

Victorian Access Regime

June 2024

Contents

1. Introduction.....	3
1.1 Purpose.....	3
1.2 Context.....	6
2. Victorian Access Regime under the VTIF	7
2.1 Declaring a REZ access scheme	8
2.2 Access limits	9
2.3 Allocating access within a REZ	10
2.4 Grid impact assessment	12
2.5 Access fees	13
2.6 Transitional arrangements	14
2.7 Timing for implementation of first access schemes	14
Glossary.....	15

Acknowledgment of Traditional Owners

We acknowledge and respect Victoria's Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partnering and meaningfully engaging with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

1. Introduction

Victoria's energy system is changing. Coal-fired power stations are becoming unreliable and retiring faster than expected. We urgently need to change our power grid to carry energy from new renewable sources and batteries across the state to Victorian homes, businesses, hospitals, schools and other vital services.

1.1 Purpose

VicGrid, the Victorian Government agency responsible for planning and developing the new infrastructure that will transport energy generated by renewables to the electricity grid, is working to make sure this change delivers the safe, reliable and affordable power Victoria needs to keep the lights on.

We are giving host communities a real say in the planning of new infrastructure so we can reduce impacts and make sure benefits are shared more fairly. We want to build the right amount of energy infrastructure in the right places at the right time. And we want to ensure we are not building more than Victoria needs – so we can minimise impacts on communities, industries and the environment, and keep down costs to reduce impacts on power bills.

The Victorian Government is introducing a new approach to managing how energy generation and storage projects access Victoria's electricity transmission network.

This public paper explains:

- what the new Victorian Access Regime is;
- why it's required; and
- how it's proposed to operate.

The paper is written primarily to inform energy industry stakeholders about the new Victorian Access Regime.

Explanations of industry terms and a glossary have been included, to give all Victorians transparency about how the state's new renewable energy and transmission infrastructure is being planned. Central to this work is the design and development of a new Victorian Access Regime that will apply to new energy generation projects seeking to connect to Victoria's electricity transmission grid. Reforming access arrangements is a core element of the Victorian Transmission Investment Framework (VTIF), which guides the Victorian Government's new approach to developing new major renewable energy transmission infrastructure and Renewable Energy Zones across the state.

What does the term 'access' mean?

To deliver power to homes, businesses and essential services, energy generators must have a physical connection – also known as 'access' – to the electricity transmission network.

At all times, the amount of energy generated (or released from storage) on to the network must match consumers' electricity demand.

To keep energy supply in balance with demand, a wholesale electricity market operates in real time.

It is similar to a fresh food market, where farmers deliver their produce to a wholesaler that buys what is needed, and at the right price, to meet market demand.

In the electricity market, generators bid the quantity of energy they are willing to supply and the price they want to receive. The market operator then accepts – or 'dispatches' – the energy generation needed to exactly meet demand.

An access regime comprises policies, regulations and/or conditions that govern the terms on which energy generators can gain access to the network.

