AEMC
Jurisdictional REZ frameworks: Final report

18 December 2024

Disclaimer

Reform Matters has been engaged by the Australian Energy Market Commission (AEMC) to conduct a comparative review of Renewable Energy Zone frameworks adopted in each jurisdiction. If you are a party other than the AEMC, Reform Matters owes you no duty with respect to or in connection with this report and will have no liability to you for any loss or damage suffered or costs incurred by you or any other person arising out of or in connection with the provision to you of this advice.

Any findings or recommendations contained within this report are based on our reasonable professional view based on the information that is available from the sources indicated and/or provided by the AEMC. The jurisdictional REZ frameworks are evolving rapidly and this report is based on information published as at the date of this report. Should the project details, external factors (including changes to any Laws, Rules and instruments made under those documents) and assumptions change then the findings and recommendations contained in this report may no longer be appropriate. Accordingly, we do not confirm, underwrite or guarantee that the outcomes referred to in this report will be achieved.

Nothing in this report constitutes legal advice and should not be relied on as such.

Table of contents

Renewable Energy Zones are supporting governments' emissions reduction goals

REZ frameworks are intended to accelerate and coordinate transmission and renewable generation investment

As the electricity industry decarbonises, a key challenge facing policy makers and industry has been the need to transform the generation fleet, shifting from a small number of large coal-fired generators to new grid-scale and distributed sources of renewable energy. There is a need for new transmission infrastructure to connect the required grid-scale generation in order to meet emissions and reliability targets. This is required both to resolve expected congestion on existing networks and to cater for generators seeking to connect in geographical areas where there are strong renewable resources but where there is currently no, or limited, transmission network infrastructure. In addition, numerous competing connection applications have put pressure on existing connection processes, prompting policy makers and industry to review how renewable generation connects to the grid.

There is pressure for the transition to occur quickly: the Commonwealth and State Governments have committed to emissions reduction targets and aging coal-fired power plants are increasingly unavailable due to maintenance and unexpected outages. New grid-scale generation and firming capacity needs to be brought into the market quickly to maintain reliability.

The ability of the national electricity framework to deliver the necessary investment in a timely and efficient way while maintaining affordability has come under increasing scrutiny and pressure. In response, most jurisdictional governments have implemented their own Renewable Energy Zone (REZ) frameworks.

Jurisdictions are derogating from the NER to achieve emissions reduction targets and reliability, but also broader objectives

The jurisdictional REZ frameworks are designed to meet emissions reduction and energy reliability objectives but also in some cases wider social and industry policy objectives such as fostering support for renewable development and facilitating regional economic development. Jurisdictional REZ frameworks cover matters such as network planning and investment (including investment tests), economic regulation of network projects delivered under the REZ framework, access schemes (including access fees) and connection process innovations.

In some jurisdictions new REZ entities have been, or are proposed to be, established to undertake functions in the REZ framework. In addition, the Australian Energy Market Operator (AEMO), the Australian Energy Regulator (AER) and jurisdictional regulators have been given additional functions under some jurisdictional REZ frameworks.

REZ frameworks have been implemented through jurisdictional legislation, statutory instruments and guidelines rather than under the National Electricity Law (NEL) and National Electricity Rules (NER). NSW, Victoria and Queensland have derogated from the application of certain elements of the NEL and NER to implement their REZ frameworks, and the Tasmanian Government has consulted on draft legislation to do the same.

This report provides a snapshot of the current state of REZ frameworks

Reform Matters was engaged by the AEMC to conduct a review of jurisdictional REZ frameworks

While they are still evolving, jurisdictional REZ frameworks are now at a stage of development where their high-level design can be compared. This provides an opportunity to consider how state governments have tackled some of the key issues that are vital for accelerating the transition, such as improved coordination of generation and transmission investment.

Reform Matters was engaged by the Australian Energy Market Commission (AEMC) to conduct a desktop review of jurisdictional REZ frameworks and provide a comparative assessment to understand their features.

We found that while jurisdictional REZ frameworks differ, they share several common features that diverge from the national framework. These are:

- a governance framework with a key role for the Energy Minister
- a REZ assessment and planning framework
- accelerated approach to transmission investment
- alternative cost recovery arrangements for transmission investment
- access to REZ transmission infrastructure
- a streamlined connections process.

The report focuses on the REZ transmission frameworks in NSW, Queensland, Victoria and Tasmania

This report focuses on the four jurisdictions that have derogated, or intend to derogate, from the National Electricity Rules (NER): NSW, Queensland, Victoria and Tasmania. The South Australian Government has not announced any intention to derogate from the national framework to implement a bespoke REZ framework.

Part A of the report sets out a high-level comparison of jurisdictional approaches to REZ transmission frameworks. Part B provides a detailed description of the current state of each REZ transmission framework.

The report explores features that are relevant to REZ transmission frameworks and, where required for context, touches on broader state-based frameworks for transmission development to support REZs and the transition to net zero.

Other reforms that are intended to help state governments meet their broader objectives in respect of REZs are out of scope of this review. These reforms include, for example revenue support mechanisms for connecting parties, amendments to planning laws, schemes to enable payments to landholders that host energy infrastructure, and cumulative impact coordination and management (such as upgrades to roads and ports and management of water and water).

Offshore wind is also out of scope of this report as it does not form part of jurisdictional REZ frameworks.

Part A

Comparison of jurisdictional approaches to REZ frameworks:

1. Overview and governance
2. REZ assessment and planning
3. Transmission investment
4. Cost recovery
5. Access to REZ infrastructure
6. Streamlined connections

Most jurisdictions are implementing their own REZ frameworks

REZ frameworks help achieve emissions reduction targets and address perceived shortcomings in the national framework

Governments in NSW, Queensland, Victoria and Tasmania have all implemented, or propose to implement, legislation to establish bespoke frameworks to develop REZs in their own jurisdiction.

There are two key reasons why jurisdictions are implementing state-based REZs. First, jurisdictions have legislated their own emissions reduction targets. A core initiative to reduce emissions is to shift from fossil fuel-powered electricity generation to clean renewable energy backed by firming technologies. Recognising this, jurisdictions have also legislated specific renewable energy targets. For example, in Queensland 50% of its energy must be generated from renewable sources by 2030, 70% by 2032 and 80% by 2035.[1]

Second, there are perceived shortcomings in the national electricity framework's ability to deliver the necessary transmission, generation and firming investment in a timely way to support both state governments' emissions reduction targets and to continue to reliably meet their state's energy needs. For example, some governments have expressed concerns that the transmission investment test in the NER is too slow and can delay the timely delivery of new transmission.[2]

Consequently, state governments have derogated from aspects of the national framework, replacing it with bespoke approaches that are intended to support achievement of their emissions reduction targets while maintaining reliable supply of electricity to customers in their state.

REZ objectives are wider than the national electricity framework

The purpose of REZs is to plan for the coordinated development of new transmission, generation, firming and storage investment in specific geographical locations.

Broadly, REZs have the following objectives:

- meet emissions reduction and renewable energy targets
- accelerate and incentivise investment in transmission infrastructure
- accelerate and incentivise investment in generation and firming infrastructure
- coordinate generation and transmission investment
- foster community support for energy infrastructure.

State governments also have wider economic, social and community objectives to support the regional communities that host REZs. These include objectives such as jobs and training opportunities, industry investment and research opportunities that are intended to benefit communities, First Nations peoples, local businesses, landholders and industry. These economic, social and community objectives, while an important feature of jurisdictional REZ frameworks, are not within the scope of the national electricity framework.

Specific State Government objectives are set out in high level REZ policy documents in each jurisdiction.

[1] See Queensland Energy (Renewable Transformation and Jobs) Act 2024, cl.9.
[2] See, for example, National Electricity (Victoria) Amendment Act 2020, Second Reading, 18 February 2020; and NSW Electricity Infrastructure Roadmap, p38.

REZ governance frameworks and REZ entities are defined in legislation

Energy Ministers have a core decision-making and oversight role

A central element of REZ frameworks is the implementation of a governance framework that defines REZ entities and their roles and responsibilities in identifying, assessing, planning and delivering REZs. Governance frameworks have been legislated in NSW, Queensland and Victoria. Tasmania has recently consulted on a draft bill.

In each jurisdiction the Energy Minister has been assigned a core decision-making and oversight role. Generally, Ministers have been given responsibility for declaring REZs, declaring or approving access regimes and appointing REZ entities. In NSW and Tasmania, the Minister is able (or is proposed to be able) to direct a network operator to carry out a REZ network infrastructure project. Other elements of their responsibilities reflect the nature of their REZ frameworks. Ministerial functions for each jurisdiction are set out on page 9.

All jurisdictions have also defined:

- a strategic network planner role, with responsibility for developing the high-level design (and in some instances the detailed design) of REZ network infrastructure, and
- an economic regulator for the REZ TNSP.

The nature of the other REZ entity roles differs, depending on the specifics of the REZ framework. For example, in NSW the focus of other REZ entities is on consumer interests and managing funding flows, while in Tasmania they relate to construction and operation of REZs. The key REZ entities in each jurisdiction, along with a summary of their roles and responsibilities, are set out on page 10.

Strategic network planner

In NSW, Victoria and Tasmania, entities that are independent of the Transmission Network Service Provider (TNSP) and current jurisdictional planning bodies under the NER have been appointed as the strategic network planner.

In Queensland, the legislation has identified these roles separately. However, the Minister has appointed the local TNSP (Powerlink) to be the REZ delivery body performing the strategic network planning.

Economic regulator of the REZ TNSP

In NSW and Tasmania, the Minister appoints the regulator of the REZ TNSP. Only the AER, the local regulator or another person prescribed by regulation may be appointed. The AER has been appointed as REZ regulator in NSW, while the appointment is yet to be made in Tasmania.

In Queensland, the AER's powers and functions as economic regulator under the NER have been modified through legislation to enable Powerlink, as the local TNSP, to recover certain costs.

In Victoria, changes are proposed to the current economic regulatory framework that supports AEMO's planning and procurement role in Victoria. AEMO's functions are proposed to transition to VicGrid and a new procurement framework introduced for major transmission projects. The proposals envisage an on-going role for the AER as economic regulator.

Ministerial REZ functions differ in detail, but are broadly similar

NSW	QLD	VIC	TAS (draft)
• Declaration of REZs • Appointment of the Infrastructure Planner for the REZ • Appointment of the Consumer Trustee and the Regulator • Direction to a network operator to carry out a REZ network infrastructure project • Declaration and amendment of access schemes in REZs	• Prepare a public ownership strategy • Request REZ assessments • Recommend to the Governor in Council the making of a regulation to declare a REZ • Endorse REZ management plans and recommend to the Governor in Council the making of a regulation to approve the management plan. REZ management plans include access and connection arrangements • Appoint the REZ delivery body • Declare that Powerlink may recover specified REZ-related costs through charges for prescribed transmission services	• Declaration of infrastructure to be major electricity transmission infrastructure • Declaration of whether proposed major electricity transmission infrastructure is within a REZ • Declaration of whether proposed major electricity transmission infrastructure is necessary to facilitate connection of a REZ to the declared shared network • Declaration of REZs • Declaration of access schemes	• Declaration of REZs including appointing a REZ planner, REZ constructor and REZ operator • Establishing access schemes • Directing REZ planners to undertake detailed planning of REZ network infrastructure • Directing REZ constructors to develop and construct REZ network infrastructure • Directing REZ operators to operate REZ network infrastructure including administering access and connection arrangements

The nature of the other REZ entity roles differs, depending on the specifics of the REZ framework

The key REZ entities in each jurisdiction, along with a summary of their roles and responsibilities, are set out in the table. Further details are available in Part B of this report.

NSW	**Infrastructure Planner**, responsible for making recommendations about REZ projects & access scheme functions including access right allocation **Consumer Trustee**, responsible for authorising a network operator to carry out a project, determining access fees and conducting competitive tenders for access rights when requested **Regulator**, responsible for regulation of REZ TNSP and determining contributions from distribution network service providers to the Electricity Infrastructure Fund **Scheme Financial Vehicle**, responsible for facilitating funding and payments for REZs
QLD	**Treasurer**, responsible for approving or endorsing certain Ministerial decisions including REZ declarations and management plans **REZ delivery body**, responsible for REZ readiness assessments, recommending REZ declarations and developing REZ management plans including access frameworks **TNSP**, responsible for implementing REZs **Regulator (AER),** applies modified form of NER to enable TNSP cost recovery for REZ assessments, establishment and cost shortfalls
VIC	**VicGrid**, responsible for strategic planning, recommending areas to be declared REZs and planning major electricity infrastructure. May also have access scheme functions.
TAS (draft)	**REZ coordinator,** responsible for strategic planning, REZ consultations and making recommendations for areas to be declared REZs **REZ planner**, responsible for detailed design of REZ network infrastructure **REZ constructor**, responsible for development and construction of REZ network infrastructure **REZ operator**, responsible for maintenance and operation of REZ network infrastructure and management of access scheme **REZ regulator**, responsible for economic regulation of REZ services, REZ cost and price plans and price determinations for REZ entities.

Frameworks are at different stages of maturity

NSW was the first jurisdiction to legislate a REZ framework in 2020. Since then, other jurisdictions have followed suit at different paces. Jurisdictions have been able to learn from each other in deciding how best to implement their arrangements.

The table below provides a snapshot of the stage that each jurisdiction is at. REZ frameworks are still evolving, and no investments have been made under the new frameworks. Over the next 12 months significant new regulation and planning documents will be published in each jurisdiction. The first major investment decisions for REZ transmission projects are expected to be made in NSW.

TAS → VIC → QLD → NSW *Increasing level of maturity (not to scale)*

	TAS	VIC	QLD	NSW
Strategy	High level REZ strategy decided	High level REZ strategy decided	High level REZ strategy decided	High level REZ strategy decided
Legislation	Draft legislation	REZ governance legislation passed; key policy papers developed for procurement and access	Key legislation passed	Key legislation passed
Planning	Strategic planning documents to be published 12 months after legislation passed	Draft strategic planning documents expected early 2025	Strategic planning documents published	Strategic planning documents published
Declaration	No REZs declared yet One REZ consultation commenced	No REZs declared yet	No REZs declared yet One REZ readiness assessment commenced	Five REZs declared
Access	No schemes declared yet	No schemes declared yet	No schemes declared yet	Two schemes declared

All jurisdictional REZ frameworks derogate from the national framework in five key areas

All jurisdictions have derogated from the national electricity framework to implement their REZ frameworks and achieve their REZ objectives.

There are five key areas where jurisdictions are diverging from the national framework, as set out in the diagram. An overview and comparison of jurisdictions' approaches to these areas are discussed in the next sections, with more detail in Part B.

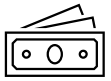
The degree to which jurisdictions have derogated from the national framework varies. In NSW, powers to derogate from the national framework are limited to derogations required to support transmission investment and the operation of access schemes. Other jurisdictions have broad powers to derogate from the national framework to the extent necessary to give effect to the REZ policies embodied in legislation.

Legislation, instruments or guidelines define the assets to which the jurisdictional framework applies in place of the national framework. These assets are:

- REZ transmission projects i.e. the transmission infrastructure that forms the REZ and may be subject to an access scheme
- REZ controlled assets i.e. assets forming part of the REZ that are not REZ transmission infrastructure assets but in relation to which access is controlled to limit impacts on REZ transmission projects and access schemes
- critical transmission projects that may not form part of the REZ but are required to support the REZ.

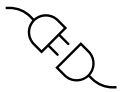
REZ assessment and planning (see pages 13-17)

Transmission investment approach (see pages 18-21)



Cost recovery of transmission investment (see pages 22-23)

Access to REZ transmission infrastructure (see pages 24-27)

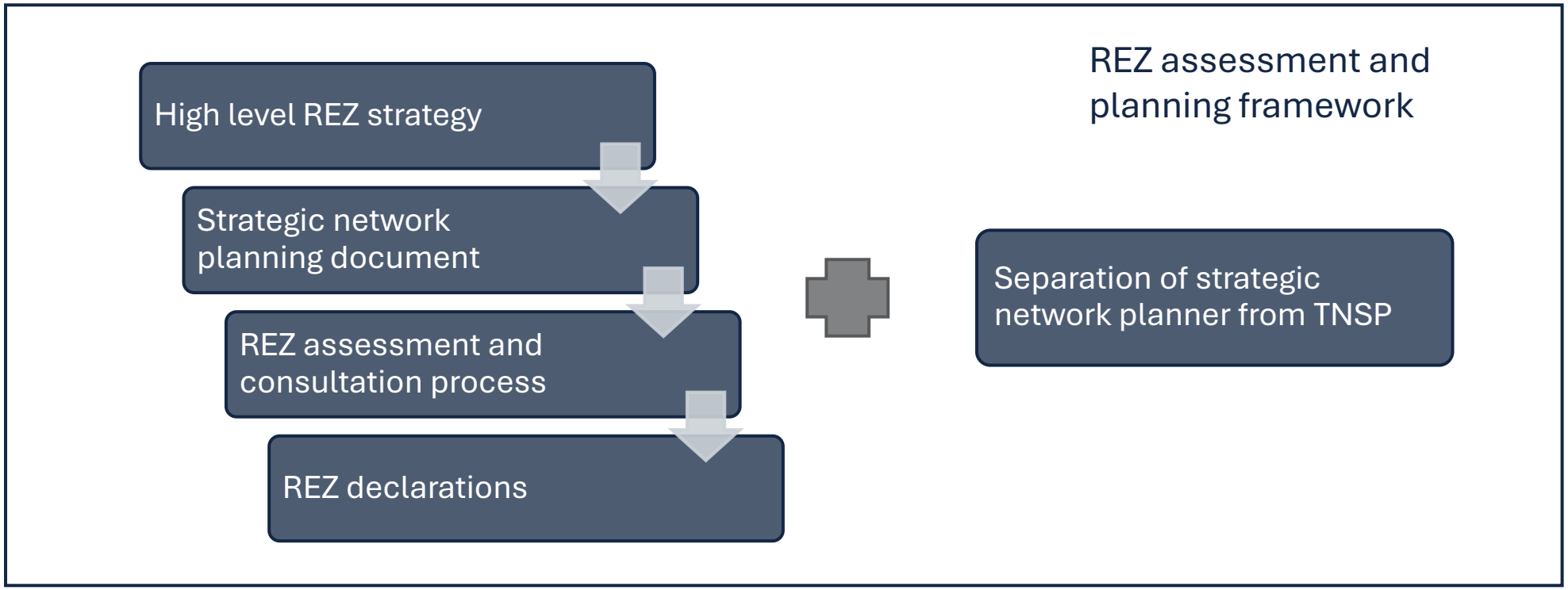


Connections process (see pages 28-29)

NSW is the only jurisdiction to diverge from the national framework to address **system strength for REZs**. Their approach is explained in Part B. Since only one jurisdiction has diverged on this issue, we have not considered it further.

REZ assessment and planning frameworks cascade from a high level REZ strategy

There are five key features of REZ assessment and planning frameworks that are common across all jurisdictions. All jurisdictions are publishing a series of policy and planning documents that are intended to cascade from a high-level policy objectives document (REZ strategy) that sets out the REZ objectives, through to the detailed planning and declaration of REZs, as shown in the diagram below. In addition, governance arrangements provide for the separation of the network planner role from the local TNSP.



Strategic network planning is broader than REZ infrastructure

High level REZ strategy

All jurisdictions have published a high-level REZ strategy, setting out the REZ objectives and a high-level plan for achieving those objectives. While the specific objectives differ, broadly they relate to coordinating and accelerating transmission and generation investment, fostering community support and broader economic, social and community objectives. These plans are given effect through enabling legislation, supported by instruments and regulations.

Strategic network planning document

All jurisdictions have developed, or will develop, a strategic network plan that flows from the high level REZ strategy. The network plan identifies the critical transmission investment required in the relevant jurisdiction to meet their REZ objectives.

Network planning is broader than the REZ transmission infrastructure. The strategic network plan identifies all the transmission network augmentations that are required within the state to facilitate investment in renewable generation to meet emissions targets, including upgrades to existing networks to support REZs. This can include transmission infrastructure projects that have been identified in AEMO's Integrated System Plan (ISP).

In NSW, Queensland and Victoria, broader network planning outside of REZ infrastructure allows these other transmission projects to be brought into the jurisdictional planning and procurement framework. These projects are then assessed and developed under the jurisdictional framework, meaning that elements of the NER that have been derogated from do not apply. In Tasmania, major transmission upgrades are being delivered under the national framework.

Page 16 provides a comparison of these reports and processes across the four jurisdictions and against the NER.

REZ assessment and consultation process

The strategic network planner conducts further assessment of REZs identified in the high-level REZ strategy before a REZ is declared. The strategic network planner will consider local conditions such as spatial assessments of resource quality and land use. There is also consultation with local communities, First Nations peoples and other stakeholders, to determine whether a REZ should be declared.

REZ declarations

REZ declarations are high level policy decisions made by the responsible Minister or through regulation, which trigger subsequent detailed planning and investment processes.

REZs are defined by a specific geographical area but can extend to specified energy infrastructure outside the geographical area. This allows additional projects to be brought into the REZ planning and procurement framework as well as made subject to the REZ access scheme, if relevant.

Separation of network planner role from the TNSP

All relevant jurisdictions have defined a strategic network planner role in legislation. The Minister has responsibility for appointing an entity to the role.

