Community information session summary

New England Renewable Energy Zone | November 2025

In early October 2025, EnergyCo invited community feedback on a new study area for dual 500kV transmission lines that will connect the New England Renewable Energy Zone (REZ) to the existing grid at Muswellbrook.

We recently held 12 community information sessions across 10 local venues as part of the consultation period. More than 800 people attended the sessions to speak with our team, share their views and learn more about the project. In response to feedback, members of EnergyCo's senior leadership team attended sessions at Gundy on 5 November and Walcha on 11 November to provide a short update and answer questions in a Q&A-style discussion. This document provides a summary of the key topics raised by the community during the sessions.

Moving to the new study area

We heard that people would like more detailed information on how we chose to move the corridor. To address this, we have released a report on our website which includes detailed information about our assessment of the new study area. You can view the 'Bulk Corridor Design Refinement Report' online at Project documents - New England Renewable Energy Zone | EnergyCo.

Previous assessment of the Aberbaldie-Niangala travelling stock reserve (TSR) alternative route option

EnergyCo assessed the TSR option in 2024 following requests from the community to increase the use of public land by locating the transmission lines within the TSR. Our assessment found locating the transmission lines within the TSR provided less favourable outcomes against multiple criteria, most notably impacts to private dwellings/landowners and high biodiversity value, and it was not progressed on this basis. The findings are available in our August 2024 report.

The northern end of the new study area is in the vicinity of the Aberbaldie-Niangala TSR (crossing it in 2 locations), however we are not seeking to locate the lines within the TSR itself. The TSR remains unsuitable for the lines, consistent with the findings of our 2024 assessment. The TSR assessment report identified that the area surrounding the TSR offers more favourable terrain, improved accessibility, and better bushfire management. The new study area takes advantages of these favourable conditions.

How we consulted with firefighting stakeholders to inform our decision to move the corridor

EnergyCo and transmission network operators engage with NSW Rural Fire Service (RFS) and other emergency service providers during the planning, construction and operation of transmission networks.

We consider the history of bushfires, the density and type of vegetation, topography, access constraints and other factors that may affect bushfire risk when planning the transmission route. Our engagement with NSW Rural Fire Service (RFS) has played an important role in this process to date, and feedback from RFS and other firefighting stakeholders has directly informed our decision to move the transmission corridor.

We are preparing a bushfire assessment for the project's Environmental Impact Statement (EIS) which will continue to be informed by ongoing consultation with NSW RFS. To support our EIS assessments, we welcome input from local firefighters on their local knowledge and insights.

EnergyCo carried out detailed engagement with RFS and other firefighting and aviation stakeholders to inform the bulk corridor refinements, specifically around avoiding aerial firefighting constraints at Chaffey Dam and Lake Glenbawn. Key activities included:

November/December 2024: Engagement with NSW RFS (State Operations and North Western Area Command) on aviation constraints at Chaffey Dam and Lake Glenbawn associated with the previous study corridor. RFS informed EnergyCo on how it uses aviation support to fight bushfires, including advice on their internal aviation resources and local specialist subcontractors Kennedy Air and Pay's Air Services.

January 2025: Engagement with NSW RFS State Operations division on corridor impacts to aerial firefighting, including helicopter vs fixed-wing operations. RFS provided EnergyCo information on the role of each firefighting resource and explained their bushfire management processes and requirements.

April/May 2025: Further consultation with relevant aviation stakeholders including NSW RFS, Kennedy Air, Pay's Air Service, Civil Aviation Safety Authority (CASA), Forestry Corporation of NSW and National Parks and Wildlife Service (NPWS) in relation to aviation support for bushfire management and the use of Chaffey Dam and Lake Glenbawn, as well as development of exclusion zones for avoiding potential conflicts at the dams. Each stakeholder shared specific information on how their assets are managed and what role they play in the bushfire management process.

October 2025: EnergyCo contacted NSW RFS and aviation contractors to confirm the corridor would be moved, therefore avoiding the aerial exclusion zones identified around Chaffey Dam and Lake Glenbawn.

How we will consult with firefighting stakeholders on the new study area

We are preparing a bushfire assessment for the project's Environmental Impact Statement (EIS). This assessment will outline detailed analysis of bushfire risk within the project area as well as mitigation measures to manage bushfire risk during construction and operation of the project. Our assessment will consider the Planning for Bushfire Protection guideline (NSW Rural Fire Service), which outlines the bushfire planning matters which need to be considered at various stages of the project development process. We will continue engaging with NSW RFS and other emergency service providers as we prepare our environmental assessments and through the construction delivery phase.

To support our bushfire assessments, we welcome input from local firefighters on their local knowledge and insights, including details about previous bushfires that may not be captured on databases.

