Office of Energy and Climate Change

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CWO REZ Access Rights and Scheme Design

Positions Paper

July 2022

Acknowledgement of Country

The Office of Energy and Climate Change acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging 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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CWO REZ Access Rights and Scheme Design: Positions Paper

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Contents

Shortened forms and definitions

Terms used in this paper have the meaning given in the draft CWO REZ Access Scheme Declaration and *Electricity Infrastructure Investment Act 2020* (NSW). Key definitions are summarised below for readability.

Term/phrase	Definition
Access rights network	The new transmission network infrastructure for the CWO REZ, identified in Schedule 1 of the draft CWO REZ Access Scheme Declaration
AEMO	Australian Energy Market Operator
Aggregate maximum capacity cap	The cap on the aggregate maximum capacity of approved projects during any capacity period, being the initial aggregate maximum capacity cap as amended from time to time
Aggregated expected capacity profile	The aggregate of the expected capacity profiles of all relevant projects together, as determined by the Infrastructure Planner, less the Infrastructure Planner's forecast profile of any load connected to the access rights network
Approved project	An eligible project that has been awarded an access right
ASL	AEMO Services Limited
Co-located hybrid project	Generation and storage projects co-located behind the same connection point
Consultation Paper	REZ Access Rights and Scheme Design: CWO Consultation Paper, December 2021
CWO	Central-West Orana
CWO REZ Access Scheme	The access scheme that will be created under the CWO REZ Access Scheme Declaration
CWO REZ Access Scheme Declaration	The Renewable Energy Zone (Central-West Orana) Access Scheme Order 2022 that is proposed to be declared by the Minister under section 24 of the EII Act with respect to the CWO REZ
CWO REZ Declaration	The Renewable Energy Zone (Central-West Orana) Order 2021 made by the Minister on 28 October 2021 as amended from time to time
Department	Office of Energy and Climate Change
DNA	Designated network asset

Term/phrase	Definition
EII Act	*Electricity Infrastructure Investment Act 2020* (NSW)
Eligible operator	A person that owns or operates an eligible project or approved project or proposes to own or operate an eligible project or approved project
Eligible project	A proposed generation or storage project or co-located hybrid infrastructure project that is to be located within the CWO REZ geographical area, that meets the eligibility requirements specified in Schedule 2 of the draft CWO REZ Access Scheme Declaration
EnergyCo	Energy Corporation of NSW
Forecast curtailment	Forecast curtailment on the access rights network or a network element (as relevant) determined by the Infrastructure Planner in accordance with the draft CWO REZ Access Scheme Declaration
Infrastructure Planner	Energy Corporation of NSW appointed as infrastructure planner for the CWO REZ under the CWO REZ Declaration
LTESA(s)	Long-term energy service agreement(s)
NEMDE	National Electricity Market Dispatch Engine
NER	National Electricity Rules
REZ	Renewable energy zone
SDSS	Short duration storage systems
TNSP	Transmission network service provider

1 Introduction

Access schemes are critical to the success of REZs

Access schemes are a key part of the NSW Government's plan to coordinate and encourage renewable energy and storage investment in renewable energy zones (REZs) and realise the objectives of the Electricity Infrastructure Roadmap and the *Electricity Infrastructure Investment Act 2020* (EII Act). The Central-West Orana (CWO) REZ Access Scheme will be the first of its kind in the National Electricity Market (NEM).

An access scheme is intended to enable efficient investment in generation, storage and transmission infrastructure in the long-term interest of consumers while delivering positive outcomes for local host and First Nations communities.

The CWO REZ Access Scheme controls the connection of projects to new network infrastructure within the CWO REZ and creates the option for a REZ connection process as an alternative to the existing framework under the National Electricity Rules (NER), to encourage efficient investment in new generation and storage projects in the REZ by reducing the risk and uncertainty that exists under the current open access framework.

Purpose of this Positions Paper

The draft CWO REZ Access Scheme Declaration sets out how generation and storage projects can receive access rights to new network infrastructure within the CWO REZ and is the primary statutory instrument for the CWO REZ Access Scheme. The draft declaration is made publicly available for a period of 28 days in line with the requirement of section 24(6)(b) of the Act. The purpose of this Positions Paper is to provide guidance on the draft CWO REZ Access Scheme Declaration and the proposed enabling regulations to facilitate consultation before gazettal of the final CWO REZ Access Scheme Declaration.

This paper aims to:

- explain the policy positions and purpose of the CWO REZ Access Scheme Declaration
- outline the proposed regulations that enable the REZ access schemes, including modifications to the NER (see Appendix B)
- provide an overview of the REZ connection process option
- detail the proposed minimum regulated community and employment component of access fees
- outline how stakeholder feedback on the December 2021 Consultation Paper has been considered.

The draft CWO REZ Access Scheme Declaration can be found on the Energy Corporation of NSW (EnergyCo) website.

You are invited to provide your feedback on the draft CWO REZ Access Scheme Declaration via a free form submission to contact@energyco.nsw.gov.au with '**Your Name – Draft CWO REZ Access Scheme Declaration**' in the subject line.

A product of collaboration and detailed analysis

This paper outlines a set of final positions that represent more than a year of public consultation, expert advice, stakeholder workshops and valuable feedback.

Figure 1: Development of the CWO REZ Access Scheme design

The CWO REZ was formally declared on 5 November 2021. It is proposed that the final CWO REZ Access Scheme Declaration will be published in the Gazette in October 2022, ahead of the opening of the NSW Consumer Trustee's first combined competitive tender for the grant of access rights and long-term energy service agreements (LTESAs) in the fourth quarter of 2022.

Consultation commenced with the March 2021 Issues Paper

The Department published a CWO REZ Access Scheme Issues Paper in March 2021, which received over 50 submissions, and hosted a public webinar in April 2021 with around 300 participants. This Issues Paper canvassed 3 potential models for the CWO REZ Access Scheme, including a limited physical connection model and 2 financial compensation models.

December 2021 Consultation Paper provides further design details

Based on this initial consultation process, the Department published the REZ Access Rights and Scheme Design: CWO Consultation Paper (Consultation Paper) in December 2021 for an 8-week consultation period. This Consultation Paper provided draft policy positions for an access scheme in the CWO REZ. These draft positions addressed the overarching design of the CWO REZ Access Scheme as it applies to the access rights network, as well as an access control mechanism for the broader REZ region, and a REZ connections process for the connection of access right holders.

Forty-one stakeholders made written submissions to the Department in response to the December 2021 Consultation Paper. These submissions responded to all or some of the 32 consultation questions posed in the paper, as well as providing more wide-ranging feedback on design issues.

This Positions Paper describes the final positions detailed in the draft CWO REZ Access Scheme Declaration

The draft CWO REZ Access Scheme Declaration and this Positions Paper build on the draft policy positions presented in the Consultation Paper, and consider these in light of stakeholder feedback, further analysis and detailed modelling. This Positions Paper provides additional context and explanation, including information on enabling regulations and contractual arrangements, to support consultation on the terms of the draft CWO REZ Access Scheme Declaration. This includes insights into the analysis and considerations behind policy design features and references to the feedback received on the Consultation Paper as relevant.

CWO REZ Access Scheme Declaration overview

The CWO REZ Access Scheme Declaration sets out eligibility requirements for connecting to the access rights network together with the initial capacity of access rights (in MW) that may be granted to generation, storage, and co-located hybrid projects. An access scheme declaration also outlines the procedures for granting access rights, how and when the amount of capacity granted may be increased, and sets the duration of access rights.

Access schemes will provide investment certainty for generation and storage projects, while promoting efficient utilisation of REZ infrastructure, improving competition, supporting community benefits and keeping downward pressure on energy prices for consumers.

Central-West Orana access rights network

A key purpose of an access scheme declaration is to specify the network infrastructure in a REZ that the access scheme applies to. The following network infrastructure is specified as the access rights network for the CWO REZ Access Scheme:

- all planned and new network infrastructure forming part of the Central-West Orana REZ under the CWO REZ Declaration operating at nominal voltages of 330 kV or 500 kV that is connected to or will connect to the existing network infrastructure operating at nominal voltages of 500 kV connecting Bayswater 500 kV substation, Wollar 500 kV substation and Mt Piper 500 kV substation
- any repair, replacement, extension or augmentation to the network infrastructure specified above that a network operator has been authorised or directed to carry out under section 31(1)(b) or section 32 of the EII Act and any market-led augmentation to the network.

This network comprises the new transmission network infrastructure that EnergyCo as the Infrastructure Planner is procuring for the CWO REZ and accommodates any extensions or augmentations to that network.

2 Access right and scheme design

Overview

An access right authorises an access rights holder to submit an application to connect an approved project to the access rights network at a connection point in accordance with the terms of any applicable Access Right Agreement and the NER (as modified by the regulations). The access rights holder holds an access right for/representing the maximum capacity of the approved project.

The CWO REZ Access Scheme will be a limited physical connections model, with a single tier of access rights, for its duration.

A physical connections model places limitations on the size, nature and operation of generation and storage projects connecting to the access rights network. This model is designed to provide investor confidence by physically restricting the capacity of eligible projects that can be granted access rights using a target level of transmission curtailment.

Access rights may only be granted to an eligible operator in respect of an approved project for a specified maximum capacity. The maximum capacity of all approved projects cannot exceed an aggregate maximum capacity cap. Maximum capacities will initially be awarded to projects as a single flat capacity across a 24-hour period. The Infrastructure Planner may introduce different maximum capacities in different periods following a consultation process. Once introduced, different aggregate maximum capacity caps will apply across different time-of-day periods.

Within the aggregate maximum capacity cap, access rights may only be granted where the eligible project's expected capacity profile does not cause the modelled forecast curtailment of the access rights network to exceed the target transmission curtailment level. If the Infrastructure Planner has also notified a target network element curtailment level for a specific network element within the access rights network, access rights for an eligible project at that network element may only be granted where the forecast curtailment does not exceed the target network element curtailment level.

Access right duration

Declaration position

The initial term of the CWO REZ Access Scheme is the period from the date of the CWO REZ Access Scheme Declaration to 20 years from the date of the electrification of the first network element of the access rights network, as notified by the Infrastructure Planner.

All access rights expire at the end of the initial term, unless the term of the CWO REZ Access Scheme is extended.

The CWO REZ Access Scheme Declaration allows for the term of the CWO REZ Access Scheme to be extended at any time at the discretion of the Infrastructure Planner. The Infrastructure Planner will also conduct a review 5 years before the expiry of the term to consider an extension to the term. The Infrastructure Planner must notify the Consumer Trustee and access right holders if the term is extended.

Policy rationale

The Consultation Paper proposed an access right duration of 15 years. Access rights were proposed to commence upon the commissioning of the first substation on the access rights network with all access rights expiring in unison at the end of the scheme.

The revised policy design for the CWO REZ Access Scheme Declaration allows for projects connecting later (due to staggered connection of projects) to still benefit from a substantial period of improved investment certainty provided by the access scheme, including to accommodate potential augmentations of the access rights network that may facilitate later connections. The term is specific to the CWO REZ Access Scheme and future access schemes may have a different duration.

The Infrastructure Planner will publish a notice on its website of an intention to extend or end the CWO REZ Access Scheme at the expiry of the scheme's term.

Stakeholder feedback

Some stakeholders noted that a shorter duration would provide greater flexibility to adapt to changing market, network and technology conditions.

Most stakeholders expressed a preference for a longer duration access scheme and access right. Stakeholder feedback suggested that a longer duration access scheme would:

- provide greater value to proponents given the expected staggering of commissioning dates
- benefit communities by delivering a coordinated development of renewable energy and transmission projects in the REZ, as well as a longer-term benefit-sharing model
- deliver greater investment certainty in the context of significant uncertainty around the national reform process.

Target transmission curtailment level

Declaration position

Applying the level

The target transmission curtailment level for the CWO REZ Access Scheme is 4.37%.

The target transmission curtailment level will apply for the initial term of the CWO REZ Access Scheme and any increase to the aggregate maximum capacity cap will not affect the level. If the 20-year initial term is extended, the Infrastructure Planner may apply a revised target transmission curtailment level for the term of any extension. This is to allow the flexibility to provide an appropriate and efficient target transmission curtailment level that reflects market conditions more than 20 years on from when the initial level is set.

The Infrastructure Planner may only grant an access right, or grant an increase to the maximum capacity of an access right holder's approved project, where a proposed project's expected capacity profile would not cause the forecast curtailment of the access rights network to exceed the target transmission curtailment level.

The target transmission curtailment level is also the relevant governing limit in a headroom assessment to increase the aggregate maximum capacity cap, described further in 'Headroom assessment' and 'Market-led augmentations' below.

Expected capacity profile

The Infrastructure Planner must determine a project's expected capacity profile. This is the Infrastructure Planner's forecast of that project's available capacity based on a combination of information that represents the project's likely generation profile based on its project characteristics as set in the access rights register and in a project's Access Right Agreements. Initially this is expected to include the representative information for the relevant plant type from the Australian Energy Market Operator's (AEMO's) Integrated System Plan, and the project's own forecast generation profile, and is later proposed to reflect a project's historical available capacity and sent out generation where appropriate. It is anticipated that the expected capacity profiles for storage projects will be based on market modelling. Where the Infrastructure Planner has introduced maximum capacity profiles, a project's expected capacity profile will reflect any reduced maximum capacity in a capacity period; see 'Capacity profiles'.