In NSW, Victoria and Tasmania, an entity other than the local TNSP has been appointed to be the strategic infrastructure planner (EnergyCo, VicGrid and the Director of Renewables, Climate and Future Industries Tasmania (ReCFIT), respectively). In Queensland, while the role is separately defined in legislation, the local TNSP (Powerlink) has been appointed to plan and deliver REZs.

There are overlaps between the national and jurisdictional planning frameworks

Interactions with NER planning frameworks are not clear

There are overlaps between projects that are captured in the jurisdictional strategic network plans and those that are included in the ISP and TNSPs' Transmission Annual Planning Reports (TAPR) under the national planning framework. This may lead to a lack of clarity or transparency about whether the jurisdictional or national framework applies to a particular project. In addition, while there is a clear link between the ISP and TAPRs supported by joint planning obligations, there is generally no clear link between the strategic network plans and the ISP or TAPRs.

In NSW, there is also a lack of clarity on the respective roles and responsibilities of EnergyCo, Transgrid and AEMO for transmission network planning. An independent report – the NSW Electricity Supply and Reliability Check-up – recommended that the Minister "commission an expert review of current Transmission Planning arrangements in NSW to reduce duplication and advise on the best approach to ensuring coordination between the Roadmap bodies (Energy Co, Transgrid, AEMO, AEMO Services)."

In Victoria there is an obligation on VicGrid to have regard to key AEMO planning and forecasting documents in developing the Victorian transmission plan.[1] This includes the ISP, Victorian Annual Planning report published by AEMO, the electricity statement of opportunities and similar documents for gas. There do not appear to be similar obligations on the REZ network planners in other jurisdictions.

NER REZ planning framework

The NER REZ planning framework (NER Rule 5.24) was developed to improve the coordination of network planning for REZs in the absence of a jurisdictional approach. It took effect in May 2021. Under this framework, AEMO may trigger a requirement for jurisdictional planning bodies (JPBs) to prepare REZ design reports in its ISP. Obligations are also imposed on AEMO and JPBs to undertake joint planning in respect of REZ design reports.

AEMO may trigger the requirement to prepare a REZ design report by the JPB if:

- A REZ including transmission network development is specified to be on the optimal development path of an ISP within 12 years of the publication of that ISP, and
- AEMO reasonably considers the Minister of the relevant jurisdiction supports the preparation of a REZ design report.

In preparing a REZ design report, the relevant JPB is required to consult with a range of stakeholders that are specified in the NER. These include parties interested in developing one or more projects in the REZ as well as local council, local community members, members of the public and any other relevant stakeholders wishing to express their views about the development of projects within the REZ.

To date, the REZ planning framework has not been used because jurisdictions have implemented their own, jurisdictional REZ planning frameworks.[2]

[1] National Electricity (Victoria) Act, s53(2).

[2] See AEMO, 2024 ISP, June 2024, p.15.

Summary of key REZ planning documents and comparison with NER

	NER	NSW	QLD	VIC	TAS (draft)
REZ strategy	No equivalent	NSW Electricity Roadmap	Energy and Jobs Plan	REZ Development Plan	Renewable Energy Action Plan
Strategic network planner	AEMO	EnergyCo	Powerlink (as REZ delivery body)	VicGrid	Director of ReCFIT
Strategic network plan	ISP	Network Infrastructure Strategy	Supergrid Infrastructure Blueprint	Victorian Transmission Plan	REZ Long Term Strategic Plan
Purpose of strategic network plan	Identify the least cost plan for the transition of the NEM to deliver safe, secure and reliable electricity to consumers within the relevant Government policy settings	Plan for the practical coordination of NSW network infrastructure to connect new generation and storage to meet the Infrastructure Investment Objectives (IIO)	Identify an optimal infrastructure pathway to transform Queensland's electricity system to meet emissions reduction, reliability and security and investment objectives under the Energy and Jobs Plan	Identify an optimal path for transmission infrastructure projects required to enable REZ development	Ensure long term renewable energy zone planning for the State
Forecast period for strategic plan	20 years	20 years	10-15 years	Initial plan 15 years, subsequent plans 25 years	20 years
Detailed REZ planning	REZ design report, TAPR	REZ declarations and infrastructure planner recommendation reports	REZ management plans, forming part of REZ declarations	REZ declarations	REZ declarations and planning by appointed REZ planner

REZ assessment and planning frameworks contribute to all government objectives

This table shows the REZ objectives that each of the key features of the REZ assessment and planning frameworks contribute to.

Objective	Accelerate & incentivise transmission investment	Accelerate & incentivise generation investment	Coordinate investment	Community support	Economic, social and community objectives
High level REZ strategy	✓	✓	✓	✓	✓
Strategic network planning	✓	✓	✓	✓	✓
REZ assessments & consultations	✓	✓	✓	✓	✓
REZ declaration	✓	✓	✓	✓	✓
Separation of planner from TNSP (excl. Qld)	✓		✓		✓

Jurisdictions have different conceptual approaches to REZ transmission projects

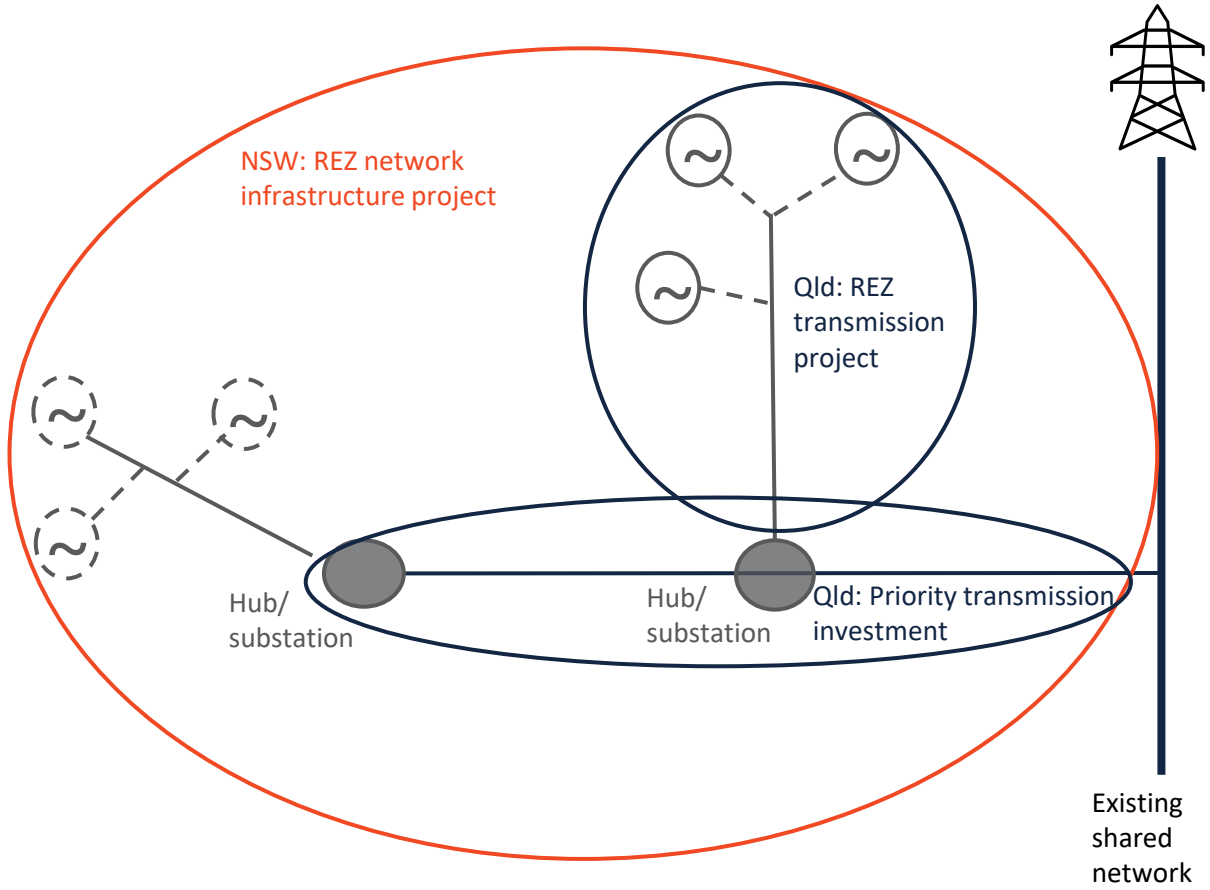
Before discussing the features of the jurisdictional approaches to REZ transmission investment and cost recovery, it is important to understand how jurisdictions are conceptualising REZ transmission projects and the interactions with other elements of the REZ framework.

In Queensland and Tasmania, REZ transmission projects are conceptually similar to shared connection infrastructure such as Designated Network Assets (DNA) under the NER. They are designed to coordinate scaled, shared connection infrastructure for connecting projects such as generation and storage that have already been identified and where there is some confidence the projects will proceed. While consumers underwrite the risks of these assets being under-utilised (see page 22), connecting parties are intended to fund them.

In Queensland, the Minister can also declare priority transmission investment to construct additional transmission network to connect shared connection assets to the national grid. These projects are treated like shared transmission network and are funded by consumers. A different approach to investment and cost recovery therefore applies compared to the REZ transmission projects.

In NSW and Victoria, REZ transmission projects are conceptually similar to the shared transmission network. These projects may cover both shared connection infrastructure and the broader "core" REZ transmission infrastructure. They are sized based on modelled efficient planting of generation in that REZ, rather than just by reference to identified projects. Consumers are required to fund REZ transmission projects, but the cost to customers may be reduced through access fees paid by connecting parties (see page 22).

NSW and Victoria also have a priority investment project framework (not shown in the diagram), similar to Queensland, that applies outside of REZs to accelerate investment in the shared transmission network. See Part B for details.



The diagram illustrates differences between the conceptual approaches of the NSW and Queensland frameworks, noting that the Victorian framework is similar to NSW and the Tasmanian approach is similar to Queensland.

Jurisdictional frameworks include features to support accelerated transmission investment

There are four key features of transmission investment approaches.

Cost recovery for early works

All jurisdictions provide for the cost of early works to be recovered to accelerate initial planning for REZ transmission projects. This includes, for example, easements, project development work, client delivery and related costs. These costs need to be incurred before a project is authorised, so a mechanism is required to allow these costs to be recovered.

This issue has recently been addressed in the national framework. The *Bringing early work forward to improve transmission planning* rule provides greater certainty for TNSPs that they will be able to recover the initial costs of a project.

Accelerating transmission investment

All jurisdictions enable the NER regulatory investment test for transmission (RIT-T) to be disapplied or modified for REZ transmission projects. Jurisdictions other than Tasmania also have frameworks to accelerate other critical transmission projects, including ISP projects and projects required to enable REZs. By identifying transmission projects as critical, the project can be brought under the auspices of the jurisdictional framework, meaning the RIT-T does not apply (or applies in a modified form).

Some jurisdictions have replaced the RIT-T with an alternative regulatory investment test that reflects broader benefits than the RIT-T. This recognises the broader objectives that jurisdictional REZs are intended to achieve. Page 20 sets out the different approaches to the alternative regulatory investment test.

Contestable procurement of REZ transmission projects

Contestable procurement of REZ transmission projects is enabled or required in jurisdictions other than in Queensland.

In Victoria, contestable procurement of transmission is already provided for under the national framework and policy released to date indicates that REZ transmission projects will also be contestable.

In NSW, shared transmission projects undertaken under the Electricity Infrastructure Investment Act (EII Act) can be contestable, diverging from the current NER framework.

In Queensland, the local TNSP is responsible for REZ transmission projects, consistent with their current approach to transmission infrastructure.

In Tasmania, REZ transmission projects can be contestable, noting these projects are akin to DNAs which have contestable elements under the national framework.

Ministerial power to direct transmission infrastructure to be built

All jurisdictions have legislated the ability for the Energy Minister to direct transmission infrastructure to be built either as part of their REZ framework or under a jurisdictional framework to action critical transmission projects.

In contrast, there is no requirement for TNSPs to invest in specific projects under the NER. TNSPs must invest to meet system standards and regulatory requirements. However, they are not required to invest in projects that have net market benefits but are not required for reliability purposes, including ISP projects.

Jurisdictions assess transmission investment on a different basis than under the NER

NER	The RIT-T must be applied to all transmission investments under the NER above a minimum threshold value. The purpose is to identify the credible option that maximises the net economic benefit to all those who produce, consume and transport electricity in the market. Where an investment is required for reliability purposes, the net economic benefit may be negative (i.e. costs must be minimised).
NSW	The Consumer Trustee (AEMO Services Pty Ltd) must assess whether a project is in the long-term financial interests of NSW electricity customers. Project goes ahead if authorised by the Consumer Trustee or via Ministerial direction on the recommendation of the Consumer Trustee. The Consumer Trustee has set out its approach to this investment test in an approach paper.
QLD	There is no investment test – the 'default position' is that connecting parties will fund the REZ transmission network so no RIT-T is required (similar to a funded augmentation or DNA under the NER). However, any funding shortfalls may be recovered from consumers if approved by Minister (subject to a prudency and efficiency test). For priority transmission investment which is on the optimal infrastructure pathway in the SuperGrid Infrastructure Blueprint, a project must, in Powerlink's opinion, maximise the net economic benefit associated with the investment and may have a negative net economic benefit. The investment test can include modification to the RIT-T and associated guidelines.
VIC	VicGrid conducts a cost benefit analysis when determining the optimal path in its Victorian Transmission Plan. No further investment test is applied to individual projects in the plan. In addition, the Minister can determine the investment test for critical transmission projects, including using multi criteria analysis that includes a broader range of factors than the RIT-T e.g. community preference and regional development indicators.
TAS (draft)	Tasmania's approach is similar to Queensland's REZ transmission project framework, but in recommending a REZ transmission project, the REZ Co-ordinator must demonstrate that the cost for the network infrastructure in the REZ is the lowest cost option.

Key differences between jurisdictional and national investment tests

There are two key differences in the way that jurisdictions have approached transmission investment tests compared to the NER. These are:

- **The parties that are considered in applying the test**. The NER requires impacts on all those who produce, consume and transport electricity to be considered. In NSW, only the financial interests of NSW electricity customers are considered.
- **Whether there can be a net economic cost**. Unless it is for reliability purposes, a transmission investment must have a positive net economic benefit under the NER. This includes transmission projects that have been identified as actionable in the ISP. In Victoria and Queensland, once a project is on the optimal path, the project may proceed with a net economic cost, provided it is minimised. In other words, once a project is on the optimal path, it is treated more like a reliability project in the NER.

Transmission frameworks contribute to the accelerated transmission investment objective

This table shows the REZ objectives that each of the key features of the transmission framework contribute to.

Objective	Accelerate, incentivise transmission investment	Accelerate & incentivise generation investment	Coordinate investment	Community support	Economic, social and community objectives
Cost recovery for early works	✓	*Accelerating investment in transmission infrastructure will ultimately support accelerated investment in generation*			
Alternative investment test	✓				✓*
Contestable procurement	✓				
Powers to direct transmission infrastructure	✓				

* The investment test takes into account the broader economic, social and community objectives that REZs are intended to achieve.

Cost recovery mechanisms differ depending on the conceptual approach to REZ projects

As discussed on page 18, jurisdictions have conceptually different approaches to REZ transmission projects. This is reflected in their approaches to cost recovery, as well as transmission investment. The table below sets out an overview of the cost recovery approaches. More detail is set out in Part B, including approaches to cost recovery for critical transmission infrastructure (i.e. transmission infrastructure that is not REZ transmission infrastructure).

	Conceptual approach to REZ transmission project	Default or primary funding source	Other funding sources	Regulatory oversight
NER	Shared transmission network	Electricity consumers via transmission use of system charges	None	Revenue determination under national framework
	Designated network assets (shared connection infrastructure)	Connecting parties	None	Principles in the NER for negotiating contributions (no revenue regulation)
NSW	Shared transmission network	Electricity consumers via distribution businesses (socialises costs across all of NSW, but directly connected transmission customers do not pay)	Connecting parties may be required to pay access fees that will offset the consumer contribution	Revenue determination under jurisdictional legislation (only jurisdiction with separate regulatory framework)
QLD	Shared connection infrastructure	Connecting parties	Electricity consumers fund any shortfall, subject to prudency and efficiency safeguard	Minister may declare amount to be recovered from consumers. NER revenue determination adjusted
VIC	Shared transmission network	Electricity consumers via transmission use of system charges	Unclear – connecting parties may contribute where demand for access rights is greater than the supply	Minister may declare amount to be recovered from consumers. NER revenue determination adjusted
TAS (draft)	Shared connection infrastructure	Connecting parties pay	Electricity consumers fund shortfall (subject to least cost safeguards)	Prices for REZ infrastructure regulated under regulator approved cost and price plan. Minister declares amount to be recovered from consumers through transmission prices.

Cost recovery approaches contribute to multiple government objectives

This table shows the REZ objectives that each of the key features of the cost recovery approaches contribute to.

Objective	Accelerate, incentivise transmission investment	Accelerate & incentivise generation investment	Coordinate investment	Community support	Economic, social and community objectives
Consumers underwriting risks of shared connection-related infrastructure	✓	✓	✓	✓*	
Changes to cost allocation approach to socialise costs to customers	✓				✓**

* Requiring consumers to underwrite the risks of shared connection-related infrastructure helps engender community support by providing for a single, managed infrastructure project. This means that affected landholders will not have multiple approaches from different proponents to construct infrastructure on their property, and there will be less infrastructure overall.

** Socialising costs across a state, such as in NSW, helps achieve economic, social and community objectives by ensuring regional communities with small populations are not required to fund significant infrastructure builds.

Jurisdictions are developing access schemes to promote specific policy outcomes

Under the national framework, all generators have the right to connect to the shared transmission network, subject to meeting technical standards and requirements. This is referred to as "open access". The designated network asset (DNA) framework introduced the ability for generators to fund shared connection infrastructure and have an access policy, approved by the AER, apply. To enable an access policy to apply, DNAs must be radial configurations.

Connection and access to REZ transmission networks is controlled under jurisdictional frameworks, requiring derogation from the NER open access or DNA access frameworks. The purpose of jurisdictional access schemes varies depending on the policy drivers and type of network infrastructure (e.g. radial versus meshed), and therefore the application and administration of access schemes can vary by REZ within a jurisdiction. For example, access schemes can:

- Support cost recovery policies requiring contributions from connecting parties. Without an access scheme in place, connecting parties do not have an incentive to contribute to the cost of network infrastructure.
- Reduce network congestion by limiting access to network infrastructure in and around REZs.
- Manage social licence considerations by coordinating multiple projects in a geographic area.

Where an access scheme is applied, connecting generation and storage projects require an access right or authorisation to negotiate connection to the REZ transmission infrastructure covered by the access scheme.

There are three key features of access schemes:

- The nature of the access right
- The access allocation process (eligibility)
- Access fees and charges.

Nature of access right: limited physical access

Only two access schemes have been declared to date, both of which apply to REZs located in NSW (see page 26 for a comparison of the two schemes). Both declared access schemes are a limited physical connection model, meaning there is a target limit of generator curtailment for a REZ, averaged over a reference year. This approach has the following implications:

- individual connecting parties have no guaranteed or even target level of physical access – the target is averaged across all connecting parties
- the access scheme only applies within the REZ – there is no limited physical access to the regional reference node.

Other jurisdictions also appear to be contemplating access schemes or arrangements that limit physical access to REZ transmission infrastructure.

No jurisdictions are contemplating financial access regimes or firm physical access to the regional reference node. NSW consulted stakeholders on the possibility of developing a financial access right but concluded it was too complex.

Access allocation processes differ and depend on conceptual approach to REZ transmission

Access allocation process

Mechanisms for allocating access to REZ transmission infrastructure differ across jurisdictions and REZs, from direct application and selection processes to competitive tenders.

In Queensland and Tasmania where REZ transmission infrastructure is constructed to support identified projects, access will be managed via an application and selection process. In Queensland, the REZ management plans will include criteria that the TNSP will use to identify entities and projects that may connect to and access the transmission network. The criteria must include consideration of:

- social licence criteria
- capability and performance of entities, and
- feasibility of projects to connect within an appropriate timeframe.

In Victoria, the current access regime policy indicates that potential connecting parties respond to a request for proposal. If the total responding capacity is less than the available capacity in the REZ, all applicants are awarded an access right (presumably subject to meeting any eligibility requirements). If the total responding capacity sought by projects is more than the available REZ network capacity, VicGrid will conduct a competitive tender to allocate access.

In NSW access rights are allocated either via competitive tender or a direct application process where this process is necessary for the timely delivery of a REZ network infrastructure project.

Access fees and charges

All jurisdictions require access holders to pay access fees and charges. In all jurisdictions, the access fees and charges capture contributions to social licence activities to support the development of the REZ.

Outside of Victoria, access fees and charges also capture contributions to REZ transmission network infrastructure. In Victoria, this may occur if the access right allocation process goes to competitive tender. In this instance, contributions to REZ transmission network infrastructure is proposed to be a criterion against which bids are assessed.

Access schemes may vary by REZ within a jurisdiction, as demonstrated in NSW

Design element	Central West Orana REZ	South West REZ
Initial physical cap on connections	5.84GW	3.98GW
Target limit of generator curtailment (average over a reference year)*	4.37%	3.86%
Key policy drivers for limiting connections	To attract generators to the REZ and manage social licence considerations	To manage congestion in the REZ from over-subscription and to manage social licence considerations
Access rights network	New transmission network in Central West Orana REZ	Project EnergyConnect and parts of actionable ISP project VNI West***
Level of meshing	Radial	Limited points of interconnection
Term**	33 years from energisation of the first network element of the access rights network	15 years from electrification of the Dinawan substation
TNSP	ACEREZ (intending TNSP)	Transgrid

*The target limit of generator curtailment is determined using modelling of the efficient level of over-subscription in the REZ having regard to the development pathway in the Infrastructure Investment Objectives Report and the transfer capacity of the relevant REZ network infrastructure project.

