Submission No 33

INQUIRY INTO IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

Organisation: The Centre for Independent Studies

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THE CENTRE FOR INDEPENDENT STUDIES

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30 January 2025

The Hon. Mark Banasiak MLC
Chair
Portfolio Committee No. 4
Submitted via https://www.parliament.nsw.gov.au/

RE: Submission to NSW Legislative Council Inquiry into Impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales

Dear Mr Banasiak,

The Centre for Independent Studies (CIS) welcomes the opportunity to make a submission to the Inquiry into the Impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales.

The CIS is a leading independent public policy think tank in Australia. It has been a strong advocate for free markets and limited government for more than 40 years. The CIS is independent and non-partisan in both its funding and research, does no commissioned research nor takes any government money to support its public policy work.

We have focused on section (c) of the Terms of Reference, and the financial cost of renewable energy zones. We submit that there is a lack of consistency in the proposed plans, routes, costs and timelines for these projects. Inevitably, it seems that costs and capacities end up being much larger than initially anticipated.

Yours sincerely,

Aidan Morrison
Director of Energy Program
Centre for Independent Studies

The historical, current and projected future financial costs associated with construction and maintenance of large scale projects within Renewable Energy Zones and related matters

The history of NSW's Renewable Energy Zones (REZs) has been fraught with changes to the transmission plans put out for consultation, their capacities, timelines and their costs — with cost estimates frequently being omitted from official documents. Given the constant changes that have been made to the plans for the New England and Central West Orana REZs, it is very difficult for consumers to know how much these projects will end up costing.

The New England REZ was created by order of the NSW Minister for Energy and Environment, Matt Kean MP, in December 2021 with an intended network capacity of 8 GW.[1] In AEMO's 2021 Transmission Cost Report, the New England REZ was expected to provide additional network capacity of between 1,295 to 2000 MW at an estimated cost of $0.8 to 2.3 billion.[2] AEMO's 2022 Integrated System Plan (ISP) was the first ISP to make the New England REZ actionable, with the project being advanced through the *Electricity Infrastructure Investment Act 2020* (NSW) rather than the ISP framework. It was initially intended to be delivered in July 2027 at a cost of $1.9 billion.[3]

By the publication of AEMO's 2023 Transmission Expansion Options Report, the New England REZ options had drastically changed (Figure 1), with its capacity reduced to between 900 to 1,500 MW and cost estimates reduced to between $0.4 to 1.0 billion.[4] In the 2024 ISP, the project was split into two parts with delivery dates pushed back from 2027 to June 2031 for Part 1 and June 2033 for Part 2, and no cost estimates were published.[5]