Aggregate expected capacity profile

The expected capacity profiles of all approved projects together then inform an aggregate expected capacity profile, determined by the Infrastructure Planner, less the Infrastructure Planner's forecast profile of any load connected to the access rights network. Figure 2 provides an illustrative example of how expected capacity profiles may be formulated over the reference year for solar generation, wind generation, and storage technologies, less load.

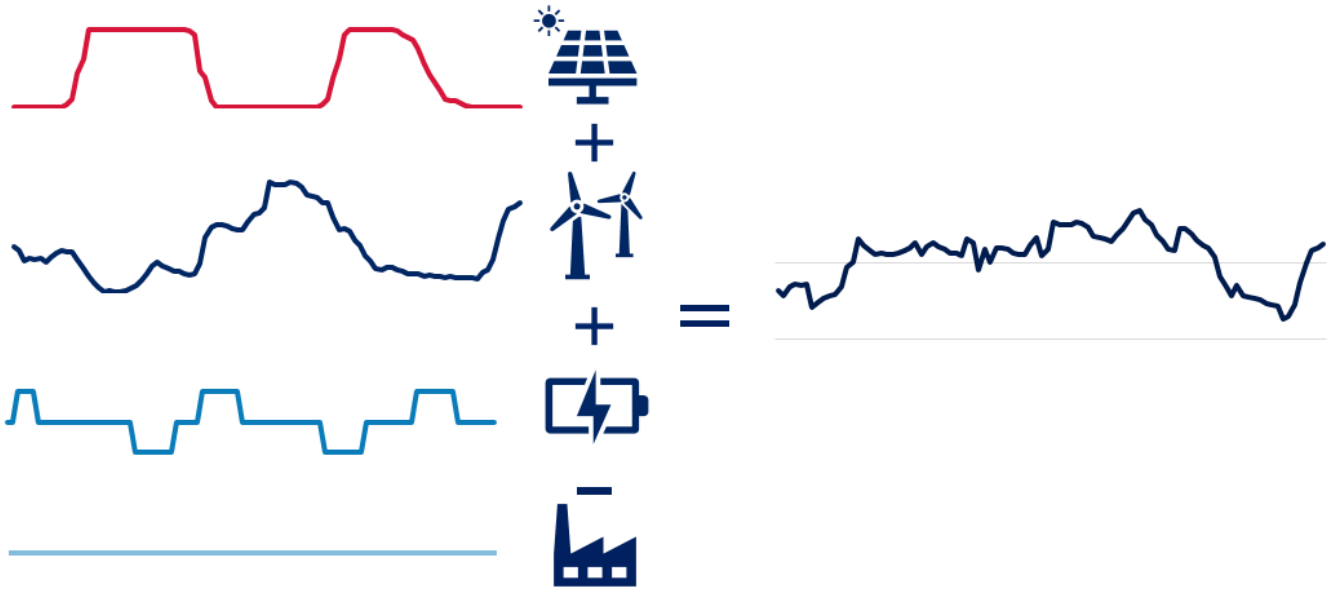

Figure 2: Aggregate expected capacity profile – including indicative solar, wind, storage, and load profiles

Forecast curtailment

Forecast curtailment is calculated on the basis of a modelling exercise. It models the generation that would have been produced (in MWh) under the aggregate expected capacity profile across an identified reference year and evaluates the percentage of this generation that cannot be sent out because it exceeds the transfer capacity of the access rights network as depicted in Figure 3 below.

Forecast curtailment for a reference year can be calculated with the following formula:

$$forecast\ curtailment\ (\%) = \frac{forecast\ curtailed\ electricity}{forecast\ potential\ sent\ out\ generation}$$

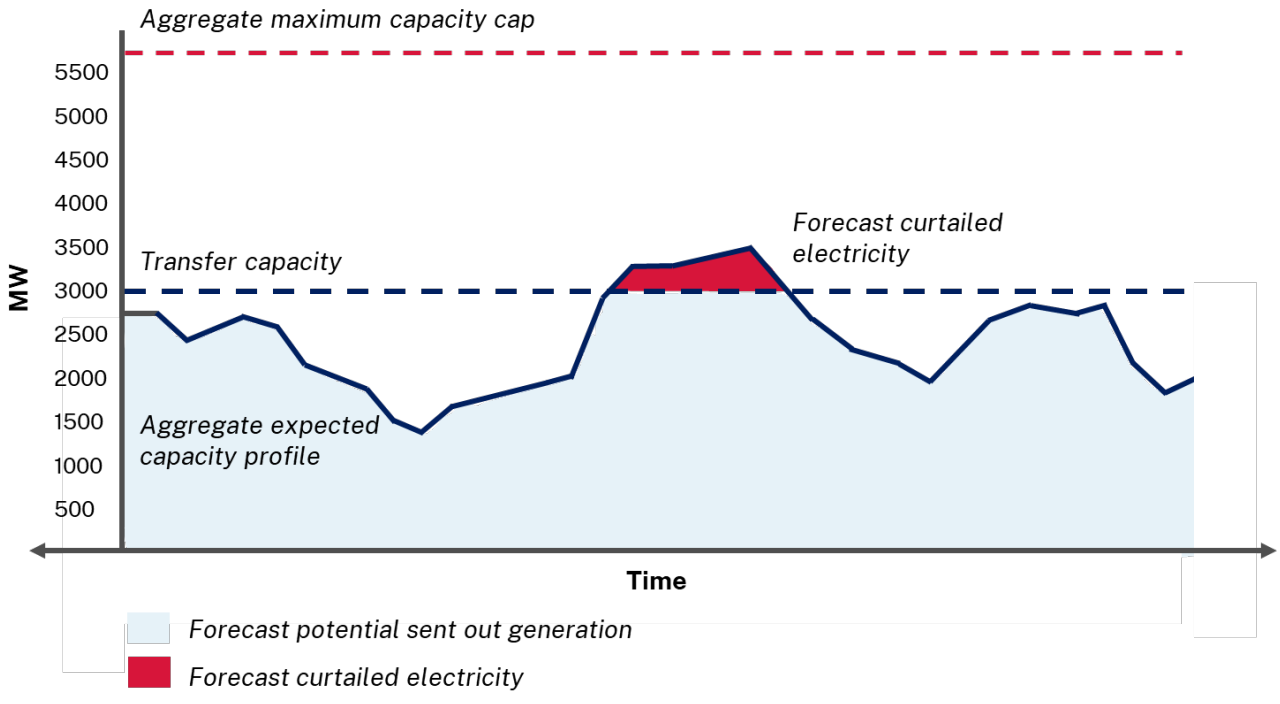

Figure 3: Forecast curtailment

Forecast curtailment can change if (a) the aggregate expected capacity profile is amended to reflect updates in the expected capacity profiles of approved projects and the impacts of load connections, and (b) the transfer capacity of the network increases.

The Infrastructure Planner may notify the Consumer Trustee and access right holders, and publish a notice on its website, of a target network element transmission level for an individual network element.

Policy rationale

In the Consultation Paper, the Department consulted on an indicative aggregate maximum capacity cap of 3.69 GW (the initial volume of access rights for allocation), and an indicative target transmission curtailment level of 0.3%.

Following further modelling and analysis conducted since the Consultation Paper, the target transmission curtailment level for the CWO REZ access network has been updated from the initial indicative level of 0.3% to 4.37% to deliver optimal consumer outcomes by increasing network utilisation. The increased figure aligns with AEMO's Integrated System Plan 2022 and market modelling. This target transmission curtailment level facilitates the higher initial aggregate maximum capacity cap of 5.84 GW.

The scheme design has been revised since the Consultation Paper to apply the additional test that an access right may only be granted where a project's modelled expected capacity profile does not cause the forecast curtailment to exceed the target transmission curtailment level. This test will apply to all projects whether joining through the initial allocation, headroom assessments, or as a market-led augmentation. The test will also be applied where a project seeks to increase its maximum capacity or seeks to make a material change to its project characteristics.

The target transmission curtailment level does not represent a firm curtailment promise but governs the Infrastructure Planner's power to grant access rights through a process that models transmission curtailment on the access rights network at a point in time. It does not reflect the expected curtailment of any individual project connecting to the REZ, which will also be subject to any technical curtailment driven by factors outside of the REZ as well as economic curtailment.

The access right is not intended to remove locational price signals for generators, but rather to give projects enough information to accurately assess these risks. This will better support proponents to engage in lender due diligence processes and achieve financial close for their projects.

The Infrastructure Planner's option to apply a target transmission curtailment level to a network element is intended to protect the value of the access right and provide investor certainty that curtailment is assessed relative to the main network elements of the REZ access rights network. This means that the Infrastructure Planner could nominate a target to prevent certain access right holders from experiencing significantly higher curtailment than the REZ-wide average.

Stakeholder feedback

Stakeholder feedback and further analysis indicated that the target transmission curtailment level should be increased from 0.3% to a higher number. Several submissions noted that the risk of higher curtailment can be priced by investors so long as it remains a consistent long-term target. The increased capacity is proposed to deliver optimal outcomes for consumers by improving network utilisation.

There was a concern among some stakeholders that the level does not reflect curtailment risk from outside of the REZ network. EnergyCo as Infrastructure Planner will not have control over connections to, and therefore curtailment as a result of, this broader network. The draft CWO REZ Access Scheme Declaration intends to provide prospective connecting parties with certainty about how decisions on the levels of capacity oversubscription will be reached on the access rights network. Information provided can then be used by individual project proponents to determine potential nodal-specific curtailment.

Stakeholders also requested that more information be published about the methodology and assumptions used to apply the target transmission curtailment level. Several submissions highlighted the need to include storage, as well as varied meteorological and network conditions, in the curtailment modelling. The draft CWO REZ Access Scheme Declaration provides a high-level outline of the approach the Infrastructure Planner will take to estimating forecast curtailment – the test against the target transmission curtailment level. The draft CWO REZ Access Scheme Declaration also provides for consultation on, and information sharing about, the application of the target transmission curtailment level to headroom assessment and market augmentations.

Capacity caps

Declaration position

The aggregate maximum capacity cap is the limit on the aggregate maximum capacity of approved projects that may hold an access right at any point in time. The initial capacity cap of the access rights network is 5.84 GW. The aggregate maximum capacity cap may be increased by the Infrastructure Planner from time to time following a headroom assessment, including a headroom assessment undertaken as part of a market-led augmentation; see 'Headroom assessment' and 'Market-led augmentations'.

The initial capacity cap is a flat capacity cap across a 24-hour period. Where maximum capacity profiles are introduced the aggregate maximum capacity cap may differ across different capacity periods; see 'Capacity profiles'.

The Infrastructure Planner must notify the Consumer Trustee and access right holders, and publish a notice on its website of any increase to the aggregate maximum capacity cap.

Policy rationale

The Consultation Paper provided an indicative aggregate maximum capacity cap of 3.69 GW. The initial aggregate maximum capacity cap has been revised to 5.84 GW. This revision is based on updated modelling and analysis conducted for EnergyCo by AEMO Services Limited, which brings modelling into alignment with AEMO's Integrated System Plan 2022 forecasts for the CWO REZ. The updated modelling considers the indicative transfer capacity of 3 GW for the access rights network as identified in the initial CWO REZ Declaration.

The revised initial aggregate maximum capacity cap of 5.84 GW also considers significant stakeholder feedback that noted the indicative figure could be increased to optimise investment and benefits to consumers. An initial aggregate maximum capacity cap supports:

- certainty for investors – by providing a clear aggregate maximum capacity, and a process, including consultation, where headroom assessments or market-led augmentations can increase this capacity
- clear market information – as to the MW volume of access available at any point in time
- flexibility for the Infrastructure Planner – to nominate a lower aggregate maximum capacity cap than calculated through a headroom assessment, reserving capacity for future substation expansions and a coordinated staged network build out.

Capacity profiles

Declaration position

A maximum capacity profile relates to the maximum sent out generation in MW across each capacity period for that approved project or eligible project. The Infrastructure Planner may grant an access right to an approved project subject to a maximum capacity profile that sets out different maximum capacity amounts for different capacity periods within a 24-hour day.

Initially, including for the first combined tender, access rights will be granted to projects on the basis of a flat maximum capacity profile across a single 24-hour day capacity period.

The Infrastructure Planner may later elect to implement maximum capacity profiles for the CWO REZ Access Scheme. Before triggering a change to maximum capacity profiles the Infrastructure Planner will first:

- notify the Consumer Trustee, access right holders and publish a notice on its website of the proposed:
  - commencement date
  - capacity periods (including the times of day, and any seasonal variations)
  - methodology for applying profiles
- hold a 28-day consultation period for stakeholders to make a submission on the above
- after considering any submissions received, notify the Consumer Trustee and access right holders, and publish a notice on its website of the:
  - final commencement date for applying maximum capacity profiles
  - final capacity periods
  - methodology for applying maximum capacity profiles.

From the notified final commencement date, new grants of access rights, or new allocations of additional generation capacity to existing access right holders, will be made across different capacity profiles, and a lower or higher maximum capacity may be allocated in different intra-day periods.

At the final commencement date, existing access right holders will be deemed to have their existing maximum capacity amounts, allocated prior to this date, transitioned across as the same maximum capacity across each of the capacity periods. The diagram below provides an example for a 250 MW project.

