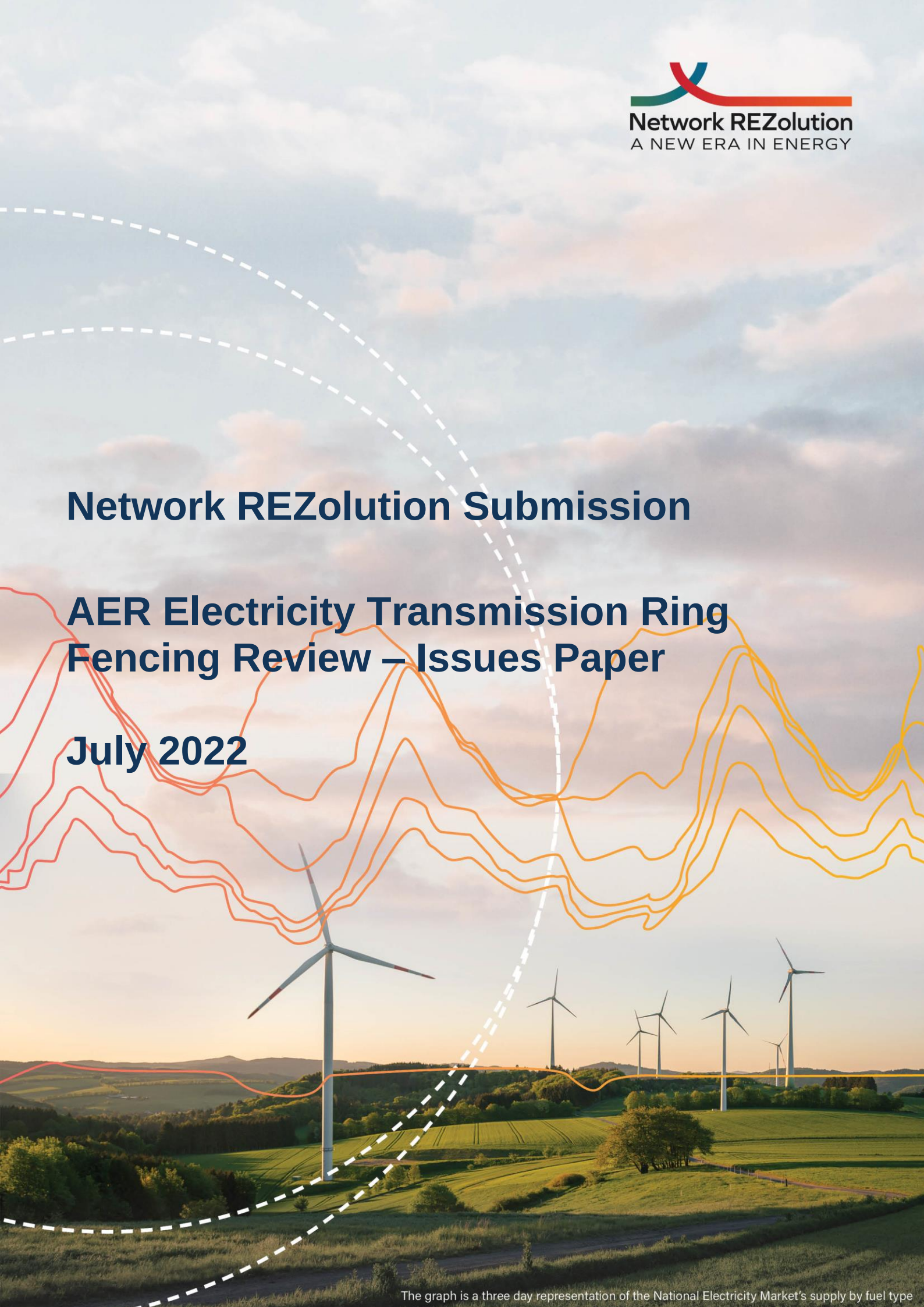
Network REZolution
A NEW ERA IN ENERGY

Network REZolution Submission

AER Electricity Transmission Ring Fencing Review – Issues Paper

July 2022



The graph is a three day representation of the National Electricity Market's supply by fuel type

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Lodged by email: ringfencing@aer.gov.au

22 July 2022

RE: Electricity Transmission Ring Fencing Review – Issues Paper

Dear Mr Feather

Thank you for the opportunity to comment on the AER's Electricity Transmission Ring-Fencing Guideline Review Issues Paper (**Issues Paper**). We appreciate the AER consulting on these important issues.