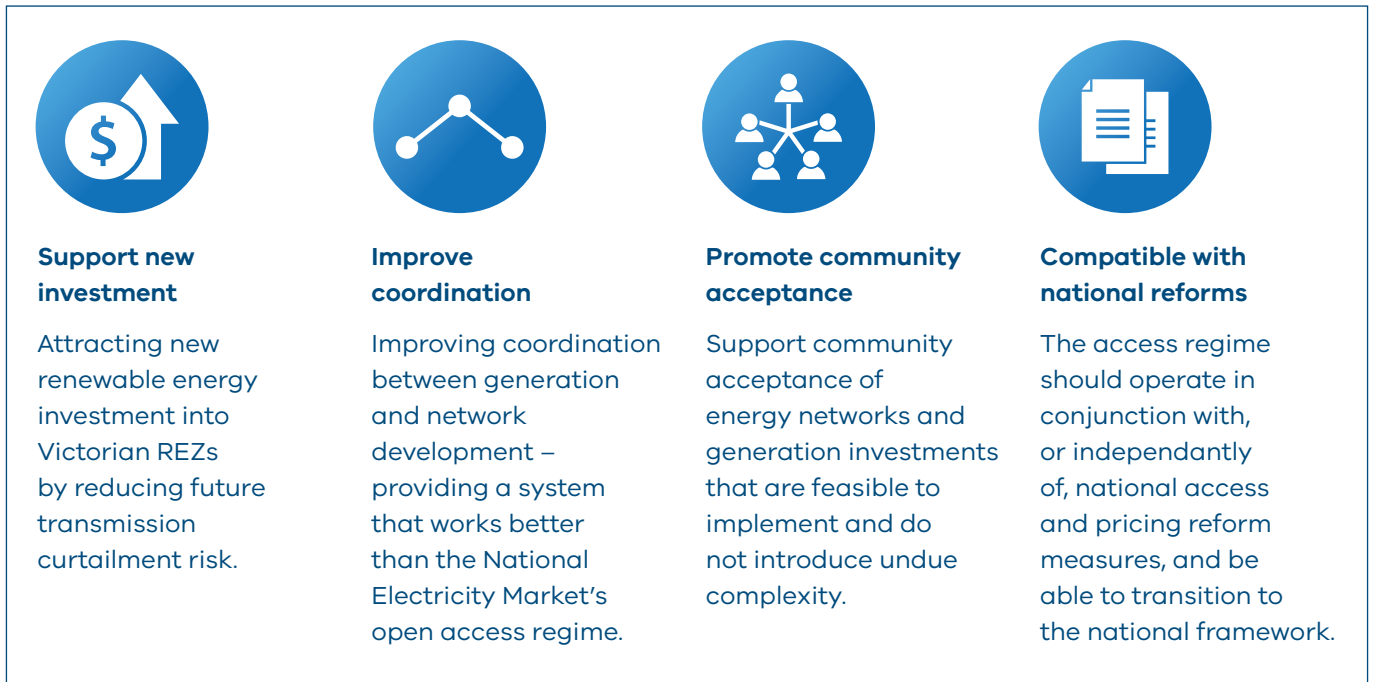
An effective access regime can give generators and investors' confidence that they can supply their energy into the market without facing excessive curtailment. Curtailment can happen when the market operator limits the output of certain generators because the network, or parts of it, reach a technical limit.



New access arrangements are critical to the successful development of future variable renewable energy (VRE) generation in Victoria.

The objectives of the VTIF Victorian Access Regime are set out in Figure 1 below.

Figure 1: Objectives of the Victorian Access Regime



The new Victorian Access Regime will encourage efficient investment in new VRE generation and battery energy storage (BESS) projects in Victoria’s Renewable Energy Zones (REZs) by reducing the risk and uncertainty that VRE investors face under the National Electricity Market’s open access regime.

The Victorian Access Regime will improve investment certainty for VRE generation developers and investors in REZs by coordinating connections on

the network to reduce the risk of curtailment, which happens when the market operator limits the output of certain generators because the network has reached a technical limit.

It will also encourage more coordinated transmission network expansions to facilitate connection, reducing the social and environmental impact of developments.



1.2 Context

In the Victorian Transmission Investment Framework (VTIF) Final Design paper released in June 2023, the Victorian Government expressed a preference for the current national access reform process to be implemented in Victoria, but committed to developing access arrangements under the VTIF if national reform was delayed, not adopted or resulted in access arrangements that did not meet the objectives of REZ development in Victoria.

As part of the VTIF consultation process from 2022 to 2024, VicGrid considered feedback from key industry stakeholders regarding the development of a Victorian Access Regime. The access regime outlined in this paper was designed based on the feedback received through those consultations. Industry will have further opportunities in 2024 to provide input to the key elements of the regime, which are discussed in this paper.

The Victorian Government has designed a new access regime to support Victoria while being ready to integrate with national reforms if they are ultimately adopted. The two sets of reforms do not disrupt each other because they relate to different aspects of the market framework and apply within different timeframes:

- The Victorian Access Regime manages which projects may connect to the system, so it takes effect before a generator or storage operator connects to the system.
- The national framework introduces new rules to decide which generator or storage system gets to generate when congestion occurs.
- When the national reforms are implemented, the elements of the Victorian Access Regime that are no longer needed can be removed.

What's happening with national reforms, and why can't we wait for them?

The new Victorian Access Regime is being designed to support Victoria while being ready to integrate with national reforms if and when they are ultimately adopted.

To hit the target of 95 per cent renewable energy generation by 2035, unprecedented new investment in generation, transmission and storage projects will be required.

Victoria needs to implement reforms now, to get on with the job of planning the state's transition to renewable energy and ensure we can keep the lights on for Victorians.

The Victorian Access Regime will help ensure we build the right amount of energy infrastructure in the right places at the right time.