** The different durations of the access schemes reflects the different characteristics of the REZs. The scheme term for Central West Orana reflects the concession period for the preferred network operator delivering new network infrastructure in the REZ and the need to attract long term investment to utilise the network. By contrast, the shorter scheme term for South West REZ reflects that the REZ infrastructure is delivered under the NER and that while a policy objective of the scheme is to manage congestion in the REZ the scheme should be reviewed within 15 years to ensure access is not inefficiently constrained by the scheme.

*** Under the EII Act, access schemes can be applied to any network infrastructure that forms part of the REZ, whether that infrastructure is delivered under the EII Act or the NER planning and investment frameworks.

Access schemes contribute to multiple government objectives

This table shows the REZ objectives that each of the key features of the access schemes contribute to.

Objective	Accelerate, incentivise transmission investment	Accelerate & incentivise generation investment	Coordinate investment	Community support	Economic, social and community objectives
Limits on physical connection		✓	✓	✓	✓
Eligibility and merit assessment of connecting projects			✓	✓	✓
Collection of access fees from participants	✓*			✓	✓

* Where access fees contribute to transmission costs

Jurisdictions are streamlining the connections process

NSW has legislated modifications to the NER connection process, but limited detail has been published on REZ connection processes in other jurisdictions. There are two key areas where NSW has diverged, and other jurisdictions are contemplating diverging, from the national framework to help streamline the connections process.

Non-negotiable REZ-specific generator access standards

Most jurisdictional frameworks contemplate, and NSW has legislated, the application of non-negotiable REZ-specific generator access standards to generation and storage connecting to REZ transmission projects.

The purpose of non-negotiable generator access standards is to help accelerate generation investment by removing the need for the connecting party and the relevant TNSP to negotiate the technical performance standards that the connecting party must meet to be able to connect to the network. These negotiations can be lengthy and so extend the timeframe for connection. Making these standards non-negotiable essentially removes a step from the NER connection process.

In addition, REZ access standards can facilitate concurrent assessment of projects and the scoping of network requirements, including system strength needs. This is because the performance of a group of projects can be modelled based on the assumed performance at the standard required in the REZ access standards, to understand network and project interactions at an earlier stage.

Concurrent assessment of projects

Under the NER, TNSPs must assess connection applications on a case-by-case basis. There are limitations on the ability of TNSPs to consider multiple applications as a batch or consider the impact of multiple connections in their power system studies prior to projects being committed. This means multiple iterations of assessment can be required as projects progress under different timeframes. This issue is currently being considered by AEMO and the Clean Energy Council via their Connections Reform Initiative (see the box below).

The NSW framework derogates, and Queensland REZ framework proposes to derogate, from the NER and gives the relevant TNSP the power to undertake concurrent assessments of multiple generation and storage projects connecting to a REZ transmission project.

The proposed Tasmanian REZ framework does not identify specific changes to connection arrangements but includes broad powers to derogate from the NER to implement changes. Victoria intends to consult on connection arrangements to support their Victorian Transmission Investment Framework in late 2024.

Connection reform initiative

AEMO and the CEC have been collaborating on initiatives to address concerns about delays in, and the increasing complexity of, connections. A rule change stemming from this process was recently made to enhance investment certainty in the R1 process. The initiative is ongoing and includes consideration of “batching” to allow concurrent assessment of projects.

Connection approaches contribute to investment objectives

This table shows the REZ objectives that each of the key features of the connection approaches contribute to.

Objective	Accelerate, incentivise transmission investment	Accelerate & incentivise generation investment	Coordinate investment	Community support	Economic, social and community objectives
Concurrent processing of applications to connect		✓	✓		
REZ-specific generator access standards (limited/no ability to negotiate)	Early clarity on network requirements; defines scope for contestable procurement	✓	✓		

Part B

Details of jurisdictional approaches

1. New South Wales

1.1 Overview and governance

1.1.1 Key legislation

The NSW Government published an Electricity Infrastructure Roadmap in November 2020. The Roadmap is a 20 year plan for the transformation of NSW's electricity system including the development of renewable energy zones (REZs).

The Roadmap is enabled under the *Electricity Infrastructure Investment Act 2020* (NSW) (EII Act). The EII Act creates the governance framework for development and implementation of REZs by conferring functions on new and existing entities. The key functions of REZ entities are described in section 1.1.4 below.

1.1.2 Powers to derogate from the NEL and NER

Provisions of the NEL and NER can be modified or disapplied by regulations made under the EII Act to enable:

- the operation of an access scheme in a REZ and achieve the objects of the EII Act (EII Act, s27(1))
- a network operator subject to an authorisation[1] to carry out an infrastructure project (EII Act, s41(1)(a)), and
- a network subject to an authorisation to receive payment or recover costs for carrying out a REZ network infrastructure project under the NER, to transition between EII Act and NER cost recovery arrangements and ensure a network operator does not receive payments under both arrangements (EII Act, s41(1)(b) to (d)).[2]

If a regulation under these sections affects AEMO's exercise of its functions, AEMO must agree to the regulation (EII Act, s27(3), s41(3)).

1.1.3 Objects of the EII Act

A person or body exercising a function under this Act must do so in a way that is consistent with the objects of this Act (EII Act, s 3(3)).

Key Objects of the EII Act are:

- to improve the affordability, reliability, security and sustainability of electricity supply
- to co-ordinate investment in new generation, storage, network and related infrastructure
- to encourage investment in new generation, storage, network and related infrastructure by reducing risk for investors
- to foster local community support for investment in new generation, storage, network and related infrastructure
- to support economic development and manufacturing

[1] An authorisation means in respect of REZs, an authorisation by the Consumer Trustee to carry out a REZ network infrastructure project or a direction given by the Minister to carry out a REZ network infrastructure project.

[2] The EII Act also requires the Minister to consult with DNSPs and TNSPs before making regulations that affect the operation or safety of network infrastructure (EII Act, s27(2), s41(2)).

- to create employment, including employment for Aboriginal and Torres Strait Islander peoples
- to invest in education and training
- to promote local industry, manufacturing and jobs, and
- to promote export opportunities for generation, storage and network technology.

1.1.4 REZ entities

Minister

The Minister for Energy and Climate Change is responsible for the EII Act. In relation to REZs, the Minister has the following key functions:

- the declaration of REZs (EII Act, s 19). The Minister is required to declare REZs in five areas of NSW: Central-West Orana, Illawarra, New England, South West and Hunter-Central Coast (NSW mandated REZs)
- the appointment of the Infrastructure Planner for the REZ (EII Act, s 19(3). The Minister is required to appoint EnergyCo NSW as the infrastructure planner for the NSW mandated REZs
- the appointment of the Consumer Trustee and the Regulator[3]
- the direction to a network operator to carry out a REZ network infrastructure project (EII Act, s 32)
- the declaration and amendment of access schemes in REZs (EII Act, s 24 & 28) and publication of guidelines for access scheme declarations (EII Act, s 26).

Infrastructure Planner

The EII Act creates an entity called the Infrastructure Planner.[4] For NSW mandated REZs, the Infrastructure Planner is EnergyCo NSW. For any other REZs declared under the EII Act, the Minister appoints the Infrastructure Planner.[5]

The Infrastructure Planner has the following key functions in relation to REZs:

- assessing and making recommendations to the Consumer Trustee about network infrastructure projects required for REZs (EII Act, s 30; EII Regulation, clause 43)
- carrying out a competitive assessment process in relation to a proposed REZ network infrastructure project including consulting with the Regulator before and during the process (EII Regulation, clause 45)
- administering access schemes, allocating access rights and other access scheme functions (EII Regulation, Schedule 1A)
- prohibiting a network operator from connecting generation or storage infrastructure with capacity of at least 30MW to its network in the circumstances specified in EII Act, s29

[3] Only the AER, IPART or a person prescribed by regulations can be appointed as regulator.

[4] An Infrastructure Planner is a person authorised under section 63 of the Act to carry out the functions of the Infrastructure Planner (EII Act, Dictionary, definition of Infrastructure Planner).

[5] The functions of an infrastructure planner in relation to a REZ or part of a REZ are to be exercised by the Energy Corporation at any time during which a person is not appointed as the infrastructure planner for the REZ or part of the REZ (EII Act, section 63(3)). The infrastructure planner is subject to the direction of the Minister (EII Act, s63(8)).

- where an access scheme applies in a REZ, administering, managing and making payments of money held for use in relation to a community purpose or employment purpose (EII Regulation, clause 42D)[6].

Consumer Trustee

The EII Act creates an entity called the Consumer Trustee.[7] The Consumer Trustee must act independently (it is not subject to Ministerial direction) and in the long term financial interests of the NSW electricity consumers (EII Act, s60(3). The Minister has appointed AEMO Services Pty Limited, a subsidiary of AEMO, as the Consumer Trustee. The key functions of the Consumer Trustee in relation to REZs are:

- determining access fees payable by participants in access schemes (EII Act, s 26)
- after considering recommendations made by the Infrastructure Planner in relation to REZ network infrastructure projects:
  - authorising a network operator to carry out the project, or
  - recommending the Minister direct a network operator to carry out the project (EII Act, s 31(1)
- if the Consumer Trustee authorises a network operator to carry out a REZ network infrastructure project, setting a maximum capital cost (EII Act, s 31(2)) – see section 1.3.2)
- reporting on the infrastructure investment objectives ((EII Act, s 45) – see section 1.2.1).

Regulator – AER

On 12 November 2021, the Minister appointed the AER as a Regulator under the EII Act to carry out specified functions of the Regulator.[8] The AER's key functions under the EII Act related to REZs are:

- performing any functions of the regulator under access schemes,
- making 5-year revenue determinations for REZ network infrastructure projects (see section 1.4.1), and
- making annual contribution determinations in relation to the Electricity Infrastructure Fund (see section 1.1.6).[9]

[6] The Infrastructure Planner also has general functions under section 63 of the EII Act to investigate, plan, co-ordinate generation, storage and network infrastructure.

[7] The Consumer Trustee is a person authorised under section 60 of the Act to carry out the functions of the Consumer Trustee (EII Act, Dictionary, definition of Consumer Trustee).

[8] The Commonwealth and NSW executed a conferral agreement which sets out the AER's functions as Regulator (see Resources in Appendix B).

[9] IPART has been appointed by the Minister to carry out some of the functions of a Regulator under the EII Act. These functions are not directly relevant to REZs.

1.1.5 Scheme Financial Vehicle

The EII Act creates functions for a Scheme Financial Vehicle (SFV).[10] Its key functions relevant to REZs are to facilitate funding and payments for REZ network infrastructure projects and community and employment purposes through:

- receipt of access fees payable by participants in an access scheme (see section 1.4.3)
- receipt of payments from consumers via DNSPs (see section 1.4.2)
- making regulated service payments to network operators under EII Act revenue determinations (see section 1.4.1), and
- paying community and employment purpose components of access fees for the Infrastructure Planner to administer and manage in REZs.

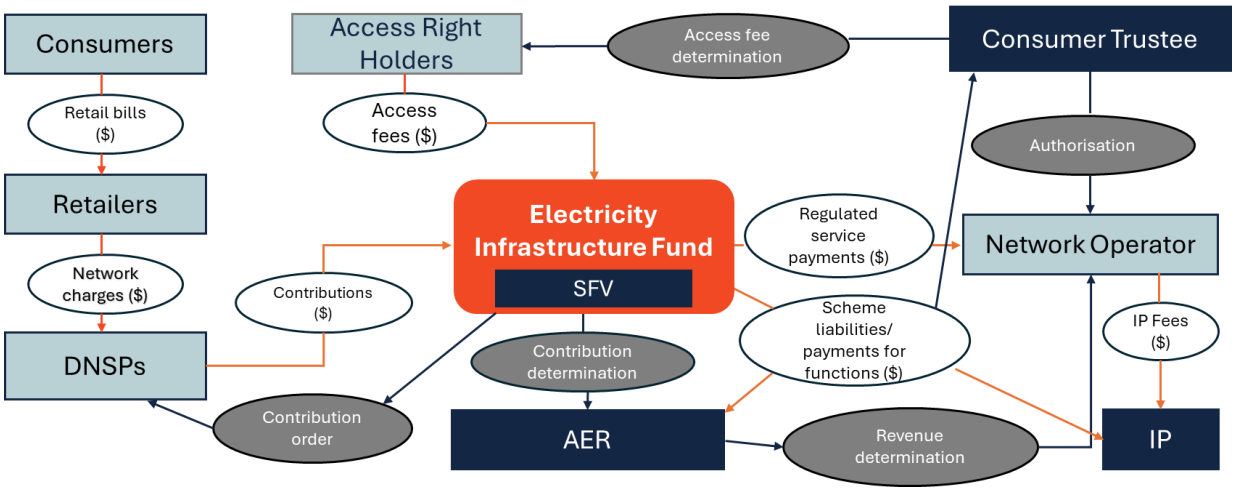
1.1.6 Electricity Infrastructure Fund

The Electricity Infrastructure Fund is a fund established and maintained by the SFV. Relevant to REZs, funds flow:

- into the fund from access fees from participants in access schemes and from contribution orders made by the SFV on DNSPs,[11] and
- out of the fund to network operators in accordance with EII Act revenue determinations and to the Infrastructure Planner to administer and manage community and employment purpose funds in REZs.

Figure 1 shows the funding flows between the various REZ entities and other relevant parties.

Figure 1: EII Act Funding flow



Source: Reform Matters

[10] The Scheme Financial Vehicle was established by the Financial Trustee on 16 September 2022. It is a proprietary company limited by shares with shares held on trust by the Financial Trustee. It is independent of the NSW Government. The Financial Trustee is appointed by the Consumer Trustee.

[11] The AER, as regulator for this function under the EII Act, must make annual contribution determinations, being the amounts required for the SFV to meet its liabilities including payments to network operators and under LTESAs (EII Act, s56). The SFV may then make contribution orders on DNSPs that require the amounts specified by the AER to be paid in to the Electricity Infrastructure Fund (EII Act, s58).

1.2 REZ assessment and planning

The NSW REZ framework includes NSW-specific network planning reports, outlined below, and a requirement for the Infrastructure Planner for a REZ to make recommendations on network infrastructure projects required for the REZ.

In addition, the NSW REZ framework includes a mechanism to enable projects planned and identified in the ISP to be "actioned" under the EII Act as priority transmission infrastructure projects (see section 1.7.1).

1.2.1 Network planning reports

Infrastructure investment objectives

The infrastructure investment objectives are specified in section 44 of the EII Act and include:

- overall objectives for the construction of generation infrastructure from renewable sources that have a generation capacity of above 30MW (large renewable generation), long duration storage infrastructure[12] and firming infrastructure[13]
- minimum objectives for the period ending on 31 December 2029 for the construction of large renewable generation and long-duration storage infrastructure.[14]

IIO Report

The Consumer Trustee must publish an Infrastructure Investment Objectives Report (IIO Report) every two years.[15] The IIO Report is focussed on the development of generation and firming infrastructure and is required to:

- set out a development pathway for that infrastructure for the next twenty years to achieve the infrastructure investment objectives, and
- a plan for the tender of LTESAs for the next 10 years.

The IIO Report is a NSW policy and therefore may be considered in AEMO's Integrated System Plan (ISP).[16] The ISP and IIO have different purposes and different "optimisation objectives". The ISP's objective is to "identify the least cost plan for the transition of the NEM to deliver safe, secure and reliable electricity to consumers within the relevant Government policy settings" and the IIO Report's objective is to "minimise costs to NSW consumers (while meeting other IIO objectives)".[17]

The latest IIO report was published in December 2023.[18]

[12] Storage units with a registered capacity that can be dispatched for at least 8 hours and is scheduled in central dispatch.

[13] Firming infrastructure is not defined in the EII Act.

[14] The minimum objectives are (1) the construction of generation infrastructure that generates at least the same amount of electricity in year as 8GW from the New England REZ, 3GW from the Central-West Orana REZ and an additional 1GW and (2) construction of long-duration storage infrastructure with storage of 16GWh and capacity of 2GW.

[15] EII Act, s45.

[16] NER, cl 5.22.3(b).

[17] IIO Report, December 2023, p21.

[18] IIO Report, December 2023.

Network infrastructure strategy

In May 2023, EnergyCo, as Infrastructure Planner, published a Network Infrastructure Strategy. It is described as a 20-year strategy for the practical coordination of NSW network infrastructure to connect new generation and storage in NSW's five mandated REZs and meet the infrastructure investment objectives. The strategy is designed to complement the development pathway for generation, storage and firming infrastructure under the IIO report.[19]

The report sets out options for development of network infrastructure projects including additional capacity in REZs.

1.2.2 REZ declarations

How a REZ is declared

A REZ is declared under an order made by the Minister (EII Act, s19).

Purpose of REZ declarations

The declaration of a REZ by the Minister activates key powers and functions under the EII Act relating to REZs:

- Infrastructure Planner recommendation of REZ network infrastructure projects – The Infrastructure Planner's function to assess and recommend to the Consumer Trustee REZ network infrastructure projects required for REZs (EII Act, s30).[20]
- Authorisation or direction of REZ network infrastructure projects – The Consumer Trustee's function to authorise a network operator to carry out a REZ network infrastructure project or recommend that the Minister directs a network operator to carry out a REZ network infrastructure project.
- Declaration of access schemes – the Minister's power to declare access schemes over all or a part of a REZ.
- Prohibition to connect orders – the Infrastructure Planner's function to prohibit a network operator from connecting generation or storage infrastructure with capacity of at least 30MW to its network under EII Act, s29.

The Minister may but is not required to exercise these powers and functions which means a declared REZ may or may not have new REZ network infrastructure projects delivered under the EII Act or have an access scheme declared over new or existing network infrastructure in the REZ.

In addition, a REZ declaration is relevant to the award of Long Term Energy Service Agreements (LTESAs).[21] The Consumer Trustee must not recommend an LTESA be made if it relates to renewable generation infrastructure that is not, or will not be, part of a REZ, unless the Consumer Trustee is satisfied that the LTESA shows outstanding merit.

[19] See NSW Network Infrastructure Strategy. Unlike the IIO report, the Network Infrastructure Strategy is not currently required by legislation so how AEMO may take it into account in the ISP is less clear than the IIO.

[20] A REZ network infrastructure project is a network infrastructure project that forms part of a REZ and consists of network infrastructure of a class prescribed in the EII Regulation. See EII Act, Dictionary and EII Regulation, clause 17.

[21] LTESAs are derivative products under which generation, storage and firming projects can access minimum cash flows for a long contract term to manage risk related to low wholesale market prices. The Consumer Trustee tenders LTESAs guided by the development pathway in the Infrastructure Investment Objectives report and the Scheme Financial Vehicle is the counterparty to the agreements.

Content of a REZ declaration

A REZ comprises:

- a specified geographical area of NSW, and
- specified generation, storage or network infrastructure, including planned or existing infrastructure (EII Act, s19(1)).

Importantly, the network infrastructure that forms part of a REZ may extend outside the geographical area specified in the declaration (EII Act, s19(2)). This means that a REZ network infrastructure project that extends outside the REZ geographical area (e.g. between the REZ geographical area and a load centre) can be recommended and authorised under the EII Act.

A REZ Declaration must also include:

- a map showing the geographical area
- the intended network capacity for network infrastructure in the REZ
- the infrastructure planner appointed for the REZ or part of the REZ, and
- other matters prescribed by regulation (EII Act, s19(3)). No other matters are currently prescribed in the EII Regulation.

REZs declared to date

Five REZs have been declared by the Minister. These REZs and key information related to the REZ as at the date of this report is set out in Table 1.

EnergyCo NSW is the Infrastructure Planner for each of the current declared REZs.

Table 1: NSW Declared REZs – key information

REZ	Intended network capacity	REZ transmission infrastructure delivered under EII Act	Access scheme
Central-West Orana	6GW[22]	Yes	Yes)
South-West	2.5GW	No	Yes
Hunter-Central Coast	1GW	Not currently	Not currently
New England	8GW	Not currently	Not currently
Illawarra	1GW	Not currently	Not currently

1.2.3 Interaction with NER planning frameworks

The reports published under the EII Act framework in some cases cover the same projects that are captured in NER planning documents including the ISP and Transmission Annual Planning Reports (TAPRs). There is also a lack of clarity on the respective roles and responsibilities of EnergyCo, Transgrid and AEMO for transmission network planning.