A fact sheet is available for further details on how we consider bushfire management in planning new transmission lines.

Requests to consider route options outside the 3km-wide study area

We are working within a broad 3km-wide study area that will be narrowed to a 1km-wide study corridor in early 2026. This helps give us flexibility to find the best possible corridor for the transmission lines in consultation with landowners. Refinements to the study area will generally be localised adjustments in response to landowner feedback and technical and environmental studies.

However, there may be areas where it is appropriate to place the final corridor outside the current 3km-wide study area, depending on the outcomes of ongoing assessments and community feedback. We are engaging with landowners in Rouchel to discuss options through this section and encourage other landowners along the corridor to contact us and have these discussions.

How impacts to high value agricultural land were assessed and mapped

Impact to agricultural land was considered in our decision to move the corridor, as outlined in the Bulk Corridor Design Refinement Report. The new study area crosses fewer areas mapped as biophysical strategic agricultural land (BSAL) compared to the previous corridor. We are seeking input from landowners in the 3km study area on how they use their land for farming and business operations so that this can be considered as we refine to a 1km-wide corridor and then a final 140m-wide easement (generally 70m for each 500kV line).

When assessing land use impacts, we use the SEED Portal which is the NSW Government's central resource for environmental data. We used the SEED Portal to map agricultural land across the new study area and minimise broad impacts where possible.

Data sources are listed on p. 82 of the report. This includes links to the specific layers used for each dataset.

Areas of challenging construction in the new study area

The new study area crosses fewer areas of challenging terrain compared to the previous corridor, meaning construction will be safer and more efficient with fewer overall impacts to landowners and the environment. However, there are still areas of complex terrain that we need to navigate particularly where the route crosses the Great Dividing Range near Barry over a stretch of around 20km. While challenging through this section, the new study area is still a significant improvement overall compared to the previous corridor because the terrain profile, whilst undulating, is more suitable to transmission lines. Towers can be located along ridges rather than on heavy side slopes, and minimum clearances to the ground can be maintained for transmission line conductors.

The new study area may require non-conventional construction methods including heavy-lift helicopters in challenging areas, but significantly less than the previous study corridor. The new study area has significantly less transmission towers that are accessed by steep tracks exceeding 18% meaning more towers will be constructed using conventional methods. The new study area also has a better terrain profile for transmission line alignment that allows for towers to be sited in accessible locations and for minimum clearances to the lines to be maintained. The previous alignment required a significantly greater number of towers in very challenging to access locations.

How we assessed environmental and biodiversity impacts

We have carried out detailed desktop analysis of environmental assessments for the new study area and will look to engage landowners for land access for field work shortly so we can understand biodiversity values in more detail at a local level. From our preliminary environmental assessments, we expect there will be fewer overall impacts due to a smaller project disturbance area and less earthworks required for enabling work, which will mean less clearing of native vegetation. The new study area also avoids a biodiversity offset site at Chaffey Dam. The environmental impacts of the project will be assessed in detail in the environmental impact statement (EIS) which will be finalised and placed on public exhibition in the second half of 2026.

Use of public land including state forest

We aim to locate the transmission corridor on suitable public lands, where possible, as guided by the NSW Transmission Guideline environment and land use principle. We appreciate that state forests have multiple uses such as conservation of biodiversity and heritage, protection of water resources, and public recreation such as walking, camping and hunting, in addition to commercial timber production.

The new corridor crosses about 11km of Nundle State Forest, north of Nundle township. We are investigating how the corridor can best avoid and minimise impacts on forestry operations, recreation, and biodiversity and cultural heritage values of the forest. We will continue to work with responsible agencies to determine the best way to minimise these impacts.

Requests to move back to the previous corridor

EnergyCo has made the decision to move to the new study area as it will allow safer and more efficient construction and reduced environmental and land use impacts. The analysis that underpins this decision is available to view in the Bulk Corridor Design Refinement Report. Our current consultation period, which closes on 12 December 2025, is focused on gathering feedback on constraints and opportunities within the 3km-wide study area so we can narrow to a 1km-wide corridor in early 2026.

Impact to koalas

We are aware of known koala populations in the region and this is a key consideration as we prepare our environmental assessments. Three recorded koala clusters were identified in the previous corridor, which has been reduced to two koala clusters as a result of moving to the new study area. Moving to the new study area has reduced the impact to mapped koala habitat from 4,100 hectares in the previous corridor to 3,600 hectares.

We will prepare a comprehensive biodiversity assessment as part of the EIS, including targeted koala surveys and thermal drone surveys. The EIS will include a detailed assessment of the project's potential impacts and outline measures to avoid, manage and mitigate these impacts.