The Network REZolution consortium – comprising Pacific Partnerships, UGL, CPB Contractors (members of the CIMIC group) and APA Group – brings a balance of experience in both contestable and regulated electricity infrastructure and is a shortlisted applicant for the Central-West Orana Renewable Energy Zone (**REZ**) Network Operator.

We recognise that preventing cross subsidies and discriminatory behaviour is important to help facilitate competition in energy services. As our participation in the CWO REZ Network Operator tender process highlights, we fully support competition in energy markets. Strong competition in well-functioning markets will help drive innovation, timely service delivery and ultimately, better outcomes for customers.

It is important that electricity transmission ring-fencing arrangements are fit for purpose and recognise the significant differences between the markets in which electricity distribution and transmission businesses operate. The risk of harm from TNSP behaviour, particularly for small TNSPs, is far lower than for distribution businesses. The AER should carefully assess whether the benefits of expanded ring-fencing obligations for TNSPs outweigh the cost.

Leveraging APA's experience as operator of two registered Transmission Network Service Providers (**TNSP**) in the National Electricity Market, our submission provides views on the issues raised in the Issues Paper. Part 1 of our submission provides high level comments, while Part 2 provides answers to the AER feedback questions.

If you wish to discuss our submission in further detail, please contact John Skinner on 02 9693 0009 or john.skinner2@apa.com.au.

Yours sincerely

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1. Submission

Key points

1. Ring-fencing is important to ensure regulated service providers do not discriminate in favour of related parties. It is also essential that ring-fencing supports, rather than hinders innovation, as this will ensure that energy can be delivered by the most efficient means possible.
2. Transmission Network Service Providers (**TNSPs**) are not homogenous, ranging from large incumbent TNSPs to small interconnectors and future REZ TNSPs. This means that a 'one size fits all' approach to ring-fencing may not be appropriate.
3. The difference in the operating environments of DNSPs and TNSPs means there is less risk of discriminatory behaviour, and associated harm to competition, from TNSP behaviour, compared to that of DNSPs.
4. Any new or expanded ring-fencing obligations will increase costs for TNSPs, and those costs will ultimately be borne by customers.
5. The AER should carefully assess whether the implications of current or expanded ring-fencing obligations outweigh the costs, relating to future smaller REZ Networks.

1.1 Introduction

Network REZolution (**Network REZolution**, or the **Consortium**) – comprising of Pacific Partnerships, UGL, CPB Contractors (members of the CIMIC group) and APA Group – brings together leading infrastructure and energy companies to support the energy transition taking place across NSW.

Network REZolution is a shortlisted applicant for the Central-West Orana Renewable Energy Zone (**REZ**) tender. If successful, Network REZolution, in which Pacific Partnerships and APA will be equity partners, will contract with EnergyCo in the role of the Network Operator.

The Consortium has extensive experience in delivering, owning and operating both contestable and regulated infrastructure investments across Australia:

- CIMIC, as the largest diversified infrastructure developer in Australia, has been involved in the delivery of over 30 privately financed infrastructure projects (valued at more than $60 billion) during the past 25 years.
- APA is Australia's largest energy infrastructure business and builds, owns, operates and maintains over $21 billion of energy infrastructure. APA operates two Transmission Network Service Providers (TNSP) in the National Electricity Market (NEM) and owns and operates both regulated and unregulated assets across Australia.

We recognise that preventing cross subsidies and discriminatory behaviour is important to help facilitate competition. As our participation in the CWO REZ Network Operator tender process highlights, we fully support competition in energy markets. Strong competition between experienced parties will help drive innovation, timely service delivery and ultimately, better outcomes for customers.

Network REZolution's consortium members have a keen interest in the development of the Electricity Transmission Ring-Fencing Guidelines (the **Guideline**):

- APA operates two fully regulated interconnectors in the NEM: Directlink and Murraylink. As registered TNSPs, Directlink and Murraylink are expected to be subject to ring-fencing obligations under the Guideline.
- In its May 2022 draft Revenue Determination Guideline for NSW Contestable Projects, the AER flagged that a new ring-fencing guideline will apply to the CWO REZ Network Operator. The AER also indicated that to the extent possible, that guideline will be consistent with the AER's Transmission Ring-fencing Guideline made under the National Electricity Rules. While the REZ ring fencing guideline may not initially have much 'work to do', given the initial focus on delivering the

regulated infrastructure rather than contestable opportunities within the REZ, the Consortium considers it useful to share some initial views on the applicability of ring fencing within REZs.

