Residential Electrification Submission 4



Senate Standing Committees on Economics PO Box 6100 Parliament House Canberra ACT 2600 21 08 2023

Dear Committee Members

Re: Submission to the Inquiry into Residential Electrification

The Energy Equality Regional Alliance (the Alliance) welcomes the opportunity to make a submission to the Senate Standing Committee on Economics for the Inquiry into Residential Electrification.

The Alliance is a new campaign formed to advocate for regional Australians impacted by energy inequality and advocate as a united voice to seek changes to Australian energy regulations.

Launched by Food and Fibre Great South Coast from South-West Victoria, the Alliance highlights the challenges regional Australians face accessing quality electricity and associated infrastructure. Too many households, businesses and farms in regional Australia don't have access to reliable and quality electricity, and existing regulatory barriers and methodology have a bias towards investment in higher density areas.

Regional Australia is key to Australia's renewable energy transition but as it stands, many regional and rural Australians do not have access to reliable and affordable electricity. In parts of South West and South East Victoria, farmers can't run their dairy equipment at the same time as their microwave. Regional and rural communities will fall further behind in an electrified Australia unless due consideration and change to energy regulations are made. It is to advocate for these urgent and necessary changes that the Energy Equality Regional Alliance (the Alliance) was formed.

The Alliance welcomes the Inquiry into Residential Electrification. We hope to work with Government to put in place the necessary policy fixes to ensure that all Australians can take advantage of an electric future, including:

- 1. A new methodology for calculating the 'net economic benefit' of energy to reflect social and economic value to offset the connection cost.
- 2. Establishing a definition for 'energy reliability' that guides the minimum acceptable standard of power supplies, capacity and quality, to ensure energy equality between regional and urban communities nationally.

We thank the Senate Standing Committee on Economics for the opportunity to respond and encourage members to contact the Alliance Secretariat at should you have questions regarding our submission.

Yours sincerely,



Natalie Collard

Spokesperson Energy Equality Regional Alliance

Before electrification Australia needs reliability

To enable regional and rural Australians to take part in an electrified future, the public focus has been on existing electricity infrastructure and making sure it has the capacity to accommodate renewables, providing electricity locally, and across the nation.

Unfortunately, while this national conversation is happening, there are parts of Australia where electricity provided, that is regulatory approved as "reliable", does not provide farms and communities with the appropriate electricity quality to operate in an electrified society. For example, families cannot run dairy equipment while trying to microwave their child's breakfast at the same time.

Currently, the AEMC describe a reliable power system as one that "has enough generation, demand response and network capacity to supply customers with the energy that they demand with a very high degree of confidence."¹ However, on the same AEMC web page, highlights the challenge "between having enough generation available to meet consumer demand for the vast majority of scenarios, and keeping costs as low as possible for consumers. The higher the reliability standard, the higher the cost for consumers."

Looking at the AER's Distribution Reliability Measures Guideline 2018² the focus is again on interruptions, not quality. The guidelines outline how to measure reliability, but does not include a definition of it. To use the mobile network example, the current regulatory system is satisfied with a portion of Australia to operate on 3G, as long as that 3G doesn't drop out mid call.

The reliability standard and the methodology for regional communities is the inherent challenge facing regional communities in Australia. Farms and many regional businesses require a greater demand for high quality electricity to run demand-intensive equipment but share distribution networks with a smaller number of consumers, making the per-head of population distribution methodology unfavourable.

This means that for an energy upgrade, the AER is hamstrung by their regulations to approve increased local investment (for concern about increased costs) and farmers or collection of farmers are requested to invest in the distribution upgrades themselves – more often than not in the millions of dollars.

At the same time as this challenge in regional Australia is occurring, they are being asked by state and federal governments to support the investment of billions of dollars in new transmission lines and renewable energy infrastructure to help power the nation.

We are asking farmers and regional communities to make a choice between running their farm and a primary school's air-conditioning at the same time while seeking their support so those in the city can have access to clean energy.

The definition for reliability needs to be extended and updated to reflect the new electricity and energies realities and differences between regional and metropolitan Australia.



¹ <u>Reliability | AEMC</u>

² <u>Report template (aer.gov.au)</u>



Vulnerability for regional and rural Australians

The price of energy is one of the key social issues in Australia. It is what most think of when talking about energy vulnerability. However, for regional and rural Australians, the question of energy vulnerability is extended beyond cost and includes equality of access to reliable electricity that is relevant to running a farm and a household at the same time.

When considering the different definitions of vulnerability, it is just as relevant to households and businesses who *can't* access electricity equitably as to those who are under financial stress. Currently, regional Australians are at a disadvantage because existing policy does not allow the AER to recognise that living regionally or rurally subjects these Australians to:

- A low likelihood of successfully passing a per capita threshold equation for energy infrastructure investments, due to lower population density.
- Less reliable and accessible energy at present than metropolitan customers.
- Reduced capacity to participate equally in the energy transition and reduce energy bills due to minimal capacity for existing infrastructure to support uptake of new green technologies, notably electric vehicles (EV).
- A lack of political, regulatory and policy attention on the impacts of the energy transition of regional communities, despite regional communities being central to new energy generation for over a decade.

Rather than solely facing income disadvantage, regional Australian households, businesses, and communities are burdened by an additional geographical disadvantage that current regulations do not account for.

Australia is positioning itself to become a global renewable superpower, recognising the potential of regional Australia due to its lower population density, complementary land uses, and abundant natural resources like wind, water, and solar.

While striving to leave no Australian behind in this transition, governments need to acknowledge that significant energy inequality already exists between metropolitan and regional Australia. Numerous regional communities are already experiencing the negative impacts of this disparity. Without immediate action, climate-positive initiatives, including increased adoption of large-scale electric vehicles, are projected to further exacerbate the energy reliability challenges faced by regional and rural Australians.

This energy inequality is evident in small yet economically impactful regional communities that currently lack access to consistent and high-quality electricity.

The difficulties faced by regional and rural Australians in obtaining quality and reliable residential electricity cannot be overlooked. These communities, despite their significant economic contributions and the immense renewable potential they hold, continue to bear the brunt of energy inequality. The current disparities in access and consistency of electricity hinder their progress and impede their ability to fully participate in the transition towards a sustainable energy future.