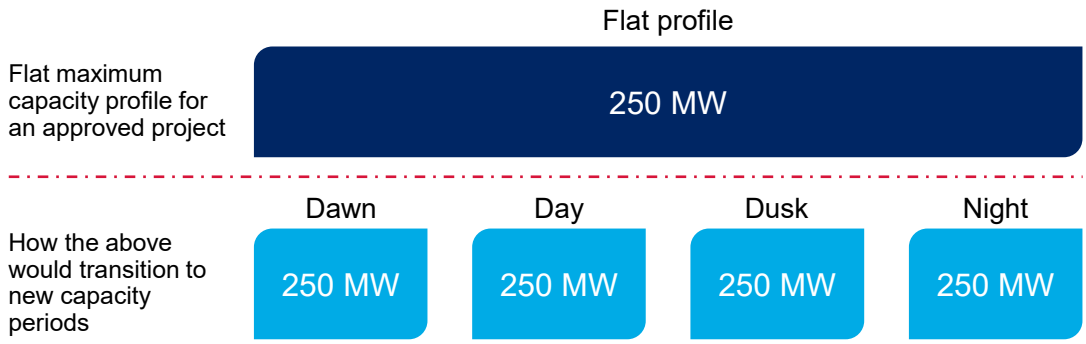

Figure 4: An illustrative example of how an approved project's flat maximum capacity profile would transition to different capacity periods across the day

Where maximum capacity profiles are introduced, proposed regulations limiting the dispatch capacity of access right holders will apply to limit dispatch to a project's highest maximum capacity. It is expected that maximum capacity profiles will be otherwise enforced contractually through an Access Right Agreement.

It is important to note that any project's maximum capacity profile does not limit AEMO's ability to call upon an approved project to dispatch above its maximum capacity when required to support system security and reliability, such as a direction to generate via a lack of reserve process.

Where maximum capacity profiles are introduced, headroom assessments may result in a different aggregate maximum capacity cap across the different intra-day capacity periods; see 'Headroom assessment'.

Policy rationale

The Consultation Paper proposed that access rights be allocated on a maximum capacity profile basis, under which generation and storage projects have capacity limits on their dispatch during 4 defined daily periods: day, night, dawn and dusk. Maximum capacity profiles were included in the REZ access design to mitigate the risk of underutilisation in certain time periods.

For purposes of administrative simplicity, the CWO REZ Access Scheme will commence with the grant of access rights over a single 24-hour capacity period.

The Infrastructure Planner retains the option to introduce maximum capacity profiles across different capacity periods at a later date, following consultation, to allow for greater utilisation of the access rights network. Should this option be implemented, the capacity profiles will include the number and timing of capacity periods and consideration of any seasonal variations that should apply to these periods.

To provide investor certainty and protect the value of the right for existing access right holders, if maximum capacity profiles across different capacity periods are introduced, any existing flat-capacity maximum capacity profiles will be transitioned as the same maximum capacity amount across all new capacity periods.

Stakeholder feedback

Stakeholders expressed concern that maximum capacity profiles could introduce additional complexity for proponents as an additional variable in tender submissions and for the project design. There was a strong view from stakeholders that maximum capacity profiles should be varied through the year to account for the significant seasonal variation in the quantum and duration of solar dispatch through the year. Some stakeholders noted that maximum capacity profiles restriction on operations at different times of day, and therefore revenue, may deter investment in the REZ.

Following consideration of stakeholder feedback, access rights will initially be granted to projects on a flat-capacity basis for the CWO REZ Access Scheme. Varied maximum capacity profiles will only be introduced following further analysis of implementation mechanisms and options for seasonal variation, and following the consultation process outlined in the draft CWO REZ Access Scheme Declaration.

Headroom assessment

Declaration position

The headroom assessment will determine the extent to which the aggregate maximum capacity can be increased to allow the Infrastructure Planner to grant additional access rights, or additional maximum capacity under existing access rights. The Infrastructure Planner must determine whether access rights could be granted without forecast curtailment on the access rights network exceeding the target transmission curtailment level.

The Infrastructure Planner will undertake a headroom assessment as soon as practicable following the completion of the initial allocation; see 'Initial allocation and exhaustion threshold'. Following this initial assessment, a headroom assessment will be conducted once every 2 calendar years for the following 6 years. The Infrastructure Planner has the discretion to notify stakeholders that a headroom assessment is not required in a given year, or to undertake an additional headroom assessment.

If, when conducting a headroom assessment, the Infrastructure Planner finds that forecast curtailment exceeds the target transmission curtailment rate of 4.37%, no headroom will be identified.

If forecast curtailment is found to be less than the target transmission curtailment level, the Infrastructure Planner will:

- identify an indicative technology mix of potential future projects (including potential ratios of types of generation and storage) and create expected capacity profiles for the potential future projects with reference to their technology types
- create a new potential profile that combines the aggregate expected capacity profile of approved projects, together with the aggregate expected capacity profile of potential future projects

- identify the maximum aggregate expected capacity profile of potential future projects that could be granted access rights without the new profile causing forecast curtailment on the access rights network to exceed the target transmission curtailment level; see Figure 5

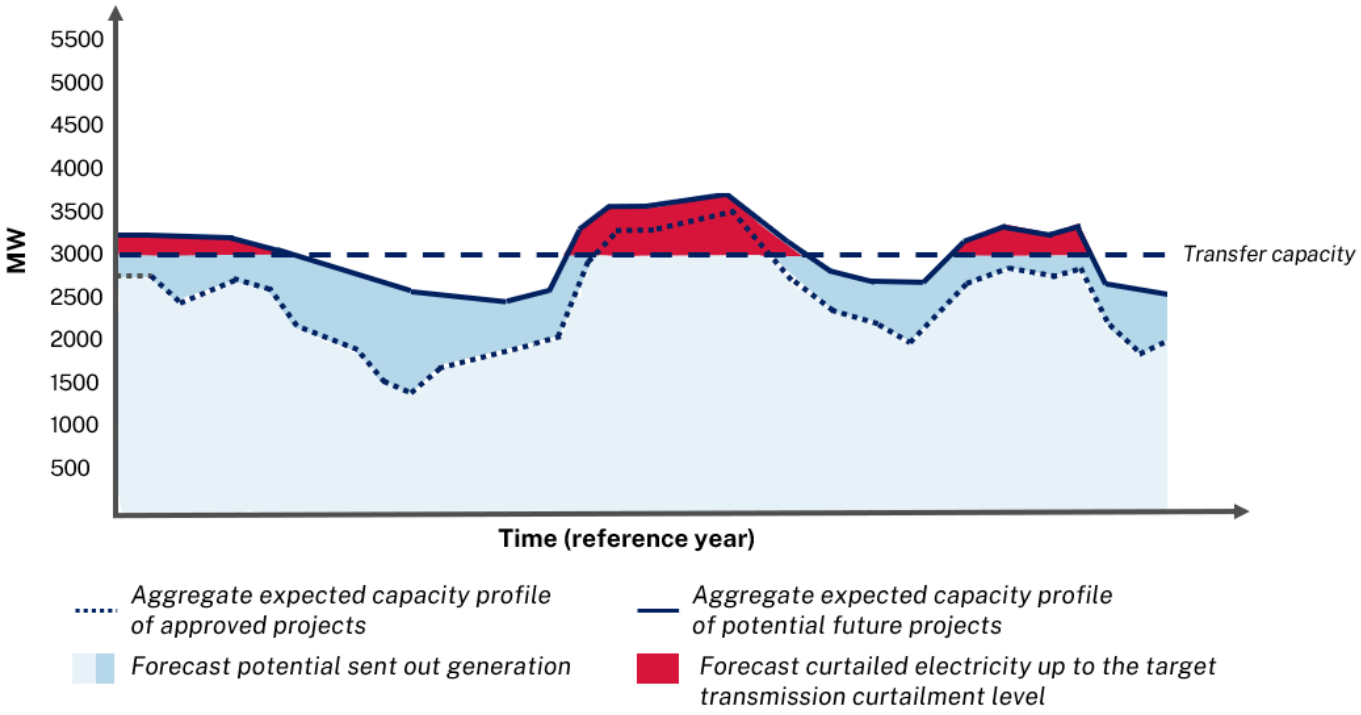

Figure 5: Headroom assessment – identifying the maximum available capacity profile

- identify the aggregate maximum capacity of the relevant potential future projects that could be granted access rights without causing forecast curtailment to exceed the target transmission curtailment level
- calculate headroom as the sum of the aggregate maximum capacity of relevant potential future projects and the aggregate maximum capacity of approved projects, minus the aggregate maximum capacity cap; see Figure 6

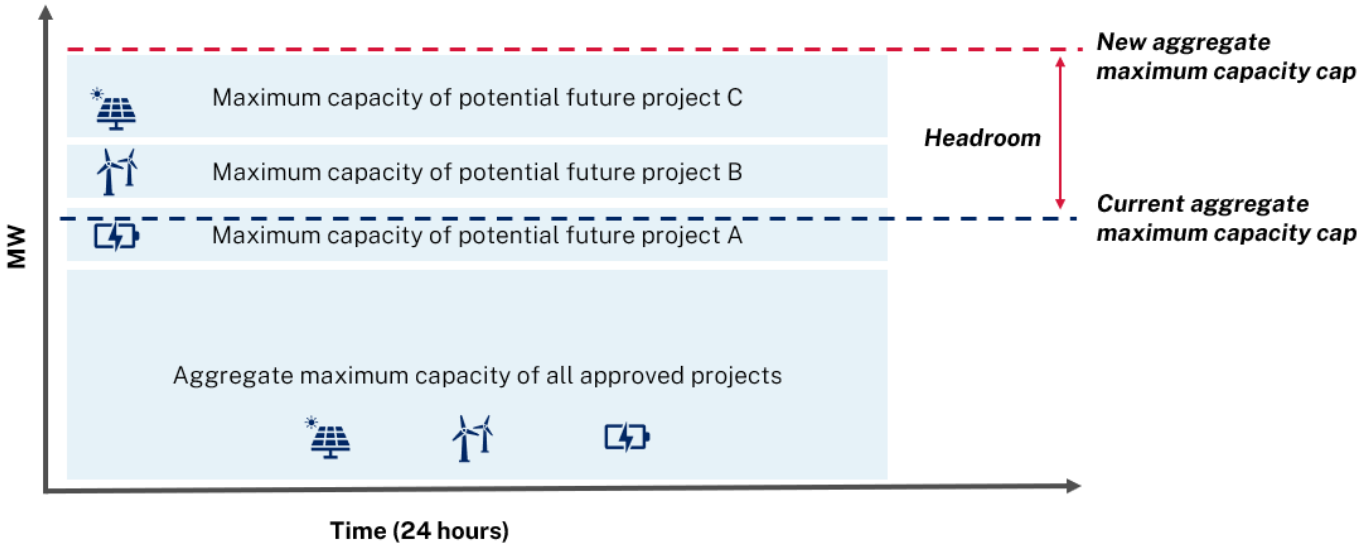

Figure 6: Calculating the new aggregate maximum capacity cap

- where the Infrastructure Planner has introduced maximum capacity profiles, the headroom assessment may identify different quantities of headroom in different capacity periods; see 'Capacity profiles' and Figure 7. This may result where either approved projects hold access rights with different maximum capacities across different capacity periods, or where the Infrastructure Planner identifies potential future projects with different maximum capacities across different capacity periods. This is expected to arise where the access rights network is close to full, and only projects with reduced maximum capacities in times of peak supply could be granted access rights without causing forecast curtailment to exceed the target transmission curtailment level.

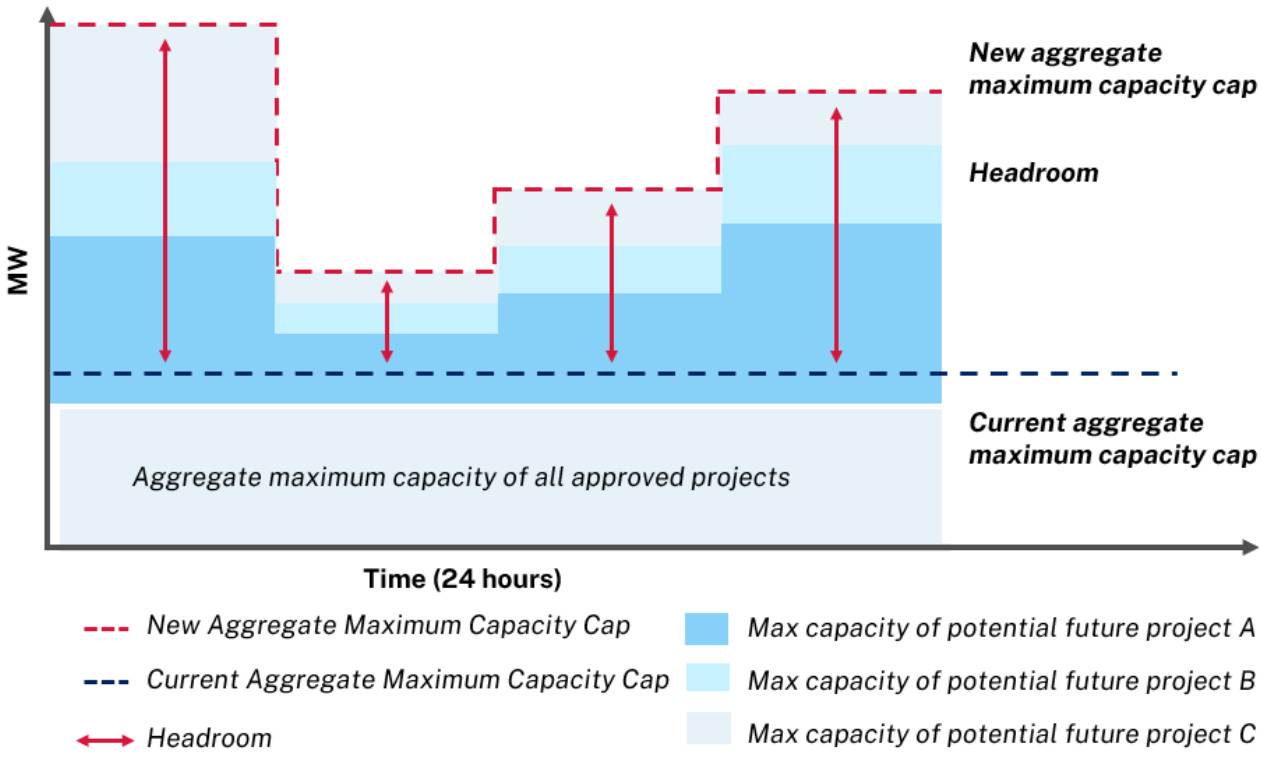

Figure 7: Calculating the new aggregate maximum capacity cap after introduction of maximum capacity profiles

The Infrastructure Planner has discretion to determine a headroom value lower than that identified in the headroom calculation.