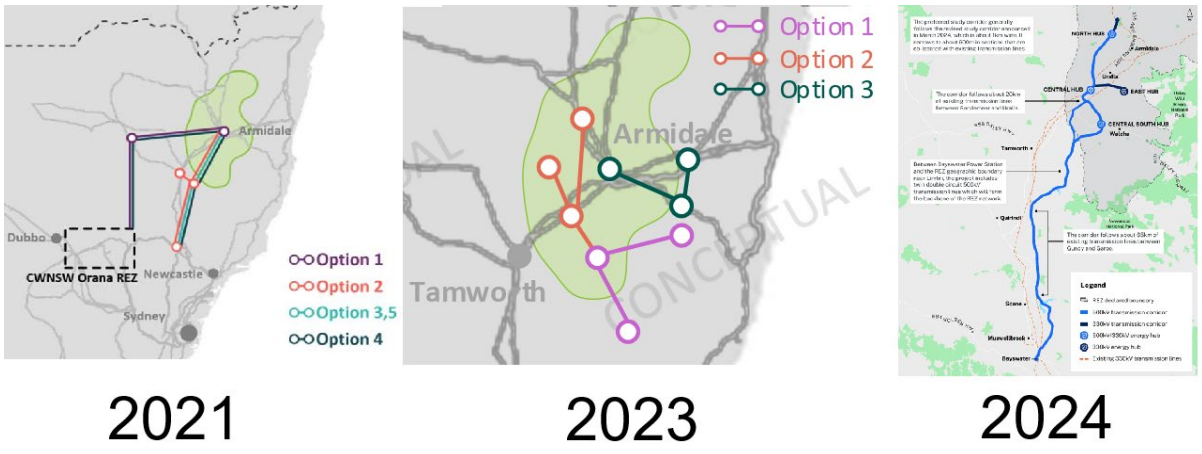

Figure 1. Map of planned New England REZ transmission corridor options in 2021 (Transmission Costs Report), 2023 (Transmission Expansion Options Report) and 2024 (Scoping Report).

One month later in July 2024, EnergyCo's Scoping Report depicted a very different transmission corridor to AEMO's version of the New England REZ in 2023 (Figure 1), with no updated cost estimates being published.[6] The delivery date was once again delayed, with 6 GW of network capacity expected to be available by 2033 and an additional 2 GW "planned for the future".[7]

The Scoping Report confirmed the total network capacity of NSW REZs was intended to be 12 GW.[8] However, this would mean the New England REZ would be making up 8 of the 12 GW of network capacity currently planned, leaving only 4 GW to be shared between the Central-West Orana, South-West, Hunter-Central Coast and Illawarra REZs.[9]

This is at odds with recent announcements made about the Central-West Orana REZ. This REZ was officially declared in November 2021 with an intended network capacity of 3 GW.[10] But in December 2023, the capacity was increased to 6 GW by 2038 with the "initial network capacity" being 4.5 GW.[11] This increase allowed AEMO to model an expansion of wind capacity in the Draft 2024 ISP that is far more rapid than the expansion indicated in the 2022 ISP, compared to the New England REZ which shows more moderate changes (Figure 2). Adding the currently planned capacities of the New England and Central-West Orana REZs gives a total of more than 12 GW, so it is unclear what the total capacity of all NSW REZs is now intended to be.

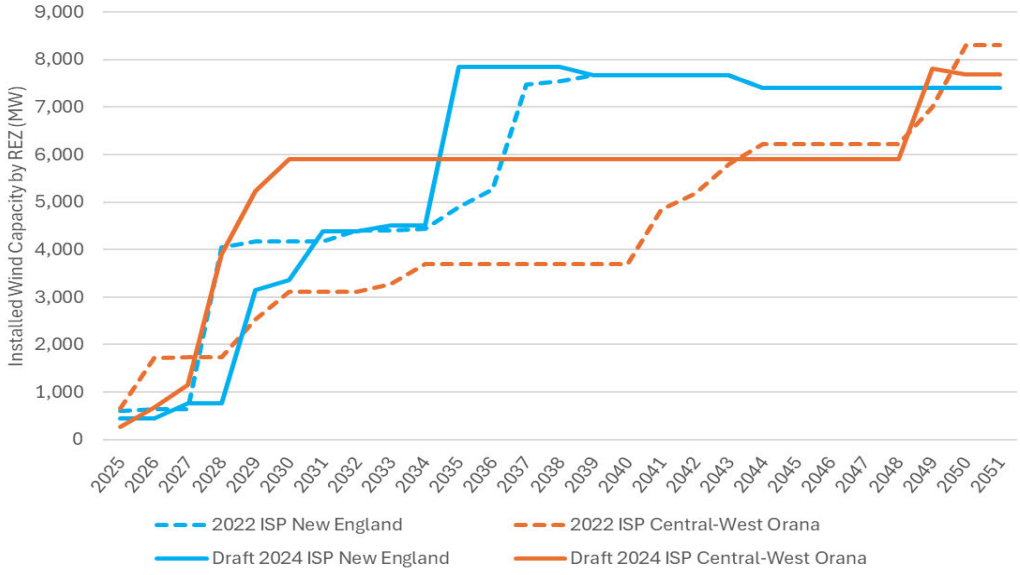

Figure 2. Installed wind capacity in the New England and Central-West Orana REZs under the ODP in Step Change for the 2022 ISP and Draft 2024 ISP.[12]

