

Submission
No 40

**INQUIRY INTO IMPACT OF RENEWABLE ENERGY
ZONES (REZ) ON RURAL AND REGIONAL
COMMUNITIES AND INDUSTRIES IN NEW SOUTH
WALES**

Organisation: Singleton Council

Date Received: 31 January 2025



SINGLETON COUNCIL

Enquiries to Mrs Mary-Anne Crawford

Our Ref 24/00591

29 January 2025

Portfolio Committee No 4 – Regional NSW
6 Macquarie Street
SYDNEY NSW 2000

Dear Hon. Mark Banasiak,

Singleton Council Submission – Parliamentary Inquiry into the impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales

Thank you for the opportunity to make a submission into the Inquiry into the impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales, referred to the Portfolio Committee No 4 – Regional NSW on the 30 July 2024.

Background Statement

The Hunter Central Coast Renewable Energy Zone (REZ) was formally declared by the then Minister for Energy under section 19(1) of the *Electricity Infrastructure Investment Act, 2020* and published in the NSW Gazette on 19 December 2022.

The declaration of the REZ established EnergyCo as the Infrastructure Planner responsible for coordinating the development of the REZ. It also sets the intended network capacity (size), geographical area and infrastructure that will make up the REZ. There are several additional functions that EnergyCo undertake, including access schemes and network solutions to facilitate the delivery of electricity into the broader electricity grid and market.

The REZ has existing 132 kilovolt (kV), 330kV and 500kV transmission infrastructure that will be critical to delivering electricity to the broader Newcastle, Sydney and Wollongong population areas. Augmentation of this network to a capacity of 1 gigawatt (GW) is required to cater for expected growth in renewable generation projects. This increase will deliver up to 8GW of additional transfer capacity from inland REZs (including the Central West Orana and New England) to support decarbonisation of existing industries in the Hunter Central Coast region.

The REZ is expected to support significant growth in solar, wind and pumped hydro projects as well as battery storage and transmission infrastructure to underpin growth

in new low carbon industries and the transition of existing industries towards achieving the Federal and State Government targets of net zero by 2050. This growth is expected across the Central West Orana REZ, the New England REZ and the Hunter Central Coast REZ.

The Singleton local government area sits in the middle of the Hunter Central Coast REZ and as a result has started to see an increase in renewable energy projects including the Hunter Transmission Project, the Bowmans Creek Wind Farm (Stage 1 and Stage 2), the Maison Dieu Solar Farm and the proposed Mitchell's Flat Solar Farm. It is expected that the increase in renewable energy projects and transmission infrastructure will continue as the REZ develops.

Singleton Council recognises the impacts of such developments in our LGA and the importance of a coordinated, transparent and consistent approach to new development. In its submission to the draft Energy Policy Framework earlier in the year, council recognised that consideration of the cumulative impacts of these developments within and across local government areas is critical to the success of the REZ's. These cumulative impacts will affect housing, infrastructure, water demand, waste services, emergency response as well as transport routes and how energy is stored for transmission.

Specifically, Council called for a coordinated approach to the need for and capacity of energy transmission for new projects to ensure infrastructure was in the most appropriate locations to minimise impacts on community and Council's own infrastructure (including road reserves).

In late 2024, the NSW Department of Planning, Housing and Infrastructure released a suite of documents referred to as the Renewable Energy Planning Framework. These documents included guidelines for State Significant Developments related to wind, solar, transmission and hydrogen projects, as well as benefit sharing, agreements and several assessment tools. Singleton Council welcomes the release of these guidelines.

However, the guidelines do not address the issues raised in our submissions, nor do they provide strategic oversight of renewable developments in the REZ. As a result, at its meeting of November 2024, Council resolved to write to the relevant Ministers seeking:

- a) Further strategic studies within the renewable energy zone; with an outcome being the development of mapping to provide transparency, clarity and certainty to communities already affected on the best locations within each REZ for renewable projects, and specifically, where State significant renewable projects are not appropriate; and
- b) Amendments to the *State Environmental Planning Policy (Resources and Energy) 2021* to include a requirement for all energy projects to obtain a site verification certificate prior to lodging a development application as well as a requirement for a renewable energy bond to ensure any land used for renewables is returned to its pre-used state (or other defined best use state).