Following a headroom assessment, the Infrastructure Planner will consult with stakeholders on its draft determination. The Infrastructure Planner must notify the Consumer Trustee, access right holders and the public of its determined headroom, including the proposed increased aggregated maximum capacity cap (in each capacity period where relevant), the forecast curtailment level, any increase in the transfer capacity and any assumptions made about the aggregate expected capacity profiles or the technology mix of the indicative potential future projects.

Stakeholders will be consulted on the draft determination for a 28-day period, and be invited to make submissions. Following this process, the Infrastructure Planner will notify stakeholders of the final determination of headroom.

Policy rationale

Headroom represents underutilisation of the network relative to the target transmission curtailment level. The Consultation Paper proposed that headroom assessments can help to optimise network utilisation to enable efficient outcomes for NSW consumers.

The draft Access Scheme Declaration provides the market with information on the initial intended frequency of headroom assessments, while giving the Infrastructure Planner flexibility to adapt this as necessary. This can help minimise time and resource expenditure for parties engaging in the consultation process, where there is not expected to be material headroom available.

The Infrastructure Planner also has flexibility to determine a headroom value that is less than the maximum headroom calculated using the methodology. This discretion could reserve capacity for future substation buildouts or accommodate a substantially lower capacity between the REZ and the load centres. This decision will always remain at the absolute discretion of the Infrastructure Planner, acting in accordance with the objects of the EII Act.

Stakeholder feedback

Stakeholder feedback highlighted the importance of transparency in the headroom assessment. Submissions recommended publishing the methodology, relevant data, assumptions, as well as the outcomes of each assessment, to maintain stakeholder confidence. The draft CWO REZ Access Scheme Declaration reflects a requirement for information sharing, and a formal consultation process open to all interested stakeholders.

Network elements

A new scheme design concept has been introduced in the draft CWO REZ Access Scheme Declaration in relation to network elements. This is intended to improve the planning and efficient utilisation of the access rights network, and to provide connecting projects with improved confidence around the target curtailment level within a specified network element. The details of a network element and the policy rationale are outlined below.

Declaration position

At any time throughout the term of the CWO REZ Access Scheme, the Infrastructure Planner may notify the Consumer Trustee and access right holders, and publish a notice on its website, of:

- the transfer capacity of an individual network element
- a target network element curtailment level, for a network element.

A target network element curtailment level will apply for the initial term of the CWO REZ Access Scheme.

If one or more network element curtailment levels have been announced, an access right may only be granted where the project's expected capacity profile does not cause the network element forecast curtailment on that network element to exceed the target network element curtailment level.

The Infrastructure Planner must calculate forecast curtailment on a network element based on its assessment of the forecast curtailed electricity during the reference year as a percentage of the aggregate sent out electricity that could have been sent out if the transfer capacity of the network element was unlimited.

Network element forecast curtailment can be calculated with the following formula:

$$network\ element\ forecast\ curtailment\ (\%) = \frac{network\ element\ forecast\ curtailed\ electricity}{network\ element\ forecast\ potential\ sent\ out\ generation}$$

In relation to market-led augmentations (see section below), the Infrastructure Planner will also take into consideration any determined target network element curtailment level when considering a market-led augmentation.

Likewise, project modifications for a project at a specified network element may only be approved where an increase to the maximum capacity does not cause the network element forecast curtailment to exceed the target network transmission curtailment level.

Schedule 3 of the draft CWO REZ Access Scheme Declaration provides further detail on the steps to assess network element forecast curtailment, and the transfer capacity of a network element.

Policy rationale

The target transmission curtailment level is designed to provide the market with some confidence of the highest level of curtailment on average across a year within the REZ, based on transmission curtailment only (and not economic curtailment).

However, depending on the planning and coordination of generation and storage projects connecting to network elements off the main trunkline of the REZ access rights network, the rate of curtailment at some network elements may be significantly higher than the whole of REZ target transmission curtailment level of 4.37%.

Therefore, to manage these risks and facilitate better outcomes for electricity consumers and project developers, the Infrastructure Planner will have the ability to apply a target network element curtailment level to any network element within the REZ. This will provide the Infrastructure Planner with the tools required to better manage risks for developers and consumers.

Transfer capacity

Declaration position

Transfer capacity of the access rights network

Transfer capacity, for the purposes of assessing forecast curtailment, means the network capacity in MW between the access rights network and the transmission network to which the access rights network is connected. It is calculated as follows.

Initially, the intended network capacity for the network infrastructure in the CWO REZ is 3 GW, as set out in the CWO REZ Declaration dated 28 October 2021.

The transfer capacity can be revised with:

- the intended network capacity of the access rights network that is the subject of a Consumer Trustee's authorisation of a REZ network infrastructure project under section 31(1)(b) of the EII Act, or a direction of the Minister under section 32 of the EII Act, or
- taking into account relevant power system limits following the commissioning of the network infrastructure.

An increase in the transfer capacity can also be created by an Infrastructure Planner-led augmentation or a market-led augmentation.

The Infrastructure Planner must notify access right holders and publish a notice on its website of the access rights network transfer capacity following:

- commissioning of the access rights network
- a headroom assessment
- the commissioning of any augmentation of the access rights network, including a market-led augmentation.

Transfer capacity of network elements

In relation to a network element, transfer capacity means the capacity in MW between that network element and another element on the access rights network. The Infrastructure Planner will initially set any transfer capacity of a network element under the CWO REZ Access Scheme Declaration. The Infrastructure Planner may later revise this capacity where the network element is augmented, including through a market-led augmentation.

Policy rationale

It is important that the CWO REZ Access Scheme design enables the creation and allocation of additional access rights as the REZ is developed, and network capacity is unlocked in stages. The aggregate maximum capacity cap may be increased by the Infrastructure Planner following a headroom assessment, including a headroom assessment undertaken as the result of a market-led augmentation.

The headroom assessment provides a process for confirming an increase in transfer capacity, as well as the modelling methodology associated with increasing available access rights to promote efficient network utilisation. Target transmission curtailment level will be kept consistent to provide market certainty as the transfer capacity is revised over the CWO REZ Access Scheme term.

3 Allocation approach

Overview

The Infrastructure Planner may grant access rights to an eligible operator, or approve an increase in the maximum capacity of an approved project in any capacity period:

In the initial allocation:

a. if the Consumer Trustee has recommended the grant or increase; or

b. in accordance with project modification processes, where the maximum capacity of an approved project will be increased by less than 5% of its original maximum capacity during that capacity period.

Once the initial allocation has been completed:

c. at the discretion of the Infrastructure Planner, including where the eligible operator has committed to fund a market-led augmentation; or

d. in accordance with a project modification process.

The eligible operator must have entered into an Access Right Agreement before the Infrastructure Planner may grant an access right.

Initial allocation and exhaustion threshold

Declaration position

The initial allocation refers to the grant of access rights, on the recommendation of the Consumer Trustee, up to the initial aggregate maximum cap of 5.84 GW.

The draft CWO REZ Access Scheme Declaration provides that the Infrastructure Planner may determine that the initial allocation has been completed before the full award of 5.84 GW, by notifying the Consumer Trustee and access right holders, and publishing a notice on its website, if:

- the aggregate maximum capacity of approved projects granted access rights under the initial allocation exceeds 90% of the initial aggregate maximum capacity cap; or
- it does not reasonably expect that significant further access rights may be awarded in the initial allocation without forecast curtailment exceeding the target transmission curtailment levels in relation to the access rights network or a network element.

Regulated position

Proposed regulations will allow the Consumer Trustee to:

- conduct competitive tenders in relation to access rights
- following a competitive tender, recommend the grant of access rights (or increase in the maximum capacity of an access right) to the Infrastructure Planner, in accordance with an access scheme declaration.

Regulations are also proposed to require the Consumer Trustee to make and follow rules in relation to competitive tenders and to consult on these rules with the Infrastructure Planner.

Policy rationale

The Consultation Paper proposed that headroom assessments to identify additional capacity on the access rights network may be run only after the initial aggregate maximum capacity cap of the access rights network is exhausted. The trigger for the initial allocation to be deemed 'exhausted' was not defined. This could create a risk that an amount of remaining capacity is left unassigned to any project, and may be too small an amount to assign to an eligible project. This could prevent the ability to progress to further allocations under a headroom assessment or market-led augmentation.

The process outlined in the CWO REZ Access Scheme Declaration provides a mechanism to deem the initial allocation exhausted and to progress to a headroom assessment, while also providing bounds on the circumstances in which the Infrastructure Planner may make this determination.

Eligibility requirements

Declaration position

Access rights may only be granted to an eligible operator for a proposed renewable generation, storage, or co-located hybrid infrastructure project that meets the eligibility criteria in Schedule 2 of the draft CWO REZ Access Scheme Declaration. All eligible projects must be located within the geographical boundary of the Central-West Orana REZ.

The table below outlines the minimum eligibility requirements for the grant of access rights for the CWO REZ Access Scheme Declaration. The Infrastructure Planner may amend or add to these requirements at a later date.

Project type	Initial allocation eligibility requirements
Generation project	• Projects that involve generation from a renewable energy source with a maximum capacity of 30 MW or above • Multiple projects with a capacity of less than 30 MW may aggregate the capacity of their generating units, if they are connected at the same connection point • Any size of generation infrastructure project awarded a firming infrastructure LTESA

Project type	Initial allocation eligibility requirements
Co-located hybrid infrastructure project	• Projects that involve generation from a renewable energy source, where the sum of the generation and storage components has a maximum capacity of 30 MW or above • Multiple projects with a capacity of less than 30 MW may aggregate the capacity of their generating units, if they are connected at the same connection point • Any size of co-located hybrid infrastructure project awarded a firming infrastructure LTESA
Storage	• Any size of storage plant is eligible to apply, including standalone short duration storage systems (SDSS)

Following the initial allocation, projects from the 3 categories in the table above with any maximum capacity are eligible, providing generation and co-located hybrid projects involve generation from a renewable energy source. However, generation or co-located hybrid projects awarded a firming LTESA will not be bound to involve generation from a renewable energy source.

Policy rationale

The Consultation Paper outlined a draft position that standalone short duration storage would be ineligible for access rights in the initial allocation. The final design position is that standalone short duration storage projects will be eligible to participate in the initial allocation alongside generation projects, co-located hybrid projects and long duration storage. This change will allow the value of standalone short duration storage projects to be leveraged across wholesale market and network services sooner than the draft position outlined. This position is consistent with a technology neutral approach and does not introduce competitive distortions between technologies.

Connections by distribution network service providers, transmission network service providers (TNSPs) and load (plant that consumes electricity, other than generation or storage plant), are not eligible for access rights but may be permitted to connect to the access rights network with the written approval of the Infrastructure Planner. This approval will consider the network service provider's or load's impact on access right holders and the objects of the Act.

Stakeholder feedback

The Consultation Paper received considerable stakeholder feedback advocating for the inclusion of SDSS in the initial allocation. These submissions reinforced the position that storage can enable efficient outcomes for NSW consumers by optimising network utilisation and creating more headroom for generation projects to hold access rights. Including SDSS in the initial allocation is also consistent with the following Objects of the EII Act:

- to improve the affordability, reliability, security and sustainability of supply
- to coordinate investment in new generation, storage, network and related infrastructure.

Allowing SDSS to seek access rights in the initial allocation could unlock a range of energy services and network services these technologies can provide. These include reducing curtailment through load-shifting, frequency control, system strength, and system restart support.

Stakeholders also raised concerns that the exclusion of standalone SDSS from the initial allocation was inconsistent with the principle of technology neutrality and could lead to inefficient investment outcomes. In response to this considered feedback, the eligibility requirements have been revised to incorporate standalone short duration storage.

Market-led augmentations

Declaration position

A market-led augmentation means an augmentation of the access rights network that is funded by one or more eligible proponents. Market-led augmentations may:

- increase the transfer capacity of the access rights network, and following a headroom assessment, result in an increase to the overall aggregate maximum capacity cap of the REZ
- increase the transfer capacity of an individual network element, allowing a project to connect where it would otherwise have caused the network element forecast curtailment on that network element to exceed the target network element curtailment level. An increase in the transfer capacity of a network element will not result in an increase to the overall aggregate maximum capacity cap.

