# Network Authorisation Guidelines

May 2022





Energy Corporation of New South Wales



Consumer Trustee

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# Overview

# Purpose and role of the guidelines

The Network Authorisation Guidelines (the Guidelines) describe the proposed process for the Energy Corporation of NSW (EnergyCo) (in its role as an Infrastructure Planner) and the Consumer Trustee to undertake their respective functions in relation to REZ network infrastructure projects under the *Electricity Infrastructure Investment Act 2020* (the Ell Act), including:

- **REZ network infrastructure project recommendations:** The process EnergyCo as the Infrastructure Planner must undertake in developing recommendations to the Consumer Trustee about REZ network infrastructure projects under section 30 of the EII Act;
- Authorising or directing REZ network infrastructure projects: The process the Consumer Trustee may undertake under section 31 of the EII Act in considering and responding to recommendations from the Infrastructure Planner.

This includes either authorising a Network Operator to carry out a REZ network infrastructure project or recommending the Minister direct a Network Operator to carry out a REZ network infrastructure project;

- **Consultation:** How the Infrastructure Planner and Consumer Trustee may independently engage and consult with stakeholders in performing their respective functions under sections 30 and 31 of the EII Act; and
- **Collaboration:** How the Infrastructure Planner and Consumer Trustee intend to collaborate with each other in performing these functions.

The Guidelines do not cover:

- Procurement criteria for selecting and nominating a network operator
- Activities prior to a REZ being declared by the Minister<sup>1</sup>
- The development of the Consumer Trustee's Infrastructure Investment Objectives Report<sup>2</sup>
- The Regulator's activities in conducting a Transmission Efficiency Test and making or adjusting revenue determinations.<sup>3</sup>

The intended approach and processes set out in the Guidelines provide a general framework under which these functions will be exercised. However, the Infrastructure Planner and Consumer Trustee retain discretion to apply the Guidelines flexibly to reflect unique circumstances of each REZ in order to meet the Objects of the Act and other requirements set out in the EII Act. While the precise application may differ on a case-by-case basis, the Guidelines should provide stakeholders greater clarity and predictability of how the functions may be performed.

The Guidelines are presented as a single document to provide transparency and clarity to stakeholders. However, these Guidelines comprise separate elements:

- Guidelines by EnergyCo in relation to its functions as the Infrastructure Planner; and
- Guidelines by the Consumer Trustee in relation to its functions.

<sup>1.</sup> The Minister has the power to declare REZs under section 19 of the EII Act.

<sup>2.</sup> Under section 45 of the EII Act.

<sup>3.</sup> Under section 38 of the EII  $\mbox{Act.}$ 

The Infrastructure Planner and the Consumer Trustee act independently of each other, and nothing fetters the discretion of either body in exercising their respective functions under the EII Act.

# Overview of REZ network infrastructure project authorisation

The scope of the Guidelines in relation to the broader process for developing and carrying out REZ network infrastructure projects is illustrated at a high level in Figure 1 below.

	1. NSW-wide system planning	<ul> <li>Consumer Trustee publishes Infrastructure Investment Objectives report including the Development Pathway and 10 year tender plan</li> <li>EnergyCo publishes Network Infrastructure Strategy</li> <li>Minister declares REZ</li> </ul>
Functions covered by Network Authorisation Guidelines	2. Develop network options for REZ	<ul> <li>Infrastructure Planner assesses network options including relevant stakeholder or community engagement</li> <li>(Optional) Consumer Trustee provides advice relating to consumer benefits of network options</li> <li>Infrastructure Planner nominates Network Operator (potentially via competitive process)</li> <li>Infrastructure Planner submits recommendation to Consumer Trustee</li> </ul>
	3. Authorise the REZ network infrastructure project	<ul> <li>Consumer Trustee considers recommendation from Infrastructure Planner</li> <li>Consumer Trustee provides authorisation (or recommends Minister direction)</li> <li>Consumer Trustee sets maximum capital cost amount and informs Regulator</li> </ul>
	4. Make a revenue determination	<ul> <li>Regulator runs Transmission Efficiency Test (TET)</li> <li>Regulator sets revenue determination for Network Operator to carry out REZ network infrastructure project</li> </ul>
	5. Carry out project	<ul> <li>Authorised Network Operator carries out REZ network infrastructure project including construction and operation</li> <li>Regulator remakes or adjusts revenue determinations</li> </ul>

**Figure 1** High level stages relating to identifying, authorising and determining revenue for REZ network infrastructure projects under the EII Act and highlighting those stages covered by the Network Authorisation Guidelines

# Framework

In addition to existing EII Act requirements, the Infrastructure Planner and the Consumer Trustee intend to be guided by the general framework in Table 1 when exercising their functions under sections 30 and 31 of the EII Act.