On 4 August 2023, an independent report – the NSW Electricity Supply and Reliability Check-up – was published. Among other things, the review recommended that "the Minister should commission an expert review of current Transmission Planning arrangements in NSW to reduce duplication and

[22] Initially declared with an intended network capacity of 3GW but amended in December 2023 to an intended network capacity of 6GW. The new Central West Orana REZ network infrastructure is authorised to operate at 4.5GW.

advise on the best approach to ensuring coordination between the Roadmap bodies (Energy Co, Transgrid, AEMO, AEMO Services)."[23,24]

The role of REZ network operators in network planning is addressed in amendments to the EII Regulation published on 13 December 2024 (including Chapter 9A of the NER NSW given effect under that regulation). Chapter 9A envisages a limited role for REZ network operators in planning of network augmentations. For example, the Infrastructure Planner will participate in joint planning with respect to REZ networks instead of REZ network operators and the REZ network operator will undertake a limited scope annual planning review and publish an annual planning report focussed on asset management.[25]

1.3 Transmission investment

1.3.1 Cost recovery for early works

The NSW REZ framework enables early works on REZ network infrastructure projects (e.g. easements, project development work, client delivery and related costs) to be undertaken prior to a project being authorised or directed, or an EII Act revenue determination being made. Development activities for REZ transmission projects can be funded by EnergyCo NSW (as Infrastructure planner) through a Transmission Acceleration Facility established in 2022.[26] The Infrastructure Planner's costs of carrying out early works can then be repaid by an authorised network operator following authorisation[27] and are not subject to a prudency or efficiency assessment by the AER.[28]

1.3.2 Investment Test

The NER regulatory investment test for transmission and regulatory investment test for distribution do not apply to REZ network infrastructure projects. Instead, there are two key steps required before a network operator may seek cost recovery for a REZ network infrastructure project under the EII Act:

- a recommendation by the Infrastructure Planner for the REZ that a network operator carry out a REZ network infrastructure project, and
- an authorisation by the Consumer Trustee or a direction by the Minister for a network operator to carry out a REZ network infrastructure project.

Infrastructure Planner recommendations

The Infrastructure Planner for a declared REZ must assess and make recommendations to the Consumer Trustee about REZ network infrastructure projects required for the REZ (EII Act, s30).

An Infrastructure Planner recommendation is required to include options for different projects to provide the intended network capacity of the REZ, staging and sequencing of projects and funding, procurement and cost recovery for recommended projects (EII Act, s30(2)). The EII Regulation prescribes specific additional content for Infrastructure Planner recommendations.

---

[23] Marsden Jacob Associates, Electricity Supply and Reliability Check Up, 4 August 2023, recommendation 18, p70.

[24] The NSW Government accepted this recommendation, and the review will be conducted by Energy, Climate Change & Sustainability within the NSW Department of Climate Change, Energy, the Environment and Water. No further information on the review has been published to date.

[25] EII Regulation, Schedule 1B, item 5; Chapter 9A, clause 9A.9.

[26] Matt Kean Media release, June 2022.

[27] EII Regulation, cl46(1)(b)(ii).

[28] AER, Revenue determination guidelines for contestable network infrastructure projects, s7.4; AER, Revenue determination guidelines for non-contestable network infrastructure projects, s7.4, s5.6

Infrastructure planner recommendations made to date

As at the date of this report, EnergyCo, as Infrastructure Planner has recommended two REZ network infrastructure projects:

- a recommendation that ACEREZ carry out the "Main CWO REZ Network Infrastructure Project" comprised of new 500kV and 330kV network infrastructure and system strength infrastructure in the Central-West Orana REZ, and
- a recommendation that Transgrid carry out the "Enabling Works CWO REZ Network Infrastructure Project" comprised of works required to facilitate the connection of the new project to Transgrid's existing transmission system.[29]

On 16 October 2024, EnergyCo announced that it was working with Ausgrid to finalise a proposed network solution to deliver the Hunter-Central Coast REZ.[30] As at the date of this report there was no public report published on an Infrastructure Planner recommendation for the Hunter-Central Coast REZ.

Authorisation or direction

The EII Act cost recovery framework for REZ network infrastructure projects is activated by an authorisation by the Consumer Trustee, or direction by the Minister, of the network operator to carry out that project. Following a recommendation from the Infrastructure Planner for a REZ network infrastructure project, the Consumer Trustee may:

- recommend the Minister give a direction to a network operator to carry out the project, or
- authorise a network operator to carry out the project (EII Act, s31(2)).

The Consumer Trustee must not recommend a direction unless it is satisfied that the direction is reasonably necessary to achieve the infrastructure investment objectives (EII Regulation, cl 19(1)). In its approach paper for the Network Authorisation process, AEMO Services (the Consumer Trustee) indicates that it will only recommend that the Minister direct a network operator to carry out a REZ network infrastructure project if:

- the direction is required to ensure that the project is delivered on time to meet the investment infrastructure objectives, and
- a non-contestable process has been used to select the network operator (see section 1.4.1) or the direction is necessary to ensure timely delivery of infrastructure required to enable a new REZ network infrastructure project.[31]

The Consumer Trustee's approach for authorising REZ network infrastructure projects is set out in its Network Authorisation Process approach paper.[32] The Consumer Trustee must not authorise a REZ network infrastructure project unless it is satisfied that the project is in the long-term financial

[29] Central-West Orana REZ Infrastructure Planner Recommendation Public Report

[30] EnergyCo media announcement, 16 October 2024

[31] Network Authorisation Process, September 2023, Approach paper for authorising Renewable Energy Zone Network Infrastructure Projects, s 3.3.

[32] Ibid.

interests of NSW electricity customers (EII Regulation, s19B(2)).[33] The Consumer Trustee must also act in a manner consistent with the objects of the EII Act.

In determining whether it is satisfied the project is in the long-term financial interests of NSW electricity customers, the Consumer Trustee must:

- undertake a cost benefit analysis of the project in accordance with the EII Regulation and give primary consideration to the analysis, or
- give primary consideration to the most recent infrastructure investment objectives report (see section 1.2.1) as at the time of the Infrastructure Planner's recommendation in relation to the authorisation (EII Regulation, cl 19B(3)).

EII Act cost benefit analysis

A cost benefit analysis by the Consumer Trustee under the EII Act and Regulation differs in material respects from the NER regulatory investment tests. An EII Act cost benefit analysis must assess the costs and benefits to consumers, and the costs or benefits from the expected change in greenhouse gas emissions as a result of the project. It is not a market benefits test as it does not consider the costs and benefits to government or electricity producers as a result of the REZ network infrastructure project (EII Act, cl 19C). In addition, the Consumer Trustee may determine that a project is in the long term financial interests of consumers despite the quantitative measurements of the cost benefit analysis being negative (EII Regulation, cl 19B(4)).

The Consumer Trustee's analysis must, among other things:

- consider the costs to NSW electricity customers from the project,
- consider the benefits to NSW electricity customers from generation and storage infrastructure connecting to the project, and
- not consider the costs and benefits to government or electricity producers as a result of the REZ network infrastructure project (EII Act, cl 19C).

If the Consumer Trustee authorises a REZ network infrastructure project it must set a **maximum capital cost amount** for the "prudent, efficient and reasonable capital costs for development and construction of the REZ network infrastructure project that may be determined by the regulator" (EII Act, s31(2)).[34] An EII Act revenue determination must not allow for cost recovery above that maximum amount (EII Act, s38(6)).

If the Minister receives a recommendation from the Consumer Trustee to direct a network operator to carry out a REZ network infrastructure project,[35] it must consult with the relevant network operator and may make a direction if it is satisfied that the direction:

- is in the public interest, and
- is consistent with the objects of the EII Act (EII Act, s32).

[33] The Consumer Trustee may be satisfied the project is in the long-term financial interests of NSW electricity customers despite the quantitative measurements of the cost benefit analysis being negative, having regard to both the quantitative measurements and qualitative elements of the cost benefit analysis (EII Regulation cl 19B(4)).

[34] The maximum capital cost may not be disclosed by the Consumer Trustee or the Regulator.

[35] EII Act, s33.

A network operator that receives a direction must comply with that direction once the regulator has made a determination that entitles the network operator to recover revenue for carrying out the project (EII Act, ss35, 39(3)).

Authorisations or directions made to date

As at the date of this report, the Consumer Trustee has authorised the two REZ network infrastructure projects for the Central West Orana REZ recommended by the Infrastructure Planner [36,37]. To date, the Minister has not issued a direction in relation to a REZ network infrastructure project.

1.3.3 Contestable procurement of REZ transmission projects

The NSW framework provides for contestable procurement of REZ transmission projects. See section 1.4.1.

1.3.4 Ministerial power to direct transmission infrastructure to be built

The Minister has the power to direct to a network operator to carry out a REZ network infrastructure project under the EII Act, s 32.

1.4 Cost recovery

1.4.1 Revenue determinations

The NSW REZ framework includes an alternative economic regulatory framework to Chapter 6 and 6A of the NER. The EII Act economic regulatory framework applies where a network operator is authorised or directed to carry out a REZ network infrastructure project (or priority transmission infrastructure project – see section 1.7.1).[38] Importantly, unlike the NER (except as it applies in Victoria) the EII Act revenue recovery framework supports:

- contestable and non-contestable selection of network operators, and
- the application of different tests to assess prudency and efficiency to components of revenue determinations depending on whether the relevant component was subject to a competitive assessment process or not.

The AER must make, develop and publish guidelines for contestable and non-contestable revenue determinations.[39] The contestable guidelines apply to components subject to a competitive assessment process (and where the AER is satisfied the competitive assessment process was genuine and appropriate)[40] and the non-contestable guidelines apply to components that were not subject to a competitive assessment process (e.g. where the network operator was selected directly by the Infrastructure Planner).

[36] Notice of authorisation – Main CWO REZ network infrastructure project, June 2024.
[37] Notice of authorisation – Enabling CWO REZ network infrastructure project, June 2024.
[38] Where a network operator is authorised or directed to carry out a project, the AER must determine the amount payable to the network operator (EII Act, s38(1)). See section 1.8 in relation to priority transmission infrastructure projects.
[39] EII Regulation, cl47(1).
[40] EII Regulation, cl 47E(2).

Key requirements for revenue determinations

Key requirements for revenue determinations under the EII Act and Regulation include:

- components of EII revenue determinations – a determination must include amounts for different components, including repayment of capital costs determined under a "transmission efficiency test" (described below), return on capital and an allowance for operating costs
- transmission efficiency test – the regulator, before making a determination, must calculate the prudent, efficient and reasonable capital costs for development and construction of the network infrastructure project, and
- maximum capital cost – the amount determined by the regulator for the development and construction of a REZ network infrastructure project must not exceed the maximum capital cost determined by the Consumer Trustee (see section 1.3.2).

Application of contestable revenue determinations

As noted above, the AER must apply its Guidelines for contestable revenue determinations if a component of a revenue determination is derived from a competitive assessment process, and the AER is satisfied that the competitive assessment process is genuine and appropriate.[41] The AER's contestable revenue determination guidelines set out how they will assess the genuineness and appropriateness of the Infrastructure Planner's process, including review of the procurement strategy and review of the process after it is completed.

If the AER is satisfied that the relevant competitive assessment process is genuine and appropriate then the costs of a network operator to carry out that project are considered prudent, efficient and reasonable.[42] The effect of this is that amounts the Infrastructure Planner agrees should be paid to the network operator for a component of a revenue determination under contractual arrangements with that operator are reflected in the AER's revenue determination.

Application of non-contestable revenue determinations

If the Infrastructure Planner directly selects a network operator rather than applying a competitive assessment process to makes its selection, the AER applies non-contestable revenue determination guidelines. The non-contestable revenue determination guidelines are based on the approach in Chapter 6A of the NER[43] but the process for making determinations differs from NER processes, enabling a more streamlined approach.

[41] EII Regulation, cl47E(2). The EII Regulation also requires the AER to determine the amount for a component relying on an adopting information provided by the Infrastructure Planner and network operator where the amount for the component is not derived from a competitive assessment process but existing contractual arrangements contain a referenced cost process that the AER considers appropriate and costs have been determined using that process (EII Regulation, cl47E(3)).

[42] EII Regulations, cl.46(1)(a).

[43] EII Regulation, cl. 47A(3)(b). Revenue determination guidelines for non-contestable projects, p2.

Revenue determinations made to date

As at the date of this report no revenue determinations have been made in relation to REZ network infrastructure projects. However, both contestable and non-contestable revenue determinations have been made in the context of the Waratah Super Battery project, a priority transmission infrastructure project,[44] and the AER received a revenue proposal for the main Central-West Orana REZ network project on 24 October 2024.[45]

1.4.2 Cost recovery from electricity consumers

Allowed revenue under EII Act revenue determinations is not recovered directly through network prices as it is in the NER context.[46] Distribution-connected customers generally pay for REZ network infrastructure projects through contributions made by DNSPs based on contribution orders determined by the AER.

Allocation of EII Act transmission costs to electricity consumers differs in two key respects from NER transmission cost allocation:

- load customers directly connected to the NSW transmission network are not required to contribute to the costs of REZ network infrastructure projects[47]
- the allocation of costs to DNSPs under contribution orders must be equitable and based on the amount of energy delivered in a year and peak demand in that year[48] – it does not include a locational component
- the inter-regional TUOS arrangements do not apply to share costs of transmission projects between jurisdictions that benefit from those projects.

1.4.3 Cost recovery from generation and storage projects

Generation and storage projects subject to access schemes may contribute to network infrastructure costs through access fees. Under the draft access fee guidelines for Central West Orana REZ and South West REZ, access right holders would pay a base fee that includes a contribution to REZ network infrastructure as well as fees to recover costs of connection infrastructure serving the specific project.[49]

Figure 1 in section 1.1.6 demonstrates how the funding flows from electricity consumers and access right holders to network operators via the Electricity Infrastructure Fund.

[44] See AER's website on the Waratah Super Battery.

[45] Central-West Orana REZ | Australian Energy Regulator (AER).

[46] The scheme financial vehicle is required to pay a network operator the amount the network operator is entitled to in accordance with the regulator's revenue determination (EII Act, s39(1)) out of the Electricity Infrastructure Fund.

[47] Or priority transmission network infrastructure projects authorised or directed under the EII Act – see section 1.7.1.

[48] EII Regulation, cl 35(1)(b).

[49] AEMO Services, Central West Orana Renewable Energy Zone (CWO REZ) Access Fee Guidelines, April 2024; AEMO Services, South West Renewable Energy Zone (SW REZ) Access Fee Guideline, May 2024.

1.5 Access to REZ infrastructure

The NSW REZ framework empowers, but does not require, the Minister to declare an access scheme to network infrastructure that forms part of a REZ (EII Act, s24(1)).[50] An access scheme overrides the NER open access framework which applies to shared network.[51] The Consumer Trustee may determine fees payable by participants in an access scheme to the SFV.

1.5.1 Objectives and scope of access schemes

Objectives

The current Guidelines for Access Scheme Declarations identify the following objectives of access schemes:

- encourage investment in new generation and storage projects in REZs by reducing risk for investors
- enable coordination of investment in new generation, storage, network and related infrastructure
- support improved land-use planning outcomes
- foster local community support for investment in new generation storage, network and related infrastructure
- support local economic development, local industry, manufacturing and jobs
- increase employment and income opportunities for First Nations peoples and promote consultation and negotiation with the traditional owners of land on which generation and storage projects in REZs are constructed or operated.

Scope

Under the EII Act an access scheme is defined as:[52]

…a scheme that authorises or prohibits access to, and use of, specified network infrastructure in a renewable energy zone by network operators and operators of generation and storage infrastructure.

The EII Act provides limited guidance on the design of access scheme that may be declared other than requiring that an access scheme must be consistent with the objects of the Act (EII Act s24(3)). However, based on the definition above an access scheme must:

- identify specified network infrastructure, and
- authorise or prohibit access to, and use of, that network infrastructure by network operators and operators of generation and storage infrastructure.

Further guidance on the contents of access schemes is provided in Guidelines for Access Scheme Declarations required to be made by the Minister (EII Act, s25(1)).

[50] More than one access scheme can apply in a REZ (EII Act, s24(4)).
[51] The NER in NSW has been modified to reflect the need for a generation or storage project seeking access to an access rights network to hold an access right before submitting an application to connect under the NER.
[52] EII Act s24(2).

1.5.2 Access scheme design

Types of access schemes

The current Guidelines for Access Scheme Declarations envisage two types of access schemes that can be applied:

- an **access right regime** under which a generation or storage project must hold access rights to access the network subject to the access scheme (access rights network), and
- an **access control mechanism** under which the access to network infrastructure in the REZ (access control network) is controlled to safeguard the objectives of an access rights regime (e.g. by limiting impacts on access right holders from connections to other networks in the REZ).

If an access rights regime or access control mechanism applies to infrastructure in a REZ, a generation or storage project is prohibited from making an application, or a network service provider from making an offer, for connection to that network unless the project holds an access right (in the case of an access rights regime) or the Infrastructure Planner has approved the connection (in the case of an access control mechanism).

Limited physical connection model

The guidelines note that a limited physical connections model for access which "places limitations on the size, nature and operation of generators with an access right based on a targeted level of transmission curtailment" is likely to form the basis for an access rights regime for mandatorily declared REZs.[53]

The limited physical connections model has been adopted for access schemes in Central West Orana REZ and South West REZ. Adoption of this model followed significant public consultation by the NSW Government on the appropriate design of the access scheme for Central West Orana REZ including exploring an alternative financial model for access which was ultimately not pursued due to its complexity.

Overview

Under the limited physical connection model, the access rights network is specified, and generation and storage projects are required to hold an access right before negotiating connection to that network.[54]

The key characteristics of the limited physical connections model are that physical connections to the specified access rights network are limited. This is intended to provide increased curtailment certainty to generators compared to the NER open access framework but there is no guarantee of actual curtailment outcomes for individual generators[55]. Physical connections are limited using the two key mechanisms:

- a **target transmission curtailment limit**, and
- an **aggregate maximum capacity cap**.

[53] Guidelines for access scheme declarations, July 2022, p9.

[54] The NER as it applies in NSW has been modified under EII Act, section 27(1) to prohibit a generation or storage project making an application to connect, or a network service provider to make an offer to connect, for connection to the access rights network unless the relevant project holds an access right.

[55] Central West Orana Application Process Guidelines, April 2024, p 24. Further information on the target transmission curtailment level is provided in the method paper published by the Infrastructure Planner.

Target transmission curtailment limit and aggregate maximum capacity cap

Under the limited physical connections model, a **target transmission curtailment limit** is determined based on the modelled efficient utilisation of the access right network. The target transmission curtailment limit:

- is a target limit on the forecast curtailment of all generation and storage projects connected to the access rights network based on the transmission transfer capacity of the access rights network
- does not guarantee levels of curtailment and generators are not compensated if the actual curtailment experienced by their project is greater than the target transmission curtailment limit[56]
- is measured at the points of the connection between the access rights network and the rest of the NSW transmission system and does not represent a forecast of curtailment between a generator and the regional reference node.

An **aggregate maximum capacity cap** is also determined and applied. This represents a ceiling on the amount of maximum capacity (in MW) that can be allocated under access rights without exceeding the target transmission curtailment limit.[57]

The limited physical connections model may not be suitable for all REZs, particularly where the planned and existing REZ network infrastructure is highly meshed and calculation making measurement of a target transmission curtailment limit complex or not possible. In these circumstances, the Minister may determine not to apply an access scheme in the REZ or apply a different form of access scheme, having regard to the Objects of the EII Act.

Nature of an access right under limited physical connections model

Under the limited physical connections models adopted in Central West Orana and South West REZs, an access right is a right to:

- negotiate connection to the access rights network, and
- send out generation to the access rights network up to the maximum capacity specified in the access right.

Access right agreements

The access scheme declarations for the current declared access schemes and the EII Regulations contemplate access right agreements under which the terms and conditions of access right agreements are set:

- A project development agreement between the access right holder and the Infrastructure Planner related to the development, construction and operation of its project, compliance with its social licence commitments and reporting obligations, and
- An access payment deed between an access right holder and the Scheme Financial Vehicle relating to the payment of access fees and provide security bonding to cover termination amounts and secure payment of access fees.[58]

[56] Central-West Orana Renewable Energy Zone Access Scheme Target Transmission Curtailment Level & Headroom Assessment Method, April 2024, p10.

[57] The access scheme declarations for Central West Orana and South West REZs include a mechanism called a "headroom assessment" under which the aggregate maximum capacity cap can be increased in certain situations including where the transfer capacity of the access rights network increases or the mix of technologies connected to the access rights network means additional connections can be permitted without the target transmission curtailment level being exceeded.

[58] Standard template project development agreements must be published by the Infrastructure Planner prior to an access right allocation process.

See the resources section (Appendix B) for links to published agreements for the declared access schemes.