Our approach will ensure that suitable access arrangements can be established when Renewable Energy Zones are declared in accordance with the first Victorian Transmission Plan to be published in 2025.

Establishing access arrangements will also be important for funding benefits for communities in regions hosting REZs.

2. Victorian Access Regime under the VTIF

Some features of the new access regime will apply across Victoria's Declared Shared Network (DSN). In addition, each REZ will be subject to its own REZ access scheme.

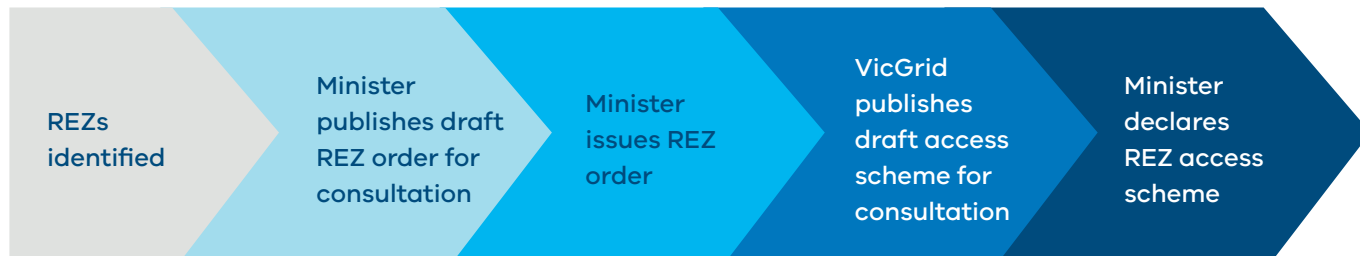
Key elements of the new arrangements include:

- The Minister for Energy and Resources will declare the Victorian Access Regime across the DSN. This regime will override the current open access arrangements embedded in the National Electricity Rules (NER). Generators that are already connected to the transmission network or have received a connection offer by AEMO would not be subject to the Victorian Access Regime.
- The Victorian Transmission Plan (VTP) will identify a set of potential REZs, together with the efficient transmission infrastructure required to connect new VRE generation capacity. To establish a REZ access scheme, the Minister will publish an order in the Government Gazette. Among other things, the REZ access scheme will specify, for each REZ, a set of access conditions that a REZ generator must meet to be entitled to connect within the REZ. To inform the Minister's decision, VicGrid will consult on a draft version of the REZ access scheme. More detail is provided in Section 2.1 Declaring a REZ access scheme.
- A REZ access scheme will place a cap on connections (known as an access limit) within a REZ up to the efficient network hosting capacity. Within a REZ, the allocation of access will, effectively, be a reservation of capacity, which will remain subject to all other technical requirements for connection. To ensure that the scheme does not favour technologies that are able to be developed most quickly, and to ensure efficient use of the network, the cap will include technology-specific limits. More detail is provided in Section 2.2 Access limits.
- Because BESS can alleviate congestion and increase the hosting capacity of a REZ by charging when there is surplus generation, BESS will not be subject to access limits. REZ orders may specify a minimum storage target subject to the Victorian Transmission Plan. More detail is provided in Section 2.2.1 Application of access limits to BESS and hybrid plant.
- Access will be granted in accordance with the process set out in the REZ access scheme. Access authorisations may be allocated on a first-ready first-served basis, via a tender process, or a hybrid approach, on a case-by-case basis. To be granted access authorisation, proposed projects in REZs will need to meet the access conditions specified by the REZ access scheme. More detail is provided in Section 2.3 Allocating access within a REZ.
- REZ generators will be protected from excessive network curtailment arising from new generator connections outside REZs. Curtailment occurs when the market operator limits the output of certain generators because the network has reached a technical limit. Generation projects seeking connection outside a REZ will be subject to a grid impact assessment, which is designed to preserve the integrity of the REZ. More detail is provided in Section 2.4 Grid impact assessment.
- Access fees will apply to new generation and storage projects within REZs to recover administration costs, and cover contributions to Renewable Energy Zone (REZ) Community Energy Funds and dedicated benefits for Traditional Owners. A fee will also apply to projects seeking to connect outside of REZs to cover costs of undertaking a grid impact assessment. More detail is provided in Section 2.5 Access fees.

2.1 Declaring a REZ access scheme

Figure 2 provides an overview of the process for establishing a REZ access scheme.