Given Singleton Council’s experiences to date, and the likely significant impact of renewable energy developments on our community and resources, a response to these matters is needed urgently to give communities confidence that the planning for a net zero future is being undertaken in a transparent, sustainable and consistent manner.

The Singleton Experience

The following table sets out the renewable energy projects and their status within the Hunter Central Coast Renewable Energy Zone (REZ). These projects will all require a level of transmission infrastructure (either existing, augmented or new) within the Singleton Local Government Area.

Renewable Energy Projects in the Hunter Valley			
Project	Council Area	Outcome	Output capacity
Major Projects Registered Central West Orana REZ Transmission	Central West, Hunter	Approved June 2024	500kV transmission lines
Denman Battery Energy Storage System	Muswellbrook	Scoping Report submitted September 2024	2.4GW capacity
Muswellbrook Pumped Hydro Energy Storage	Muswellbrook	Scoping Report submitted December 2023	500MW
Restart of Redbank Power Station	Singleton	Scoping Report submitted July 2023	1,000,000 MWh
Maison Dieu Solar Farm	Singleton	Scoping Report submitted August 2022	150MW
Goulburn River Solar Farm	Upper Hunter Shire	Approved August 2024	520MW
New England REZ Transmission Project	Muswellbrook	Scoping report submitted July 2024	500kV transmission lines
Edderton Solar Project	Muswellbrook	Scoping Report submitted April 2024	800,000MWh
Upper Hunter Battery Energy Storage System	Upper Hunter Shire	Scoping Report submitted August 2023	800MWh / 400MW
Upper Hunter Solar Farm	Muswellbrook	Scoping Report submitted December 2023	90MW Solar Farm 60MWh / 30MW Battery
Kayuga Solar Farm	Muswellbrook	Scoping Report submitted October 2023	100MW Solar Farm 100MWh / 50MW battery
Upper Hunter South Solar Farm	Muswellbrook	Scoping Report submitted December 2023	90MW Solar Farm

Renewable Energy Projects in the Hunter Valley			
Project	Council Area	Outcome	Output capacity
Liddell Battery and Bayswater Ancillary Works	Muswellbrook	Approved March 2022 Modified February 2024	500MW delivery capacity or 2GWh storage capacity
Muswellbrook Battery Energy Storage System	Muswellbrook	Approved July 2023	300MWh / 150MW battery storage
Muswellbrook Solar Farm	Muswellbrook	Scoping Report submitted July 2022	347GWh / 135MW
Maxwell Solar Farm	Muswellbrook	Approved August 2020	25MW Solar Farm
Bowmans Creek Wind Farm Stage 2	Muswellbrook	Scoping Report submitted July 2024	120MW Wind Farm
Bowmans Creek Wind Farm	Singleton	Approved February 2024	54 Turbines 5.6MW per turbine
Liverpool Range Wind Farm	Upper Hunter	Approved March 2018 Modification August 2023	1332MW
Hunter Transmission Project	Singleton, Cessnock, Lake Macquarie	Scoping Report Critical State Significant Infrastructure	Transmission capacity of 500KV duplication and extension
Hunter Central Coast REZ Network Infrastructure Project	Singleton, Cessnock	Commence works in January 2025	Augmentation of existing transmission to 1GW in line with REZ objectives

Of these projects, The New England REZ Network Infrastructure Project, the Sydney Ring North (Hunter Transmission Project) and the Hunter Central Coast REZ Network Infrastructure Project are included in the Australian Energy Market Operator (AEMO) 2024 Integrated System Plan for the National Electricity Market¹.

The impact of these developments on socioeconomic, cultural, agricultural and environmental impacts is not clear, transparent or coordinated. Each project is being considered on its merits in isolation of these impacts.