Construction of the project will not start until a Flora and Fauna Management Plan is approved by the NSW Planning Secretary. The Flora and Fauna Management Plan will outline how impacts on koalas (and koala habitat) will be avoided and minimised, including identifying any koalas present in the clearing footprint, relocating them to suitable locations nearby and undertaking continual checks of the construction footprint to ensure koalas (and other animals) have not returned to the active work site. Areas of koala habitat to be retained will also be identified on site and no machinery, vehicles or equipment will be allowed in these areas.

Weather conditions and elevation in the new study area

Local conditions are a key consideration in the design and environmental assessment of the transmission project. The future network operator will develop the detailed design for the REZ network infrastructure in accordance with Australian standards and guidelines. The design standards consider technical requirements for various weather conditions (including snow, ice, wind, flooding and other factors).

The new study area has some high elevation with some individual towers across small sections of the corridor (between 10 and 12km) being marginally higher than 1,300 metres. Only some towers in these sections are higher than 1,300 metres and weather conditions are generally comparable to the previous study corridor through these areas.

The new study corridor has improved access track arrangements for construction of the transmission lines, meaning there is less risk of inclement weather delaying construction.

Request for information on how much has been spent on compulsory property acquisition to date

EnergyCo has not undertaken any compulsory acquisition for the New England REZ.

The property acquisition program for transmission line easements has not yet commenced; this is due to start from mid-2026. We will work with landowners to bring forward this timeline where this is their preference. Compulsory acquisition is only carried out as a last resort after we have exhausted all options to negotiate an agreement with the landowner.

We have undertaken freehold acquisitions in some locations, including two properties that were acquired in the previous corridor at Sandy Creek, however these acquisitions were completed via a mutual agreement with the landowners in consideration of their personal circumstances. We are unable to disclose the purchase details for these properties for privacy reasons.

Land and property

We heard a range of questions about land and property matters including the easement and property acquisition process, valuation and compensation, land access and impacts to land use.

We have a wide range of resources available on our website to help you better understand the property process and living and working around transmission easements which you can view online at Information for landowners | EnergyCo. We also encourage landowners to contact their Property Manager at any time to discuss individual property matters.

How we acquire transmission easements

In most cases, we don't buy land outright for new transmission lines. Instead, we work with landowners to acquire an easement, which gives us a legal right to access and use part of the land. Easements allow farming to continue underneath the lines once they are operational. If we acquire an easement, you will remain the owner of the land and can continue using the land, with some restrictions to ensure public safety and reliability.

We typically acquire:

- a wider temporary construction easement (250m wide)
- a narrower permanent easement which is defined once construction is finished. For the New England REZ bulk transmission corridor, this is generally between 120m-140m wide (70m for each 500kV line and 60m for each 330kV line).

We have resources available online which discuss acquisition and easements in more detail:

- information for landowners
- valuation and compensation

- compulsory acquisition explained
- support and resources for landowners

We encourage landowners to contact their Property Manager at any time with questions and to discuss individual property matters.

How landowners are compensated for acquisition

If EnergyCo acquires an interest in your land, you are entitled to two forms of compensation:

- compensation in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* (Just Terms Act)
- strategic benefit payments under the Strategic Benefits Payments Scheme.

The Just Terms Act sets out the acquisition process and how compensation is determined. Your entitlement to compensation is the same whether the easement is acquired by mutual agreement or through a compulsory process. Read our fact sheet for further details on how compensation is determined.

In addition to compensation under the Just Terms Act, the NSW Government has established a Strategic Benefit Payments (SBP) Scheme to recognise the role of landowners hosting transmission lines with a capacity of 330kV and greater. Under the SBP Scheme, landowners are paid the equivalent of $200,000 in 2022 dollars, per kilometre of eligible transmission line infrastructure hosted on their property. Payments are paid in annual instalments over 20 years, adjusted annually for inflation using the Consumer Price Index. The payments are **in addition** to the upfront compensation package landowners are entitled to from EnergyCo for easement acquisition in accordance with the Just Terms Act.

Compulsory acquisition

Compulsory acquisition is a legal process that enables EnergyCo to acquire land and easements for critical renewable energy infrastructure and when we are unable to complete the acquisition process by agreement with a landowner. We strongly prefer to reach an agreement with landowners directly and will work with them to achieve this.

Compulsory acquisition is only used as a last resort to ensure critical infrastructure projects that benefit NSW communities can proceed on schedule. We undertake this process in accordance with the Just Terms Act. Read our fact sheet for more information on how compulsory acquisition works and how we work with landowners during this process.

Importantly, no compulsory acquisition has been undertaken for the New England REZ. Acquisitions completed to date have been via mutual agreement with landowners, which is our first priority when acquiring any property or easement interests.