One or more eligible operators may propose a market-led augmentation to the access rights network or an individual network element by a written application to the Infrastructure Planner.

The eligible operator(s) proposing the market-led augmentation must pay the Infrastructure Planner's costs of undertaking the assessment and consultation process. The eligible operators will also have any resulting increase to the aggregate maximum capacity cap or increased transfer capacity of an individual network element identified via headroom, made available to the eligible project(s) for which the market-led augmentation was proposed.

In assessing the market-led augmentation, the Infrastructure Planner will determine whether the increased aggregate maximum capacity cap is sufficient to allow connection of the proposed project to the access rights network without causing forecast curtailment to exceed the target transmission curtailment level or target network element curtailment level.

The Infrastructure Planner must assess the increased transfer capacity of the access rights network, how the market-led augmentation will be implemented, and how the proposal can be managed with any other proposals to augment the network.

A draft determination will be made publicly available for at least 28 days for consultation. The Infrastructure Planner will notify the eligible operator(s) of the final determination, including the increased transfer capacity of the access rights network or a network element, the expected headroom resulting from the augmentation, the revised aggregate maximum capacity cap and any assumptions made about technology mix. The Infrastructure Planner has discretion to reject any proposal.

Policy rationale

The Consultation Paper identified a mechanism for the market to propose an augmentation to the access rights network to allow the creation of additional access rights without harming existing access right holders. As identified in the stakeholder feedback, there are a range of metrics that could be used in a 'do no harm' methodology to define and assess the 'harm' impact of a market-led augmentation.

The draft CWO REZ Access Scheme Declaration helps to protect existing access right holders through a test that the project connecting following a market-led augmentation will not cause forecast curtailment to exceed the target transmission curtailment level. This provides access right holders with greater certainty and ability to forecast NEM locational price signals such as marginal loss factor and curtailment.

Stakeholder feedback

Certain stakeholders expressed concerns about whether a 'do no harm' test would deliver the best outcomes for NSW consumers. These submissions noted that the complexity and administrative burden of do no harm assessments may outweigh the benefits; while other submissions suggested that the approach may protect the interests of access right holders at the expense of projects that would be more beneficial for consumers.

Project modifications

Declaration position

Maximum capacity

The Infrastructure Planner may only approve and grant an increase in the maximum capacity of an approved project if:

- the increase in maximum capacity will not cause a breach of the aggregate maximum capacity cap
- the increase in maximum capacity will not cause the forecast curtailment to exceed the target transmission curtailment level or, if relevant, a target network element curtailment level.

Where the maximum capacity of an approved project will be increased by less than 5% of its original maximum capacity during the capacity period, the Infrastructure Planner may, in its absolute discretion, grant additional access rights directly to the access right holder. The Infrastructure Planner must notify the Consumer Trustee of its proposal to approve the increased maximum capacity.

Project characteristics

An access right holder may only make a material change to its project characteristics if the change has been approved by the Infrastructure Planner. The Infrastructure Planner has discretion to determine whether a proposed change to the project characteristics of an approved project will have a material impact on a project's expected capacity profile. The Infrastructure Planner must determine whether the change can be accommodated without causing the forecast curtailment to exceed the target transmission curtailment level.

Access Right Agreements

Access Right Agreements refers to the Project Development Agreement and any other agreements between an eligible operator and the Infrastructure Planner or Scheme Financial Vehicle relating to the development or operation of a project.

While the draft CWO Access Scheme Declaration includes a mechanism for projects to modify project characteristics, with Infrastructure Planner approval, the Access Right Agreement may provide further details and parameters, in accordance with the process outlined in the declaration. Updates may include either increases or reductions in a project's maximum capacity.

Policy rationale

When projects make bids for access rights, they will be required to provide details of the characteristics of their project, including technology composition of the generator or storage plant. These project characteristics will be included in the Access Right Agreement.

The treatment of a project modification request will differ depending on the nature of the requested modifications, and at what point in the connections process the request is made. It is important that there are processes in place to accommodate changes and that project modifications are not unnecessarily restricted. Permitting modifications will support innovation and the adoption of emerging technologies over time, as well as improving outcomes for NSW electricity consumers.

Stakeholder feedback

Stakeholder feedback demonstrated that modifications to project characteristics may be proposed pre-commissioning and post-commissioning and may be driven by a variety of factors. Submissions noted that project modifications should not be unnecessarily restricted given the incremental cost of an expansion or technology addition may be more cost-effective than developing a new project. Stakeholders provided a list of reasons that modifications to project characteristics may be required, which included:

- technology changes – specification, availability, and cost changes
- connection changes – connection costs, timeframes, and requirements
- market changes – unforeseen changes in energy or ancillary service value, which could change project economics
- regulatory changes – policy changes that change operating incentives or make installation of storage more economic
- planning assessment and community requirements – feedback from community stakeholders or requirements of the planning approvals process.

4 Access control mechanism

An access control mechanism is proposed as a mechanism that restricts the connection of load or generation to network infrastructure identified in a REZ declaration under section 19 of the EII Act, other than the access rights network. Its purpose is to provide an opportunity to manage the future planning of connections to network infrastructure where such connections are expected to have a significant impact on an access rights network.

An access control mechanism, if introduced, would not impact existing connected projects, or projects that are substantially progressed in their development, such as projects that have submitted, or will shortly submit, an application to connect.

Under the EII Act, an access control mechanism can only apply to infrastructure identified in a REZ declaration under section 19 and cannot impact other infrastructure outside of the declaration.

Declaration position

No access control mechanism is proposed for the Central-West Orana REZ.

The CWO REZ Access Scheme Declaration only creates an access rights regime. An additional access scheme could be declared over networks within the Central-West Orana REZ, if an access control mechanism is required in the future.

Policy rationale

The Consultation Paper proposed the introduction of an access control mechanism that would apply to existing network infrastructure, over 66 kilovolts (kV), identified in the CWO REZ Declaration as published on 5 November 2021. Two implementation options explored were to:

- control access by requiring projects seeking to connect to the access control network to participate in a merit evaluation through the competitive tender allocation process
- control access through a separate additional 'do no harm' test.

Following stakeholder feedback, it is instead proposed that the Infrastructure Planner will continue to work collaboratively with Essential Energy and Transgrid on network planning matters to reduce the risks of future detrimental impacts on the access rights network. It is proposed that the parties will share information on future network changes that might result in adverse impacts on access right holders; for example, an augmentation to an existing transmission line that might result in significant new generation connecting in or close to a REZ.

Further protection is provided by the requirement for the Infrastructure Planner to approve any application by a network service provider to connect a transmission network or distribution network to the access rights network. In considering an application the Infrastructure Planner will have regard to the impact of the proposed connection on existing and future access right holders and the objects of the EII Act.

If significant impacts are identified, the Minister may declare an additional access scheme, or amend the CWO REZ Access Scheme Declaration, to implement an access control mechanism. Any such scheme would be consulted on, and it is proposed that the scheme would include measures to protect parties such as generation or storage proponents that are already connected to the relevant network, or that are substantially progressed in their development or in the connection process.

Stakeholder feedback

Stakeholder feedback focused on whether introducing an access control mechanism is necessary to mitigate risks to REZ access right holders. There were diverse views amongst stakeholders, with submissions highlighting the need to protect value for access right holders or enable ongoing investment in the CWO REZ.

Stakeholders raised concerns that a control mechanism would disincentivise investment in the region that could support the delivery of low-cost new generation in NSW without adversely impacting access right holders. These submissions also considered that enough complementary measures are in place to provide access right holders with the investment certainty required.

5 Activating the access scheme

Amendments to the declaration

Declaration position

A 'Declaration Change Proposal' may be made by the Minister after considering any advice from the Infrastructure Planner. The Infrastructure Planner must give notice to access right holders of the Declaration Change Proposal and seek submissions on the proposed amendments over a 28-day exhibition period.

If the Minister wishes to proceed with the Declaration Change Proposal the Minister must:

- take into consideration advice provided by the Infrastructure Planner, including whether the proposal will have an adverse impact on access right holders
- provide notice of the updated Declaration Change Proposal by publishing it on the Infrastructure Planner's website
- seek and consider submissions from any person on the updated Declaration Change Proposal
- invite access right holders to vote on the final Declaration Change Proposal.

If the Infrastructure Planner considers that the final Declaration Change Proposal will have a material adverse impact on access right holders, the final Declaration Change Proposal will be subject to the approval of access right holders. The Minister may only implement the final change proposal if:

- access right holders representing more than 75% of aggregate maximum capacity vote in favour of the final Declaration Change Proposal, or
- more than 75% of access right holders voting, vote in favour of the Declaration Change Proposal.

Voting on a final Declaration Change Proposal must be conducted in accordance with voting procedures notified to access right holders by the Infrastructure Planner.

Policy rationale

The EII Act includes provisions for the amendment of an access scheme declaration. Specifically, Section 28 of the EII Act states that the Minister may amend an access scheme declaration in the following circumstances:

a. to correct a minor error or misdescription
b. to provide further details and specifications about information contained in the declaration
c. if there are no participants in the access scheme immediately before the declaration is amended
d. if the amendment is made in accordance with the terms of the access scheme.

The mechanism included in the draft CWO REZ Access Scheme Declaration is designed to maintain investor confidence by protecting the value of their access right, while future-proofing the scheme. It is important to accommodate amendments to allow the scheme to remain fit for purpose for its 20-year duration.

Amendments to the CWO REZ Access Scheme Declaration may be required for several reasons, including to:

- enable the introduction of new mechanisms into the CWO REZ Access Scheme in the future, if the need arises; for example, because additional controls are required to protect the rights of access right holders
- enable the CWO REZ Access Scheme to evolve as necessary where there are changes to the market or regulatory arrangements, such as changes to the access framework in the National Electricity Law/NER.

Contracts

Policy rationale

The Consultation Paper proposed the following key agreements to support the delivery of the CWO REZ Access Scheme and the CWO REZ (Figure 8). These documents are linked to and interact with both the CWO REZ Access Scheme Declaration and the access rights register.

Figure 8: Contracts to support the delivery of the CWO REZ Access Scheme

Access Right Agreement

Access Right Agreement refers to a Project Development Agreement and other agreements to be entered into between an eligible operator and the Infrastructure Planner or Scheme Financial Vehicle relating to the development or operation of a project.

Access Right Agreements are proposed to set and monitor the competitive tender bid undertakings, including:

- project development and high-level milestones
- reporting requirements
- security payments/bonds
- social licence commitments.

The agreements may also include information on the characteristics of approved projects, including technical specifications. Material changes to project characteristics require the approval of the Infrastructure Planner under the draft CWO REZ Access Scheme Declaration. For further information on project modifications see 'Project modifications'.

It is expected that Access Right Agreements will also provide for the relevant payments under the CWO REZ Access Scheme including:

- system strength charges payable by project operators
- access fee payment structures.

Access Right Agreements may also provide for construction terms to facilitate the coordination of approved projects, and the design and construction of the access rights network.

The Department may publish the terms of Access Right Agreements for prospective bidders to review. Additionally, the Consumer Trustee will also publish tender guidelines and an indicative access fee that will provide further information ahead of the combined tender.

Connection Agreement

The Consultation Paper proposed that the Connection Agreement be a tripartite agreement between the proponent, primary TNSP and Network Operator. This policy position has been revised and parties connecting to the access rights network will be required to enter into a bilateral Connection Agreement with the Network Operator. Parties may also be required to enter into a separate agreement with Transgrid if appropriate pending finalisation of the roles of the relevant network service providers.

To ensure consistency, accountability and clarity of roles across the proposed contractual agreements to give effect to the CWO REZ Access Scheme, it is anticipated that with respect to an approved project the same legal entity, on behalf the project proponent, shall act as:

- counterparty to the Access Right Agreement(s)
- registered access right holder
- Registered Participant under the Rules authorised to make an application to connect and enter into a Connection Agreement.

This position is still under development and may be subject to change following further feedback. Flexibility may be required to accommodate arrangements where relevant legal entities are not yet established.

Project Deed

The Project Deed authorises the Network Operator to design, build, own and finance the access rights network. It is proposed that the Project Deed will incentivise timely completion by making the start of service payments to the Network Operator dependant on stages in the access rights network and projects becoming operational.

The Project Deed will include a performance regime applicable to the Network Operator to incentivise good performance, including in the areas of availability, reliability and planned outages.

Under the performance regime, the amounts will be deducted from the service payments for poor performance. The performance regime is proposed in place of a regulatory incentive scheme for unplanned outages, planned outages and network availability.

Long-term energy service agreement

The LTESA is an optional contract granting projects a series of rights, but not an obligation, to access a minimum cash flow for their energy services during the term of the agreement. Both access rights and LTESAs will be offered through the combined competitive tender process run by the Consumer Trustee. Parties seeking an access right to connect to the access rights network may also seek an LTESA, or may apply for an access right without an LTESA.

Where a project seeks both an access right and an LTESA, the Project Development Agreement is expected to contain terms concerning the development or operation of the project that are common to both an access right and an LTESA.

Further details can be found in the market briefing note for competitive tender participants in CWO REZ.