As outlined in our submission below, Directlink, Murraylink and the CWO REZ transmission network are fundamentally different to the five incumbent TNSPs in the NEM: Powerlink, Transgrid, AusNet, ElectraNet and TasNetworks. It is important that the AER recognises these differences when developing the Guideline.

1.2 Ring-fencing arrangements must support innovation

As the recent Integrated System Plan (**ISP**) has confirmed, the transformation and decarbonisation of the NEM calls for levels of investment in generation, storage, transmission and system services "*that exceed all previous efforts combined*."[1] The 10,000km of new transmission that is required to connect low cost generation to customers is only part of the story. Investment is also required in storage, system services and other technologies that support the many gigawatts of variable renewable energy (**VRE**) that will be installed across Australia.

We recognise that ring-fencing has an important role to play in preventing cross subsidies and ensuring that regulated businesses do not discriminate in favour of related parties. At the same time, competition, innovation and collaboration between all sectors of the energy supply chain will help ensure that the required investment takes place as efficiently as possible.

It is important that ring-fencing supports, rather than hinders, innovation. This will ensure that energy can be delivered by the most efficient means possible, and that customers do not pay more than necessary for the investment needed to decarbonise the NEM.

Ring-fencing arrangements will be most effective where they recognise the particular circumstances of the industry, including the characteristics of the businesses subject to the ring-fencing obligations, the sophistication of competitors, and market characteristics such as the rate of technological change.

1.3 Compared to DNSPs, TNSPs are not homogenous

In the Issues Paper, the AER indicates that it intends to draw on the Distribution Ring-Fencing Guideline when developing its electricity transmission guideline.[2] While the AER also recognises that there are differences in the regulatory frameworks and operating environments, it is useful to highlight some of the characteristics of the DNSP and TNSP industries in the NEM.

Table 1 outlines the annual operating expenditure (**opex**) of regulated DNSPs in the NEM. All the regulated DNSPs are medium to large businesses, and the average annual opex is $235 million. The fact that there are no small distribution networks in the list is in part because small electricity networks can apply to the AER for a network exemption, which means that they don't need to register with AEMO as a network service provider.

Table 1: 2020 Annual opex of DNSPs in the NEM (Source: AER Network Performance Data 2021)

DNSP	Annual opex ($2020)	DNSP	Annual opex ($2020)
Evoenergy	$59m	TasNetworks (D)	$92m
Ausgrid	$485m	AusNet (D)	$261m
Endeavour Energy	$283m	CitiPower	$96m
Essential Energy	$382m	Jemena Electricity	$98m
Energex	$364m	Powercor Australia	$268m
Ergon Energy	$398m	United Energy	$159m
SA Power Networks	$282m	Power and Water	$69m

1 AEMO, *Integrated System Plan,* June 2022, p3
2 AER, *Issues Paper,* p9

In contrast to the DNSP industry, which is characterised by a relatively homogenous group of businesses which, on the whole, provide a very similar set of distribution services, the TNSPs do not have anywhere near the same homogeneity.

As can be seen from Table 2, the five TNSPs that are responsible for managing the transmission network in each of the NEM's jurisdictions are medium to large businesses, with an average annual opex of $115 million.

Aside from these five incumbent TNSPs, there are currently two other registered TNSPs in the NEM: the Directlink and Murraylink interconnectors (the bottom two rows, highlighted). Unlike DNSPs, these interconnectors are not able to apply for an exemption from registration and have a much smaller operating budget (around $3 million per annum).

Table 2: 2020 Annual opex of TNSPs in the NEM (Source: AER Network Performance Data 2021, Directlink and Murraylink Regulatory Accounts)

TNSP	Annual opex ($2020)
Powerlink	$204m
Transgrid	$163m
AusNet	$80m
ElectraNet	$101m
TasNetworks	$27m
Directlink	$3.3m
Murraylink	$2.7m

The two interconnectors, Directlink and Murraylink, have other characteristics that make them different to the local TNSPs:

- **Size:** They are much smaller assets than the primary TNSPs: the Directlink interconnector is 63km long and Murraylink is 180km
- **HVDC**: Both interconnectors use High Voltage Direct Current (**HVDC**) to transmit energy, in contrast to the more common alternating current (**AC**) systems. This means that both Directlink and Murraylink are unlikely to have generation assets connected to them.
- **Reference nodes:** Neither Directlink or Murraylink are connected to the local reference node for the purposes of the NEM dispatch engine.
- **Control:** AEMO directly controls the operation of Directlink and Murraylink, including how much of, and how often, capacity is dispatched.