Property valuation

We use two valuations to help inform your market value compensation entitlements, conducted by qualified professional valuers, to ensure a fair outcome. This includes EnergyCo's independent valuation as well as an independent valuation carried out by the landowner's nominated valuer. EnergyCo will pay for your reasonable legal and valuation fees as outlined by the Just Terms Act.

The valuations will consider a range of factors that make up market value, including specific attributes like business operations which are unique to each property, to ensure landowners are fairly compensated for the acquisition. We have further resources and information available on our website and have a team of property specialists available to discuss the compensation landowners will be entitled to if we proceed with an acquisition.

Compensation for properties where land or easements will need to be acquired will be informed by an independent valuation as part of the acquisition processes. Landowners are encouraged to engage their own valuer to inform of them of their compensation, with reasonable fees reimbursed by EnergyCo.

Land access for field investigations

We need to carry out field work within the new study area to inform our technical design work and environmental assessments. To do this, we will ask permission from landowners to access their property. Land access is voluntary and we will not attempt to access private land for field investigations without permission. We encourage landowners to provide access for field work, as we can deliver favourable outcomes if our environmental and technical assessments are informed by field data from private properties rather than desktop analysis alone. In areas where we don't have access, we will need to make assumptions based on desktop analysis which may not take into consideration specific constraints and attributes of individual landholdings. You can read more in our field investigations fact sheet about how we work with landowners to carry out field work.

It is at the landowners' discretion if they grant access to EnergyCo for field work. If early access is not granted, we would carry out any necessary site investigations once access has been obtained through the formal acquisition process under the Just Terms Act.

Impacts to private airstrips and aviation activities

We encourage landowners who carry out aviation activities to contact us so we can understand your operations and use of airstrips, including weed-spraying and other activities. It is important we gather this information from landowners so we can reduce or avoid impacts to aerial operations when refining the transmission corridor, and so we can avoid putting transmission lines where low-flying aerial operations take place.

An aviation assessment has not yet been completed for the project, however this will be developed as part of the EIS. The EIS will include a detailed assessment of the potential impacts to aviation safety from the construction and operation of the transmission network. The assessment will

consider various aviation activities including air transport operations, emergency service operations, aerial baiting and fertiliser, pest and crop spraying.

Electric and magnetic fields (EMF) and impact to livestock

The effects of EMF from transmission lines are well studied and documented. Transmission lines produce extremely low frequency EMFs which are significantly below the international standards for human exposure both at the edge of the transmission easement and directly below the lines, and are therefore not considered a risk to health. Similarly, there is no evidence that EMF emissions have a detectable effect of EMF emissions on livestock health, milk production, fertility, behaviour or carcass quality. You can find detailed information about EMF in our fact sheet.

Planning approval pathway

We heard people would like more details on the steps for planning approval, including when a revised scoping report will be developed.

The New England REZ network infrastructure project was declared a critical state significant infrastructure (CSSI) project by the NSW Minister for Planning and Public Spaces in June 2024 as it is considered *'essential for the State for economic, environmental or social reasons'*.

Under the *Environmental Planning and Assessment Act 1979* (EP&A Act), CSSI applications must be approved by the NSW Minister for Planning and Public Spaces following a comprehensive assessment process. This includes extensive community consultation and the preparation of a scoping report and environmental impact statement (EIS).

Scoping report status and next steps

The scoping report provides an overview of the project and potential impacts that will require further assessment under the EP&A Act. The scoping report supports EnergyCo's request for Secretary's Environmental Assessment Requirements (SEARs) which guides the development of the EIS. EnergyCo submitted the scoping report for the project to the Department of Planning, Housing and Infrastructure (DPHI) in July 2024 and received Secretary's Environmental Assessment Requirements (SEARs) in late 2024.

Following the announcement of the new study area in October 2025, EnergyCo is preparing an updated scoping report to be lodged with DPHI **by the end of 2025**. The revised scoping report will support EnergyCo's request for amended SEARs which will guide the development of the EIS. The revised scoping report can be read as a standalone document.

The scoping report itself does not constitute a development application; EIS is the key planning document for the project which will be lodged with DPHI for assessment and exhibition in the

second half of 2026. There are no public submissions on the scoping report, however you are welcome to contact us with feedback and questions at any time.

Environmental impact statement

The EIS is a document required for state significant infrastructure projects under the NSW planning system. It provides a description of the project, how it will be constructed, and a technical assessment, including potential environmental, social and economic impacts. It also outlines a range of mitigation measures which would be implemented to avoid, minimise and/or mitigate potential impacts to the surrounding environment and local communities during construction and operation of the project.