Singleton Council has undertaken analysis on the likely financial impact to our organisation for the redeployment of resources away from service delivery and into supporting the implementation of renewable energy projects, including critical State significant infrastructure and ancillary activities (such as the Port to REZ road upgraded needed to support transport of renewable energy infrastructure into the regions). Our analysis estimates that the support required by our council staff for these projects will cost our council over \$2.7M over the next four years.

¹ [2024-integrated-system-plan-isp.pdf](#)

Uncertainty in the System

From the list of renewable energy projects likely to impact the Singleton local government area, all but the three transmission projects are private State significant developments, subject to the suite of guidelines released by the DPHI in November 2024.

One of the guidelines, the Transmission Guideline, is particularly relevant to the Singleton experience. The Guideline supports major upgrades and expansions to the NSW transmission network and includes guidance on the assessment requirements for a range of impacts expected from this type of development. The Guideline applies to State Significant Infrastructure and Critical State Significant Infrastructure transmission developments and does not apply to distribution networks.

Transmission infrastructure includes the network of powerlines and equipment that transports electricity from the point of generation to substations². From here, the distribution network carries electricity to homes, businesses and other places as needed³.

The energy market in NSW forms part of the National Electricity Market which is overseen by the AEMO. The AEMO is responsible for transmission planning that is identified in the Integrated System Plan. The ISP includes high voltage (major) infrastructure needs to support the supply of electricity generated by renewable (and other) developments in a safe and reliable manner. The AEMO does not oversee the distribution network.

The high voltage network is owned by the State of NSW (Electricity Transmission Ministerial Holding Corporation) which leases the network through the NSW *Electricity Network Assets (Authorised Transactions) Act 2015* to Transgrid. The *Electricity Supply Act, 1995* allows Authorised Network Operators to distribute electricity to consumers. There are three Authorised Network Operators in NSW, Essential Energy, Ausgrid and Endeavour Energy. These ANOs are responsible for specific geographic regions in NSW. For Singleton, the ANO is Ausgrid.

ANOs, alongside Transgrid may be responsible for developing and operating future transmission networks in NSW.

The Energy Corporation of NSW (EnergyCo) is a statutory authority established under the *Energy and Utilities Administration Act 1987* and is the appointed infrastructure planner for each REZ in NSW. EnergyCo is responsible for coordinating, planning, designing, constructing and operating network infrastructure in the REZ on behalf of ANOs. EnergyCo is responsible for creating access arrangements within each REZ for private electricity generating projects.

None of the arrangements provided considers the construction of private transmission infrastructure within or on public land.

² [Transmission Guideline](#)

³ [Transmission Guideline](#)

The *NSW Roads Act, 1993* provides the process for undertaking works within a road reserve, which can only be undertaken with the approval of (or on behalf of) the roads authority. For much of the REZ, the roads authority is the relevant local council.

The *NSW Electricity Supply Act 1995* provides a mechanism for ANOs to install transmission infrastructure within the road reserve, in consultation with the local Council.

The Transmission Guideline refers to State Significant Infrastructure and Critical State Significant Infrastructure transmission developments and does not apply to distribution networks. State Significant Infrastructure and Critical State Significant Infrastructure transmission developments are undertaken by ANOs who are acting for or on behalf of a public authority.

The State Environmental Planning Policy (Transport and Infrastructure) 2021 provides for the installation of transmission infrastructure without consent in clause 2.44, provided the works are carried out by or on behalf of an electricity supply authority or public authority without consent on any land. Under the SEPP and electricity supply authority is a person or body engaged in the distribution of electricity to the public or in the generation of electricity for supply to the public and includes (amongst other entities) a transmission operator or distributor that holder a license under the *Electricity Supply Act 1995*. In NSW there are three transmission operators, Essential Energy, Ausgrid and Endeavour Energy.

State significant renewable energy projects, including wind and solar, require development consent for both the generation and transmission elements of the project. In addition, to connect to the electricity network, these developments require approved access to the electricity market through both EnergyCo and the AEMO.

However, the relationship between generation and transmission to grid connection is not clear. There is currently no avenue available for private developers to either construct transmission infrastructure within or on public land, and there is no mechanism for these developments to connect.

