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# Notification of Draft Headroom Assessment in the Central-West Orana Renewable Energy Zone

August 2024

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# Acknowledgement of Country

Energy Corporation of New South Wales acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past and present through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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# 1. Notification of Draft Headroom Assessment

The Energy Corporation of NSW (EnergyCo), in its capacity as Infrastructure Planner for the Central-West Orana Renewable Energy Zone (CWO REZ), is exercising its discretion under the *Renewable Energy Zone (Central-West Orana) Access Scheme Declaration 2022* (Access Scheme Declaration)<sup>1</sup> to conduct a headroom assessment.<sup>2</sup>

In December 2023 the *Renewable Energy Zone (Central-West Orana) Order 2021* was amended to increase the intended network capacity from 3 GW to 6 GW, noting the network infrastructure will be built at 4.5 GW.<sup>3</sup> This was reflected in the network recommendation authorised by the Consumer Trustee in May 2024.<sup>4</sup> Increasing the transfer capacity allows more generation to connect in the CWO REZ without breaching the Target Transmission Curtailment Level (TTCL) of 4.37%.

Based on the increase to the transfer capacity of the Central-West Orana REZ network infrastructure under that authorisation,<sup>5</sup> EnergyCo has formed the opinion that there is likely to be material headroom across the single 24-hour day capacity period.<sup>6</sup>

## Summary of Notification of Draft Headroom Assessment

- Current aggregate maximum capacity cap: 5.84 GW
- Proposed increase to aggregate maximum capacity cap: 1.93 GW
- **Proposed new aggregate maximum capacity cap: 7.7 GW.**

The basis of this opinion is explained in this Notification of Draft Headroom Assessment.

This Notification of Draft Assessment includes the following information:<sup>7</sup>

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<sup>1</sup> As amended by the *Renewable Energy Zone (Central-West Orana) Access Scheme (Amendment) Order 2024* (dated 5 April 2024), available at: [Government Gazette No 116 of Friday 5 April 2024 \(nsw.gov.au\)](#).

<sup>2</sup> Clause 10(1)(c) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>3</sup> *Renewable Energy Zone (Central-West Orana) Order 2023*: [https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette\\_2023\\_2023-580.pdf](https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette_2023_2023-580.pdf)

<sup>4</sup> Notice of Authorisation Enabling CWO REZ Network Infrastructure Project: <https://aemoservices.com.au/-/media/services/files/publications/authorisation-function/notice-of-authorisation-cwo-enabling.pdf?la=en>

<sup>5</sup> Notice of Authorisation Enabling CWO REZ Network Infrastructure Project: <https://aemoservices.com.au/-/media/services/files/publications/authorisation-function/notice-of-authorisation-cwo-enabling.pdf?la=en>

<sup>6</sup> For the purposes of this headroom assessment there is one maximum capacity across a single 24-hour day capacity period (cl 7(6) *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*).

<sup>7</sup> Clause 10(4) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*

- (a) the proposed headroom available in each capacity period (section 2.1) and the proposed increase to the aggregate maximum capacity cap for each capacity period (section 2.2);<sup>8</sup>
- (b) forecast curtailment on the access rights network before and after the proposed increase to the aggregate maximum capacity cap for each capacity period (section 2.3);<sup>9</sup>
- (c) any material assumptions about the aggregate expected capacity profiles or the technology mix of potential future projects made as part of the headroom assessment (section 2.4);<sup>10</sup>
- (d) any other information having a material impact on the headroom assessment (section 2.5);
- (e) the consultation period during which submissions may be made by the Consumer Trustee, access right holders<sup>11</sup> and the public (section 1.1).

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## 1.1. Consultation on the Notification of Draft Headroom Assessment

This Notification of Draft Headroom Assessment is open for public consultation for a minimum period of 28 days.<sup>12</sup> Feedback must be in the form of written feedback and can be submitted to: [cwo.access@energyco.nsw.gov.au](mailto:cwo.access@energyco.nsw.gov.au).

**Submissions close on 5 September 2024.**

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## 1.2. Next steps

Once the consultation period concludes, the Infrastructure Planner will consider all written submissions received and publish a notice of the 'Final Headroom Assessment' on the EnergyCo website<sup>13</sup>, which will include the headroom available,<sup>14</sup> the increase in the aggregate maximum capacity cap<sup>15</sup> and any material assumptions about the aggregate expected capacities profiles or the technology mix of potential future projects made as part of the headroom assessment.<sup>16</sup>

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<sup>8</sup> Clause 10(4)(a) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>9</sup> Clause 10(4)(b) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>10</sup> Clause 10(4)(c) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>11</sup> There are currently no access right holders in the CWO REZ.

