

Dear AER, South Australian Ministers and others,

I strongly object to the Mid North South Australia Renewable Energy Zone (REZ) Expansion Stage seeking to increase its revenue to fund early works 1a contingent project in accordance with clause 6A.8.2 of the National Electricity Rules (NER).

I also just as strongly object this project involving the construction of dangerous and potentially very flammable new 275 kV and 132 kV transmission lines.

In the 2025 Submission to CSIRO's Draft 2024-2025 GENCOST Report (11 Feb 2025), Independent Engineers, Scientists and Professionals clearly demonstrated why renewables should NOT receive funding at all:

"Inaccurate costings and irresponsible flawed methodology:

"1.0 Flawed Methodology According to GenCost², "The stated purpose of GenCost is to provide essential capital cost information for the modelling community to use in their own system cost studies." While the capital cost data, despite some contestable issues, is useful for user studies (we use it in our whole-of-system modelling), we consider the LCOE results to be controversial and not indicative of real-world costs. The GenCost report starts with an 'Important Disclaimer' which states in part: "The reader is advised and needs to be aware that such information may be incomplete or unable to be used in any specific situation." Presumably, this disclaimer is made for legal reasons but it also shows a lack of confidence. 1 GenCost Executive Summary Pviii 2 GenCost Section D.4.16 P108 4 GenCost also states³ that: Modelling studies such as AEMO's Integrated System Plan do not require or use LCOE data. LCOE is a simple screening tool for quickly determining the relative competitiveness of electricity generation technologies. It is not a substitute for detailed project cashflow analysis or electricity system modelling which both provide more realistic representations of electricity generation project operational costs and performance." Despite this warning, GenCost makes definitive conclusions regarding the cost of firmed solar and wind⁴ being the lowest cost. It is unfortunate that government ministers and managers do not make time to read such details. The ideological commitment to so-called renewables appears foundational. It is incontrovertible from ministerial statements that government energy policy is based on the stated assertion that firmed wind and solar are the cheapest form of electricity generation as shown by CSIRO's GenCost reports. Our whole-of-system cost assessments in previous submissions, based on cashflow modelling as suggested by GenCost is more realistic, demonstrate that this assertion is incorrect. LCOE outputs shown in GenCost, even when modified by estimated (2030) integration costs, indicate exactly the opposite of whole-of-system capital cash flow modelling. It is apparent that the basic LCOE methodology in GenCost is aimed at providing theoretical marginal investment indicators rather than total system costs⁵. They are two different things yet GenCost is hailed by government ministers as the authority to dictate the design of the national power grid through regulations thus bypassing qualified power systems engineers. This difference in methodology urgently needs reconciliation to avoid misleading information from continuing to adversely affect national energy policy.

2.0 Cost Modelling Accuracy Our assessments conclude that the AEMO 2024 ISP Step Change scenario does not represent a viable grid design for delivering reliable electricity because its proposed storage facilities and baseload generation capacities are grossly insufficient under worst-case conditions and very expensive. Appendix 1 to this submission is a top-level modelling analysis of grid reliability, which was submitted to AEMO last August as part of the IAS consultation process. For this submission, it is updated with the subsequent release of AEMO's 2024 Electricity Statement of Opportunities (ESOO), which contains significantly reduced forecasts for future peak power demands in the Step Change

scenario and reductions in annual energy delivery. Our top-level capital cost analysis in Appendix 2, which was also provided to the IAS consultation, is based on whole-of-system modelling using generation and storage capacities from AEMO's 2024 ISP and capital cost factors from the draft 2024-25 GenCost. That analysis is more comprehensive because it takes into account facility lifetimes and estimates for transmission extensions, distribution infrastructure upgrades, grid stabilisation and disposal. It is important to understand accuracy versus fidelity in all modelling.

- Accuracy is how well the analysis results predict future reality.
- Fidelity is the degree of detail embraced by the model. Higher fidelity does not necessarily lead to more accuracy, especially when input data and assumptions contain great uncertainties.

3GenCost Section 6.1 P57 4GenCost Executive Summary Pxi and Figure 0-2 Pxii 5GenCost Section 2.1.4 P20 5 We understand that predicting future costs over 25 years is extremely difficult. Changing situations can lead to errors of hundreds of percent (e.g. Snowy 2.0). GenCost acknowledges uncertainties in costings but does not quantify all of the impacts to their LCOE outputs. GenCost's capital cost factors for generation and storage technologies are estimated by referencing multiple papers and sources, all of which suffer significant uncertainties. ISP capacity models are based on predictive modelling of electricity demand, weather impacts and social licence for CER availability among many variables, all of which contribute considerable uncertainties. We argue that past experience shows it is prudent to assume that all cost models will exhibit indicative uncertainties of at least 30-50% and in some cases considerably more. Nevertheless, we suggest that using a simple top-level whole-of-system model is adequate to assess 25-year cost estimates since the uncertainties of the input data used by all models over a 25-year period dominates the accuracy of results, regardless of modelling fidelity. When used in a comparative manner to assess various design options, most models can be expected to provide somewhat improved 'relative accuracy'.