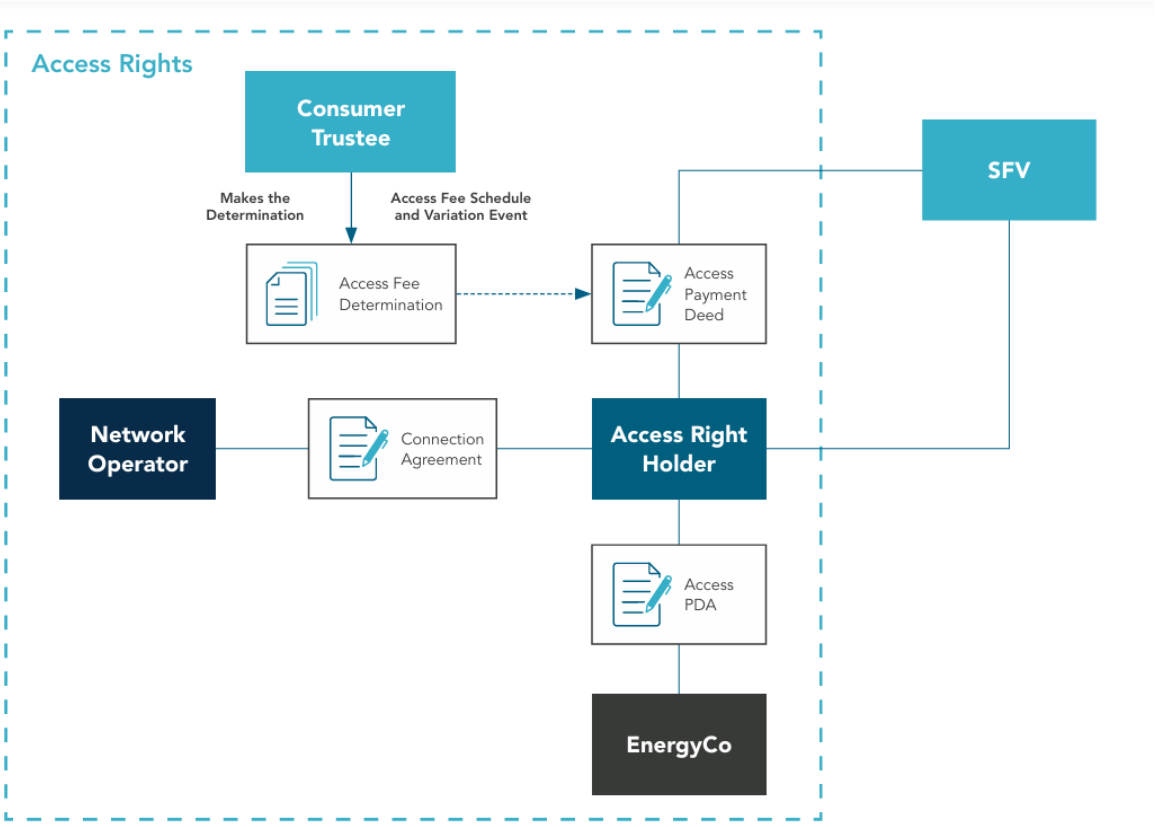
Access right allocation

Access rights are granted by the Infrastructure Planner,[59] generally after one of the following processes has been conducted:

- the Consumer Trustee has conducted a competitive tender (on request of the Infrastructure Planner or as required under an Access Scheme Declaration) and has recommended the grant of access rights to the Infrastructure Planner (EII Regulation, cl 42A)
- the Infrastructure Planner has conducted a competitive tender (EII Regulation, Schedule 1A, cl 3(1)), or
- the Infrastructure Planner has conducted a direct Application Process.[60] An Application Process can only be used if the Infrastructure Planner considers it is necessary for the timely delivery of a REZ network infrastructure project (EII Regulation, Schedule 1A, cl 5(1)).[61]

An overview of the contract structure for the access right agreements is set out in Figure 2.

Figure 2: Access right agreement – contract structure



Source: AEMO Services, South West Renewable Energy Zone (SW REZ) Access Fee Guidelines, May 2024, p7.

[59] EII Regulation, Schedule 1A, cl 6.

[60] An Application Process is a process for inviting, accepting and assessing applications from participants for the grant or increase of access rights without a competitive tender.

[61] The Infrastructure Planner conducted an Application Process for the first allocation of Central West Orana access rights – see section 1.6.4.

1.5.3 Access fees

Access fee determination

The Consumer Trustee must determine access fees payable by participants in an access scheme,[62] taking into account the following principles:

- maximising financial value for NSW electricity customers
- recovering the cost of the operation of the access scheme
- optimal use of the existing and planned network infrastructure in the REZ, and
- transparency in total determined or expected fees payable under the access scheme for participants[63] and other principles prescribed by regulation (EII Act, s26(1)).

Access fees must include components to be used for community and employment purposes which must not be less than the minimum amount or proportion, or exceed the maximum amount or proportion prescribed by the EII Regulation.[64]

Access fee payment

Access fees must be paid by participants in access schemes to the SFV and form part of the Electricity Infrastructure Fund. Access fees generally[65] offset payments from the Electricity Infrastructure Fund including payments to network operators authorised or directed to carry out REZ network infrastructure projects and subject to AER revenue determinations.

See section 1.4.1 for information on revenue determinations and contribution orders.

Current declared access schemes

Access schemes have been declared in Central-West Orana REZ and South West REZ based on the limited physical connections model described in section 1.5.2. Access schemes have not yet been declared in the Hunter Central Coast, New England and Illawarra REZ.

Comparison of existing access schemes

The declared access schemes share some key characteristics but differ from each other in several important respects due to, among other things, local conditions, network capacity (including modelled efficient utilisation of the access right network) and how the network infrastructure subject to the access schemes is delivered. For example, a key policy driver for the South West REZ access scheme was to manage potential congestion given very high levels of generation that would be likely to connect under open access and create congestion, whereas the focus of the Central West Orana scheme was to attract new investment to the REZ. These drivers partly explain differences in access scheme duration (15 years for South West REZ compared to 33 years for Central West Orana REZ).

Key information from the two existing schemes is set out in Table 2.

[62] Access fees are separate and additional to any fees payable to the relevant NSP related to the connection of an access right holder to the access rights network or access control network.
[63] Prescribed by EII Regulation, clause 55A.
[64] EII Act, s26(3). Statutory minimums and maximums prescribed in EII Regulation, clauses 56 and 57.
[65] Community and employment purpose components of access fees are paid by the SFV to the Infrastructure Planner and the Infrastructure Planner manages and administers those funds.

Table 2: Comparison of NSW Declared Access Schemes – key information

Design element	Central-West Orana access scheme	South-West REZ access scheme
Initial aggregate maximum capacity cap	5.84GW[66]	3.98GW
Target transmission curtailment level (over a reference year)	4.37%	3.86%
Access rights network	New transmission network in Central West Orana REZ planned under the NER framework	Project EnergyConnect and parts of actionable ISP project VNI West planned under the NER framework
Term	33 years from energisation of the first network element of the access rights network	15 years from electrification of the Dinawan substation
Planning and cost recovery of access rights network	EII Act – planned and procured by Infrastructure Planner and EII Act cost recovery pathway (revenue determination pending)	NER – planned under NER framework, RIT-T applied, AER Chapter 6A cost recovery pathway
Interconnection of access rights network and existing network infrastructure	Connection at new 500kV substation (Barigan's Creek)	Limited points of interconnection (e.g. at Buronga and Dinawan substations)
Network operator	ACEREZ (authorised under the EII Act)	Transgrid (delivering the access rights network under the NER)
REZ connection process	Yes – see section 1.7	No, unmodified NER connection process
Centralised system strength[67]	Yes	No, generation and storage projects must mitigate their system strength impact under the NER framework
Access right allocation process for first allocation of Access Rights	Application Process conducted by the Infrastructure Planner	Competitive tender conducted by the Consumer Trustee

1.6 Streamlined connections

The NSW Government has modified the NER connection process as it applies to specified access schemes under the EII Regulation.[68] The EII Regulation gives effect to a new Chapter 9A of the NER that applies in NSW[69] and the connection process amendments are "designed to address the challenge of connecting multiple generators in similar timeframes". The key elements of the REZ connection process are:

- Application of **non-negotiable REZ access standards** rather than negotiation of individual generator standards during the connection process.[70]

[66] The initial aggregate maximum capacity cap (generation hosting capacity) was based on an intended network capacity for Central-West Orana REZ of 3GW. The transfer capacity of the authorised access rights network is 4.5GW. The Infrastructure Planner is currently undertaking a "headroom assessment" to increase the aggregate maximum capacity to 7.7GW.

[67] In Central-West Orana REZ the authorised network operator provides system strength for generation and hybrid generation and storage projects representing maximum capacity of 5.84GW. Standalone storage projects must self-remediate their system strength impact under the NER framework.

[68] EII Regulation (amendment 13 December 2024): sl-2024-626; Chapter 9A of the NER (as gazetted 6 December 2024): NSW Government Gazette No 476 of 06 December 2024.

[69] EII Regulation, clause 59.

[70] REZ access standards for the initial tranche of CWO REZ access standards were published in July 2022. See EnergyCo's website.

- **Concurrent processing of applications to connect** under which the relevant network service provider can undertake power system studies for a group of connecting projects at one time.

In addition, where **centralised system strength** is provided by the REZ network operator and a generation or storage project pays a component of access fees relating to system strength, the project is not subject to NER requirements to mitigate system strength impact through self-remediation or opting in to the NER system strength charge. System strength is discussed in section 1.7.2.

1.6.1 REZ access standards

Key features of the approach to access standards in NSW REZs are:

- REZ access standards are developed by the Infrastructure Planner with approval of AEMO and in consultation with relevant network service providers
- different access standards may apply in different REZs and to different tranches of Access Rights allocated with respect to the same REZ
- REZ access standards replace the Automatic Access Standards (AAS) subject to a limited exception mechanism[71]
- the ability to negotiate access standards under NER clause 5.3.4A does not apply
- the relevant REZ network service provider and AEMO (in respect of AEMO advisory matters) will be required to confirm that the Access Right Holder complies with the applicable access standards.

REZ access standards for the initial tranche of CWO REZ access standards were published in July 2022.[72]

1.6.2 Concurrent processing of applications to connect

Concurrent processing of applications to connect (rather than project by project assessments under the NER) will be facilitated under the modifications to the NER referred to in section 1.6.1 above. These modifications enable the connection process for generation and storage projects connecting in a similar location (e.g. to a part of a REZ network infrastructure project) in similar timeframes to be undertaken at the same time. Specifically, the modifications to the NER enable a relevant REZ network service provider to:

- establish a concurrent processing group to conduct power system studies for all generators forming part of the group collectively, and
- remove a project from a concurrent processing group for specified reasons generally where the project is causing a delay to the progress of the concurrent processing group.[73]

[71] In limited circumstances related to power system security, the relevant network service provider can propose exceptions to REZ access standards. The access right holder and AEMO (in respect of AEMO advisory matters) must approve any exceptions.
[72] See Energy Co website on how NSW REZ Access Standards are intended to apply to Central-West Orana REZ.
[73] Chapter 9A NER (NSW), clause 9A.6.6 and 9A.6.7.

1.7 Other issues

1.7.1 Priority transmission infrastructure projects

The EII Act establishes a framework for actioning priority transmission infrastructure projects that sit alongside and complement the REZ framework. Priority transmission infrastructure projects are transmission projects identified and planned under the NER[74] that are required to meet reliability or power system security requirements including forecast shortfalls in system security services such as system strength and inertia, identified in the ISP.[75] As REZ frameworks are the focus of this report, only a high-level overview of priority transmission investment framework is provided below.

Investment tests

Priority transmission infrastructure investments can be directed or authorised by the Minister on recommendation of the Consumer Trustee. The Consumer Trustee is generally required to follow the same process for making recommendations on priority transmission infrastructure projects as applies to REZ network infrastructure projects – see section 1.3.2.

Cost recovery

A network operator's costs of carrying out a priority transmission infrastructure project authorised or directed by the Minister are recovered through an EII Act revenue determination. The AER's guidelines for contestable and non-contestable revenue determinations apply to both Priority Transmission Infrastructure Projects and REZ network infrastructure projects – see section 1.4.1.

As at the date of this report both contestable and non-contestable revenue determinations have been made in the context of the Waratah Super Battery project, a priority transmission infrastructure project.[76]

Access and connection

Access schemes cannot be applied to priority transmission infrastructure project under the EII Act. The NER open access and chapter 5 connection process will apply to connections to those projects.

1.7.2 System strength

Unlike other jurisdictions, the NSW framework includes measures to address system strength within a REZ that diverge from the NER approach. Key features of the approach to system strength in REZs are:

- the Infrastructure Planner may recommend a system strength solution as part of a REZ network infrastructure project to be delivered by an authorised network service provider[77]
- Access Right Holders receiving the benefit of central system strength will be required to contribute to its cost through the payment of system strength access fees
- the Access Right Holder will not be required to self-remediate or be exposed to the NER system strength charge under NER, clause 5.3.4B if it pays for system strength through Access Fees.[78]

[74] For example, projects identified in the ISP or in a project assessment draft report or project specification consultation report for a RIT-T conducted under the NER.
[75] EII Act, s34(3)(a) (EII Act as amended by the *Energy Legislation Amendment (Clean Energy Future) Act* 2024).
[76] See AER website on the Waratah Super Battery.
[77] EII Act, s30.
[78] Chapter 9A NER (NSW), clause 9A.3.5.

2. Queensland

2.1 Overview and governance

2.1.1 Key policy and legislation

The Queensland Government issued a draft REZ Roadmap in 2023. It was last updated in March 2024.[79]

The framework for enabling Queensland renewable energy zones (REZs) is stablished under the *Energy (Renewable transformation and Jobs) Act* 2024 (RTJ Act) and Energy (Renewable transformation and Jobs) Regulation 2024.

Part 6 of the RTJ Act creates the governance framework for development and implementation of REZs including by conferring functions on new and existing entities. Currently, there are no regulations made to support Part 6 of the RTJ Act (Renewable Energy Zones).

2.1.2 Derogation from the NEL and NER

The RTJ Act includes numerous provisions that directly modify the NEL and NER or that empower derogation from the NEL and NER under regulation. In relation to REZs these include:

- modifying the NEL and NER as necessary to give effect to restrictions on connection and access to REZ transmission networks and REZ controlled assets – see section 2.5.4, and
- allowing for recovery of REZ transmission network costs and REZ readiness assessments under NER transmission determinations – see section 2.4.1.

2.1.3 Purposes of the Renewable Transformation and Jobs Act

Main purposes of the RTJ Act

The main purposes of this Act are:

- to increase the amount of electricity generated in Queensland from renewable energy sources
- to facilitate and support the efficient and coordinated augmentation of the national transmission grid in Queensland to accommodate the increased generation of electricity from renewable energy sources in a safe, secure, reliable and cost-effective way, and
- to provide support and advocacy for workers in the energy industry and communities affected by the increased generation of electricity from renewable energy sources RT Act (RTJ Act, s3).

Purposes of the RTJ Act in respect of REZs

The purposes of the RTJ Act, Part 6 (Renewable Energy Zones) are:

- to provide for parts of Queensland that are suitable to be REZs to be declared REZs
- to ensure the impact of the declaration of REZs on Queensland communities is appropriately considered, and
- to provide for coordinated and streamlined connection and access to transmission networks in REZs by regulating connection and access to:
  - the transmission networks, and

[79] Renewable Energy Zone Roadmap, March 2024 Renewable Energy Zone (REZ) Roadmap. The Roadmap is expected to be reviewed every 2 years.

  - transmission assets that materially affect, or will materially affect, the capacity or functioning of the transmission networks, and
- to facilitate and support the development and operation of transmission networks in REZs, including by providing for the recovery of costs associated with the provision of the transmission networks.

Performance of functions under the RTJ Act

In performing a function under the RTJ Act, Div 6 (Renewable energy zones) the Minister and Treasurer must have regard to:

- the infrastructure blueprint
- any REZ assessment for a part of Queensland that is or includes the REZ, and
- any other matter the Minister or Treasurer considers relevant.

2.1.4 REZ entities

Minister

The Minister for Energy and Clean Economy Jobs is responsible for the RTJ Act but must act jointly with the Treasurer in exercising some functions under the Act. In relation to REZs, the Minister has the following key functions:

- prepare a public ownership strategy (RTJ Act, s13)[80]
- request REZ assessments (see section 2.2.2)
- Recommend to the Governor in Council the making of a regulation to declare a REZ (see section 2.2.2)
- endorse REZ management plans and recommend to the Governor in Council the making of a regulation to approve the management plan
- keep a copy of the REZ management plan for a declared REZ available on the Department's website (RTJ Act, s47(3))
- jointly with the Treasurer, approve amendments to REZ management plans (see section 2.2.2)
- appoint the REZ delivery body (see section below)
- declare that Powerlink may recover specified REZ-related costs through charges for prescribed transmission services (see section 2.4.1).

Treasurer

In relation to REZs, the Treasurer has the following key functions:

- approve the Minister's recommendation to the Governor in Council for the making of a regulation to declare a REZ (see section 2.2.2)
- endorse REZ management plans
- approve the making of a cost recovery declaration by the Minister (see section 2.4.1)
- jointly with the Minister, approve amendments to REZ management plans (see section 2.2.2)

[80] This strategy is relevant, but not specific, to REZs.

REZ delivery body

The RTJ Act creates an entity called the REZ delivery body (RTJ Act, Part 6, Div 7). The Minister has appointed Powerlink as the REZ delivery body.[81]

The REZ delivery body's key functions are:

- to assess parts of Queensland identified in the infrastructure blueprint as possibly suitable to be a REZ, and decide whether or not to make recommendations to the Minister for the parts to be declared to be a REZ
- to make recommendations to the Minister for parts of Queensland to be declared to be a REZ
- to develop a REZ management plan for each part of Queensland the REZ delivery body recommends to the Minister to be declared to be a REZ
- to conduct a REZ assessment for a part of Queensland on request of the Minister.

TNSP – Powerlink

The TNSP (Powerlink) has the following functions under the RTJ Act relating to REZ transmission networks:

- follow the process under the REZ management plan for identifying entities and projects for access and connection to REZ transmission network and REZ controlled assets
- enter into connection agreements with participants connecting to REZ transmission network in accordance with the REZ management plan
- set access and connection fees and charges (RTJ Act, s70)
- apply for cost recovery in relation to shortfalls in establishment and operational costs, and REZ assessment costs (RTJ Act, s71).

Regulator

In respect of REZs, the RTJ Act provides for the AER's powers and functions as economic regulator under the NER to be modified to enable the TNSP to recover shortfalls in establishment and operational costs, and REZ assessment costs (RTJ Act, s73).

2.1.5 Government ownership

The RTJ Act (s13) specifies that the public ownership strategy for energy assets must include public ownership targets of:

- for generation assets,[82] 45% or more
- for transmission and distribution assets, 100%
- for deep storage assets[83], 100%

[81] Under RTJ Act, s75 the Minister may appoint a government entity, a Commonwealth regulatory body or a Commonwealth government agency as the REZ delivery body. Powerlink was appointed as REZ delivery body on 30 August 2024.

[82] Generation assets are defined to include generating systems registered under the NER other than specified assets including small (below 30MW) generating systems, pumped hydro and battery energy storage systems.

[83] Assets for pumped hydro storage capable of generating at least 1,500MW for 24 hrs and prescribed by regulation.

2.2 REZ assessment and planning

2.2.1 Network planning reports

Queensland Energy and Jobs Plan

The Queensland Energy and Jobs Plan[84] outlines the Government's plan for the transformation of the state's energy system to 2025. The Plan sets new renewable targets for the state, with an aim to reach 80% renewable energy by 2025.

SuperGrid Infrastructure Blueprint

The Queensland Government published the SuperGrid Infrastructure Blueprint in September 2022. The Blueprint complements the Energy and Jobs Plan by setting an "optimal infrastructure pathway to transform Queensland's electricity system".[85] The objectives of the Plan are to transform the Queensland electricity system in order to achieve a range of objectives including emission reduction targets. REZ investments form part of the optimal infrastructure pathway that also includes major transmission path upgrades and investments in storage and dispatchable capacity. The first update to the report is expected in 2025.

Queensland REZ Roadmap

The Queensland REZ Roadmap responds to the SuperGrid Infrastructure Blueprint and the Queensland Energy and Jobs Plan with a plan for REZs. The Roadmap was last issued in March 2024.

REZ management plans

The REZ delivery body is required to develop a REZ management plan for each REZ that includes the plan for transmission network for that REZ.

2.2.2 REZ declarations

How a REZ is declared

A regulation made under the RTJ Act can declare a part of Queensland to be a REZ (RTJ Act, s38(1)).

The Minister may recommend to the Governor in Council that a regulation declaration is made if:

- the declaration of a REZ has the Treasurer's approval
- the REZ delivery body has recommended the part of Queensland be declared to be a REZ, and
- the Minister is satisfied that the relevant part of Queensland is suitable to be a REZ and the declaration will help achieve the main purposes of the RTJ Act (RTJ Act, s38(2)).

REZ readiness assessments

Before a recommendation to declare a REZ is made, the RTJ Act, Part 6, Div 4 requires the REZ delivery body to follow a detailed process called a REZ readiness assessment to assess how ready communities are to host a REZ. These assessments include identifying:

- whether a community is suitable to host a REZ having regard to local priorities and trends
- how the community would benefit from the REZ
- how to minimise cumulative impacts from REZ development

[84] Published in September 2022 and updated in 2023 (see Resources section)
[85] Queensland SuperGrid Infrastructure Blueprint, p3.

Considerations include social, environmental and economic matters including First Nations considerations, local infrastructure, land use and agriculture, local industry and supply chains.

REZ management plans

Each REZ declared under the RTJ Act must have a management plan that is approved by regulation (RTJ Act, s38(3)(c), s47).

The Minister may recommend to the Governor in Council a regulation to approve a REZ management plan if it is satisfied that the plan meets all the content requirements under the RTJ Act (RTJ Act, Div 3, Subdiv 1) and the process requirements for the preparation of a management plan have been satisfied (RTJ Act, Div 3, Subdiv 1).

A REZ management plan must, among other things:

- be consistent with achieving the main purposes of the RTJ Act
- state the objectives of the REZ
- include information on:
  - the geographic boundary of the REZ
  - the renewable energy sources in the REZ
  - the REZ transmission network for the REZ – see section 2.5.1 for more information
  - the REZ controlled assets for the REZ – see section 2.5.2 for more information
  - dispute resolution processes.