Figure 2: Process for establishing a REZ access scheme under the VTIF



To declare a REZ, the Minister will publish an order in the Government Gazette. Once the Minister issues a REZ order, VicGrid will publish a draft access scheme for consultation. **The REZ access scheme will set out:**

- access limits for different types of VRE generation seeking connection within the REZ
- access fees
- access conditions
- a description of the process to allocate access authorisations.

Access conditions are the criteria that a VRE generator must meet to be eligible to connect within a REZ.

Examples of possible access conditions are set out in the box on this page. While some access conditions are likely to be standard for all REZs, others may be bespoke, depending on the relevant circumstances.

Examples of possible access conditions

- Minimum requirements relating to a proponent’s community engagement performance.
- Requirements relating to the community impact of the VRE generator’s connection assets.
- Project has met specified development milestones.
- Date when the project must be operational.
- Requirements relating to technical performance.

VicGrid will conduct further consultation on the connection arrangements to support the VTIF later this year. One of the matters to be explored is 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.

Following consultation on a draft REZ access scheme, the Minister may establish the REZ access scheme by publishing an order in the Government Gazette. The REZ access scheme may be revised and updated in the future, if necessary. The process for updating it will be subject to a similar consultation process.

2.2 Access limits

An access limit is a maximum cap (in megawatts) on how much generation capacity of a specific type of VRE may connect within a REZ. Access limits give investors visibility of hosting capacity and assurance that a REZ's capacity will not be oversubscribed. This helps investors assess their level of exposure to network curtailment more accurately.

The VTP will identify geographic areas that VicGrid proposes to develop as REZs, together with indicative hosting capacity (in megawatts) of each REZ. The process used to prepare the VTP is described in the VTIF Final Design paper. The VTP Guidelines, which are scheduled to be consulted upon later this year, will include a more detailed explanation of how the VTP will be developed, including how the efficient hosting capacity of a REZ will be determined. The Minister will consider the optimal transmission investment pathway described in the VTP for the purposes of declaring REZs and REZ access schemes.

Access arrangements that account for diversity of technology type deliver substantially improved network utilisation compared with arrangements that do not account for technology type. Further, there is a risk that a poorly designed access scheme could distort outcomes in favour of technologies that are able to be developed most quickly. For these reasons, the REZ access schemes will specify separate access limits (maximum capacity caps) for each type of VRE. Where appropriate, access limits will differentiate between onshore wind and offshore wind.

As the VTP will eventually be reviewed every four years, it will be necessary to provide developers with more frequent updates about how much capacity is left within the access limits for each REZ. VicGrid will maintain a publicly available heat map on its website, which will be updated each time a new VRE generator connects.

Victorian REZs declared by the Minister will be more targeted than the broad geographic regions that have been identified in various publications to date. The order declaring each REZ will also specify the preferred transmission corridor within the REZ and between the REZ and the DSN. Applications for new generator connections within a REZ will only be accepted if they do not result in a breach of the relevant access limit.

Access will be made available up to each relevant access limit following implementation of a REZ access scheme, with ongoing review and potential for the access limit to be updated over time in response to changing power system conditions. For instance, an access limit may be revised after an incumbent generating system retires or disconnects or following a transmission augmentation.

A REZ access scheme may permit new connections above the access limit, if the connection applicant is willing to fund investments that mitigate their impact on the level of curtailment faced by REZ generators. The framework for considering connection applications above the REZ access limit will be set out in the REZ access scheme.

2.2.1 Application of access limits to BESS and hybrid plant

BESS is different from generation because it can act as a generator or a load, depending on its state of charge and market conditions. BESS can increase the hosting capacity of a transmission network and soak up surplus generation by charging when the network is congested (and discharging when market prices are high). BESS should be encouraged to connect within REZs as it permits demand to be met using a smaller transmission network than would otherwise be required.

For these reasons, VicGrid does not propose to apply access limits to storage. Storage will still be required to obtain an access authorisation to connect within a REZ, but there will be no maximum cap on how much BESS may connect. REZ orders may specify a minimum storage target for the REZ, which may be determined by the Victorian Transmission Plan.

When setting access limits, VicGrid will take into account the role of BESS in alleviating transmission congestion. Where BESS has the effect of increasing the hosting capacity of a REZ, VicGrid will review whether it is appropriate to revise the access limit as part of the VTP planning process. This calculation is complex as the impact depends on the size and duration of BESS operation, the duration and extent of congestion on the transmission network and the operational behaviour of the BESS.