The EIS will be submitted to DPHI and displayed for public exhibition for at least 28 days. During the exhibition, members of the public, government agencies and key stakeholders will be invited to make submissions to DPHI on the merits of the project.

We are currently preparing a range of detailed assessments for the EIS. We plan to lodge the EIS for public display in the **second half of 2026.**

After the EIS public exhibition, DPHI will collate all submissions and provide them to EnergyCo for review and consideration. EnergyCo will then prepare a submissions report that responds to the issues raised. The submissions report will be made publicly available on the NSW Major Projects Planning Portal.

Information on the project planning approval pathway is available in our fact sheet. You can also read more about the assessment process for CSSI projects at planning.nsw.gov.au.

How we assess the corridor if land access is not granted

Where access is not granted to private property during the EIS development process, EnergyCo will work with our regulators to determine the appropriate assessment method to be implemented for the project.

For biodiversity, this may include adopting methods such as desktop data and background research, remote surveys (which may include utilising surveys in nearby locations such as publicly accessible land as surrogates), and in some instances adopting conservative assumptions. We may need to prepare a revised biodiversity assessment after exhibition of the EIS to document any additional biodiversity surveys that were carried out. If the project is approved, we may also commit to conducting biodiversity surveys prior to construction to maximise the opportunity for biodiversity surveys.

For Aboriginal heritage, this may include using the predictive model based on landforms and known or recorded sites, and engaging with Native Title holders, our Registered Aboriginal Parties and Local Aboriginal Land Councils to develop a deeper understanding of the site types across the landscape. Similar to biodiversity, we may commit to preparing a revised Aboriginal cultural heritage

report following exhibition of the EIS and conducting field investigations in some locations prior to construction commencing.

Energy hubs and network design

We've heard that the energy hub sites are a priority issue for communities in these areas, particularly around the central south hub near Walcha. We recently published an update on the network design on our website: Refining the New England REZ network | EnergyCo

Justification for the central south hub

There are five energy hubs (substations) proposed for the New England REZ network: central A, central B, central south, east, and north. Central hub A and B will be the largest and most important hubs in the network, connecting to nearby generators as well as Transgrid's existing network. Central south, north and east hubs will primarily act as connection points for nearby generation and storage projects. The size and scale of each hub will be guided by expected demand, which will become clearer once we know which generation projects obtain planning approval and access rights.

Based on our industry engagement to date we expect there is adequate demand for the central south hub near Walcha, noting some projects are still in the early phases and may not yet be in the public domain. We will keep the community informed as further details about the hub sites are confirmed.

Need for the transmission corridor near Walcha if central south hub is not built

In the event that the central south hub is not required (i.e. if no generation and storage projects are awarded planning approval and access rights), EnergyCo would still propose to construct the bulk transmission corridor through this location to connect to the existing grid at Muswellbrook. This is the preferred location for the corridor from a constructability perspective regardless of whether a hub is built in this location.

Future plans for the south hub (deferred in 2024)

The south hub was deferred from the REZ network infrastructure project in early 2024 and is not part of EnergyCo's current plans for stages 1 and 2 of the network. The hub may be built in the future if needed based on energy demand, however this would be subject to a future stage of the project with a separate planning approval process and community consultation.

Renewable energy generation and storage developments

We heard a range of questions about renewable energy generation and storage projects in the REZ and how EnergyCo is working with project developers. Further information is available online in our fact sheet and access scheme page.

Network capacity vs generation capacity

Network capacity (also known as transfer capacity) is the maximum amount of electricity that the transmission network can safely transfer from renewable energy projects to the grid at one time. The New England REZ has a maximum intended network capacity of 8 gigawatts (GW) under the *Electricity Infrastructure Investment Act 2020*. EnergyCo is initially proposing to unlock 6 GW of network capacity through the first two stages of the project. An additional 2 GW may be delivered through future stages subject to energy demand.

Generation capacity is the maximum amount of electricity that energy projects can generate at one time when operating at full capacity. Generation capacity of a REZ is typically higher because renewable projects are not always operating at full capacity at a given time. **Storage capacity** is how much surplus wind and solar energy can be stored for later use.

The New England REZ is expected to support around 12 GW of generation (from solar and wind) with 4 GW of storage to fill the initial 6 GW of network transfer capacity provided by the new REZ transmission network.

Intended network capacity of the REZ and whether this has changed over time

The intended network capacity for the New England REZ was enshrined in legislation in December 2020 through the *Electricity Infrastructure Investment Act 2020* (the EII Act). The Minister for Energy formally declared the REZ in December 2021 via the Renewable Energy Zone (New England) Declaration Order. Both the legislation and declaration order outline an intended network capacity of 8 GW for the New England REZ network infrastructure.