The REZ delivery body must prepare the draft REZ management plan and submit it to the responsible Ministers for endorsement. The request for endorsement may include a request for endorsement of:

- the proposed or existing network that it is proposed to be REZ transmission network, and
- the process to be used by the TNSP to identify entities that may connect to and access the transmission network and the projects in relation to which the connection and access may be granted.

The draft REZ management plan is consulted on publicly for at least 60 days. The REZ delivery body must consider all submissions and make amendments as appropriate to reflect those submissions before submitting the management plan to the responsible Ministers for endorsement.

Non-substantial changes to a REZ management plan may be made by the REZ delivery body. The responsible Ministers can approve amendments to a REZ management plan that are required because of amendments of a REZ declaration. However, there are limitations on the power to make amendments, including:

- if an amendment of the REZ declaration for the REZ changes the REZ transmission network or REZ controlled assets for the REZ, the management plan may be amended to the extent necessary to apply the management plan to the REZ transmission network or REZ controlled assets for the REZ as changed, and
- the responsible Ministers must be satisfied the amendment does not adversely affect in a material way any participant in the REZ (RTJ Act, s48).

REZ declarations

A REZ is a part of Queensland declared by regulation to be a REZ (RTJ Act, s38). A regulation declaring a REZ must:

- identify the geographic boundary of the REZ
- state the objectives of the REZ

- identify:
  - the management plan for the REZ
  - the existing or proposed transmission network, or the part of an existing or proposed transmission network, that is the REZ transmission network for the REZ
  - the transmission assets that are REZ controlled assets for the renewable energy zone, and
- state the term of the declaration, which must be a period of not less than 15 years after the day on which the first participant is connected to the REZ transmission network for the REZ.

Potential REZs identified to date

As at the date of this report, no REZs have formally been declared by Regulation. The REZ Roadmap identifies 12 potential REZs and four phases of REZ development:

- In-flight – this means that there is a network infrastructure project in development in the REZ that will be delivered under the NER framework. These in-flight REZs may be declared as REZs under the RTJ Act in the future.
- Phase 1 – Early-mid 2020s
- Phase 2 – Mid-Late 2020s
- Phase 3 – Early 2030s

Key information on the potential REZs and their current status is set out in Table 3.

Table 3: Potential REZ – key information

Region	REZ	Phase	Expected installed generation	Activities commenced
Southern Queensland	Southern Downs REZ	In-flight	2-2.6GW	
	Western Downs REZ	In-flight	2-2.6GW	
	Woolooga REZ	Phase 2	1.8-2.4 GW	REZ assessments expected to start late 2024, early '25
	Darling Downs REZ	Phase 2	1.6-2 GW	
	Tarong REZ	Phase 3	2-2.6 GW	
Central Queensland	Callide REZ	Phase 1	2-2.6 GW	REZ readiness assessment including community consultation complete and inputs & findings published
	Calliope REZ	Phase 1	1.5-2 GW	
	Isaac REZ	Phase 2	1.4-1.8 GW	
	Capricorn REZ	Phase 2	1.4-1.8 GW	
North and Far North Queensland	Far North Queensland REZ	In-flight	500-700 MW	REZ readiness assessments due to start late 2024, early '25
	Collinsville REZ	Phase 2	1.6-2 GW	
	Flinders ERZ	Phase 2	2-2.4 GW	

Notes

1. Sourced from Queensland REZ Roadmap, p12 and the Department of Energy and Climate website.

In-flight REZs

In-flight REZs are REZs that are already in progress under the NER and where there is a network infrastructure project in development in the REZ. The Roadmap notes that these REZs may be declared as REZs under the RTJ Act in the future but no detail has been published as to when this might occur and, if so, the implications for transmission network development and generator connection and access.

Southern Downs REZ – MacIntyre Wind Precinct connection project

Powerlink constructed 65km of transmission lines and two switching stations in the Southern Downs REZ. Key components of the MacIntyre Wind Precinct project are Designated Network Assets (DNA) under the NER and are subject to an AER Access Policy approved on 4 April 2024.[86] The Access Policy has three foundation proponents: MacIntyre Wind Farm, owned by ACCIONA Energia – which will use approximately half the capacity of the new transmission infrastructure,[87] Karara Wind Farm and Herries Range Wind Project.

Western Downs REZ – Wambo Wind Farm connection project

Powerlink has been engaged by the developers of Wambo Wind Farm (Stanwell and Cubico) to connect the project to Powerlink's transmission network. The project is in the planning and development stage. There are no published details on the funding and access and connection arrangements for the connection project.

Far North Queensland REZ – Kaban Green Power Hub connection project

Powerlink constructed a new switching station and three transmission towers to connect the Kaban Green Power Hub being developed by Neoen to its existing transmission system.[88] The Northern Queensland REZ is supported by upgrades to Powerlink's transmission infrastructure between Cairns and Townsville.[89] There are no published details on the funding and access and connection arrangements for the connection project.

2.2.3 Interaction with NER planning frameworks

The reports published under the Queensland transmission framework[90] in some cases cover the same projects that are captured in the ISP. There is no clear statement as to how the various reports are intended to operate together.

[86] AER Decision - Powerlink Designated Network Asset Access Policy - MacIntyre DNA; MacIntyre Designated Network Asset (DNA) Access Policy (powerlink.com.au).

[87] See Powerlink's website.

[88] Kaban Green Power Hub Connection Project | Powerlink.

[89] Launch of Northern Queensland Renewable Energy Zone | Powerlink.

[90] Including the REZ framework and Priority Transmission Investment Framework – see section 2.7.1.

2.3 Transmission investment

Conceptually, REZ transmission networks[91] are similar to designated network assets under the NER because:

- they are envisaged to be shared connection infrastructure for identified connection and generation projects, and
- the 'default position' under the RTJ Act is that connecting generation and storage projects will fund the REZ transmission network.

Because the REZ transmission network is envisaged to be funded by connecting generation and storage projects, Powerlink as TNSP can invest in REZ transmission networks without having to apply the RIT-T.

2.3.1 Cost recovery for early works

If a TNSP carried out a REZ readiness assessment in its capacity as REZ delivery body (section 2.2.2) then the Minister may declare that all or part of any REZ assessment costs can be recovered by the TNSP though charges for prescribed transmission services.

A declaration enabling cost recovery under this mechanism can only be made with the approval of the Treasurer and if the responsible Ministers are satisfied that:

- the REZ assessment was conducted appropriately and efficiently, and
- there is no reasonable way for the service provider to recover all of the REZ assessment costs for the assessment other than through charges for prescribed transmission services.

A declaration must include, amongst other things, the amount of the REZ assessment costs that can be recovered and the period over which the costs may be recovered.[92]

2.3.2 Investment test

As generally REZ transmission network is intended to be funded by participants who connect to the infrastructure, the RTJ Act does not specify regulatory investment tests for REZ transmission network.

2.3.3 Contestable procurement of REZ transmission projects

Unlike in other jurisdictions, the Queensland framework does not provide for contestable procurement of REZ transmission projects. Rather Powerlink, in its capacity as local TNSP, is responsible.

2.3.4 Ministerial power to direct transmission infrastructure to be built

The Minister may direct priority transmission investment projects to be built – see section 2.7.1.

2.4 Cost recovery

Powerlink may recover the costs of REZ transmission network through connection and access fees set by Powerlink as the REZ delivery body (see section 2.5.3) rather than Powerlink recovering its costs through charges for prescribed transmission services. Generally, the RTJ Act does not envisage

[91] Under the RTJ Act, REZ transmission network is a part of the transmission network that is in the REZ and identified in the relevant REZ declaration as the REZ transmission network for the REZ.

[92] RTJ Act, s72.

regulated cost recovery for REZ transmission network.[93,94] However, the Act provides that the Minister may declare that the TNSP (Powerlink) may recover establishment and operational costs that are not recovered from renewable projects, and REZ assessment costs, through charges for prescribed transmission services.

2.4.1 Establishment and operational cost shortfalls

If there is a shortfall between the establishment and operational costs incurred by the TNSP for a REZ transmission network[95] and the amount of fees and charges paid or payable by participants, then the Minister may declare that all or part of the shortfall can be recovered by the TNSP though charges for prescribed transmission services.

A declaration enabling cost recovery under this mechanism can only be made with the approval of the Treasurer and if the Minister is satisfied that:

- the TNSP has acted reasonably and prudently in giving access to the REZ transmission network (e.g. in relation to deciding fees and charges)
- the TNSP has used the service provider's best endeavours to recover the establishment and operational costs for the transmission network from participants through fees and charges, and
- there is no reasonable way for the TNSP to recover the shortfall other than through charges for prescribed transmission services.

A declaration must include, amongst other things, the amount of the shortfall that can be recovered and the period over which the costs may be recovered.[96]

2.4.2 NER derogations to support cost recovery for declared costs

If the Minister makes a declaration that REZ establishment and operational cost shortfalls, or REZ assessment costs, are recoverable through charges for prescribed transmission services provided by the TNSP, then the RTJ Act requires that a NER transmission determination must be made in the way, and in accordance with requirements, prescribed by regulation (RTJ Act, s73(2)). Currently no regulations have been made under this section of the RTJ Act.

2.5 Access to REZ infrastructure

2.5.1 REZ transmission network

Restrictions on access

Connection and access to REZ transmission networks is restricted. The key mechanisms for restricting access and connection are requirements under the RTJ Act, s54 and the access and connection requirements in the relevant REZ management plan.

[93] Under the Act, Powerlink may decide fees and charges payable by a participant for connection and access to the REZ transmission network under the REZ management plan for the relevant REZ.
[94] Note that the RTJ Act does include a framework to support planning and investment in priority transmission infrastructure projects. These projects are "backbone" upgrades to the transmission system that can support generation from REZ-connected generators reaching load centres.
[95] Establishment and operational costs include reasonable and prudent costs of preparing a REZ management plan and constructing, maintaining and operating the transmission network (RTJ Act, s69).
[96] RTJ Act, s71.

Under the RTJ Act:

- an entity can only connect to and access the REZ transmission network for a REZ under a connection agreement between the entity and the TNSP
- a TNSP may enter into a connection agreement for connection and access to the REZ transmission network for a REZ only:
  - with an eligible entity for an eligible project (as those terms are defined in the relevant REZ management plan),
  - if any of the conditions on which the entity is an eligible entity or the project is an eligible project are met, and
  - in accordance with the process for entering a connection agreement under the REZ management plan.
- it is required that the terms and conditions of a connection agreement for connection and access to a REZ transmission network is in accordance with the REZ management plan and the conditions listed above (RTJ Act, s54).

Regulation of connection and access under REZ management plan

A REZ management plan must specify details about the regulation of connection and access to the REZ transmission network, including:

- the capacity of the transmission network
- if more than one renewable energy source is available in the REZ, the percentage of the capacity intended to be derived from each source
- technical requirements for connection to the transmission network
- the process to be used by the TNSP to identify entities that may connect to and access the transmission network and the projects in relation to which the connection and access may be granted
- the process to be used to enter into a connection agreement for connection and access to the transmission network, including fees for enquiries and applications and timeframes for processing of applications
- details about dispute resolution processes
- processes that apply in relation to REZ transmission network when the REZ declaration ends (RTJ Act, s42(1)).

Access allocation process

The process to be used by the TNSP to identify entities and projects that may connect to and access the transmission network may include stated criteria that must be satisfied for connection and access to the REZ transmission network and must have regard to:

- social licence criteria
- the capability and performance of entities to develop projects for the REZ transmission network and connect the projects to the transmission network, and
- the feasibility of projects to be developed and connected to the REZ transmission network within an appropriate timeframe (RTJ Act, s42(2)).

Disputes about access

Any dispute about connection or access to the REZ transmission network between the TNSP and participants and proposed participants for the REZ are governed by the dispute resolution processes stated in the management plan for the REZ (RTJ Act, s54(5)).

2.5.2 REZ controlled assets

REZ controlled assets are transmission assets that:

- materially affect, or will materially affect, the capacity or functioning of the REZ transmission network for the REZ
- are outside the REZ or inside the REZ but not part of the REZ transmission network, and
- are identified in the REZ declaration for the REZ as REZ controlled assets for the REZ.

Restrictions on access

Connection and access to REZ controlled assets is restricted. The key mechanisms for restricting access and connection are requirements under the RTJ Act, s57 and the access and connection requirements in the relevant REZ management plan.

Under the RTJ Act:

- an entity can only connect to and access the REZ controlled assets for a REZ under a connection agreement between the entity and the TNSP, and
- a TNSP may enter into a connection agreement for connection and access to the REZ controlled assets for a REZ only:
  - with an eligible entity for an eligible project (as those terms are defined in the relevant REZ management plan), and
  - if any of the conditions on which the entity is an eligible entity or the project is an eligible project are met.

Regulation of connection and access under REZ management plan

A REZ management plan must specify details about the regulation of connection and access to the REZ controlled assets including the process to be used by the relevant TNSP to identify entities that may connect to and access the REZ controlled assets and the projects in relation to which the connection and access may be granted (EII Act, s43).

2.5.3 Access fees and charges

Access and connection fee determination

Under the RTJ Act, the TNSP (Powerlink) may decide the fees and charges a participant must pay for access and connection to a REZ transmission network (RTJ Act, s70(1)). The Act provides that the fees and charges:

- may include an amount representing the participant's contribution to the establishment and operational costs for the REZ transmission network (RTJ Act, s70(2))
- are instead of any fees and charges payable for connection and access to the transmission network under the NEL (RTJ Act, s70(3)).

Access and connection fee payment

Although not explicitly stated, the RTJ Act envisages payment of the fees and charges referred to above under the connection agreement between Powerlink and the relevant participant.

2.5.4 NER derogations to support access and connections

The RTJ Act derogates, or empowers derogations from the NEL and NER to support the REZ access and connection framework in the following ways:

- the NEL and NER, as they apply in Queensland, are modified as necessary to give effect to the restrictions on connection and access to REZ transmission networks and REZ controlled assets (RTJ Act, s54(4))
- access standards negotiated under the process in the regulations are taken to be negotiated access standards under the NER (RTJ Act, s55(3))
- connection agreements negotiated under the process in the regulations are taken to be NER connection agreements (RTJ Act, s56(2))
- disputes relating to access and connection to REZ transmission networks are governed by the dispute resolution processes defined in the relevant REZ management plan (RTJ Act, s54(5))
- any fees and charges payable for connection and access to a REZ transmission network are instead of any fees and charges payable for connection and access to the transmission network under the NEL and NER (RTJ Act, s70(3)).

2.6 Streamlined connections

The process of connecting to REZ transmission networks may be streamlined compared to the NER process through regulations made under the RTJ Act, s55. Regulations may:

- specify that the TNSP and a proposed participant for a REZ may negotiate an access standard for the REZ transmission network for the REZ in the way, and in accordance with the requirements, prescribed by regulation (RTJ Act, s55)
- modify the NER process for negotiated access standards by:
  - specifying how AEMO is involved in the process
  - enabling or requiring the TNSP to assess performance of participants in the REZ as a whole when negotiating with individual proposed participants
  - defining how access standards are decided and performance is assessed.

2.7 Other issues

2.7.1 Priority transmission investments

The RTJ Act (Part 5) establishes a framework for actioning critical transmission infrastructure projects that sits alongside and complements the REZ framework. For example, priority transmission investments (PTIs) may relieve constraints in existing 'backbone' transmission infrastructure, enabling generation connected to REZ transmission networks to reach load centres. As REZ frameworks are the focus of this report, only a high-level overview of the PTI framework is provided below.

Investment tests

Eligible PTIs may be identified by regulation. These projects are not subject to the RIT-T but must follow a prescribed assessment process under the RTJ Act before being declared by the Minister and Treasurer as PTIs. Once declared, Powerlink is required to construct the PTI.

Cost recovery

If Powerlink is directed to construct a PTI (see section 2.7.1) it is entitled to cost recovery under its NER revenue determination. Regulations under the RTJ Act specify how Powerlink's NER revenue determination is to be adjusted to enable allowances for PTIs to be included in Powerlink's allowed

revenue. The allowance can include amounts associated with a PTI incurred at any stage of development.

Access and connection

The RTJ Act does not envisage changes to NER connection and access frameworks for PTIs. On this basis the NER open access and chapter 5 connection process will apply to connections to PTIs.

2.7.2 System strength

The Queensland REZ framework does not include REZ-specific requirements for system strength. Unlike in NSW where contestably appointed TNSPs may provide system strength for REZs, in Queensland the only TNSP for REZ transmission networks is Powerlink who is also SSSP in Queensland.

2.7.3 Grandfathering of connection to REZ transmission network and REZ controlled assets

As noted in section 2.2.2, no REZs have been formally declared under the RTJ Act and so no REZ management plans are in place.

The RTJ Act specifies grandfathering arrangements for connection and access to REZ transmission networks and REZ controlled networks that have commenced prior to the making of a regulation declaring or amending a REZ (RTJ Act, Div 5, Subdiv 5).

2.7.4 Ceasing to be REZ transmission network

If a transmission network ceases to be a REZ transmission network for a REZ (e.g. if the term of the REZ declaration ends), then the NEL and NER apply in the same way as they do to other transmission networks. In this circumstance a negotiated access standard or connection agreement negotiated under the RTJ Act continues to be taken as a negotiated access standard or connection agreement under the NEL and NER (RTJ Act, s82).

3. Victoria

3.1 Overview and governance

3.1.1 Key policy and legislation

The Victorian Government issued a REZ Development Plan Directions Paper in 2021,[97] a Victorian Access Regime policy paper in June 2024, a final policy paper on the Victorian Transmission Investment Framework in July 2024 and final Victorian Transmission Plan Guidelines in September 2024.

The framework for enabling Victorian renewable energy zones (REZs) is established under amendments to the *Electricity (Victoria) Act 2005* (NEVA) made in May 2024. Part 6 of the NEVA creates the governance framework for development and implementation of REZs including the conferral of REZ planning functions on VicGrid (Division 2) and the arrangements for the Victorian Transmission Plan (Divisions 3 to 5) and REZ declarations (Division 6).

The key policy papers referred to above envisage further stages of legislative reform to support REZs, including amendments implementing a new transmission procurement framework and access regime.[98]

3.1.2 Derogation from the NEL and NER

The NEVA includes numerous provisions that directly modify the NEL and NER or that empower derogation from the NEL and NER under regulation. Relevantly to REZs these include:

- existing powers for the Minister to direct AEMO to procure a specified augmentation, augmentation services or direct a declared transmission system operator (DTSO) to carry out a specified augmentation or non-network services and to modify the application of provisions of the NER for the purposes of giving effect to the direction (NEVA, s16Y)
- proposed derogation from the requirement for the procuring party to apply the NER regulatory investment test for transmission to proposed investment in projects on the optimal pathway under the Victorian Transmission Plan[99]
- derogations from the NER which would be required to enable the new Victorian Access Regime.[100]

3.1.3 Objects of the NEVA

Victorian transmission planning objective

The Victorian transmission planning objective is:

- to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:
  - price, quality, safety and reliability and security of supply of electricity; and
  - the reliability, safety and security of the national electricity system; and

[97] Victorian Renewable Energy Zones Development Plan Directions Paper, February 2021. A summary of stakeholder views on the development plan has been published, available here.
[98] 2024 Victorian Transmission Plan Guidelines, section 1.4.
[99] Victorian Transmission Investment Framework final policy paper; 2024 Victorian Transmission Plan Guidelines, section 1.4.
[100] VicGrid, Victorian Access Regime, June 2024, available here.

- the delivery of transmission services consistent with a least-regrets development pathway, and
- the achievement of targets set by Victorian legislation:
  - for reducing Victoria's greenhouse gas emissions; or
  - that are likely to contribute to reducing Victoria's greenhouse gas emissions.

Application of the Victorian transmission planning objective

The Victorian transmission planning objective guides:

- VicGrid in the development of the Victorian transmission planning objective, and
- the Minister in declaring REZs.

3.1.4 REZ entities

Minister

The Minister for Energy and Resources is responsible for the NEVA. In relation to REZs, the Minister has or is intended to have[101] the following key functions:

- declaration of infrastructure operating or intended to operate at nominal voltages between 66kV and 220kV to be major electricity transmission infrastructure
- declaration of whether proposed major electricity transmission infrastructure is within a REZ
- declaration of whether proposed major electricity transmission infrastructure is necessary to facilitate connection of a REZ to the declared shared network
- declaration of REZs
- declaration of access schemes,

VicGrid

VicGrid is a body within the Victorian Department of Energy, Environment and Climate Action (DEECA). Through the Victorian Transmission Plan and Victorian Transmission Plan Guideline, VicGrid's key functions related to REZs are:

- REZ planning functions including recommending potential REZs
- planning the development of major electricity transmission infrastructure within current or potential renewable energy zones to augment the declared shared network, and
- planning for the connection of major electricity transmission infrastructure to the declared shared network (NEVA, s53(1)).

In addition, VicGrid is developing the Victorian access regime and will play a key role in the Victorian REZ access regime including in allocation of access authorisation and grid impact assessments (see section 3.5).[102]

[101] Only Stage 1 of the legislative changes to implement the Victorian REZ framework are currently in place. These legislative changes relate to the role of VicGrid in REZ planning, the legislative framework for the Victorian Transmission Plan and the declaration of REZs. Further stages are envisaged by the Victorian Transmission Investment Framework final report and the Victorian access regime policy paper.

[102] VicGrid, Victorian Access Regime, June 2024.

