

24 April 2023

The Australian Energy Market Operator (AEMO)

Submission: Consultation on AEMO's 2023 Integrated Systems Plan (ISP) Methodology

Climate Action Network Australia (CANA) welcomes the opportunity to participate in the Australian Energy Market Operator's (AEMO) 2024 Integrated Systems Plan (ISP) Methodology consultation process. CANA is a member-based organisation made up of over 150 civil society organisations advocating for Australia's rapid transition to a zero-emissions country. We seek a fair Australia, free of climate pollution, where people and nature are protected from dangerous climate change.

We welcome improvements to climate policy made by the Albanese Government, including the passage of the Climate Bill 2022 and update to Australia's Nationally Determined Contribution (NDC) under the Paris Agreement and the reforms to the Safeguard Mechanism. These commitments are important first steps that need to be followed with ambitious policy and investment if we are to mitigate dangerous climate change. At this stage in Australia's decarbonisation journey, every year counts - and so the next iteration of the ISP must provide an ambitious roadmap for renewable energy.

For Australia to meet its NDCs in line with the Paris Agreement, the National Electricity Market needs rigorous inputs to determine pathways for rapid decarbonisation. We note that the ISP Methodology consultation has been framed as relatively narrow in scope. Given the current lack of opportunities to weigh in on the broader set of inputs shaping the 2024 ISP, CANA hopes to take this opportunity to provide recommendations that are also related to the Inputs, Assumptions and Scenarios Report (IASR) as these assumptions will inform the ISP. We also ask that AEMO provide another opportunity for community consultation on the IASR before its finalisation in July, given the amount of market and policy changes that have taken place since December (when the IASR was first published) as well as the large amount of feedback received on the IASR.

Further, the proposed changes to the ISP Methodology diminish the contributions that key clean energy technologies are likely to make to the NEM, thus providing space for fossil-fuel derived gas to displace renewable energy sources in the NEM. This jeopardises the rapid transition Australians need for energy security and a healthy climate. As the ISP sets a long-term roadmap for the NEM, it is crucial that AEMO does not underestimate the potential for rapid decarbonisation, while modelling several different pathways to achieving the 1.5 degree goal based on different assumptions.

The ISP has an important role guiding the market by signaling where investments are most needed; given this role it is important that the ISP actively plan multiple scenarios that demonstrate different ways to achieve the rapid transition

Australia has committed to “strive to keep within reach”. Investors also need to know that AEMO is fully thinking through different pathways to NEM decarbonisation in order to need the ISP to fully model the confidently provided capital for the development of Renewable Energy Zones to power the NEM.

As such, CANA makes this submission for AEMO to address the following within a revised ISP Methodology;

1. CANA supports AEMO proactively working to model a cost of carbon as part of cost-benefit analysis in line with inclusion of carbon emissions reductions in the National Energy Objectives.
 - a. Doing so will provide a more realistic, forward-focused blueprint for the NEM, particularly as decarbonisation of the sector accelerates.
2. CANA encourages AEMO to conduct additional modelling for Candidate Development Paths in line with several 1.5°C aligned scenarios to demonstrate alternative pathways to rapid decarbonisation of the NEM.
 - a. This should be done by identifying a 1.5°C emissions budget, then this budget should be used to map out more than one pathway, based on the long-term interest of consumers.
 - b. The only current 1.5°C scenario within the ISP (“Green Energy Exports”) appears to be overestimating the role of fossil-fuel hydrogen in decarbonising the NEM, especially domestically. We recommend tweaking this model to reduce the assumptions around biogas and domestic hydrogen use.
 - c. More broadly, CANA urges AEMO to expand its modelling of decarbonisation pathways that minimise (and quickly eliminate) the use of non-renewable sources of energy.
We strongly encourage AEMO to model at least one alternative 1.5°C pathway that is focused on domestic decarbonisation driven by renewable energy, improved renewable energy storage capacity and high rates of electrification.
 - d. CANA also recommends that the current 1.5°C Green Energy Exports scenario model Renewable Energy Industrial Precincts in the way that REZs are modelled, to frame regional developments needed to achieve economic diversification and the rapid decarbonisation of our domestic and export economies.
3. CANA asks that AEMO conduct modelling that accurately captures the necessity of renewable energy storage devices, and that their propensity to improve in design over time is accounted for.
 - a. CANA is concerned that AEMO has downplayed the role of renewable energy storage devices in the scenario plans and underestimates their improved design over time, which may unduly influence the modelling. AEMO should revise its modelling with the view that storage devices like batteries will continue to innovate and improve on their performance.

Given the matters raised above, CANA urges AEMO to undertake rigorous modelling that accurately considers the full potential of renewable energy generation, storage and use in the NEM to set Australia on track for a 1.5°C aligned, decarbonised energy sector.

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Should you have any questions, please feel free to contact me using the details below.

Sincerely,

A handwritten signature in cursive script that reads "H. Chand." followed by a period.

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