EnergyCo's public communication on the New England REZ has historically referred to 8 GW of network capacity. Documentation is available to view online at Project documents - New England Renewable Energy Zone | EnergyCo.

Status of generation and storage projects

We have not yet confirmed which generation and storage projects will connect to the New England REZ transmission network. This is because an access scheme has not yet been established, which is the first step in the process to enable generators to connect to the grid. Under the access scheme,

developers will be able to apply for access rights to the network through a competitively run tender process. Further details are available on our website and FAQs.

If the Minister for Energy declares an access scheme, access rights will be awarded in tranches over the next few years. Generators will connect progressively as the REZ network is energised.

Most generation and storage projects are in early development and aren't expected to begin construction for a few years. The transmission infrastructure will generally take longer to build.

What attracts developers to the build in the REZ and connect to the new network

Generation and storage projects in the New England REZ will be subject to an access scheme which manages how generators can connect to the network. They help encourage investment by providing clear rules and incentives for renewable energy projects to develop and connect to the grid, and they give greater confidence around how much electricity developers can produce and sell.

Under an access scheme, generators pay access fees which will flow back to the community to fund community benefit and employment programs. Further details are available on our website, fact sheet and FAQ.

Generation and storage developments outside the REZ and whether these will connect to the New England 500kV transmission corridor

EnergyCo's planning for the New England REZ is focused on enabling generation and storage projects within the REZ boundary to connect efficiently to the new network through purpose-built energy hubs (substations).

Projects located outside the REZ cannot connect directly to the new 500kV transmission lines because there is no energy hub outside the REZ boundary to facilitate their connection. The REZ infrastructure has been designed specifically to serve projects within the declared area, where hubs can consolidate connections and manage network flows safely and efficiently.

Acquiring land for generator projects and transmission connection lines

Renewable energy developers don't have the authority to acquire land or property interests using compulsory powers under NSW legislation. This means they need to enter into a mutual agreement with landowners to acquire or lease property for their projects. This is at the discretion of each developer and EnergyCo is not involved in this process.

For transmission line connections between generators and the REZ network, we are proposing a model where EnergyCo will plan the layout and design of connection lines from projects to energy hubs. EnergyCo would handle the planning, environmental approvals, and land agreements for these connections. Projects would pay for and build their own connection lines. This model would apply to

any project with an access right, other than certain scenarios outlined in the New England REZ generation and storage strategy consultation paper.

Project alternatives

We heard a variety of questions about potential alternatives for the project including the use of nuclear power, small-scale community energy solutions, undergrounding transmission lines and upgrading existing transmission lines.

Undergrounding transmission lines

The New England REZ has an expected network transfer capacity of 8GW. This is a significant amount of energy to be transported from the REZ south to Bayswater, requiring twin 500kV double circuit transmission lines along the bulk corridor in an overhead configuration. Some of the challenges of underground cables at this capacity include:

- **Construction:** Underground cables suitable for the high voltages required for long distance transmission would be much larger than the conductor or wire used in overhead lines, and much more complex to install. They are larger and heavier than equivalent capacity overhead lines and are typically installed in large, deep trenches which have a very high construction impact.
- **Cooling and thermal management challenges:** Underground transmission lines accumulate heat in the surrounding soil due to poor natural dissipation. The underground cables could not operate at full planned capacity and would require to be downrated in capacity due to limited heat dissipation resulting in a greater number of cables to reach the same capacity as overhead transmission lines. Cooling systems may be implemented to limit this, however the cost of implementing such cooling systems over long lengths of corridor would be immense and would introduce ongoing operational risks.
- **Time and cost:** Construction would be long and costly due to the extent of trenching and specialist procedures required to lay heavy cable without causing cable damage. This means that meeting energisation targets using underground cable technology would be extremely challenging, even if cost were not an issue. The cables have large bend radii and therefore would not be able to traverse through the landscape and avoid constraints in the same manner as overhead transmission lines.
- **Repairs and maintenance:** Underground cables need ongoing maintenance to function effectively. When cable failures occur, average repair times are significantly longer than those for overhead lines. Specialised skills, plant and equipment would be required, and large areas of

excavation may be required to identify the fault, resulting in longer repair times and interruptions to energy supply.

- **Environment and land use impacts:** Underground transmission lines are unsuitable in complex or sensitive areas such as rivers, cliffs and Aboriginal heritage sites, while overhead transmission can more readily avoid or minimise impacts to these areas. Constructing underground transmission lines requires extensive trenching which disturbs soil and biodiversity and can make the land unsuitable for farming activities.

These challenges apply even if undergrounding were applied in localised contexts as opposed to the entire corridor. For these reasons, EnergyCo is progressing an overhead transmission design for the New England REZ.