AEMO

AEMO is currently the Victorian transmission planner and procurer and has worked with the Victorian Government to identify transmission investment to support REZs.[103] Based on DEECA's website, reforms to how transmission is planned and developed in Victoria are being progressed. Under the Victorian Transmission Investment Framework, responsibility for planning Victoria's declared shared network, and all of AEMO's associated declared network functions, will be transferred to VicGrid from AEMO.[104]

Regulator

The Victorian Transmission Investment Framework envisages a new procurement framework for major transmission projects and a role for an independent regulator to undertake independent oversight and cost recovery for projects on the optimal pathway in the Victorian Transmission Plan. The entity that will act as regulator has not yet been identified.

3.1.5 REZ Fund

The Victorian REZ Fund is a fund of $540 million established that will be used to strengthen the electricity network to support REZs. $480 million from the REZ Fund has been invested in 12 projects to "reduce existing constraints and support the connection of Victoria's pipeline of renewable energy projects (Stage One projects)".[105]

3.2 REZ assessment and planning

3.2.1 Network planning reports

REZ development plan

The Victorian Government and AEMO have identified potential network infrastructure projects to support REZs. The projects identified included "both anticipatory medium-term transmission developments to enable future REZ development, as well as technical solutions that could be progressed in the near term to support the efficient connection of Victoria's existing pipeline of renewable energy projects."[106] The transmission developments were identified as Stage 1 projects for immediate progression to relieve network constraints and Stage 2 projects that require further assessment.

As noted above, $480 million from the REZ Fund has been invested in twelve Stage 1 projects.

Victorian Transmission Investment Framework

Under the Victorian Transmission Investment Framework, responsibility for planning Victoria's declared shared network, and AEMO's associated declared network functions, will be transferred to VicGrid from AEMO, ending AEMO's Victorian transmission network service provider role. This change is subject to legislation being passed (expected mid-2025) and the transition is intended to occur in a staged way.[107]

[103] See the Victorian Government's website, here.
[104] See VicGrid's website, here.
[105] See the Victorian Government's website here.
[106] Victorian-Renewable-energy-zones-development-plan-directions-paper.pdf, p9
[107] See VicGrid's website, here.

Key elements of the framework are:

- a Victorian transmission planning objective (see section 3.1.3)
- the development of a Victorian Transmission Plan – see below
- a new project procurement framework
- an access scheme to encourage more investment in REZs – see section 3.5
- engagement and benefits for Traditional Owners, host communities and landholders.[108]

Victorian Transmission Plan

VicGrid is required to publish the first Victorian Transmission Plan by 31 July 2025 (NEVA, s60(1)(a)). The plan will be a forward view of transmission and REZ development in Victoria and will identify:

- an optimal path for transmission infrastructure projects required to enable REZ development, following detailed market modelling, cost benefit analysis, robustness analysis and power system analysis
- priority REZs for development
- preferred corridors for REZ transmission projects to be developed in the first 10 years of the Victorian transmission plan
- an indicative hosting capacity of each REZ.

The initial plan will take a 15-year view and subsequent plans will take a 25-year view and be published every four years, starting in 2027 (NEVA, s60(1)(b) &(c)).

The plan will be informed by early engagement with Traditional Owners, local communities, landowners and other regional stakeholders and will plan for transmission development under different future scenarios.

Victorian Transmission Plan Guidelines

VicGrid published Victorian Transmission Plan Guidelines in September 2024, following consultation on draft Guidelines published in June 2024. The Guidelines include key inputs, sensitivities, methodologies and assumptions that will be considered as part of the making of the Victorian Transmission Plan (NEVA, s57) and outline how the optimal pathway for transmission infrastructure projects will be determined.

3.2.2 REZ declarations

How a REZ is declared

The Minister may declare an area of Victoria as a REZ (NEVA, s63(1)).

Before declaring a REZ the Minister must:

- ensure the Department publishes a draft REZ order and invites submissions on the draft
- consider any submissions received
- consult with the Premier and the Treasurer (NEVA, s64)
- publish the final REZ order, the Minister's reasons for declaring a REZ and a summary of submissions in the Government Gazette (NEVA, s63(4)).

[108] Victorian Transmission Investment Framework Final Design Paper, July 2023.

REZ declaration contents

A REZ declaration must set out:

- the boundaries of the REZ, including a map of the zone
- the preferred transmission corridor within the REZ and between the REZ and the Victorian Declared Shared Network
- intended transmission hosting capacity within the REZ
- engagement requirements and expectations of project proponents during project development (NEVA, s63(2)).

The Minister must publish their reasons for declaring a REZ in the Government Gazette (NEVA, s63(4)).

Potential REZs identified to date

As at the date of this report, no REZs have formally been declared by regulation. However, the Victorian Access Regime paper published by VicGrid in June 2024 indicates that declared REZs will be "more targeted than the broad geographic regions that have been identified in various publications to date" including in the ISP.[109]

VicGrid recently undertook public consultation on the REZ study area which identified areas for more detailed assessment as potential REZs. The draft Victorian Transmission Plan, to be released in early 2025, will identify "priority candidate areas" that are proposed for renewable energy generation development in the next 15 years. Following consultation on the draft plan, proposed REZs will be identified in the first Victorian Transmission Plan to be published by 31 July 2025.[110]

3.2.3 Interaction with NER planning frameworks

In performing REZ planning functions through the Victorian transmission plan and Victorian transmission plan guideline, VicGrid must have regard to the most recent:

- Integrated System Plan
- Victorian Annual Planning report published by AEMO
- electricity statement of opportunities
- gas statement of opportunities, and
- Victorian Gas Planning Report (NEVA, s53(2)).

3.3 Transmission investment

The final design paper for the Victorian Transmission Investment Framework indicates that a new procurement framework for the delivery of major transmission projects will be consulted on in mid-late 2024. No publication consultation appears to have commenced on the procurement framework at the date of this report. However, some high-level elements of the framework have been decided.

3.3.1 Cost recovery for early works

See section 3.7.1 for the current framework in Victorian to enable early works for specified transmission augmentations. The proposed new procurement framework under the Victorian

[109] Victorian Access Regime paper, June 2024, p 9.
[110] 2024 Victorian Transmission Plan Guidelines, September 2024, p19.

transmission investment framework may also address early works cost recovery, as commencement of work on a project will not be dependent on completion of an investment test (see below).

3.3.2 Investment test

The Victorian transmission investment framework will remove the requirement to apply a regulatory investment test to projects identified on the optimal pathway identified in the Victorian Transmission Plan. These projects will proceed straight to the new procurement process as a "separate economic assessment is not required, given this would duplicate parts of the planning process already undertaken for projects in the optimal pathway, including the cost benefit and robustness analysis, and delay timely delivery of projects".[111]

3.3.3 Contestable procurement of REZ transmission projects

The Victorian transmission investment framework will outline the approach to procure major transmission augmentations included in the optimal pathway under the Victorian Transmission Plan.

Little detail is available on the proposed procurement framework, but it appears the Victorian Government proposes to retain a contestable procurement model for transmission augmentations included in the optimal pathway.[112]

3.3.4 Ministerial power to direct transmission projects to be built

The Minister may direct priority transmission investment projects to be built – see section 3.7.1.

3.4 Cost recovery

The information published to date on the Victorian REZ framework does not include information on cost recovery arrangements for transmission projects on the optimal pathway (other than enabling VicGrid fees and charges to be recovered through prices for prescribed common transmission services (EII Act, s67)). However, the Victorian Transmission Investment Framework will set out how the Regulator will undertake independent oversight and the cost recovery for projects on the optimal pathway.[113]

3.5 Access to REZ infrastructure

3.5.1 Access regime design

In June 2024, VicGrid announced that it was implementing a new Victorian Access Regime to:

- support new renewable generation investment in Victoria's REZs
- improve coordination of generation and transmission capacity
- promote community acceptance, and
- be compatible with national reforms.

[111] Victorian Transmission Investment Framework, final design paper, p32. Note also that the NEVA currently empowers the Minister to modify or disapply the RIT-T to identified projects (NEVA, s16Y).

[112] Victorian Transmission Investment Framework, final design paper, p10

[113] Victorian Transmission Investment Framework final design paper, p33

Based on information published by VicGrid to date, the key elements of the access regime are:

- Derogation from open access – it will override the NER open access regime in the part of the declared shared network to which it applies.
- Application to new renewables and batteries – it will apply to new renewable energy generation and battery energy storage systems seeking connection to the Victorian Declared Shared Network.
- Management of congestion – it will seek to mitigate future congestion by managing connections in alignment with REZ hosting capacity.
- Access limits applied in each REZ and to each technology type – access to the Declared Shared Network within a REZ will be subject to a cap on connections up to the determined efficient network hosting capacity (in MW). The cap will apply per technology type but will not apply to BESS or to the BESS component of hybrids. Access limits may be updated over time in response to changing power system conditions.
- Funded augmentations – connections above the access limit may be permitted if a proponent is "willing to fund investments that mitigate their impact on the level of curtailment faced by REZ generators".
- Reporting on available capacity – as the Victorian Transmission Plan will only be published every four years, VicGrid proposes to maintain a publicly available heat map on its website indicating available capacity, which will be updated each time a new VRE generator connects.
- Grid impact assessments outside REZs – projects connecting outside REZs will be subject to grid impact assessments, assessing their impact on generation within REZs.
- Access fees within REZs – new renewable energy generation and battery energy storage systems will be required to pay fees to cover administration costs and contributions to community energy funds and benefits for Traditional Owners.
- Fees outside REZs – projects connecting outside REZs will need to pay for grid impact assessments.
- Grandfathering arrangements – generators that are already connected or have received a connection offer from AEMO would not be subject to the access scheme.

3.5.2 Access scheme implementation

Based on information published by VicGrid to date:

- following the declaration of a REZ, VicGrid will recommend access schemes to the Minister following a public consultation process
- following the recommendation from VicGrid, the Minister will declare each REZ access scheme by order published in the Government Gazette
- VicGrid will allocate access rights within each REZ
- VicGrid will conduct any required grid impact assessments
- VicGrid will monitor the status of national access arrangements and develop an approach to integrate with any agreed new national arrangements.

3.5.3 Access scheme contents

Based on information published by VicGrid to date, access scheme declarations will include:

- access limits for different types of variable renewable energy (VRE) projects
- potentially, minimum targets for storage in the REZ
- eligible VRE projects
- access fees

- the process to be used to allocate access including the invitation to tender documents that would be used if the capacity of eligible projects exceeds an access limit
- access conditions that must be satisfied by access seekers, for example:
  - minimum requirements relating to a proponent's community engagement performance
  - requirements relating to the community impact of the VRE generator's connection assets
  - meeting specified development milestones including dates for operation
  - requirements relating to technical performance
- a process for considering authorising access above the access limit.

A successful proponent will receive an 'access authorisation'.

3.5.4 Process for allocating access authorisation

Allocation

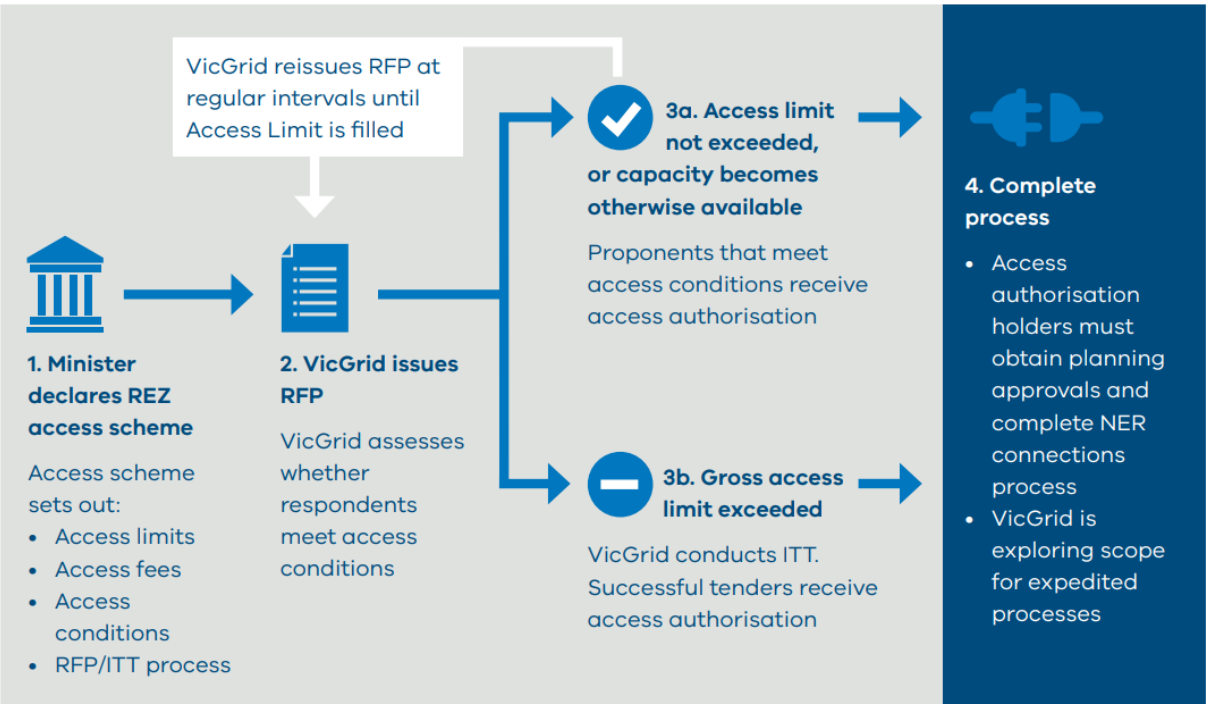
The process for allocating access will be set out in the access scheme and VicGrid have indicated that the process may be on application 'first-ready, first-served basis', a tender, or a combination of these methods.

Based on information published by VicGrid to date, the first step in the access allocation process is expected to be a request for proposal issued by VicGrid. Projects wishing to connect will need to respond indicating whether they can meet the access conditions. The outcome of this process will then determine next steps:

- If the compliant proposals do not meet or exceed the access limit, all respondents with compliant proposals will be awarded access authorisation.
- If the compliant proposals exceed the access limit, an Invitation to Tender (ITT) process will be used to decide which projects should be allocated an access authorisation based on assessment of highest merit focussed on "financial contributions to help offset the cost of developing shared REZ transmission assets".

See the figure below from the Victorian Access Regime paper which provides an overview of the proposed access allocation process.

Figure 3: Proposed access allocation process



Source: Victorian Access Regime paper, June 2024, p11.

Reallocation

If a project granted access rights does not meet the timetable for energisation or breaches its access conditions, its access rights may be revoked and the authorisation made available to others.

3.5.5 Access fees and charges

New renewable energy generation and battery energy storage systems that hold access authorisation will be required to pay annual access fees to cover administration costs and contributions to community energy funds and benefits for Traditional Owners. It is not clear from the papers published who the access fee would be payable to.

Where a tender process is used to allocate access authorisation (see section 3.5.4) a financial contribution to help offset the cost of developing shared REZ transmission assets appears to be contemplated but it is not clear whether this would take the form of an access fee.

3.5.6 Next steps in the development of the Victorian Access Regime

VicGrid is expected to consult on:

- the method for calculating efficient network hosting capacity of Victorian REZs
- grid impact assessments guidelines – this will be of key interest projects who may be seeking connection outside REZs
- potential for access conditions relating to the connections process, including a requirement for "mandatory generator performance standards, set in advance for each REZ""[114]

As at the date of this report, these consultations have not commenced.

[114] Victorian Access Regime paper, June 2024, p8.

3.6 Streamlined connections

As noted above, VicGrid intends to consult on the potential for access conditions relating to the connections process "such as whether the access conditions should include mandatory generator performance standards, set in advance for each REZ."[115]

3.7 Other issues

3.7.1 Critical transmission investments

Amendments made in 2020 to the NEVA[116] establish a framework for actioning crucial augmentations to the declared transmission system in Victoria (crucial transmission augmentation framework). No changes to this framework have been flagged to date in the context of policy papers outlining the procurement framework proposed to support the Victorian Transmission Plan. As REZ frameworks are the focus of this report, only a high-level overview of the crucial transmission augmentation framework is provided below.

Overview

The crucial transmission augmentation framework empowers the Minister to make orders "actioning" transmission augmentations and related services where there is or may be a crucial national electricity system need in Victoria or in Victoria and another participating jurisdiction.

An order may, among other things:

- specify a project as a specified augmentation or related services (such as early works) as specified augmentation services or specified non-network services
- require AEMO to procure or conduct a tender for, or require a declared transmission system operator to carry out, the specified augmentations or services.

Investment tests

The NEVA empowers the Minister to modify or disapply the RIT-T as it applies to an augmentation or services specified under an order or to require that an alternative investment test be applied to the project in place of the RIT-T.[117]

Cost recovery

AEMO or a declared transmission system operator can recover the costs of complying with an order as specified in the order. An order made by the Minister may:

- provide for the recovery by AEMO of any costs it incurs in respect of providing or acquiring specified augmentations and services, and
- deem the services provided by a specified augmentation or augmentation service to be a prescribed transmission service or other types of services for the purposes of the NEL or NER.

Access and connection

The crucial transmission augmentation framework does not specifically envisage changes to NER connection and access frameworks for specified augmentations, although the Minister does have

[115] Victorian Access Regime paper, June 2024 p8.
[116] NEVA, Part 3, Div 7 – Modification of regulatory arrangements for specified declared transmission system augmentations and related services.
[117] NEVA, s16Y(1)(e), (2)(d).

broad powers to make an order that derogates from the NER which could extend to changing access arrangements. In the absence of NER derogations made under an order, the NER open access and chapter 5 connection process will apply to connections to specified augmentations.

3.7.2 System strength

A REZ-specific approach to system strength is not envisaged in the planning documents published to date. However, it is proposed that technical assessments are undertaken to confirm that transmission pathways identified in the Victorian Transmission Plan can operate securely and meet supply requirements such as system strength.

3.7.3 Grandfathering of connections

VicGrid has indicated that generators that are already connected or have received a connection offer from AEMO would not be subject to the access scheme.

4. Tasmania

4.1 Overview and governance

4.1.1 Key policy and legislation

The Tasmanian Government announced its Renewable Energy Action Plan in December 2020 following the Tasmanian Parliament's legislating of the Tasmanian Renewable Energy Target (TRET) on 18 November 2020. The Action Plan set key priorities for Tasmanian renewable energy including targets for renewable energy and developing a Renewable Energy Coordination Framework to support the renewable energy growth required to achieve the TRET and support large-scale renewable energy projects.

The Renewable Energy Coordination Framework published in 2022 set out a roadmap for the first phase of activities under the Action Plan, including establishing the first REZ and key early milestones for Project Marinus.

The legislative framework for enabling Tasmanian REZs will be established under the *Energy Co-ordination and Planning Act* (EPC Act). An exposure draft of the *Energy Co-ordination and Planning Amendment (Renewable Energy Zones) Bill 2024* (REZ Bill) was released for consultation on 18 July 2024 and would insert a new Part 3A – Renewable Energy Zones in the REZ Bill.[118]

The summary of the Tasmanian REZ framework is based on the draft REZ Bill referred to above. As at the date of this report, the REZ Bill has not been introduced into Parliament.

4.1.2 Derogation from the NEL and NER

The REZ Bill derogates from the NEL and NER to regulate connection and access to REZ network infrastructure and empowers the making of regulations disapplying or modifying the application a provision of the NEL or NER as it applies to REZ network infrastructure (REZ Bill, s11ZE).

4.1.3 Objects of REZs

Objectives of the REZs

The objectives of REZs are:

- to facilitate new generation and storage capacity from renewable energy resources to meet increasing electricity demand
- to deliver required transmission more efficiently
- to foster support for renewable projects through community input into planning their location and to share the benefits of renewable energy zones with local communities
- to facilitate State and regional economic development and to support emissions reduction, and
- to help deliver any renewable energy targets set out in the EPC Act (REZ Bill, s11C).

4.1.4 REZ entities

Minister

In relation to REZs, the Minister responsible for Energy is intended to have the following key functions:

- declaration of REZs including appointing a REZ planner, REZ constructor and REZ operator

[118] Draft Energy Co-ordination and Planning Amendment Renewable Energy Zones Bill 2024

- establishing access schemes
- directing REZ planners to undertake detailed planning of REZ network infrastructure
- directing REZ constructors to develop and construct REZ network infrastructure
- directing REZ operators to operate REZ network infrastructure including administering access and connection arrangements.

REZ Co-ordinator

The Director of Energy Planning is appointed as REZ Co-ordinator (REZ Bill, s11D) and has the following key functions:

- long-term strategic planning in relation to REZs including preparing and publishing the REZ Long Term Strategic Plan (see section 4.2.1)
- to lead and co-ordinate community and stakeholder engagement for REZs
- to conduct REZ social and economic assessments for REZs
- to provide advice and information to the Minister in relation to REZs
- to make recommendations to the Minister for areas of Tasmania to be declared REZs
- to make recommendations to the Minister in relation to REZ access arrangements
- to manage the selection process for persons seeking to connect to, and access, REZ infrastructure in accordance with the requirements of any applicable access scheme (REZ Bill, s11E).

REZ planner

The REZ planner for a REZ is appointed by the Minister and is responsible for planning REZ infrastructure including:

- the detailed design of REZ network infrastructure
- coordination of engagement with landholders, communities and other stakeholders (REZ Bill, s11W).

REZ constructor

The REZ constructor for a REZ is appointed by the Minister and is responsible for the development and construction of REZ network infrastructure (REZ Bill, s11X).