6 Access fees

Community and employment purposes

Regulated position

Under the EII Act the access fees determined by the Consumer Trustee must include components that are to be used for community and employment purposes. The purposes will be prescribed by regulations and will apply consistently for all access schemes across all REZs. These regulations, together with regulations for the minimum community and employment components of an access fee, are expected to come into force in mid-2022.

The proposed regulations for community and employment purpose categories are set out below:

Purpose	Proposed regulation
Community purpose	A 'community purpose' includes a program, service or infrastructure that falls within one or more of the following categories: • public and community services and infrastructure • health services and infrastructure • accommodation and housing supply • local and regional energy programs and infrastructure • environmental programs and infrastructure • parks and recreation infrastructure • research, education, creative arts and cultural programs • tourism programs and infrastructure • services, programs or infrastructure that support First Nations people • any program, service or infrastructure that provides a benefit to a local community in the geographic area that forms a REZ.
Employment purpose	An 'employment purpose' includes a program, service or facility that falls within one or more of the following categories: • employment programs, services and facilities • skills and training programs, services and facilities • any program, service or facility that supports a person to gain employment, skills or experience relevant to employment opportunities in the geographic area that forms a REZ.

Policy rationale

The proposed regulations for community and employment purpose categories were drafted broadly to ensure sufficient flexibility for REZ communities to access funding for a variety of projects. The categories in the regulations will apply to all REZs, and the broad drafting ensures that each REZ community's regional and local needs can be considered.

Community and employment amounts

Regulated position

The EII Act provides that regulations may prescribe the minimum and maximum amounts that are to be used for community and employment purposes. As community and employment amounts are a component of the total access fee determined by the Consumer Trustee, the amount/proportion of funding for community and employment purposes is dependent on the total value of the access fee.

Proposed regulated minimum amounts

The regulations will prescribe the minimum amounts that are to be used for community and employment purposes in 2 circumstances.

The first circumstance will apply where the total access fee for a participant in the access scheme is equal to or greater than $2600/MW/year. In this circumstance, the minimum amount of the total access fee that is to be used for community and employment purposes is expected to be:

- $1,700/MW/year for community purposes
- $600/MW/year for employment purposes.

The second circumstance will apply where the access fee for a participant in the access scheme is less than $2600/MW/year. In this circumstance the minimum proportion of the total access fee that is to be used for community and employment purposes is expected to be:

- 60% of the annual access fee for community purposes
- 20% of the annual access fee for community purposes.

Maximum amount

The regulations will not prescribe a maximum. While regulations set a minimum figure, it remains open to the Consumer Trustee to set a higher community and employment component when setting an access fee for each tender round and for each REZ.

Indexing and access right extension

For both community and employment purposes, the minimum amount of the total access fee may be indexed by the Consumer Trustee when determining the access fee payable under section 26(1) of the EII Act. As the regulations set the minimum for all future access fees, indexing allows the nominal value to increase over time, in the same manner as the total access fee.

To allow project proponents to accurately estimate project costs, the regulations reflect that where an access right is extended under the terms of the declaration beyond the initial term for a participant in the access scheme, the minimum amount that is to be used for community and employment purposes is $0.

Community and employment programs

Further regulations are under development to enable the disbursement of community and employment components of the access fee from the Electricity Infrastructure Fund (via the Scheme Financial Vehicle) to EnergyCo to facilitate the management of community and employment programs.

Policy rationale

In proposing the regulated minimum amounts for community and employment purposes, EnergyCo considered and analysed a range of factors to ensure the amounts could achieve the objectives of the EII Act including fostering local community support and creating employment opportunities within the REZ community. When determining the optimum amount for community and employment components, EnergyCo considered the following factors:

- the desired outcome of supporting initiatives that make a genuine and meaningful impact to REZ communities
- the current value of benefit sharing paid by project proponents
- the impact on NSW electricity consumers
- the feasibility for project proponents
- the proposed value of the access right (access fee).

The regulated minimum provides a guarantee to REZ communities that a certain amount or percentage of the total access fee will be dedicated to community and employment programs.

The absence of a regulated maximum provides further flexibility as it gives the Consumer Trustee the ability to set the community and employment components of the access fee higher where the value of the access rights allows it.

Stakeholder feedback

The Department received mixed stakeholder feedback on the quantum and principles for setting the access fee discussed in the Consultation Paper. Project proponent stakeholders would prefer lower access fees to ensure projects can connect and that the in-REZ-ex-REZ playing field is level. Community group stakeholders indicated a strong preference for higher access fee contributions, to ensure the community and employment programs can be funded at levels above and beyond current project proponent contributions.

Several stakeholders highlighted that it was important that existing or planned community benefits provided by project proponents were taken into account when calculating the total access fee. Project proponent benefit sharing initiatives will be recognised through the merit criteria assessment of the combined tender via higher overall scores for committed and planned community benefits.

The Consumer Trustee is expected to publish a draft CWO access fee determination that will include the total access fee and the community and employment amounts.

7 System strength provisions

Centrally provided system strength

Policy position

Initial system strength requirements for the access rights network are intended to be provided by the Network Operator delivering the access rights network and it will form part of the network specification under the Project Deed. The Network Operator's efficient costs of meeting initial system strength requirements will be included in the Network Operator's revenue determination and recoverable from the Scheme Financial Vehicle. It is intended that the Scheme Financial Vehicle will then be substantially reimbursed through fees collected (potentially by EnergyCo) from connecting projects. It is expected that this fee will be charged to connecting projects through an Access Right Agreement.

To provide investors with certainty over their system strength charges, it is proposed that the method for calculating the system strength charge will be provided to prospective bidders ahead of the competitive tender.

To ensure projects are not double-charged for the supply of system strength through both the above fee and the NER system strength charge, projects that:

- have contributed to the costs of the system strength provided by the Network Operator will have their system strength quantity for the purposes of the NER system strength charge reduced accordingly. For CWO REZ, it is proposed that generators allocated access rights in the first tender will contribute to the costs of system strength provided by the Network Operator. This contribution will be reflected in a system strength quantity of zero so they are not exposed to the system strength charge under the NER[1] unless the project is altered following connection
- have not paid fees to contribute to the costs of the system strength provided by the Network Operator or who subsequently alter their plant resulting in an increased demand for system strength, will be exposed to the NER system strength charge.

Any ongoing system strength requirements will be met by the system strength service provider under the NER and, subject to the above, the system strength charge under the NER will apply.

Policy rationale

The Consultation Paper proposed a coordinated, centralised approach to the provision of system strength for the access rights network. This is intended to achieve efficiencies in design and procurement. This will avoid the need to undertake full system strength impact assessments for

[1] References to the system strength charge in this paper are references to the system strength charge as it will apply under the NER on commencement of the AEMC rule change *Efficient management of system strength on the power system*.

each project individually and assess system strength remediation schemes during the connection process. It should also reduce the inefficiencies that can be created by decentralised provision of system strength.

Under the Consumer Trustee authorisation and Project Deed between the Network Operator and EnergyCo, the Network Operator will deliver specified system strength requirements designed to ensure stable network operation up to the initial aggregate maximum capacity cap of the Central-West Orana REZ, at the time of design.

8 REZ connection process

Declaration position

Participants in the access scheme, including any Network Operator and operator of generation and storage plant proposing to connect to the access rights network, must comply with REZ Access Standards and any processes established to coordinate the connection of multiple plant to the access rights network. These processes will include the collection and use of generation and storage plant data, the modelling of generation and storage plant performance standards and assessing system impacts of multiple generation and storage plant connections:

- notified to operators of generation and storage plant by the Infrastructure Planner or Network Operator;
- set out in a participant's relevant access right agreements; or
- as otherwise set out in the Rules (as modified by regulation).

It is proposed that this streamlined REZ connection process may be implemented after the declaration is gazetted but before any participants commence the connection process. In the interim, those seeking to advance connections ahead of any streamlined connection process should contact the Infrastructure Planner. If a REZ connection process is not implemented, connection will continue to be governed by the NER.

Policy rationale

The Consultation Paper proposed a streamlined REZ connection process (Figure 9) to expedite the connection of generator and storage projects to the access rights network and achieve time and cost efficiencies. Key elements of the REZ connection process that are intended to increase certainty are:

- setting of REZ Access Standards that all generation and storage projects connecting to an access rights network will be required to meet, and network service providers and AEMO are required to accept, without negotiation
- processing of connection power system studies for access right holders in a batch.

Stakeholder feedback

Stakeholders generally supported streamlining connections to an access rights network and agreed this process would provide more certainty of timeframes. Some stakeholders flagged risks to achieving a REZ connection process including the complexities of managing batched power system studies, intention to require unencrypted generator technical models to be provided, implications of batched power system studies on projects seeking connection outside a REZ and challenges providing 'final' plant models earlier than generally required under the NER connection process.

Since the Consultation Paper was published, EnergyCo, in collaboration with AEMO and Transgrid, developed the REZ Access Standards specifying the technical requirements generation and storage projects that are allocated access rights in the first competitive tender for the CWO REZ will be required to meet in order to connect to the access rights network. Draft REZ Access Standards were subject to extensive consultation in April and May 2022, with industry feedback taken into account in the Final REZ Access Standards. The Final REZ Access Standards were published on 23 June 2022 on the EnergyCo website.

The table below outlines how stakeholder feedback was considered in the final design of the REZ connection process.

Design feature	Status	Position in December 2021 Consultation Paper	Updated position
REZ Access Standards (REZ GPS and REZ IBR Standards)	**Maintain position**	The Consultation Paper proposed that proponents be required to meet a non-negotiable set of REZ Access Standards as a condition of being allocated an access right.	Draft REZ Access Standards were subject to extensive industry consultation and finalised, taking into account stakeholder feedback. The Final NSW REZ Access Standards intended to apply to access right holders are published on EnergyCo's website.
Batching of power system studies	**Change position**	Proponents receiving an access right will follow a 'batched' connection process. A single round of batched power system studies per auction will be conducted using 'final' plant models for all projects that have submitted applications to connect to the access rights network in that auction.	Batching of power system studies will occur twice in the process, once before execution of a connection agreement with advanced R0 models and once after, at the registration stage, with R1 models. The Infrastructure Planner will manage the batched process and, on the advice of the relevant network service providers and AEMO (as relevant), determine which access right holders should be included in a batch. 'Batch readiness' will be dependent on the progress of relevant projects and the maturity of the plant models available for use in power system studies. To participate in a batch, access right holders will be required provide advanced R0 models ('R0.9') to be used in the initial batched power system studies and tuning process to optimise the performance of the access rights network and connected projects. Each project's compliance with the REZ Access Standards will be assessed at this stage. An offer to connect (the execution of a connection agreement) will be dependent on an access right holder demonstrating that its project can comply with the REZ Access Standards.

Design feature	Status	Position in December 2021 Consultation Paper	Updated position
			Once an access right holder has completed the detailed design stage of its project, R1 models can be provided and power system studies and final tuning can be conducted prior to registration. An access right holder that is not able to demonstrate that its project can comply with the REZ Access Standards during assessment of a batch may be deferred to join a subsequent batch, at the discretion of the Infrastructure Planner. This is intended to avoid delays to other access right holders in the batch.
Connection via designated network assets (DNAs)	**Change position**	Projects connecting to a designated network asset that is connected to REZ infrastructure will be required to hold access rights before connecting to that designated network asset.	The DNA framework under the NER will be disapplied in relation to the access rights network. Each REZ Access Scheme Declaration may provide details on the eligibility of DNAs to form part of the REZ access rights network. If eligible, persons seeking access to the access rights network will be required to do so at connection points on the access rights network and any extensions or augmentations of the access rights network will be subject to the approval of the Infrastructure Planner. For the purposes of the draft CWO REZ Access Scheme Declaration, the access rights network will not include any DNAs.