Upgrading existing transmission lines

The existing 330kV transmission lines that currently transfer power between Bayswater, Tamworth and Armidale, and between Armidale, Kempsey and Newcastle, are operated by Transgrid. They are not suitable for the large amounts of energy to be transmitted for the New England REZ and are running near full capacity.

We considered if the existing lines could be upgraded to meet the capacity requirements for the REZ, however this option was excluded early in the evaluation process due to a number of constraints:

- high construction impacts as the existing lines would need to be taken down, easements widened, and new infrastructure built. The existing lines are not suitable for additional transmission lines to meet added capacity so any added capacity to reach the 2.4GW and 6.0GW would require new easements to be built.
- lengthy power outages during construction which would have a major impact on energy users and the operation of the National Electricity Market (NEM). Modification and building around the existing lines would also not be able to achieved without extensive power outages.
- increased impact to regional centres along the existing route which have experienced major growth since the lines were first built.

For these reasons, upgrading the existing lines was not a preferred option for the REZ and is not being considered further.

Following the New England Highway

From a constructability perspective, it is technically feasible to build transmission lines along the New England Highway between Muswellbrook and the REZ as the highway generally follows flatter terrain which is favourable for construction. However, this route presents several challenges which make it unsuitable:

- the corridor would cross nearby to or through various developed townships along the highway between Bayswater Power Station and the REZ, including Aberdeen, Scone, Wingen, Murrurundi, Tamworth and Bendemeer
- the 140m-wide transmission easement for the twin 500kV lines could not be accommodated wholly within the road corridor and the lines would still need to cross adjacent land. This widened easement would place the alignment in close proximity and affect a significantly greater number of landowners compared to the current study corridor
- flatter sections of the New England Highway, such as between Tamworth and Bendemeer, already host transmission lines which means the new corridor would need to be located along steeper and more challenging terrain.

Co-location with existing transmission lines

We understand that communities would like to see the new transmission lines co-locate with existing lines as much as possible to help consolidate impacts to landowners.

Co-location of the of the NE REZ Transmission lines would be challenging. It would involve constructing the new lines beside the existing Transgrid line in steep and challenging terrain.

This would require construction of new access tracks through the steep terrain, with significant earthworks required to construct the transmission tower foundations. Accessing the tower for construction for deliveries of steel, concrete and heavy construction plant would be difficult. It would also require erection of new transmission towers beside live 330kV lines. The existing transmission lines in many locations do not have remaining access that would be suitable to access a tower located adjacent. This is because of the topography and the existing access that is provided to the existing lines. In civil engineering designs, the location of the existing tower in many places was found to be at the ideal spot for traversing the difficult terrain. A tower adjacent would place this on the side of a hill resulting in the need for difficult and new access tracks or placing on the next peak meaning new access tracks.

Landowners currently hosting the existing line would also be impacted, having to host an additional 2 new 500kV lines.

To connect the transmission lines to the REZ, the transmission lines would need to traverse densely populated areas around Tamworth which would also impact a high number of landowners.

Using existing easements

The existing transmission line between Bayswater and the REZ are generally 330kV in capacity. The general minimum easement width for a 330kV line is 60 metres. These easements are not capable or suitable for hosting the addition network capacity that is required for the New England REZ transmission project. An easement for a single 500kV transmission line is generally 70m wide, or 140m wide for dual 500kV lines.

Small-scale energy solutions

As we move away from coal-fired power, a mix of renewable technologies will power our state including rooftop solar and household batteries. Small-scale energy generation are integral to supporting the new energy system but cannot meet future demand without large-scale solar and wind farms, and energy storage like pumped hydro and big batteries. Large-scale renewable energy projects in the New England REZ will deliver the bulk power required to keep the lights on as coal-fired power stations retire.

AEMO releases an Integrated System Plan (ISP) report every two years which outlines NSW energy needs and actionable projects. The 2024 ISP identifies the New England REZ as an actionable project to meet NSW's energy requirements based on modelling of future residential and industry energy use.

Other topics

Access tracks and local road impacts

Where practical and to minimise impacts to landowners, EnergyCo would look to utilise existing access tracks on a property to access the transmission easement, with new access tracks constructed along the transmission easement. This is not always achievable due to a number of constraints, including topography and proximity of the existing tracks to dwellings o other farm operations.

Access tracks would be utilised for both construction and maintenance of the transmission line. Easements for access tracks to the transmission corridor would be acquired by EnergyCo where required.

We will carry out a traffic assessment for the EIS which will identify any local road improvements or upgrades that may be required to ensure the project can be built while maintaining local safety. We will also work with the appointed network operator to identify specific local requirements which will ensure safety of road users, for example, stopping OSOM movements on Waverley Road during hours when the school bus is operating.