Similarly, access limits will apply to only the REZ generator component of a hybrid energy development.



2.3 Allocating access within a REZ

Access authorisations may be allocated on a first-ready first-served basis, through a tender process, or through a hybrid approach, depending on the circumstances that apply to the relevant REZ. The process used to allocate access for each REZ will be set out in the REZ access scheme (and will be subject to consultation).

REZ generation project proponents will need to obtain a REZ access authorisation in addition to all required environmental and planning approvals. They will also need to fulfil the connection requirements set out in Chapter 5 of the NER. VicGrid is considering options to expedite the connections process for REZ generation project proponents and will consult on options later this year.

VRE generation and BESS proponents wishing to connect within a REZ will need to respond to a request for proposals (RFP) issued by VicGrid in accordance with a timetable published by VicGrid. To be eligible to receive an access authorisation, a respondent's proposal must demonstrate their VRE generation project is able to meet the access conditions applicable to that REZ.

VicGrid will review responses to the RFP and determine which, if any, proposals meet the access conditions. Thereafter, different processes will apply, depending on whether the total capacity of eligible generation projects seeking to connect within the REZ is under the relevant access limit or exceeds it.

2.3.1 If the capacity of eligible generation projects is under an access limit

If an access limit is not reached, then an access authorisation will be awarded to all respondents whose proposals meet the access conditions.

Any remaining capacity will be made available as part of a subsequent RFP process, which will be issued at regular intervals. For example, once a REZ access scheme comes into effect, RFPs could be issued at 6-month intervals until an access limit is reached. Once an access limit is reached, there will be no further RFPs unless circumstances change. For example, the Minister might declare a revision to the access limit following a VTP review, or capacity could become available because a project's access authorisation is revoked (see section 2.3.3).

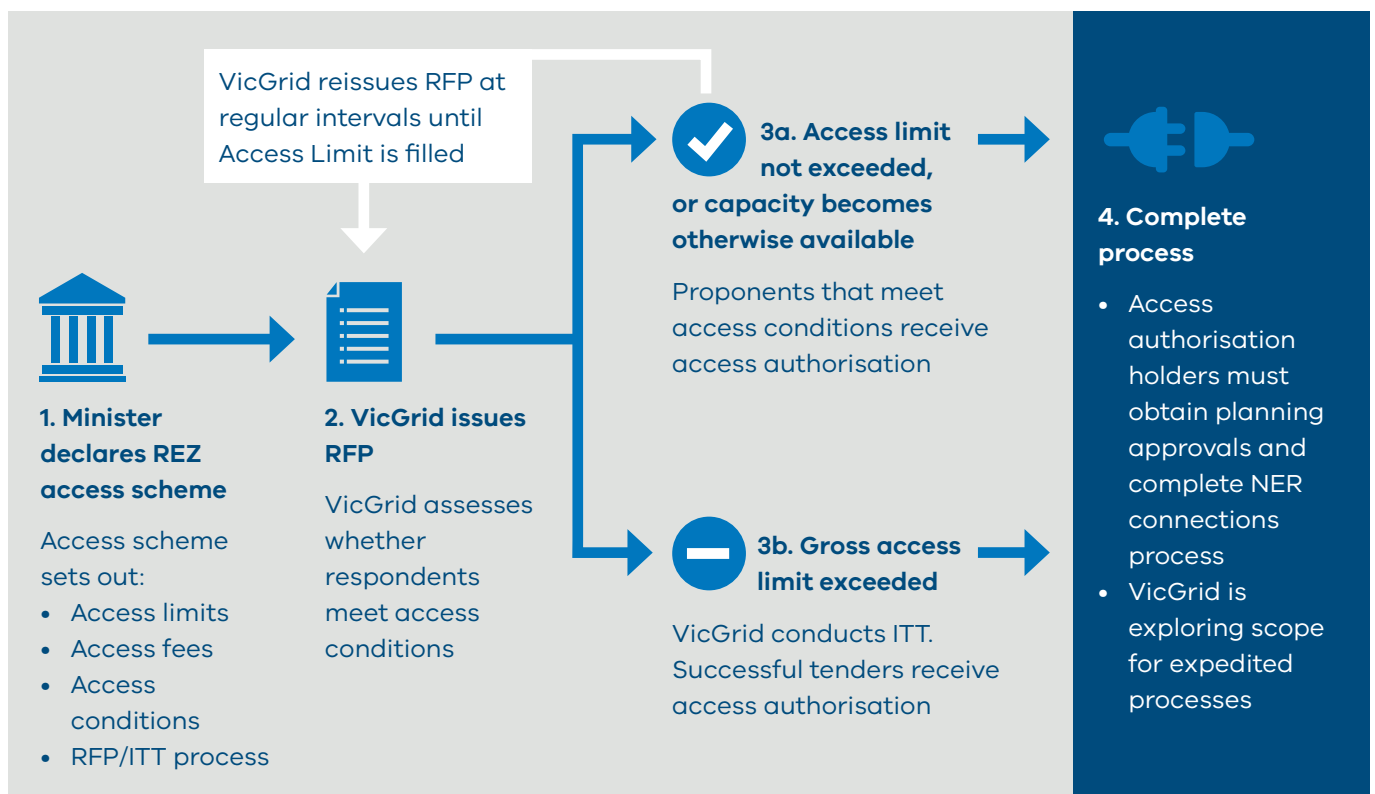
2.3.2 If the capacity of eligible projects exceeds an access limit