3.0 Capital Cost Factors GenCost defines future capital cost factors⁶ for various generation and storage technologies. It observes recent years when freight and raw materials rapidly increased costs. Its use of a 2006 to 2009 price bubble to show prices returned to previous expectations is not entirely realistic since the industry was much smaller at that time and basic power costs affecting manufacturing have been recently escalating much more rapidly. GenCost's contention that "...inflationary pressures for most technologies and the cost of some...such as solar PV and batteries are falling again" is contestable. We believe this is only a small part of the story. In our view:

- Renewables are now relatively mature technologies after 30 years of intensive development, thus making assumptions of substantial future cost decreases too optimistic.
- Labour costs have been hit with high inflation recently; these costs are not going to go down.
- The dominance of one country, China, in the entire supply chain for renewables makes higher future prices likely as competition is stifled and hence deserves more careful analysis.
- Increasing demand in global markets may cause price rises.
- Shipping costs are being hit by increasing fuel costs.
- Operating costs of renewables are greater than anticipated, as the UK and Germany have found.
- Subsidies for the cheapest form of electricity generation, which surely should not still be necessary) could be reduced, adding to manufacturing costs.

Compounding the uncertainties in predicting future costs are:

- a. realisation that the extraordinary costs involved are not affordable nor sustainable,
- b. the negative impact on national economies from unreliable intermittent power,
- c. many countries, including the largest, doing nothing or very little, to meet Net Zero goals,
- d. the withdrawal of the US from the Paris Accord,
- e. the mounting market failure of EVs,
- f. recognition that the science of climate catastrophism is overstated and overhyped, and
- g. the severe environmental impacts of solar and wind generation installations being regarded as unacceptable.

6GenCost Section 5 P35 6 The ability to estimate the impacts of these factors is almost impossible, further reinforcing the substantial uncertainties in all future forecasting. In our analysis, we bracket future costs by using both better known CSIRO 2024 cost factors flatlined across the next 25 years and

CSIRO's optimistic capital cost factor projections. The difference in real total whole-of-system cost estimates (Appendix 2) for the 2024 ISP baseline is about 40%." [Attachment 2025 SUBMISSION TO CSIRO'S DRAFT 2024-25 GENCOST REPORT.pdf](#)

"The AEMC should aim for principles-based regulation focusing on consumer protection rather than an outcomes-based approach that views increased CER uptake and coordination as an end in itself" CIS-submission-to-AEMC-Electricity-pricing-review.pdf

"The rapid CER uptake and coordination assumed by AEMO is not guaranteed. The Review should consider how best to protect consumers in the short and long term regardless of whether CER uptake and coordination increases, decreases or remains at current levels. This is especially important given how many of these benefits are somewhat mutually exclusive (for example, flexibility in CER use and coordination). Consumers should be free to choose between them. The AEMC should aim for principles-based regulation focusing on consumer protection rather than an outcomes-based approach that views increased CER uptake and coordination as an end in itself. Consumers should be able to choose to participate in the CER market or not, according to their willingness to bear risks associated with becoming traders of electricity rather than simply consumers. 1 The responsibility for reducing electricity-related emissions and ensuring the grid can handle peak demand lies with generators, governments, network service providers and grid operators. These entities are well placed to handle increasing complexity and risk. The review should bear this in mind and avoid shifting the increasing complexity and risk of maintaining cheap, reliable, and clean electricity onto unwilling consumers – the majority of whom do not own solar panels, home batteries, or EVs."

AEMO is not telling the truth about "being bound to force the 82% target of any scenario as Freedom of Information of CIS has exposed. [Why I'm standing up to AEMO's Integrated System Plan - The Centre for Independent Studies](#)

The first Frontier Economics report clearly showed the cost difference between Labor and the Coalition's plans. According to this report, Labor's renewables only plan will cost \$600 billion, whereas the Coalition's plans will save over \$100 billion in costs, showing that nuclear is cheaper than Labor's renewables only plan, not to mention, what seems to be Labor's dishonesty, and I feel, great lack of integrity in presenting their plan and then unjustifiably attacking the Coalition's plan, which is clearly much more cost effective and obviously will not need all of the extremely costly, dangerous and potentially highly flammable high voltage transmission lines. [Frontier's modelling exposes flaws of Labor's renewables policy - Hancock Energy](#)

And then there is the very concerning extremely high electric bushfire risk that seems to be irresponsibly largely ignored by developers, planners and government, even though the 2009 Black Saturday fires, that killed 173 people, whilst injuring 414 more people and doing untold damage to homes, businesses, pets, wildlife, the biodiversity and ecosystem throughout Victoria as it spread, with two of the fires from the high voltage transmission lines exploding like Hiroshima bombs.

In addition, last year 24 Fire Fighting Brigades took a stand against fighting renewable and high voltage transmission line fires stating ([CFA strike: Volunteers refuse to fight wind, solar and transmission line fires | Wind Energy News](#)):

The brigades' letter calls for "an immediate halt" of all current and proposed high voltage transmission lines and renewable energy infrastructure projects, and demands the government give "genuine consideration of concerns and acknowledgment of the negative impacts to our people and communities. "Further action will be considered and taken as deemed necessary," the letter stated. Village CFA captain and St Arnaud deputy group

officer Peter Knights said: "Our brigades are not prepared to defend renewables infrastructure that destroys our communities, carves up our land, reduces our productive capacity and divides people."

['Scares the hell out of us': CFA volunteers to strike over infrastructure ruining rural communities](#)

So based on my above evidence-based reasons why exactly is this renewable project or any other renewable project being gaining any planning approvals or being built if they, along with planners, local, state are completely aware via submissions about the true costs and extremely high electric bushfire risk when there is no justification at all for these renewables to be built, especially since the high electric bushfire risk cannot be completely eliminated and mitigation strategies do NOT do enough to prevent electric bushfires that CANNOT be put out with water or any other bushfire prevention tactics.

I have included in my email further evidence of my submission statements and why I strongly object to this or any other renewable project like it.

Kind regards,

Carol-Ann Fletcher

NW Tasmania