Impact to beef production in NSW

Impacts to farming and existing land use are a key consideration for EnergyCo in developing new critical transmission projects. Once the lines are built, farming activities like livestock grazing can continue within an easement. Some activities may be subject to restrictions for safety and operational reasons, like height restrictions for plant and equipment. We are engaging with landowners during the planning process to understand how they use their land so we can plan the lines with the least impact on farming and business operations.

Project cost, financing and authorisation

A final cost estimate for the New England REZ transmission network has not yet been determined. The REZ network infrastructure will be financed by the competitively selected network operator with the costs to be recovered through the regulatory framework under the *Electricity Infrastructure Investment Act 2020* (EII Act).

EnergyCo is currently leading a contestable procurement process to appoint network operator for the New England REZ who will finance, design, build, operate and maintain the new transmission infrastructure. We recently identified 3 shortlisted applicants who we will engage with during the Request for Proposal (RFP) stage which includes assessing commercial and financing structures that are in the long-term financial interest of NSW electricity consumers. Cost estimates remain commercially sensitive while we are in an open procurement process to ensure we deliver the best possible project outcomes and value for energy consumers.

The Australian Energy Regulator (AER) will monitor the procurement process to ensure a competitive assessment process is genuine and appropriate, and costs recovered from NSW electricity consumers are prudent, efficient and reasonable.

Further regulatory oversight is provided by AusEnergy Services Ltd (ASL) which acts as the independent Consumer Trustee under the EII Act. Their role is to act in the long-term financial interests of NSW electricity consumers to improve the affordability, reliability, security and sustainability of electricity supply.

The final cost for the project will be published once the AER makes its revenue determination for the project. This will occur after the preferred network operator has been appointed.

Cost of moving the route

Route adjustments are a typical part of the design process for projects of this size and the change to the corridor is part of the project's overall development costs. Making these adjustments in the early development phase will provide better long-term outcomes for consumers by avoiding later changes and re-work. Moving to the new study area means the project will be more efficient and easier to build, which would reduce overall costs and make the project better value for energy consumers who will ultimately pay for the costs.

Delivering benefits for host communities

EnergyCo will establish a community and employment benefit program (CEBP) for the New England REZ which will be funded through the access fees paid by generators to connect to the network. Through the CEBP communities will receive hundreds of millions of dollars to bring long-term benefits to the region, supporting local business opportunities, services, infrastructure and community interests. An initial $128 million for community and employment benefits has already been made available for communities in the Central-West Orana REZ, the state's first REZ, over the next four years. You can read more about the program at energyco.nsw.gov.au/cebp.

Decommissioning of the transmission network

The REZ transmission lines will have a design life of 50 years, however it is unlikely that they would be decommissioned at the end of this period. The life of the asset could be extended with the implementation of a maintenance regime and various interventions through the life of the assets.

Cost of the Central-West Orana REZ transmission project

The Infrastructure Planner Recommendation Report (IPRR), published by EnergyCo in May 2024, stated that the National Electricity Rules-equivalent consumer-funded capital cost of the Central-West Orana REZ was expected to be around $5.45 billion (nominal, adjusted for inflation). That cost estimate figure fell within the cost range outlined in the NSW Government's May 2023 Network Infrastructure Strategy. The IPRR cost estimate was subject to regulatory oversight and review by the Australian Energy Regulator (AER) and the Consumer Trustee.

The original $650 million estimate by Transgrid in 2020 was for a very early-stage project with a different scope, route, and capacity to what's now being delivered. Since then, the project has been significantly redesigned to reflect legislated targets, extensive community feedback, and market demand. This includes a new route to reduce agricultural and environmental impacts, increased transfer capacity from 3GW to 4.5GW (expandable to 6GW) and added infrastructure to support more renewable generation and system strength.

Next steps

The 'have your say' period is open until **Friday 12 December 2025**. You can send your feedback by email to nerez@energyco.nsw.gov.au. Alternatively, give our team a call on **1800 061 114** (toll free). We can make arrangements to receive your feedback in person or via post if this is your preference.

We are seeking initial feedback to help us refine the 3km-wide study area down to a 1km-wide corridor in early 2026. There will be further opportunities to have your say as the project progresses, including the exhibition of the environmental impact statement (EIS) in the second half of 2026. Direct engagement with landowners will be ongoing as we refine the corridor.

Sharing your input now will help ensure the corridor refinement process is informed by local knowledge and feedback.

Early next year, we will publish a feedback report outlining the key topics raised by the community and EnergyCo's responses. We will share the report with the community once finalised.