In this case, an Invitation to Tender (ITT) process will be used to decide which projects should be allocated an access authorisation.

Merit criteria will be used to assess projects during the ITT process and will be set out in the ITT documents. The merit criteria will focus on financial contributions to help offset the cost of developing shared REZ transmission assets. VicGrid will consult on a draft ITT document as part of the consultation on the draft REZ access scheme.

VicGrid will review the tenders and allocate access authorisations to successful tenderers. Figure 3 provides an example of a hybrid process for allocating access within a REZ. Note that the allocation approach outlined in this example is designed to be applied in conjunction with the current connections process. Other approaches to the connections process may have implications for how access in REZs is allocated.

Figure 3: Example of a process for allocating access within a REZ under the VTIF



2.3.3 Reallocation of access authorisations

To support the timely development of REZs, access authorisations will be made available on a use-it-or-lose-it basis. A key requirement for REZ generators will be to commit to a deadline for energisation. If a deadline is not met, VicGrid will be entitled to revoke the REZ generator’s access authorisation and make it available to others.

The objective is to ensure Victorian consumers are not exposed to a supply shortfall because projects that have been allocated access fail to proceed in a timely manner. **When deciding whether to reallocate a project’s access authorisation, VicGrid would consider things such as:**

- the expected duration of the delay
- the impact of the delay on Victorian electricity consumers
- whether the factors that caused the delay were within the control of the project proponent.

VicGrid would also be entitled to revoke an access authorisation if a project no longer meets access conditions (Examples of access conditions on next page).



2.4 Grid impact assessment

REZ generators will be protected from excessive network curtailment arising from new generator connections outside the REZ. A grid impact assessment will apply to generators who wish to connect to the DSN outside of a REZ.

Due to the meshed design of Victoria's DSN, electrical flows on one part of the power system can affect the flows on other parts of the system. There is a risk that the output of REZ generators could be curtailed due to congestion caused by subsequent generator connections outside the REZ. This could occur, for instance, if a non-REZ generator sought to connect just outside a REZ, on a part of the transmission network that REZ generators rely on to transport their output to load centres and electricity consumers.

To mitigate this risk, proponents wishing to connect generation outside a REZ will be subject to a grid impact assessment as part of the connection application process. **Project proponents will be permitted to connect to the DSN if they can demonstrate that their proposed generation project:**

- results in efficient investment in accordance with the Victorian transmission planning objective, as defined in the *National Electricity (Victoria) Amendment (VicGrid) Act 2024*, which updates the *National Electricity (Victoria) Act 2005*.
- does not impose undue incremental network curtailment on existing and planned REZ generators
- meets any other requirements specified in the Grid Impact Assessment Guidelines.

Details of the assessment and process in applying the assessment will be set out in Grid Impact Assessment Guidelines, which will be developed and maintained by VicGrid. The Grid Impact Assessment Guidelines will describe, among other things, how connection applicants could mitigate their impact on the level of curtailment faced by REZ generators, for instance by funding minor network augmentations and/or investing in storage.

A draft version of the Grid Impact Assessment Guidelines will be published for stakeholder feedback later this year.



2.5 Access fees

All generators, BESS and hybrid projects seeking connection within a REZ will be subject to an annual access fee. Access fees are designed to cover the following:

- the cost of administering the Victorian Access Regime
- the minimum contributions to be made by generators, BESS and hybrid projects towards REZ Community Energy Funds and dedicated benefits for Traditional Owners and other contributions
- the administration of these community benefits contributions.