Costs for the Central-West Orana REZ have also gone up dramatically. In AEMO's 2020 ISP, the REZ transmission link was expected to cost $650 million,[13] but as of May 2024, the consumer-funded capital costs are now expected to total almost $5.5 billion.[14] However, as costs have gone up, AEMO has also uprated the demand correlation of wind generation in

the Central-West Orana REZ from B (2029-30, 2039-40) and C (2049-50) in the 2020 ISP[15] to straight As in the 2024 ISP, improving the benefits of the project in the model.[16]

These frequent changes to the transmission corridor route, timeline, capacity and cost estimates for NSW REZs mean consumers cannot have any certainty in the costs of these projects. Given the significant cost blowouts already experienced by the Central West Orana REZ, and the delays experienced by the New England REZ, there is a serious risk that future REZ developments will face similar issues that could inflate future financial costs associated with construction and maintenance of REZ projects far beyond what is currently assumed. More transparency on the part of EnergyCo is needed so consumers can understand the true costs of these projects.

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[1] EnergyCo. 2021. "Renewable Energy Zone (New England) Order 2021". https://gazette.nsw.gov.au/gazette/2021/12/2021-643.pdf.
[2] AEMO. 2021. "2021 Transmission Cost Report". p 51. https://aemo.com.au/-/media/files/major-publications/isp/2021/transmission-cost-report.pdf.
[3] AEMO. 2022. "2022 Integrated System Plan". p 67. https://aemo.com.au/-/media/files/major-publications/isp/2022/2022-documents/2022-integrated-system-plan-isp.pdf.
[4] AEMO. 2023. "2023 Transmission Expansion Options Report". p 75. https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-transmission-expansion-options-report.pdf.
[5] AEMO. 2024. "2024 Integrated System Plan". p 57. https://aemo.com.au/-/media/files/major-publications/isp/2024/2024-integrated-system-plan-isp.pdf.
[6] EnergyCo. 2024. "New England Renewable Energy Zone Network Infrastructure Project: Scoping Report". p 19. https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PDA-73912716%2120240729T214848.356%20GMT.
[7] Ibid, p 1.
[8] Ibid, p 2.
[9] Ibid.
[10] NSW Government. 2021. "NSW Government Gazette No 569 of 5 November 2021". https://resources.reglii.com/NSWGG.2022.3.29.G569.pdf.
[11] NSW Government. 2023. "Two big milestones mean the Central-West Orana Renewable Energy Zone is powering ahead". https://www.nsw.gov.au/media-releases/orana-rez-powering-ahead.
[12] 2022 Final ISP results workbook - Step Change - Updated Inputs; 2024 Draft ISP results workbook - Step Change.
[13] AEMO. 2020. "2020 Integrated System Plan". p 89. https://aemo.com.au/-/media/files/major-publications/isp/2020/final-2020-integrated-system-plan.pdf.
[14] EnergyCo. 2024. "Central-West Orana Renewable Energy Zone: Rationale and basis for EnergyCo's network recommendations". p 11. https://www.energyco.nsw.gov.au/sites/default/files/2024-05/cwo-rez-public-report-infrastructure-planner-recommendation-may-2024.pdf.
[15] AEMO. 2022. "Appendix 3. Renewable energy zones". p 27. https://aemo.com.au/-/media/files/major-publications/isp/2022/2022-documents/a3-renewable-energy-zones.pdf.
[16] AEMO. 2024. "Appendix 3. Renewable energy zones". p 23. https://aemo.com.au/-/media/files/major-publications/isp/2024/appendices/a3-renewable-energy-zones.pdf.