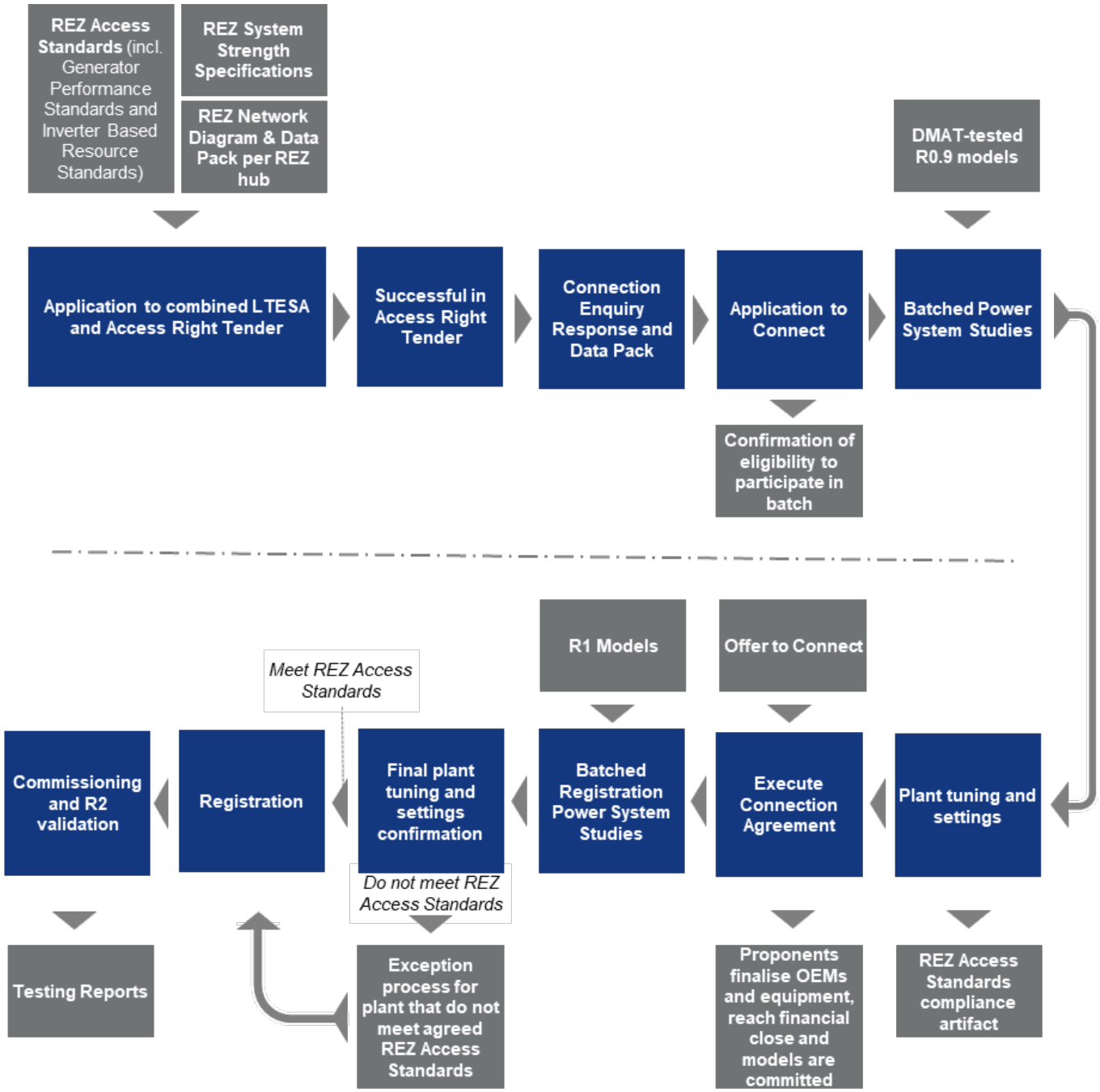

Figure 9: Revised streamlined REZ connection process

Implementation

Modifications to the NER will be required to enable the operation of a streamlined connection process for the connections of access right holders to an access rights network where the streamlined connection process forms part of an access scheme.

The streamlined connection process will enable functions to develop REZ Access Standards, coordinate connection applications, coordinate the delivery of centrally provided system strength, administer and undertake batched power system modelling to determine compliance with the REZ Access Standards and manage the physical aspects of generator and storage connections.

The key design elements of the streamlined connection process proposed to be specified in the regulations required to give effect to these components are described below.

Key design element	Proposed policy position and treatment in regulations
REZ Access Standards	• The application to access right holders of a non-negotiable set of standards for technical requirements under the NER. • Access right holders are required to propose the REZ Access Standards in their application to connect and any application to alter their generating system. It is proposed to modify the NER to: – remove the right for access right holders to negotiate access standards and require access right holders to propose the REZ Access Standards in their application to connect – treat the REZ Access Standards in the same way as automatic access standards proposed by a generator under the NER. • The Infrastructure Planner will make the REZ Access Standards to be applied to specified REZs and groups of access right holders. Different standards may be set for different REZs or different tranches of access allocations for the same REZ. A regulation is proposed to confer this function on the Infrastructure Planner under the EII Act.
Batching of power system studies	• The power system modelling required to assess access right holders' compliance with the REZ Access Standards and other connection assessments will be conducted on a batched basis so the interactions between all access right holders' plant, other REZs progressing concurrently and the NEM power system can be assessed at one time. • The Infrastructure Planner will act as batch administrator for power system studies conducted in relation to access right holders' plant. The Infrastructure Planner will have discretion to manage the entry and exit of access right holders from batch. A regulation is proposed to confer this function on the Infrastructure Planner under the EII Act. • The Infrastructure Planner will be notified by the relevant network service provider when the plant model submitted by an access right holder is suitable for assessing compliance with the REZ Access Standards as part of the batched power system modelling process. It is proposed to modify the NER to permit the relevant network service provider or AEMO (if applicable) to temporarily stop progressing an access right holder's connection process if directed by the Infrastructure Planner as batch administrator.
Centrally provided system strength	• Initial system strength requirements for the access rights network are intended to be provided by the network service provider delivering the access rights network and it will form part of the network specification. • Access right holders connecting to the access rights network will not have an option to self-remediate for system strength impacts. Instead, they will be required to pay the system strength charge calculated under the NER but those who contribute towards the cost of centrally provided system strength will have this contribution recognised in the system strength quantity that is

Key design element	Proposed policy position and treatment in regulations
	used to calculate that charge. The method for calculating the system strength charge will be provided to bidders ahead of the competitive tender. Further details are provided above; see Section 7 'System strength provisions'. • Modifications to the NER will be required to give effect to the policy intent referred to above, including disapplying the ability of an access right holder to elect to self-remediate for system strength.
Assets connecting approved projects to the access rights network	• The policy intent is that the designated network asset framework under the NER should be disapplied in relation to the access rights network. The policy intent is that dedicated connection assets of any length can connect to the access rights network. Under the NER, dedicated connection assets may be no longer than 30 km in route length. • It is proposed to modify the NER to provide that extensions or augmentations of the access rights network cannot occur under the DNA framework and to remove the 30 km route length limitation in the definition of dedicated connection assets under the NER. • Each access scheme declaration can specify eligibility of DNAs to form part of the access rights network.

9 More information

- Efficient management of system strength on the power system, AEMC rule determination
- EnergyCo website
- Final REZ Access Standards intended to apply to Central-West Orana REZ [PDF 621KB]
- Guidelines for Access Scheme Declarations [PDF 370KB]
- Market Briefing Note: Competitive tender participants in Central West Orana REZ [PDF 173KB]
- Renewable Energy Zones – Access Scheme: Issues Paper on Central-West Orana Renewable Energy Zone Access Scheme [PDF 2.9MB]
- REZ access rights and scheme design: Central-West Orana: Consultation paper [PDF 1.0MB]

Appendix A – Detailed design overview

The table below has been designed to help the reader easily identify which final positions represent a change following consultation and the nature of the change.

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Scheme design: physical connections model (see '2 Access right and scheme design')	**Maintain position**	The Consultation Paper proposed that the CWO REZ Access Scheme be a limited physical connections model, with a single tier of access rights.	The aggregate maximum capacity of all approved projects during any capacity period must not exceed the aggregate maximum capacity cap. An access right may only be granted where the eligible project's expected capacity profile does not cause forecast curtailment to exceed the target transmission curtailment level. **Clause 7(3)**
Scheme duration (see 'Access right duration')	**Change position**	The CWO REZ Access Scheme duration was defined as 15 years from the commissioning of the first substation and all access rights expire in unison at the end of the scheme.	The initial term of the Central-West Orana REZ Access Scheme starts from the date of the CWO REZ Access Scheme Declaration and ends 20 years from the date of the commissioning and electrification of the first network element of the access rights network, as notified by the Infrastructure Planner to the Consumer Trustee and access right holders. The term may be extended by the Infrastructure Planner, at its discretion, by notifying the Consumer Trustee, access right holders and the public of the extended term. **Clause 13 and Part 7 Dictionary**

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Aggregate maximum capacity cap (see 'Capacity caps')	**Change position**	The Consultation Paper proposed an aggregate maximum capacity cap of 3.69 GW. The aggregate maximum capacity cap is set in the CWO REZ Access Scheme Declaration and may not be revised down. The aggregate maximum capacity cap can only be revised up following an assessment of network utilisation by EnergyCo that identifies underutilisation that can be set as the headroom capacity.	The initial aggregate maximum capacity cap is 5.84 GW. The aggregate maximum capacity of all approved projects during any capacity period must not exceed the aggregate maximum capacity cap. The aggregate maximum capacity cap will be revised following the final headroom determination. Where the Infrastructure Planner has introduced capacity profiles a headroom assessment may identify different aggregate maximum capacity caps in different capacity periods. The Infrastructure Planner must notify the Consumer Trustee and access right holders, and publish a notice on its website, of any increase to the aggregate maximum capacity cap. **Clause 8**
Maximum capacity profiles (see 'Capacity profiles')	**Change position**	The Consultation Paper proposed that access rights are allocated on a maximum capacity profile basis, under which generation and storage projects have capacity limits (MW of sent out generation) to their dispatch during 4 defined daily periods: day, night, dawn and dusk. A project could have different maximum capacities across each of the 4 periods.	The Infrastructure Planner will initially grant only a flat maximum capacity but may in future grant an access right subject to a maximum capacity profile that could set a different maximum capacity across defined daily periods. Before introducing maximum capacity profiles, the Infrastructure Planner must first notify the Consumer Trustee and access right holders of the proposed capacity periods, commencement date, and methodology for applying capacity profiles. Proposed regulations require maximum generation in the National Electricity Market Dispatch Engine (NEMDE) to be no greater than the highest maximum capacity allocated for an access right. Where a lower maximum capacity is allocated during a daily period, it is expected that compliance will be enforced contractually under the Access Right Agreement. **Clause 7(5), 7(6) and 7(7)**

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Co-located hybrid projects (see 'Eligibility requirements')	**Maintain position**	Co-located hybrid projects would have flexibility to define the maximum capacity profile based on either the aggregate sent out generation capacity of their generation and storage components for each of the 4 daily periods, or a lesser value.	Co-located hybrid infrastructure projects that involve generation from a renewable energy source, where the sum of the generation and storage infrastructure components have a maximum capacity of 30 MW or above, which are to be located within the geographical boundary of the Central-West Orana REZ, will be eligible to apply for access rights. Any co-located hybrid infrastructure project awarded a firming infrastructure LTESA will also be eligible. A co-located hybrid infrastructure project's maximum permitted output at its connection point (as specified in its Connection Agreement) must be no more than the maximum capacity of its access rights. The maximum permitted output at the connection point may be less than the maximum generation of all units comprising the co-located hybrid infrastructure project. **Schedule 2 – Eligible Projects, Table 1: Eligibility requirements**
Initial Allocation: Eligibility of storage (see 'Eligibility requirements')	**Change position**	It was proposed that hybrid (generation and storage) projects and standalone long duration storage could apply for access rights. The Consultation Paper noted that standalone short duration storage projects would not be accommodated in the initial allocation, but would become eligible in headroom assessments and market-led augmentations.	**Schedule 2, Table 1** sets out the eligibility requirements for the initial allocation and the subsequent award of access rights, including: **Initial allocation:** • Storage infrastructure projects with any maximum capacity, including standalone short duration storage. **After the initial allocation:** • Storage infrastructure projects with any maximum capacity, including standalone short duration storage.

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Expected capacity profile (see 'Expected capacity profile')	**Maintain position**	The Consultation Paper defined expected capacity as a time series profile representing the forecast generation, in megawatts, for a generator or storage project for each dispatch interval over a forecast year. It proposed that the initial expected capacities would be developed using existing approaches and drawing on AEMO data and methodologies. The expected capacities would be updated after access rights are allocated, with information about actual projects and their performance.	The Infrastructure Planner must determine an expected capacity profile for each relevant eligible project and approved project based on its project characteristics and the information that the Infrastructure Planner considers best represents the relevant eligible project or approved project's likely future generation profile including, without limitation, representative information for the relevant plant type from the Integrated System Plan, market modelling, the eligible project or approved project's own forecast generation profile and, in the case of an approved project, any historical available capacity and sent out generation. **Clause 7(8)**
Target transmission curtailment level (see 'Target transmission curtailment level')	**Refine position**	The Consultation Paper introduced a target transmission curtailment level to: • provide sufficient certainty to proponent generators with regard to in-REZ transmission curtailment levels • provide flexibility to grant access rights above the aggregate maximum capacity cap where the network is considered underutilised, including when the intended network capacity of a REZ is increased by EnergyCo. It was proposed that the target transmission curtailment level for the REZ would be defined prior to Allocation 1 and not be changed for the duration of the CWO REZ Access Scheme.	The target transmission curtailment level is 4.37%. The target transmission curtailment level will apply for the term and for the avoidance of doubt, any increase to the aggregate maximum capacity cap will not affect the target transmission curtailment level. In assessing the award of access rights in the initial allocation, headroom assessments and market-led augmentations, the Infrastructure Planner will determine the extent to which additional access rights could be granted without forecast curtailment exceeding the target transmission curtailment level on the access rights network.