Without approved network connection, obtained through a complex arrangement between State and Federal government entities, many (if not all) of these renewable energy projects will be stranded assets unable to construct the transmission infrastructure needed to connect to the broader electricity network. Singleton Council sees this as a significant barrier to the development of the Hunter Central Coast REZ and the current pipeline of renewable energy projects flagged for the region.

What is Benefit Sharing as a Transmission LGA?

The benefit sharing arrangements for transmission projects are absent from the Renewable Energy Planning Framework for development within or on public land.

The Transmission Guideline includes the provision of annual payments for the hosting of high voltage transmission infrastructure on private land. The Guidelines sets a \$200,000 per kilometre (in 2022 dollars) as a total payment. By way of example, the transmission infrastructure required for the Bowmans Creek Wind Farm includes 14

kilometres of overhead and 7 kilometres of underground transmission lines within the road reserves of the Singleton and Muswellbrook local government areas. In this case, precluding benefit sharing for transmission lines deprives the Singleton and Muswellbrook local government areas of \$4.2M.

The Strategic Benefit Payments Scheme also precludes payment for the hosting of transmission infrastructure within or on the local road network. It appears that the intent of the strategic benefit payment and benefit sharing schemes are to preclude local councils from securing funds to mitigate the impacts of development.

In addition, the Benefit Sharing Guideline, whilst precluding transmission projects, also advises the consent authority to not impose conditions requiring other contributions under section 7.11 or section 7.12 of the *Environmental Planning and Assessment Act 1979*.

As such, the preclusion of strategic benefit payments for the use of road reserves to host infrastructure is inconsistent with clause 7.4 of the Environmental Planning and Assessment Act 1979, which provides for a planning agreement allowing, amongst other things, monetary contribution to be used for or applied towards a public purpose. Clause 7.4(2) sets out (without limitation) that a public purpose includes:

- The provision of public amenities or public services
- The provision of affordable housing
- The provision of transport or other infrastructure related to land
- The funding of recurrent expenditure related to the provision of public amenities or public services, affordable housing or transport or other infrastructure
- The monitoring of the planning impacts of development
- The conservation or enhancement of the natural environment

The Federal Government's National Guidelines – Community Engagement and Benefits for Electricity Transmission Projects sets out the importance of community benefit programs development in investment in community infrastructure or public spaces and support for community health, education and environment projects – all activities provided to communities by local councils. Importantly, these guidelines do not specify the value of impacts, rather, it recognises that these are likely to be local and specific, whilst enabling collaborative identification of community needs through working with local councils and communities to identify long term needs and benefits.

In 2023, Singleton Council adopted a Planning Agreement Policy that sets out the framework for negotiating community benefits from State significant developments and other developments for which a planning agreement is sought, by creating a clear, transparent and consistent approach to securing funding to mitigate the impacts of significant development within the local government area. Councils that develop such policy frameworks should not be penalised by guidelines that do not take into consideration local and specific needs.

Conclusion

Singleton Council is experiencing a significant increase in renewable energy projects, including wind, solar and transmission projects that are both State and critical State significant infrastructure. Singleton Council's submission is focussed on identifying the impacts of case-by-case project development and implementation, the current legislative framework and the lack of support to councils hosting transmission infrastructure.

Based on the above, Singleton Council is seeking:

- a) Further strategic studies within the renewable energy zone; with an outcome being the development of mapping to provide transparency, clarity and certainty to communities already affected on the best locations within each REZ for renewable projects, and specifically, where State significant renewable projects are not appropriate; and
- b) Amendments to the *State Environmental Planning Policy (Resources and Energy) 2021* to include a requirement for all energy projects to obtain a site verification certificate prior to lodging a development application as well as a requirement for a renewable energy bond to ensure any land used for renewables is returned to its pre-used state (or other defined best use state); and
- c) Review the Transmission Guidelines to provide clarity to councils in relation to the application of the EP&A Act to the benefit sharing arrangements available to support the impacts of these development types on councils and communities that host this infrastructure.

If you have any further enquiries, please do not hesitate to contact Mary-Anne Crawford on telephone

Yours faithfully,

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