<sup>12</sup> Clause 10(4)(e) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>13</sup> Clause 10(5)(a)-(c) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>14</sup> Clause 10(5)(c)(i) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>15</sup> Clause 10(5)(c)(i) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>16</sup> Clause 10(5)(c)(ii) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

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## 1.3. More information

For more information on headroom and headroom assessments please refer to the [Central-West Orana Renewable Energy Zone Access Scheme Target Transmission Curtailment Level & Headroom Assessment Method](#) paper.

# 2. Outcomes and Assumptions of Draft Assessment

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## 2.1. Proposed Headroom Available

Under the Access Scheme Declaration, EnergyCo as the infrastructure planner may conduct a headroom assessment whenever the opinion is formed that there will likely be material headroom.<sup>17</sup> Following the amendment to the CWO REZ Declaration and authorisation of the CWO REZ Network Infrastructure Project, the transfer capacity of the REZ is determined to be 4.5 GW. This is larger than the 3 GW transfer capacity from which the current aggregate maximum capacity cap of 5.84 GW was calculated. As such, EnergyCo has formed the opinion there will likely be material headroom available across the access rights network.

The increase in aggregate maximum capacity will provide certainty to the market and communities on the amount of development occurring in the immediate term, while still allowing for future developments to progress following subsequent headroom assessments. The identification of headroom also encourages the utilisation of network infrastructure across the REZ.

Headroom is the extent to which additional maximum capacity could be granted under access rights in all relevant capacity periods without forecast curtailment exceeding the target transmission curtailment level.

The Central-West Orana REZ is the first REZ being developed under the *Electricity Infrastructure Investment Act 2020*, meaning there are many REZ specific processes occurring for the first time in NSW, including headroom assessments. EnergyCo, as Infrastructure Planner, is exercising its discretion to take a conservative approach when calculating the possible increase in generation capacity resulting from the increase in network transfer capacity.<sup>18</sup>

At the time of this headroom assessment, no projects have been allocated access rights, and the current aggregate maximum capacity in the 24-hour capacity period is 0 MW. The proposed change

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<sup>17</sup> Clause 10(1)(c) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>18</sup> Clause 10(1)(c) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

is to increase the aggregate maximum capacity cap to 7.7 GW. The increase is sufficient to capture the potential outcome of the current access rights application process while being prudent not to pre-empt specific future developments in and around the access rights network. Following completion of this headroom assessment, the process can be reviewed and any learnings incorporated ahead of subsequent headroom assessments.

### **Future headroom assessments**

The aggregate maximum capacity cap proposed in this headroom assessment **may not be the final limit** on aggregate maximum capacity for the Central-West Orana REZ. EnergyCo will conduct further headroom assessments in accordance with the Access Scheme Declaration, including a headroom assessment being conducted as soon as practical following the completion of the initial allocation<sup>19</sup> and every two calendar years during the period of six calendar years after the initial allocation is complete.<sup>20</sup>

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## **2.2. Proposed Increase to the Aggregate Maximum Capacity Cap**

The current aggregate maximum capacity cap for the CWO REZ is 5.84 GW. Following the headroom assessment, the proposed new aggregate maximum capacity cap for the 4.5 GW network transfer capacity is 7.7 GW. **This is a proposed increase of 1.93 GW.**

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## **2.3. Forecast Curtailment**

The forecast curtailment before and after the proposed headroom were calculated in line with the Central West Orana Renewable Energy Zone Access Scheme Target Transmission Curtailment Level & Headroom Assessment Method Paper.

Before the headroom assessment, the forecast curtailment on the access rights network is 0%, as there are no access right holders in the REZ (at the time of writing this document). Modelled planting of generation (solar and wind) up to the aggregate maximum capacity of 5.84 GW, for 3 GW of transfer capacity, results in forecast curtailment of 4.37%.

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<sup>19</sup> Clause 10(1)(a) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

<sup>20</sup> Clause 10(1)(b) of *Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022*.

After the headroom assessment, the forecast curtailment (based on the assumptions provided in section 2.4) of the new aggregate maximum capacity cap of 7.7 GW, for 4.5 GW of transfer capacity, is 0.25%. This does not breach the TTCL of 4.37%.

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## 2.4. Assumptions

For the purposes of this headroom assessment EnergyCo has considered the projects applying for access rights in the Access Application process. Using this information, the following assumptions were made:

### Aggregate expected capacity profiles

EnergyCo represented each project using the expected capacity profiles that were used as part of the Target Transmission Curtailment Level assessment in the current access rights application process. These profiles may be those provided by the project's applicant, or as determined by EnergyCo following clarifications with the relevant applicant and considering other relevant information.

### Technology mix of potential future projects

The technology mix is that of the projects applying for access award, totalling 7.7 GW:

Solar and solar hybrid: 3,056 MW

Wind: 2,951 MW

Stand alone battery: 1,700 MW (2 hr)

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## 2.5. Other Material Information

No other information was identified as having a material impact on this headroom assessment.