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
		For the CWO REZ Access Scheme the target transmission curtailment level was indicatively calculated to be 0.3%.	In addition, an access right may only be granted where the eligible project's expected capacity profile does not cause forecast curtailment to exceed the target transmission curtailment level. **Clause 9 and Clause 7(3)**
Network elements (see 'Network elements')	**New position**	The Consultation Paper did not propose limits on individual network elements.	The Infrastructure Planner may notify the Consumer Trustee and access right holders, and publish a notice on its website, of: • the transfer capacity of an individual network element • a target network element curtailment level, for a network element. Where the Infrastructure Planner has published a target network element curtailment level, an access right may only be granted where the eligible project's expected capacity profile does not cause forecast curtailment of the network element to exceed the target network element curtailment level. **Clause 9(2) and 9(3) and Clause 7(3)(c)**
Exhaustion threshold (see 'Initial allocation and exhaustion threshold')	**Refine position**	For the Consultation Paper, the aggregate maximum capacity cap was indicatively calculated as 3.69 GW. It was proposed that headroom calculations could proceed only after the initial allocation had been	To ensure the smooth operation of the CWO REZ Access Scheme, a process to trigger the exhaustion of the initial allocation is required. The Infrastructure Planner may determine that the initial allocation has been completed if:

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
		exhausted. The threshold and definition of 'exhausted' was not defined.	• the volume of access rights granted under the initial allocation exceeds 90% of the initial aggregate maximum capacity cap; or • due to the application of subclause 7(3) it does not reasonably expect that significant further access rights may be awarded in the initial allocation. **Clause 7(4)**
Transfer capacity (see 'Transfer capacity')	**Change position**	The Consultation Paper proposed that a network expansion could accommodate the creation of additional access rights through either: • an increase of the aggregated maximum capacity cap following an EnergyCo–led expansion of a REZ's network capacity • a mechanism for the market to fund, or EnergyCo to propose, augmentation to the access rights network to allow the creation of additional access rights, without harming existing right holders.	In relation to the access rights network, transfer capacity means the network capacity in MW between the access rights network and any other transmission network to which the access rights network is connected. The transfer capacity of the access rights network is the 3 GW intended network capacity for the access rights network specified in the CWO REZ Declaration. This capacity can be revised where an increased transfer capacity of the access rights network is authorised or directed under the EII Act, or the network as commissioned provides a higher capacity. The transfer capacity may also be increased through market-led augmentations (see below). **Schedule 3**

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Calculation of headroom (see 'Headroom assessment')	**Refine position**	Headroom is the volume of additional access rights that could be allocated without resulting in forecast REZ-wide transmission curtailment exceeding the transmission curtailment level. Headroom represents underutilisation of the network relative to the target transmission curtailment level. The Consultation Paper did not provide a methodology for allocating access rights under Allocation 2.	Headroom refers to the increase in aggregate maximum capacity that can be accommodated without resulting in forecast curtailment on the access rights network exceeding the target transmission curtailment level. Where the Infrastructure Planner has introduced capacity profiles a headroom assessment may identify different aggregate maximum capacity caps in different capacity periods. In calculating headroom the Infrastructure Planner must follow a process that includes identifying an indicative technology mix and expected profiles of indicative projects within that mix, to determine the additional capacity that may be accommodated. The Infrastructure Planner must conduct a headroom assessment as soon as practicable following completion of the initial allocation. Following this, the Infrastructure Planner must conduct an assessment once every 2 calendar years during the period of 6 calendar years following its initial headroom assessment, unless the Infrastructure Planner has determined that a headroom assessment is not required. **Clause 10 and Schedule 3**

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Market-led augmentations (see 'Market-led augmentations')	**Refine position**	The Consultation Paper introduced a mechanism to allocate access rights where the market proposes and funds a network augmentation that expands the REZ intended network capacity. Proposals would be assessed based on a 'do no harm' principle for existing access right holders. Market-led augmentations would only be considered once the initial allocation is complete, and a headroom assessment has been undertaken.	One or more eligible operators may propose a market-led augmentation to the access rights network. The Infrastructure Planner must assess the increase in the aggregate maximum capacity cap, and the available access rights, that can be created by the proposed market-led augmentation. The draft determination will be published on its website for consultation. **Clause 11**
Project modifications (see 'Project modifications')	**Refine position**	The Consultation Paper proposed that project characteristics can be modified prior to commissioning and post commissioning, subject to approval. For modifications that would not require an increase to the maximum capacity, the modifications are assessed and approved by EnergyCo, with consideration of the impact on existing projects. For modifications that would require an increase to the maximum capacity of the project, proponents would be required to secure the additional access rights before EnergyCo approval.	The Infrastructure Planner may only approve an increase in the maximum capacity where the increase does not cause: • a breach of the aggregate maximum capacity cap • the forecast curtailment to exceed the target transmission curtailment level or the target network curtailment level. Where the maximum capacity of an approved project will be increased by less than 5% of the original maximum capacity, the Infrastructure Planner may approve the increase subject to **subclause 7(3)**. The Infrastructure Planner may reduce the maximum capacity of an approved project in accordance with an Access Right Agreement.

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
			An access right holder may only make a material change to its project characteristics if the change has been approved by the Infrastructure Planner. The Infrastructure Planner has the discretion to determine whether a change is material based on the impact of the change on a project's expected capacity. The Infrastructure Planner's approval is subject to **subclause 7(3)**. **Clause 12**
Access control mechanism (see '4 Access control mechanism')	**Change position**	An 'access control mechanism' will be introduced that would apply to existing network infrastructure that is over 66 kV within the geographical boundary of the CWO REZ. Two implementation options were proposed to control access: • a competitive tender allocation process for adjacent projects • an additional 'do no harm' test.	No access control mechanism is proposed for inclusion in the declaration. It is instead proposed that the risks of impacts on the access rights network from projects connecting to existing infrastructure will be managed through a collaborative planning approach with Essential Energy and Transgrid. This will be supported by a requirement for the Infrastructure Planner to approve the connection of any network by a network service provider to the access rights network. If risks were to materialise an additional access scheme declaration could introduce an access control mechanism over existing infrastructure within CWO REZ in the future.

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
Amendments to the declaration (see 'Amendments to the declaration')	**New position**	The Consultation Paper did not include detail on the process for amending a declaration.	The CWO REZ Access Scheme Declaration provides for future amendments to the declaration in certain circumstances. The provisions aim to maintain investor confidence by protecting the value of the access rights, while future-proofing the scheme. The Minister may make a Declaration Change Proposal. The Infrastructure Planner must notify access right holders of the reasons for the proposed amendments, any submissions received must be considered. The Minister may only implement a final change proposal that has a material adverse impact on access right holders if: • access right holders representing more than 75% of the aggregate maximum capacity vote in favour of the final Declaration Change Proposal, or • more than 75% of access right holders voting, vote in favour of the Declaration Change Proposal. **Clause 18**
Contract arrangements (see 'Contracts')	**Refine position**	Access right holders enter into a Project Development Agreement that will set and monitor tender bid undertakings. Proponents may enter into a tripartite Connection Agreement with the Network Operator and Transgrid.	An approved project must enter an Access Right Agreement prior to the grant of an access right. **Clause 7(2)**

Design feature	Status	Position in December 2021 Consultation Paper	Current position as reflected in the draft CWO REZ Access Scheme Declaration
			Access Right Agreements may also include a separate agreement in relation to the coordination of the construction of approved projects and the access rights network. A Connection Agreement is expected to be signed between project operators and the Network Operator. An agreement may also be signed with Transgrid if relevant.
Project characteristics (see 'Project characteristics')	**Refine position**	The Consultation Paper noted that project characteristics would be set thought the tender process for the life of a project.	Changes to project characteristics that materially impact a project's expected capacity profile require the Infrastructure Planner's approval, and this approval will be subject to conditions and a test that the changes will not cause forecast curtailment to exceed the target transmission curtailment level. **Clause 12**

Appendix B – Regulatory reforms

The open access regime that generally applies to transmission and distribution networks under the NER will not apply to the access rights network. The open access regime will be replaced by the access scheme declared by the Minister under the EII Act. Modifications will be required to the NER, through regulations under section 27(1)(a) of the EII Act, to enable the operation of the declared access scheme. Additional regulations to enable the scheme are also proposed under section 24(5) of the EII Act. The regulations and modifications to the NER are expected to include the changes described in the table below. Please note that the regulatory reforms outlined below do not include those that would be required to implement a streamlined REZ connection process as outlined above in Section 8.

Italicised terms used in the table have the same meaning as in the NER.

Regulation	Policy position
Commencement of connection process	Modify the NER such that *Generators* seeking connection to the access rights network are not permitted to make a *connection* enquiry under the NER. *Generators* that are granted access rights to the access rights network will be taken to have made a *connection* enquiry in respect of that network under the NER. Following the allocation of access rights, access right holders will receive information equivalent to that contained in a response to a *connection* enquiry under the NER from the Infrastructure Planner or the relevant *Network Service Provider* to enable the preparation of an *application to connect*.
Access 'gateway' mechanism	Modify the NER such that the consent of the Infrastructure Planner is required for: • a *Generator* to make an application to connect a *generating system* to the access rights network; or to a *distribution network* or *transmission network* subject to an access control mechanism • a *Network Service Provider* to make an application to connect a *transmission network* or *distribution network* to the access rights network or to a *distribution network* or *transmission network* subject to an access control mechanism • a *Customer* to make an application to connect *plant* to the access rights network

Regulation	Policy position
	• a *Network Service Provider* to make an offer to connect to a *Generator*, *Network Service Provider* or *Customer* in relation to the access rights network or to a *distribution network* or *transmission network* subject to an access control mechanism • a *Generator* to apply under clause 5.3.9 of the NER for an alteration to a *generating system* connected to an access rights network, or a *generating system* connected to a *distribution network* or *transmission network* subject to an access control mechanism • a *Network Service Provider* to approve an alteration to a *generating system* connected to an access rights network, or a *generating system* connected to a *distribution network* or *transmission network* subject to an access control mechanism, under clause 5.3.9 of the NER.
Require maximum generation in NEMDE to be no greater than capacity of access rights	Modify the NER to require a *Generator* with a *generating system* connected to the access rights network that is comprised of one *generating unit* to submit a maximum generation amount to AEMO, as part of its bid and offer validation data that does not exceed the maximum capacity for which it holds access rights. Where a *Generator's generating system* (other than a co-located hybrid infrastructure project) comprises multiple *generating units* and those *generating units* are not aggregated for the purpose of *central dispatch*, the sum of the maximum generation of each *generating unit* must be no greater than the maximum capacity for which the *Generator* holds access rights and must be consistent with the maximum capacity for the relevant *generating unit* specified in the access rights register. If required, modifications will be made to the NER to reflect the policy intent that the maximum capacity of a *generating unit* recorded in the access rights register will not impact AEMO's powers to direct the *dispatch* of that *generating unit* in accordance with the National Electricity Law and NER. This will support the implementation of the access scheme and simplify the enforcement of access rights.
Connection agreements	Modify Schedule 5.6 (Part A) of the NER so that *connection agreements* for *Generators* seeking connection to the access rights network are required to include the maximum permitted output at the *connection point.* The maximum permitted output at the *connection point* must be no greater than the maximum capacity for which the *Generator* holds access rights under the access rights register. In the case of co-located hybrid infrastructure projects, the maximum permitted output may be less than the sum of the maximum generation of each *generating* unit comprising the project.

Regulation	Policy position
Direction to disconnect	Modify rule 5.9 of the NER to: • empower the Infrastructure Planner to direct the *Network Service Provider* for an access rights network to *disconnect* the *facilities* of a *Generator* from the access rights network • require the Infrastructure Planner to consult with AEMO prior to giving a direction to a *Network Service Provider* in relation to the potential impacts of the *disconnection* on *power system security* and the timing of the *disconnection* • require a *Network Service Provider* to *disconnect* the *facilities* of a *Generator* from the access rights network if it is directed to do so by the Infrastructure Planner • extend clause 5.9.4 to provide that AEMO and the *Network Service Provider* for an access rights network have no liability for loss or damage suffered or incurred by a *Registered Participant* by reason of a *disconnection* on direction by the Infrastructure Planner.
Disapply NER access dispute provisions	Disapply the NER access dispute provisions as they might otherwise apply to disputes relating to the application of the 'access gateway mechanism' referred to above by a *Network Service Provider* of an access rights network or a *distribution network* or *transmission network* subject to an access control mechanism. Disputes about other terms and conditions of access (e.g. relating to access to prescribed and negotiated transmission services and aspects of the connection agreement) will remain subject to the commercial arbitration provisions in chapter 5 of the NER.
Reversion to NER access regime	Modify the NER to provide for the 'access gateway mechanism' referred to above to cease to apply when the term of the declared access scheme ends. Following the end of the access scheme term, *Generators*, *Network Service Providers* and *Customers* will seek access to the access rights network and any *distribution network* or *transmission network* subject to an access control mechanism under the access framework applicable under the NER at that time.
Functions of the Infrastructure Planner	Make regulations to confer functions on the Infrastructure Planner to enable the Infrastructure Planner to perform its functions under the access scheme declaration. These functions may include to: • calculate headroom, as outlined in the declaration • notify eligible projects, access right holders and the public of applicable REZ Access Standards

Regulation	Policy position
	• apply eligibility criteria for access rights • forecast curtailment on the access rights network, and apply limitations to the connection of projects with respect to forecast curtailment impacts.
Recovering scheme administration costs	Prescribe in the regulations that the Scheme Financial Vehicle is liable to pay the costs of administering the access scheme to the Infrastructure Planner.
Community and employment purpose fees	Prescribe in regulations that the Scheme Financial Vehicle is liable to transfer funds collected from access fees for employment and community purposes to the Energy Administration Account for disbursement by the Infrastructure Planner. To confer a function on EnergyCo as the Infrastructure Planner to disburse the funds paid into the Energy Administration Account from the component of access fees collected for employment and community purposes.
Declaration	Prescribe in regulations additional matters that an access scheme declaration may address, including: • specify different classes of operators that are subject to an access right regime or access control mechanism • prescribe matters related to the connection process for access right holders • outline functions of the administrator, Infrastructure Planner and Consumer Trustee.