reactors (SMR) technology. SMRs remain a speculative technology, and there are currently no commercial plants existing in the world. Currently, the only facilities that may be operational are located in undemocratic countries with secretive regimes and regulators that either do not exist, or where they do, are not subject to transparent and democratic regulatory operations. Furthermore, there is no evidence that these reactors are functioning in a stable power system.

In addition, it remains illegal in Australia to build nuclear power generation. The ETU questions the value of estimating the cost of an illegal generation source and how this is a reasonable approach when a fundamental basis of GenCost is to model its projections by factoring in Australia's current and future policy settings.

Finally, the ETU is concerned about the steep learning curve forecast in the document, given the absence of a commercial plant. GenCost should reflect the most up to date costs associated with the UAMPS estimate and remain at that price until a unit is finally commercialised, noting that there are still significant doubts that commercialisation will ever occur. To forecast such a steep learning curve absent any evidence of a commercial plant operating is deeply problematic.

### *Skills, Training and Workforce*

The ETU continues to be concerned with the limitations of GenCost and other energy planning processes and their assessment of the impacts of skills, training and workforce development.

The recent Jobs and Skills Australia (JSA) *Clean Energy Capacity Study* forecasts that Australia will need an additional 32,000 electricians by 2030, with 85,000 needed by 2050.

Currently there is very little investment in skills and training in the power generation sector broadly that would align with building the future workforce needed for a successful energy transition. Traditional fossil fuel generation is heading rapidly towards plant closures and investment in the next generation of tradespeople has long taken a back seat, with some exceptions.

Renewable energy generation projects rarely, if ever employ workers in certificate III trade training programs. Limited effort is being made to train a future Australian workforce with project proponents often failing to employ a single apprentice. A case in point being the Hunter Power Project (HPP). The HPP currently has around 200+ employees in blue collar roles and is ramping up. Electrically there is a team of about 40 currently on site. This is expected to top out at over 100.

The construction company building this project on behalf of Snowy Hydro has told the workforce they will put on just three apprentices for each of the electrician, boilermaker, and mechanical fitter qualifications - just nine apprentices at a ratio of just 7% for electricians that will fall to 3% as the project ramps up.

The ETU's experience is that some project proponents are attempting to recruit overseas workers to fill critical roles, however the ETU notes that the current and projected shortage of electricians is and will be global. With much of the globe having more ambitious energy transition policy that is embedded with robust procurement obligations associated with skills, training, wages and conditions, Australia will simply be unable to compete.

Whilst the 2023-4 GenCost report anticipates some correction from the price escalations caused by supply chain constraints and raw material costs, a significant proportion of the reductions in these costs modelled by GenCost will be offset by labour market constraints and wage price increases.

The ETU remains of the view that GenCost needs to factor in workforce modelling as an important additional factor in its overall modelling processes.