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AEMO

Via email: forecasting.planning@aemo.com.au

Response to Draft 2023 Inputs Assumptions and Scenarios Consultation

<https://aemo.com.au/consultations/current-and-closed-consultations/2023-inputs-assumptions-and-scenarios-consultation>

On behalf of the Community Power Agency, we thank you for the opportunity to provide feedback through the 2023 Inputs Assumptions and Scenarios Report (IASR) Consultation.

The [Community Power Agency](http://www.cpagency.org.au) is a not-for-profit organisation that works to ensure communities are engaged in and benefiting from the transition to renewable energy. Established in 2011, Community Power Agency provides expert advice to community organisations, industry and government. We seek to build strong support for renewable energy and foster the development of community energy. We have supported more than 50 community energy groups to develop and deliver their own clean energy goals, and we provide guidance to inform national and state-based strategies for the roll out of Renewable Energy Zones, particularly in the areas of best-practice engagement and economic participation by regional communities.

One of our key concerns with the figures that AEMO proposes to use in its 2023-24 forecasting and planning activities is the level to which it falls short on caps on emissions to reduce the impacts of climate change.

While the IASP acknowledges that numerous factors, including a shifting political environment, has driven a more rapid approach to the transition to clean energy, this is not reflected adequately in the four scenarios. Offshore wind, while included as a sensitivity, has the potential for exponential growth which aren't reflected in the scenarios. The declaration of Renewable Energy Zones, with large targets for renewable energy generation and a keen interest by developers demonstrated by a high volume of Registrations of Interest, many of which have moved through the development pipeline of planning and construction.

Of key concern is that only one of the four scenarios meets the objectives of the Paris Climate Accord, to which Australia has committed. The scenario 'Green Energy Exports' attempts to limit the temperature increase to 1.5°C above pre-industrial levels, however it makes some problematic assumptions about the role of hydrogen, which need to be fixed for this scenario to be useful. Renewable hydrogen is necessary for a limited set of hard-to-decarbonise industries, such as replacing coking coal in steel-making and gas in the making of fertilisers. Wherever a process can be electrified, it should be, with renewable hydrogen only used where no other alternatives are available.

Blending of hydrogen in gas networks is extremely inefficient and the transition to high mixes of hydrogen - or even pure hydrogen - in the existing gas network will be extraordinarily expensive, requiring large amounts of the gas network to be essentially rebuilt from scratch.

In calculating the emissions budgets of scenarios, the IASR also doesn't appear to consider the climate impact of fugitive hydrogen emissions. This will lead to a lesser impact than fugitive emissions from methane/gas today, but will not be zero.

This scenario should instead focus on enabling Australia to take responsibility for the Scope 3 emissions embodied in exports like iron ore and bauxite by processing them here with renewable power and renewable hydrogen.

Given the uncertainty over whether the future political environment will make the Green Energy Exports scenario possible, the ISAR should also include a 1.5°C scenario focused purely on the decarbonisation of our domestic economy. This scenario should lay out an energy transition focused on accelerated domestic decarbonisation driven by rapid renewables and storage build, high levels of electrification, and improved energy performance economy-wide. Hence, a different name would be required if this scenario was modified (or an additional one created).

A critical element that is missing from the IASR is a strong rationale for excluding a number of legislated and/or funded state policies in its base-case policy assumptions. NSW's stated target is a reduction of 70% (from 2005 levels) by 2035. Legislated Victorian targets for emissions reductions include the 75-80% target (from 2005 levels) by 2035. These should be included across all scenarios.

The IASR should acknowledge the Capacity Investment Scheme announced by Minister Bowen in December 2022, which will provide \$10B of underwriting for procurement of at least 6GW new renewable resources.

The '82% renewables by 2030 government target' underpins and guides significant federal government funding decisions, and therefore should be assumed as a policy setting in all scenarios.

All scenarios seem to be predicated on the current national 43% emissions reduction target. Again, given the IASR's stated goal of "covering the breadth of potential and plausible futures impacting the energy sector," at least some of these scenarios should be testing a higher target.

The Strong Electrification sensitivity that was included in the 2021 IASR should also be included in the 2023 IASR. This should be included to consider the planning implications of a future that is a high ambition, high electrification and high energy efficiency option. This would enable a modelling that accounts for maximum possible electrification and therefore the effects of under or over investment in electricity infrastructure.

If you would like to receive more detailed information about our suggestions and feedback, please get in touch: kristy@cpagency.org.au.

We look forward to receiving your responses to the submissions from this round of consultation.

Kind regards,
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