

1 February 2021

Australian Energy Market Operator
20 Bond Street
Sydney NSW 2000

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

Dear Sir/Madam,

Submission on draft 2021 Inputs, Assumptions, and Scenarios Report (IASR)

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 150 environment groups and thousands of supporters across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

We welcome the opportunity to comment on the draft 2021 IASR.

Central scenario

Australia has committed to the objectives of the Paris Climate Accord, including limiting temperature rises to below 2 degrees C. It is inappropriate that the "Central" scenario is incompatible with this objective.

The lack of continuity between energy market settings and agreed climate objectives is a key driver of investment uncertainty and higher economic costs in the National Energy Market (NEM).

The practical difference between the Central scenario and Paris-compliant scenarios is only the pace of change. Fortunately, policymakers and market participants have been highly responsive to actions recommended in the Integrated System Plan. Therefore, aligning the "Central" scenario with a below 2 degrees pathway would provide useful guidance to policymakers and investors alike and has the potential to reduce economic costs by resolving a key source of friction in the energy market. The ClimateWorks Australia Decarbonisation Futures 2020 Report found that the Australian electricity sector needs to reach near zero emissions by 2035 to align with a 2 degrees scenario.

Emissions reductions in sectors outside of the electricity sector are likely to be far more expensive, are unplanned, and more difficult in the short term. Therefore, even if the policy of a 26 – 28 percent reduction by 2030 in nationwide greenhouse pollution is chosen to guide the carbon budget for the Central scenario, the rate of decarbonisation for the electricity system should far exceed 26 – 28 percent by 2030.

Recommendation 1: Align the carbon budget of the Central scenario with a below 2 degrees pathway, recognising that electricity sector emissions reductions must lead other sectors.

Rooftop PV

The 2020 IASR drastically underestimated rooftop PV uptake. For example, the forecast installation rate for the next decade for NSW was 200 MW per annum. A total of 244 MW was installed in NSW in Q3 2020 alone, around a third of total installations nationally.

The Draft 2021 IASR has not yet fixed this error. Rooftop PV forecasts are not updated the rooftop from the 2020 ES00. While the COVID-related increase in PV uptake was impossible to predict, NCC considers it very likely that the permanent increase to residential daytime consumption will continue to influence rooftop PV uptake.

Furthermore, the NSW government has announced a policy of supporting 300,000 households to install rooftop PV and batteries with zero interest loans. The program is still in the pilot phase yet presents an upside risk that installations will exceed even the high levels seen in 2020 of almost 1 GW per annum in NSW alone. This rate is five times higher than the draft Central scenario. Such a large potential forecasting error has serious implications for failing to prepare for rapidly falling minimum demand.

Recommendation 2: Drastically revise Rooftop PV uptake in all scenarios. Revise the Central Scenario forecast to 3 GW per annum as suggested by the *Clean Energy Regulator's September Quarterly Carbon Market Report 2020*, with possible upsides in High DER and Export Superpower scenarios. This should flow through to analysis of potentially rapidly declining minimum demand. This has implications for the desirability of battery installations versus gas peaking, as well as bringing forward other interventions such as reactive power support.

Electric Vehicles

NCC notes that the NSW government has committed to electrifying the 8000-vehicle bus fleet by 2030.

Recommendation 3: Update electric vehicles forecast to include electrifying the NSW bus fleet by 2030, and the likelihood that other states will follow suit.

Please do not hesitate to contact Dr Brad Smith, Campaigns Director, on (02) 9516 1488 or bsmith@nature.org.au should you require any further information.

Yours sincerely,



Nature Conservation Council
The voice for nature in NSW

A handwritten signature in blue ink that reads "Chris Gambian". The signature is fluid and cursive, with a horizontal line underneath it.

Chris Gambian
Chief Executive
Nature Conservation Council of NSW