Access fees apply in addition to connection charges that currently apply to new generation and BESS connections.

Generators who wish to connect outside a REZ will be required to pay a fee that reflects VicGrid's reasonable costs associated with the conduct of a grid impact assessment.

What are we doing with the access fees and where can you find out more about that?

Access fees will apply to new generation and storage projects within REZs. These fees will be used to:

- recover administration costs;
- cover contributions to community benefits including new Renewable Energy Zone (REZ) Community Energy Funds and dedicated benefits for Traditional Owners; and
- cover administration of the community benefits contributions.

More information about the design of these benefits, and how they will be delivered to communities, is outlined in the draft REZ Community Benefits Plan.

Stakeholders and communities are invited to provide feedback on the draft plan.

To read the draft plan, provide feedback, and for locations and times of upcoming workshops, visit www.engage.vic.gov.au/vtif-rez-community-benefits



2.6 Transitional arrangements

For any given REZ, the REZ access scheme will come into effect on the date that the Minister issues the REZ access scheme order pertaining to that REZ. Any connection applicant wishing to connect generation within the REZ will need to connect in accordance with the REZ access scheme, which includes payment of an access fee.

For generators who do not wish to connect within a REZ, the Victorian Access Regime will come into effect on the date the Minister declares the first REZ access scheme. Any connection applicant wishing to connect to the DSN that has not received an offer to connect by that date will be required to undergo a grid impact assessment.

In practice, since the grid impact assessment seeks to preserve the access of REZ generators, the application of the test will critically depend on whether there are any declared REZs in the vicinity of the project that will compete for access to the wider network. The grid impact assessment will become increasingly relevant as more REZ access schemes are declared.

2.7 Timing for implementation of first access schemes

The framework for declaring REZs has been legislated in updates to the *National Electricity (Victoria) Act 2005* made through the *National Electricity (Victoria) Amendment (VicGrid) Act 2024*. The framework for declaring REZ access schemes is part of the second stage of VTIF legislation and is expected to be established in mid-2025.

There will be further consultation on the detailed design of the Victorian Access Regime:

- In mid-2024, VicGrid will consult on the method for calculating efficient network hosting capacity of Victorian REZs.
- In the second half of 2024, VicGrid will consult on the Grid Impact Assessment Guidelines.
- In addition, each REZ declaration and REZ access scheme order will be subject to consultation as REZs are developed.

Stakeholders will have the opportunity to comment on the arrangements that apply both within and outside REZs. VicGrid looks forward to working with stakeholders to develop the detailed design of the Victorian Access Regime.



Glossary

Term	Meaning
Access authorisation	A cap (in megawatts) on the capacity of a VRE generation system that an applicant is able to connect within a REZ.
Access limit	A cap (in megawatts) on the capacity of a specific type of VRE that a REZ will host. In other words, the total wind generation that a REZ will host will have an access limit, as will solar generation and other types of VRE.
BESS	Battery energy storage system.
DSN	Declared shared network in Victoria.
ESC	Essential Services Commission of Victoria.
Grid impact assessment	An assessment to determine the suitability of a project seeking to connect outside a REZ.
Hosting capacity	The total capacity (in megawatts) that a proposed augmentation within a REZ will be able to support.
Hybrid	A combination of a VRE generating system and a battery energy storage system.
ISP	AEMO's Integrated System Plan.
REZ	Renewable energy zone, as declared by the Minister.
REZ generator	A VRE generating system connected to, or intending to connect to, a REZ.
REZ BESS	A battery energy storage system connected to, or intending to connect to, a REZ.
VRE	Variable renewable energy.
VTIF	Victorian Transmission Investment Framework.
VTP	Victorian Transmission Plan.

Contact us



Phone: 1800 418 341

Email: vicgrid@deeca.vic.gov.au

Deaf, hearing or speech impaired? Please contact the National Relay Service on 133 677 or communications.gov.au/accesshub/nrs



Need an interpreter? Contact Translating and Interpreting Service (TIS) on 131 450 (within Australia) or visit www.tisnational.gov.au

ISBN 978-1-76136-730-4 (Print)

ISBN 978-1-76136-731-1 (pdf/online/MS word)

Disclaimer: The information in this document is current at the time of printing, may be subject to change and should not be relied upon. Please visit vicgrid.vic.gov.au for the latest updates.