Some of these characteristics are expected to be common to the CWO REZ transmission network infrastructure. For example, the CWO REZ will be confined to a small geographic area around Dubbo and Wellington in Central West NSW, and will not be connected to the local reference node for the purposes of the NEM. Similarly, while the CWO REZ network infrastructure will be maintained and operated by the successful tenderer, ultimate control of the REZ will rest with AEMO, the national system operator. These characteristics are expected to be similar for future REZs.

To ensure that ring fencing does not impose unnecessary costs, these market characteristics must be taken into account when developing the Guideline.

1.4 Risk of discrimination for TNSPs

As the AER alludes to in the Issues Paper, the difference in the operating environments of DNSPs and TNSPs means there is less risk of discriminatory behaviour, and associated harm to competition, from TNSP behaviour, compared to that of DNSPs. For the reasons outlined below, we agree with this assessment.

1. Different market characteristics

The distribution ring-fencing guideline is very much focused on the protection of competition in local markets, with the businesses likely to be harmed by DNSP behaviour often being local electricians, local construction firms, and (in NSW) accredited service providers who connect local businesses and households to the distribution network. These businesses may not have the ability to identify discriminatory behaviour, let alone take steps to prevent it. Many of the services being undertaken by these businesses are routine, with thousands of services being provided every day.

The markets where TNSPs operate, however, are characterised by very different customers, who are involved in large scale augmentations, connections and generation projects. These customers are well resourced and able to identify, and protect themselves, against any discriminatory behaviour. The services being provided by these customers are much larger and infrequent than the services being provided at the distribution level.

2. Size and location of the TNSP

For some TNSPs, there may be very limited opportunity to discriminate, given the size and characteristics of the transmission asset. The AER identified this possibility in its draft *Revenue determination guideline for NSW contestable network projects.* The AER noted that because some network operators operate in a limited network area that is not directly connected to the regional reference node, this is likely to result in a lower risk of harm to electricity customers.[3] While this statement was made in the context of network operators in NSW Renewable Energy Zones, we think that it also applies to other TNSPs not connected to regional reference nodes, such as interconnectors. For the Directlink and Murraylink interconnectors, the fact that they are dispatched by AEMO further reduces their ability to discriminate in electricity markets.

3. Established rules for connections

In 2017, the Australian Energy Market Commission (**AEMC**) introduced a contestability regime for new connections to the transmission network. The AEMC's Transmission Connection and Planning Arrangements (**TCAPA**) rule change put in place measures that reduce the opportunity for a TNSP to favour itself when competing to provide contestable connections for generators or load. It did this by clarifying that non-regulated transmission services can be provided by the TNSP or any other service provider.[4]

In its November 2019 discussion paper which kicked off the current review, the AER agreed that the TCAPA rule change largely addressed any risks of discrimination in respect of connection services.[5] Seeing as connections are one of the main contestable services provided by TNSPs, the AER should carefully assess whether the benefits of introducing an additional layer of regulation for these services will outweigh the potential costs.

4. TNSPs established through competitive procurement processes

A further issue for the AER to consider is the basis on which the TNSP is established. A TNSP established through a highly contestable tender process poses less risk of harm to competition. The CWO REZ network operator, for example, will:

- have less of an opportunity to cross subsidise its affiliate, given the tender process will reveal the efficient costs of providing the transmission services, and these costs will be overseen and approved by a regulator;
- be subject to obligations and performance criteria set out under a project deed with the Energy Corporation of NSW (EnergyCo) who will closely supervise many functions of the network operator. This will significantly reduce the opportunity for the CWO REZ network operator to discriminate in favour of an affiliate.

It is clear from the four characteristics above that the risk of discriminatory behaviour is much lower for TNSPs, and therefore strengthened functional separation requirements may not be appropriate. This is particularly true for TNSPs established through highly competitive processes, such as the CWO REZ network operator.

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3 AER, *Draft Revenue determination guideline for NSW contestable network projects,* May 2022, p26
4 AER, *Electricity Transmission Ring Fencing Arrangements Discussion Paper,* November 2019, p29
5 AER, *Electricity Transmission Ring Fencing Arrangements Discussion Paper,* November 2019, p29

In our view, existing electricity transmission ring-fencing arrangements have been effective at minimising the risk of cross subsidisation through the requirement to keep separate accounts for any ring-fenced services. New or extended ring-fencing arrangements, such as legal separation, should only be imposed if there is a clearly identified issue to be resolved and the benefits of doing are assessed as outweighing the costs.