REZ operator

The REZ operator for a REZ is appointed by the Minister and is responsible for the operation of REZ infrastructure including:

- the maintenance and operation of REZ network infrastructure
- the management of the access scheme for REZ network infrastructure
- entering into and manage access agreements and REZ connection agreements with participants in the REZ.

REZ Regulator

The REZ regulator is appointed by the Minister[119] and has functions including:

- making price determinations for REZ services

[119] The Minister may appoint the AER, the Tasmanian Economic Regulator or another person prescribed by regulation as the REZ regulator (REZ Bill, s11Q(1)).

- regulating prices, terms and conditions for the provision of REZ services
- issuing guidelines in relation to the performance or exercise of its functions (REZ Bill, s11Q).

REZ Services

A REZ service is defined as any service provided by a REZ entity in relation to a REZ or a REZ access order.

4.2 REZ assessment and planning

4.2.1 Network planning reports

REZ Long Term Strategic Plan

The REZ Coordinator is required to prepare and publish a REZ Long Term Strategic Plan for a 20-year period, with the first plan to be published within 12 months of the commencement of the relevant section of the REZ Bill (REZ Bill, s11F). The Plan must be updated every 5 years.[120]

The REZ Long Term Strategic Plan must, among other things:

- examine demand scenarios that may occur over the life of the plan
- identify potential REZs that could meet the demand scenarios in the plan
- identify the infrastructure and its indicative costs that may be necessary for each potential REZ identified
- make recommendations relating to the optimal sequencing of REZs and REZ infrastructure
- propose low cost, early works for identified projects infrastructure environmental such as design, studies planning approvals.

Detailed planning

The Minister must appoint a REZ planner for a REZ. The REZ planner undertakes detailed planning including engagement activities for REZ network infrastructure. The Minister may direct the REZ planner to carry out its planning functions but must ensure that there are appropriate cost recovery arrangements for the REZ planner for carrying out those functions.

[120] Or sooner if requested by the Minister or if in the opinion of the REZ Co-ordinator, there has been a material change to the key assumptions and forecasts underlying the plan.

4.2.2 REZ declarations

How a REZ is declared

The Minister may declare an area of Tasmania as a REZ if:

- the REZ Coordinator has recommended the REZ be declared, and
- the Minister is satisfied that the declaration is consistent with the REZ objectives (see section 4.1.3) (REZ Bill, s11H(1)).

The Minister must consider submissions received during consultation (see below) and consider cost implications for Tasmanian electricity customers and social, economic and other relevant impacts of the REZ on the parts of the State affected by the REZ (REZ Bill, s11J).

The REZ Coordinator may only make a recommendation that an area of Tasmania be declared a REZ if it:

- is satisfied that the declaration would be consistent with the REZ Long Term Strategic Plan and the REZ objectives
- has conducted a REZ social and economic assessment for the proposed REZ and has submitted a report on that assessment to the Minister
- is satisfied, and can demonstrate, that the cost for the network infrastructure in the REZ, as identified in the REZ Long Term Strategic Plan, is the lowest cost option (REZ Bill, s11I).

A draft REZ declaration must be publicly consulted on and a notice inviting submissions must be issued for a period of not less than 28 days (REZ Bill, s11J).

REZ declaration contents

A REZ declaration must set out:

- the geographic boundaries of the REZ
- the generation, storage and network infrastructure, including planned and existing infrastructure that forms part of the REZ
- the intended network capacity of the REZ infrastructure
- the REZ controlled assets, if any
- the threshold amount for the REZ, being the minimum financial commitment that must be met by selected participants in a renewable energy zone before construction can begin on the REZ infrastructure for that renewable energy zone (threshold amount)
- the REZ planner, REZ constructor and REZ operator appointed for the REZ.

Network infrastructure may be specified as REZ controlled assets if:

- the network infrastructure is outside the geographical area of the REZ
- the network infrastructure is not part of the REZ infrastructure for the REZ
- further connections to the network infrastructure would materially affect the network capacity for, or functioning of, the REZ infrastructure for the REZ (REZ Bill, s11H(4)).

Proposed REZs

As at the date of this report, no REZs have formally been declared in Tasmania. However, the 2024 ISP identified 3 on-island REZs in Tasmania: North East Tasmania, North West Tasmania and Central Highlands.[121] Between May and September 2024, the Government consulted on the North West REZ which has a hosting capacity of approximately 1000 MW.[122] The feedback from the consultation is expected to inform the Minister's decision on the declaration of the REZ under the proposed legislative framework.

The consultation documents for the North West REZ identify proposed generation and load projects, a new 220 KV transmission line between Hampshire Hills and Burnie and a new substation at Hampshire Hills to be delivered by TasNetworks.[123] The generation and load projects would be required to connect to the new transmission line to avoid multiple connections between projects and the existing transmission network at Burnie.[124]

4.2.3 Interaction with NER planning frameworks

The REZ Long Term Strategic Plan may cover the same projects that are captured in the ISP. However, the plan is likely to provide additional detail to the ISP on REZs and REZ transmission, so may complement rather than duplicate or be inconsistent with the ISP.

4.3 Transmission investment

4.3.1 Cost recovery for early works

The Minister must ensure that there are appropriate cost recovery arrangements for the REZ planner for carrying out detailed planning activities, including engagement. See section 4.4.1.

4.3.2 Investment test

Because the REZ infrastructure is envisaged to be funded by connecting generation and storage projects, the REZ Bill does not envisage the application of the RIT-T to investment in that infrastructure. However, in recommending the declaration of a REZ the REZ Co-ordinator must be satisfied, and able to demonstrate, that the cost for the network infrastructure in the REZ, as identified in the REZ Long Term Strategic Plan, is the lowest cost option (REZ Bill, s11I).

In addition, it is worth noting that conceptually, REZ infrastructure is similar to designated network assets under the NER because:

- they are envisaged to be shared connection infrastructure for identified connection and generation projects, and
- the 'default position' under the REZ Bill is that connecting generation and storage projects will fund REZ infrastructure.

[121] AEMO, 2024 Integrated System Plan, Appendix 3 Renewable Energy Zones, page 8.
[122] See REZ website here.
[123] This is part of the North West Transmission Development planned by TasNetworks.
[124] See REZ website here.

Investment decision

The Minister effectively makes investment decisions for REZ infrastructure as the Minister must appoint a REZ constructor and REZ operator for a REZ and may direct those parties respectively to construct and operate REZ infrastructure (REZ Bill, s11X, 11Y).

Threshold amount of financial commitment before construction of REZ infrastructure

Construction cannot begin on REZ infrastructure for a REZ until the threshold amount is met.

4.3.3 Contestable procurement of REZ transmission projects

The Tasmanian REZ framework contemplates that the planning, construction and operation of REZ transmission projects may be contestable by empowering the Minister to appoint any person as a REZ planner, constructor or operator. A person will require a transmission licence under *the Electricity Supply Industry Act 1995* to carry on a transmission operation in Tasmania.[125]

4.3.4 Ministerial power to direct transmission projects to be built

The Minister has the ability to direct REZ transmission projects to be built. See section 4.1.4.

4.4 Cost recovery

4.4.1 Overview

REZ services include the planning, construction and operation of REZ infrastructure. Before directing a REZ entity to plan, construct or operate REZ infrastructure, the Minister must ensure that there are appropriate cost recovery arrangements for the REZ planner for carrying out those functions (REZ Bill, s11X, 11Y).

Participants in a REZ must pay fees and charges for the REZ service costs incurred by the REZ entities for that REZ (REZ Bill, s11S). The Regulator has the function of regulating the prices and terms and conditions for the provision of REZ services and may issue guidelines for this purpose (REZ Bill, s11T).

If there is a shortfall between the amounts recovered from REZ participants and the REZ service costs for a REZ, the Minister may make an order declaring that all or part of the shortfall may be recovered by a REZ entity through prices charged to consumers.

4.4.2 Price determination

The Regulator must make price determinations that apply to REZ entities in respect of REZ services (REZ Bill, s11V). The price determination must, among other things, determine prices, terms and conditions for REZ services in accordance with any pricing principles prescribed in the regulations. For example, a price determination can:

- fix a maximum allowable revenue, or rate of contribution, to be paid by a participant in a renewable energy zone for a REZ service, or
- specify pricing policies or principles to be applied in relation to a REZ service.

The Regulator must publicly consult on the proposed price determination.

[125] Currently only TasNetworks, Marinus Link Pty Ltd and Basslink Pty Ltd hold transmission licences: Electricity Licences Issued | Office of the Tasmanian Economic Regulator

4.4.3 Cost and price plans

The Regulator must determine a cost and price plan for REZ services once the threshold amount is met. Once the threshold amount is met, the Regulator must request the REZ planner, REZ constructor and REZ operator to provide proposed cost and price plans to the Regulator and the REZ entity must comply with that request (REZ Bill, s11U(1),(2)). The proposed cost and price plans must include, for the relevant REZ services:

- proposed annual revenue requirements
- project capex and opex
- proposed access and connection agreements, and
- proposed cost allocation arrangements between participants in the REZ for the REZ services.

The Regulator must approve a cost and price plan if it includes the required contents, is consistent with the guidelines made by the regulator and is in accordance with any relevant price determination.

4.4.4 Shortfall declaration

As noted above, if there is a shortfall between the amounts recovered from REZ participants and the REZ service costs for a REZ specified in the price and cost plans approved for the entity, the Minister may make an order declaring that all or part of the shortfall may be recovered by a REZ entity through prices charged to consumers (s11S(3)). The REZ Bill does not provide guidance on how the Minister would make a shortfall declaration.

4.5 Access to REZ infrastructure

4.5.1 Access scheme order

The Minister may make an order establishing an access scheme that is to apply to REZ network infrastructure if the REZ Coordinator has recommended the access scheme (REZ Bill, s11N(1)).

There can be more than one access scheme in a REZ (REZ Bill, s11N(2)(5)).

4.5.2 Access scheme contents

An access scheme order may:

- authorise, prohibit, restrict or limit access to REZ network infrastructure
- specify terms and conditions on which persons can access REZ network infrastructure. This could include the process for selecting participants and requirements in relation to bonds or other security, and
- specify fees, or the means for calculating fees, payable for accessing the REZ infrastructure.

4.5.3 Restrictions on connection and access

Connection and access to any network infrastructure that forms part of a REZ[126] is restricted to persons that have entered into a connection agreement and an access agreement[127] with the REZ operator (REZ Bill, s11P(1)).

[126] As specified in the REZ declaration (see section 0 above).

[127] An access agreement between the REZ operator for a REZ and a participant in a REZ for access to REZ network infrastructure (REZ Bill, s11A).

A REZ operator for a REZ is only permitted to enter into a connection agreement and access agreement with a person if:

- the person is a selected participant in that REZ. A selected participant is, in relation to a REZ, a person that has been selected by the REZ Co-ordinator, following consultation with the relevant REZ operator, to be a participant in the renewable energy zone
- the person has met any conditions under which they have been selected as a selected participant (REZ Bill, s11P(2)), and
- any other relevant requirements under the access scheme for the REZ have been met.

4.5.4 Process for allocating access

As noted above:

- only selected participants who enter into a connection agreement and access agreement with the REZ operator can access REZ network infrastructure
- the REZ Coordinator has the function of managing the selection process for participants
- the access scheme order can specify requirements for the selection of participants.

4.5.5 Access fees

An access scheme order may specify fees, or the means for calculating fees, payable in relation to access to the REZ infrastructure (REZ Bill, s11N(2)(c)).

In addition, see section 4.4 above regarding price determinations for REZ services.

4.6 Streamlined connections

An access scheme may specify REZ-specific connection arrangements and the REZ Bill empowers the making of regulations to derogate from the NER to regulate connection and access to REZ infrastructure. However, no specific derogations to NER connection arrangements have been identified in policy papers to date.

4.7 Other issues

4.7.1 System strength

No specific arrangements for system strength are contemplated in the Tasmanian REZ framework.

Appendices

Appendix A: Glossary

Term	Definition
AER	Australian Energy Regulator
EII Act	*Electricity Infrastructure Investment Act* 2020 (NSW)
EnergyCo NSW	Energy Corporation of NSW, established under the *Energy and Utilities Administration Act 1987* (NSW)
IIO Report or Infrastructure Investment Objectives Report	In NSW, a report published by the Consumer Trustee under section 45 of the EII Act.
Infrastructure Planner	In NSW, the person authorised to exercise the functions of an infrastructure planner under the EII Act, s 63
ISP	The Integrated System Plan as defined in the NER
LTESAs	Long Term Energy Service Agreements as defined under the EII Act, s46
maximum capital cost	In NSW, the maximum amount for the prudent, efficient and reasonable capital costs for development and construction of a REZ network infrastructure project that may be determined by the Regulator
NER	National Electricity Rules
NEVA	The *Electricity (Victoria) Act 2005* (Vic)
NSW mandated REZs	REZs the Minister is required to declare in NSW being REZs in Central-West Orana, Illawarra, New England, South West and Hunter-Central Coast.
Queensland REZ Roadmap	The REZ Roadmap first issued in July 2023 and last updated in March 2024 (see resources section)
responsible Ministers	In Queensland, means the Minister for Energy and Clean Economy Jobs and Treasurer acting jointly
RTJ Act	*Energy (Renewable transformation and Jobs) Act* 2024 (Qld)
REZ	Renewable Energy Zone
REZ Bill	In Tasmania, means the *Energy Co-ordination and Planning Amendment (Renewable Energy Zones) Bill* 2024
REZ delivery body	In Queensland, the entity appointed as the REZ delivery body under s75, being Powerlink
REZ network infrastructure project	In NSW, a project that forms part of a REZ and is of a class of infrastructure prescribed in the EII Regulation
REZ controlled asset	In Queensland, for a REZ, means transmission assets that: • materially affect, or will materially affect, the capacity or functioning of the REZ transmission network for the REZ • are outside the REZ or inside the REZ but not part of the REZ transmission network, and • are identified in the REZ declaration for the REZ as REZ controlled assets for the REZ
REZ transmission network	In Queensland, for a REZ, means the transmission network or part of the transmission network that is in the REZ and identified in the relevant REZ declaration as the REZ transmission network for the REZ
SuperGrid Infrastructure Blueprint	In Queensland, the report described in section 2.1.
threshold amount	In Tasmania, the minimum financial commitment that must be met by selected participants in in the REZ under the REZ declaration before construction can begin on a REZ transmission infrastructure

Appendix B: Resources

B.1 New South Wales

Resource	Link
Electricity Infrastructure Investment Act 2020 (NSW)	Electricity Infrastructure Investment Act 2020 No 44 - NSW Legislation
Electricity Infrastructure Investment Regulation 2021 (NSW)	Electricity Infrastructure Investment Regulation 2021 - NSW Legislation
Electricity Infrastructure Investment Amendment (Functions) Regulation 2024 (NSW)[128]	sl-2024-626
Chapter 9A of the NER (NSW): NSW Government Gazette, Number 476 – Electricity and Water	NSW Government Gazette No 476 of 06 December 2024
Appointment of entities	
Appointment of AER as Regulator – Conferral Agreement	Agreement on AER functions under NSW's Electricity Infrastructure Investment Act 2020 | Australian Energy Regulator (AER)
Access schemes generally	
Guidelines for access scheme declaration	Guidelines for Access Scheme Declarations (nsw.gov.au)
Planning reports	
Infrastructure Investment Objectives Report, December 2023	2023-iio-report-december_final.pdf (aemoservices.com.au)
Network Infrastructure Strategy, May 2023	NSW Network Infrastructure Strategy
Electricity Supply and Reliability Check Up and Government Response	Electricity Supply and Reliability Check Up | NSW Climate and Energy Action
Authorisation	
AEMO Services, Network Authorisation Process approach paper, September 2024:	240926-september-network-authorisation-process-and-approach-paper.pdf
EII Act Revenue determinations	
Revenue determination guideline for NSW contestable projects	Revenue determination guideline for NSW contestable projects | Australian Energy Regulator (AER)
Revenue determination guideline for NSW non-contestable projects	https://www.aer.gov.au/industry/registers/resources/guidelines/revenue-determination-guideline-nsw-non-contestable-projects-july-2024
Central West Orana REZ	
CWO REZ Declaration	Government Gazette No 569 of Friday 5 November 2021 (nsw.gov.au) Government Gazette No 580 of Friday 15 December 2023 (nsw.gov.au) Government Gazette No 137 of Friday 19 April 2024 (nsw.gov.au)
Central-West Orana REZ Infrastructure Planner Recommendation Public Report	Microsoft Word - CWO REZ - public report - FINAL DRAFT.docx (nsw.gov.au)
Authorisation of Main CWO REZ Network Infrastructure Project	notice-of-authorisation-cwo-main.pdf (aemoservices.com.au)

[128] Note that the amendment to the EII Regulation made on 13 December 2024 was not consolidated as at the date of this report.

Authorisation of Enabling CWO REZ Network Infrastructure Project	notice-of-authorisation-cwo-enabling.pdf (aemoservices.com.au)
CWO REZ Access Scheme Declaration	Government Gazette No 116 of Friday 5 April 2024 (nsw.gov.au)
CWO REZ Extension of Access Scheme term	https://www.energyco.nsw.gov.au/sites/default/files/2023-08/cwo-rez-access-scheme-notice-of-extension-of-term%20-20230831.pdf
CWO REZ Access Right Application Process Guidelines April 2024	Central-West Orana REZ Access Rights Application Process | EnergyCo (nsw.gov.au)
Central-West Orana Renewable Energy Zone Access Scheme Target Transmission Curtailment Level & Headroom Assessment Method	Central-West Orana Renewable Energy Zone Access Scheme Target Transmission Curtailment Level & Headroom Assessment Method (nsw.gov.au)
CWO REZ Access Scheme - Standard Development Agreement	PDA - With Access Right EnergyCo - TEMPLATE VERSION (nsw.gov.au)
CWO REZ - REZ Access Standards	NSW REZ Access Standards intended to apply to Central-West Orana REZ | EnergyCo
South West REZ	
SW REZ Declaration	Government Gazette No 515 of Friday 4 November 2022 (nsw.gov.au)
SW REZ Access Scheme Declaration	Government Gazette No 126 of Friday 12 April 2024 (nsw.gov.au)
SW REZ Access Scheme - Standard Development Agreement	SW REZ Project Development Agreement (EnergyCo updated template 22 August 2024) (aemoservices.com.au)
SW REZ Access Rights Tender 2024	South West Renewable Energy Zone Access Rights and Long Duration Storage LTESA (aemoservices.com.au)

B.2 Queensland

Resource	Link
Overarching policy document	
REZ Roadmap, March 2024	Renewable Energy Zone (REZ) Roadmap (epw.qld.gov.au)
Key legislation	
Energy (Renewable Transformation and Jobs) Act 2024 (Qld)	Energy (Renewable Transformation and Jobs) Act 2024 - Queensland Legislation - Queensland Government
Energy (Renewable Transformation and Jobs) Regulation 2024 (Qld)	Energy (Renewable Transformation and Jobs) Regulation 2024 - Queensland Legislation - Queensland Government
Planning documents	
Queensland Energy and Jobs Plan, September 2022 and 2023 update	QEJP 2023 Update (epw.qld.gov.au), QEJP 2023 Update (epw.qld.gov.au)
Queensland SuperGrid Infrastructure Blueprint, September 2022	Queensland SuperGrid Infrastructure Blueprint (epw.qld.gov.au)

B.3 Victoria

Resource	Link
Overarching policy document	
REZ Development Plan	https://www.energy.vic.gov.au/__data/assets/pdf_file/0028/580618/Victorian-Renewable-energy-zones-development-plan-directions-paper.pdf
Key legislation	
National Electricity (Victoria) Act 2005	National Electricity (Victoria) Act 2005 (legislation.vic.gov.au)
National Electricity (Victoria) Amendment (VicGrid) Act 2024 (as made)	National Electricity (Victoria) Amendment (VicGrid) Act 2024 | legislation.vic.gov.au
Planning documents	
Victorian Transmission Investment Framework final design paper, July 2023	Victorian Transmission Investment Framework_Final Design Paper (energy.vic.gov.au)
Victorian Transmission Plan Guidelines, September 2024	2024-victorian-transmission-plan-guidelines.pdf (energy.vic.gov.au)
Access schemes	
VicGrid, Victorian access regime factsheet, June 2024	Victorian-access-regime-factsheet.pdf (energy.vic.gov.au)
VicGrid, Victorian Access Regime, June 2024	https://www.energy.vic.gov.au/__data/assets/pdf_file/0023/706910/Victorian-access-regime-paper.pdf

B.4 Tasmania

Resource	Link
Overarching policy document	
Tasmanian Renewable Energy Action Plan, December 2020	Tasmanian_Renewable_Energy_Action_Plan_December_2020.pdf (recfit.tas.gov.au)
Renewable Energy Coordination Framework, 2022	Renewable_Energy_Coordination_Framework_May_2022.pdf (recfit.tas.gov.au)
Key legislation	
Energy Co-ordination and Planning Amendment (Renewable Energy Zones) Bill 2024	https://recfit.tas.gov.au/__data/assets/pdf_file/0004/530194/Draft_Energy_Co-ordination_and_Planning_Amendment_Renewable_Energy_Zones_Bill_2024.pdf
Guide to the Energy Co-ordination and Planning Amendment (Renewable Energy Zones) Bill 2024	Guide_to_the_Energy_Co-ordination_and_Planning_Amendment_Renewable_Energy_Zones_Bill_2024.pdf

REFORM MATTERS

info@reformmatters.com.au
reformmatters.com.au