1.5 Assessing the costs and benefits

In the Issues Paper, the AER outlines initial views on new or expanded ring-fencing obligations in many areas of functional and legal separation, and new compliance obligations.

Any new or expanded ring-fencing obligations will increase direct costs for TNSPs, and those costs will ultimately be borne by consumers. Based on the AER's initial views, there could potentially be additional costs in the following areas:

- reporting and compliance
- independent auditing
- staff training
- IT changes relating to information access and disclosure
- separation of offices
- regulatory costs associated with waiver applications

The potential costs associated with expanded ring-fencing obligations extend beyond direct costs, as there could be:

- reduced innovation, with network businesses forced to opt safer and well understood network options
- regulatory uncertainty, leading to higher hurdle rates, due to regulatory uncertainty associated with the need for subsequent waiver applications.

The AER recognises that it needs to carefully consider whether the benefits of strengthening functional separation outweigh the potential costs. Functional separation aims to prevent a TNSP discriminating in favour of an affiliate operating in similar markets. The risk of a TNSP discriminating in non-electricity markets, such as gas or telecommunications markets, is very low. Strengthened functional separation requirements where a TNSP's related parties operate in non-electricity markets is likely to add significant cost with no corresponding benefits to competition or consumers.

We have not endeavoured to quantify the additional cost of the AER's initial positions, however, any new or expanded ring fencing obligations could have a material impact on operating costs. For smaller TNSPs, where the application of expanded ring-fencing obligations is unlikely to have any competition benefits, it may be appropriate for the AER to consider an automatic waiver from certain ring fencing provisions.

1.6 Transitional arrangements

In the Issues Paper, the AER indicates that a short transition to any new ring-fencing arrangements is its preferred approach. Seeing as the AER's review has been on hold since 2019, it is not clear why a short transition period is required. A short transition period is likely to result in waiver applications, similar to when the DNSP guideline was introduced.

2. Responses to feedback questions

Question	Network REZolution response
1. What are the potential harms and benefits of the guideline referring to services, rather than activities?	We support the Guideline referring to services, rather than activities. This will help ensure technology neutrality and the most efficient outcomes for customers.
2. What are the potential harms and benefits for consumers, the market and TNSPs of requiring TNSPs to legally separate transmission and non-transmission services?	We do not consider that requiring TNSPs to legally separate transmission and non-transmission services is required. The existing cost allocation arrangements applied by TNSPs address the cross subsidisation risks that legal separation seeks to remedy. For many TNSPs, the potential harm from legal separation outweighs the cost. This is because the additional costs involved from legal separation will outweigh any benefits to competition. As outlined in section 1.5 of our submission, where the application of expanded ring-fencing obligations is unlikely to have any competition benefits, it may be appropriate for the AER to consider an automatic waiver from certain ring fencing provisions.
3. How would the definitions for transmission services set out in Chapter 10 of the NER cover these new and emerging electricity services?	No comment
4. What is the appropriate range of services TNSPs should be able to provide without legal separation? For example: a) Distribution services; b) Contestable electricity services; and c) Non-electricity services. What are the possible harms and benefits to consumers and the market from TNSPs offering these services?	We do not consider that requiring TNSPs to legally separate transmission and non-transmission services is required. The existing cost allocation arrangements applied by TNSPs address the cross subsidisation risks that legal separation seeks to remedy. The possible harms and benefits from TNSPs offering these services will depend on the circumstances of the TNSP and the market in which it operates. There should not be a 'one size fits all' approach to ring-fencing.
5. In the case of TNSP-owned batteries, should TNSPs be able to lease excess capacity to third parties? What are the potential harms and benefits to consumers, the market and TNSPs of this?	As the Issues Paper notes, TNSPs are investing in batteries to meet a network need. Utilising batteries is often a more efficient option than traditional network investment.

	To ensure that ring fencing does not stifle innovation, TNSPs should be able to continue leasing excess capacity to third parties. This approach will result in the most efficient outcome for customers, given that excess battery capacity not required for network support can be utilised for third party contracting. Because network support requirements may be difficult to forecast, and may be seasonal, this approach will help ensure the battery assets are utilised efficiently, with full access to the revenue value stack. This will result in the most cost effective outcome for customers.
6. In relation to non-transmission services, what would be the harms and benefits to consumers, the market and TNSPs of moving to a waiver approach rather than a revenue cap?	Requiring waivers increases regulatory uncertainty compared to the revenue cap approach. This is because the service provider is required to seek regulatory approval prior to commencing innovative projects. This problem is particularly acute if the waiver does not extend for the life of an asset, creating the risk that the regulator will 'change its mind' if the service provider needs to reapply for a waiver.
7. If a revenue cap approach was maintained, what would be the appropriate form and magnitude of that cap?	No comment
8. If legal separation is applied, how should existing services be treated?	No comment
9. What are the key potential harms and risks that an obligation not to discriminate should target?	We agree that the obligation not to discriminate should extend to all services, both regulated and contestable, offered by a TNSP.
10. What are the potential harms and benefits to consumers, the market and TNSPs of strengthening the obligation not to discriminate?	Extending the obligation not to discriminate will provide consumers and competitors with confidence that service providers are not discriminating in favour of an affiliate.
11. What are the potential harms and benefits to consumers, the market and TNSPs of introducing additional functional separation obligations for: a) staff sharing; b) office sharing; and c) branding and cross-promotion?	As outlined in section 1.4 of our submission, the risk of discriminatory behaviour is far lower for TNSPs. This means that the potential costs to consumers from implementing additional functional separation obligations are likely to outweigh the benefits. As outlined in section 1.5 of our submission, where the application of expanded ring-fencing obligations is unlikely to have any competition benefits, it may be appropriate for the AER to consider an automatic waiver from certain ring fencing provisions.

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12. Should any new functional separation obligations apply to all contestable services? Should any exceptions apply, and if so, why?	See response to question 11.
13. What are the potential harms and benefits to consumers, the market and TNSPs of aligning the transmission and distribution guidelines in relation to information access and disclosure?	For small TNSPs, aligning the transmission and distribution guidelines in relation to information access and disclosure is unlikely to create any benefits for consumers.
14. Are there any potential inconsistencies with the Transmission Connections and Planning Arrangements rule change we need to consider?	No comment
15. What are the potential harms and benefits to consumers, the market and TNSPs of aligning the transmission and distribution guidelines in relation to obligations on third party service providers that support the provision of prescribed transmission services?	No comment
16. What are the potential harms and benefits to consumers, the market and TNSPs of expanding the scope of compliance reporting?	The Issues Paper proposes a significant expansion of compliance obligations, including annual reporting, independent annual assessment of compliance, and ongoing monitoring obligations. These obligations will significantly increase costs for TNSPs. For smaller TNSPs, these obligations could be material. It is not clear that the AER has considered whether the benefits from these expanded obligations outweigh the potential costs.
17. Should the timeframe for reporting all breaches be extended to 15 days?	We agree with this suggestion.
18. Would there be benefit in the AER providing more clarity on the application and assessment process for waivers?	Relying on waivers to enable innovative projects to go ahead increases costs and regulatory uncertainty. As outlined in our response to question 6, regulatory uncertainty is particularly acute if the waiver does not extend for the life of the asset and the service provider needs to reapply for a waiver. Rather than a waiver approach, we propose that a public register be required by DNSPs, similar to the Stand Alone Power Systems (**SAPS**) register required by DNSPs when reporting information about SAPS deployed in the market. The register could include information such as the type of service being provided

	and the costs allocated to consumers. The ring-fencing guideline could also specify that such projects must have been procured via a public, arms length procurement process.
19. Do you agree with the AER's initial views that certain clauses should not be subject to waivers (e.g. the obligation not to discriminate and information access and sharing)? Please explain your reasons.	It is not clear why certain clauses of the Guideline should not be subject to waivers. If a waiver can be shown to promote the National Electricity Objective and is clearly in customers' long term interests, we cannot see why it should not be granted.
20. Which elements of the assessment criteria used to assess waiver applications by DNSPs would be appropriate for transmission?	No comment
21. What factors should we take into account in considering the duration of waivers?	While waivers are not the preferred option, it is important that the waiver process creates as much certainty as possible for project proponents. This means that waivers should extend for the life of the asset, contract, or other period as requested by the proponent.
22. Are there any circumstances where class waivers may be appropriate for transmission?	While waivers are not the preferred option, we can see areas where class waivers may be appropriate, such as where technological change leads to issues with the application of the Guideline.
23. What are the potential harms and benefits to consumers, the market and TNSPs of removing the ability of the AER to impose additional obligations on a TNSP (clauses 9 and 10 of the guideline)?	No comment
24. Are there any other issues in relation to this review that you would like the AER to consider?	No comment