#### Table 1 Intended approach to exercising functions under sections 30 and 31 of EII Act

Approach	Description		
Acting in NSW electricity consumer interests	The Infrastructure Planner and Consumer Trustee exercise their functions in consumers' interests to improve the affordability, reliability, security and social licence impacts on local host communities.		
	The Consumer Trustee also acts in the long-term financial interests of NSW electricity customers.		
Timely/efficient processes	The processes the Infrastructure Planner and Consumer Trustee undertake facilitates network infrastructure projects to be developed and delivered in a timely manner to support the timelines set out in the infrastructure investment objectives report and the most recent development pathway.		
Independent and expert	The Infrastructure Planner and Consumer Trustee act independently of each other in making decisions relating to their respective functions under the EII Act and these Guidelines.		
	The Infrastructure Planner applies its expertise in developing and recommending network infrastructure projects.		
	The Consumer Trustee applies its expertise in assessing the merit of these recommendations having regard to the long-term financial interests of NSW electricity customers and the Development Pathway contained in the IIO Report (Development Pathway).		
Collaborative approach	The Infrastructure Planner and Consumer Trustee intend to harmoniously exercise their respective functions under the EII Act, and where necessary to collaborate with each other as well as relevant stakeholders.		
	The Infrastructure Planner and Consumer Trustee intend to take a 'no surprises' approach in considering and assessing options for a REZ network infrastructure project. For example, the Consumer Trustee and Infrastructure Planner intend to consult with each other in preparing the Development Pathway and the Network Infrastructure Strategy respectively to ensure projects and project timing are aligned to best deliver the Objects of the EII Act.		
	Further, the Infrastructure Planner may consult the Consumer Trustee in assessing different options for REZ network infrastructure projects prior to the Infrastructure Planner submitting its recommendation for authorisation to the Consumer Trustee.		
Stakeholder focussed	To the extent the Infrastructure Planner and the Consumer Trustee consider appropriate, either or both may engage with stakeholders to enable stakeholder perspectives and inputs to be reflected in the recommendations and decisions regarding REZ network infrastructure projects.		

# **Review process**

The Guidelines will be reviewed by EnergyCo and the Consumer Trustee as required.

EnergyCo and the Consumer Trustee will undertake targeted stakeholder consultation to inform a review of these Guidelines.<sup>4</sup> EnergyCo and the Consumer Trustee respectively intend to transparently consider stakeholder feedback when conducting a review of the Guidelines. EnergyCo and the Consumer Trustee each retain discretion as to how best to consult and seek input from stakeholders as part of any review process.

# Stakeholder input on REZ network infrastructure projects

Figure 2 below outlines the various stages in which stakeholders may have the opportunity to inform either the Infrastructure Planner or the Consumer Trustee in the exercising of their respective functions under the EII Act.

4. Stakeholder consultation may not be undertaken where changes to the Guidelines are minor or administrative in nature.

NEM-wide System Planning	Strategic NSW S	System Planning	Individual REZ Network Design	REZ Assessment
	Plan meet Infrastructure Investment Objectives		Develop network options for the REZ	Test option against NSW consumer interest
AEMO	NSW CT	EnergyCo	Infrastructure Planner	NSW CT
<ul> <li>Publications: <ul> <li>Integrated System Plan (ISP)</li> <li>Inputs, Assumptions and Scenarios Report (IASR)</li> </ul> </li> <li>Key outcomes: <ul> <li>Scenarios and assumptions for use in strategic NSW system planning</li> <li>IASR adopted in IIO report</li> </ul> </li> </ul>	<ul> <li>Publications: The Infrastructure Investment Objectives (IIO) Report</li> <li>Development Pathway, and</li> <li>10-year Plan for LTESA tenders</li> <li>Key outcomes:</li> <li>Determine preferred Development Pathway</li> <li>Determine plan for conducting LTESA tenders</li> <li>Pathway adopted in ISP</li> </ul>	<ul> <li>Publications: Network Infrastructure Strategy</li> <li>Key outcomes: Strategic options to meet targets through REZs. Provide: <ul> <li>REZ delivery schedule</li> <li>Network infrastructure options</li> <li>Community engagement and regional development</li> <li>Information for investors</li> </ul> </li> </ul>	<ul> <li>Key outcome: Infrastructure Planner submits recommendation to Consumer Trustee</li> <li>Key functions: <ul> <li>Assess network options including potential routes, network configurations, capacity and staging</li> <li>Consider relevant stakeholder and community impacts</li> <li>Nominate Network Operator to carry out project</li> </ul> </li> </ul>	<ul> <li>Key outcome:</li> <li>Authorises a Network Operator to carry out the REZ network infrastructure project</li> <li>Key functions:</li> <li>Test whether Infrastructure Planner's recommendation is in the long-term financial interests of NSW electricity customers</li> <li>Compare recommendation against most recent Development Pathway</li> <li>Set maximum capital cost amount if authorised</li> </ul>
Topics for stakeholder input	Topics for stal	koholdor input	Topics for stakeholder input	Tapiaa far stakabaldar ipput
<ul> <li>Inputs, assumptions and scenarios used in modelling</li> </ul>	<ul> <li><u>Topics for stakeholder input</u></li> <li>General modelling and optimisation approach</li> <li>Inputs, assumptions and scenarios used</li> <li>High level options identification and comparison</li> <li>Opportunities for community engagement and regional development</li> </ul>		<ul> <li><u>Topics for stakeholder input</u></li> <li>General approach and option selection through Network Authorisation Guidelines</li> <li>Community impacts from route options</li> <li>Technical options (including nonnetwork)</li> <li>Market testing for delivery by a competitive Network Operator</li> </ul>	<ul> <li>Topics for stakeholder input</li> <li>General principles and approach through Network Authorisation Guidelines</li> <li>Optional: additional stakeholder feedback to supplement that done by Infrastructure Planner*</li> </ul>
				* Consumer Trustee retains discretion to conduct targeted or public consultation to inform authorisation decision if warranted

Figure 1 Opportunities for stakeholder input in the recommendation and authorisation of REZ network infrastructure projects

# Infrastructure Planner options assessment and recommendations



Energy Corporation of New South Wales

# A.1 Overview and overall approach

The EII Act requires EnergyCo to be appointed as Infrastructure Planner for the Central-West Orana, Illawarra, New England, South West and Hunter-Central Coast REZs<sup>5</sup>. During any time where there is no Infrastructure Planner appointed, the functions of the Infrastructure Planner are to be exercised by EnergyCo.<sup>6</sup>

This Guideline only applies to the exercise of the Infrastructure Planner's functions where EnergyCo is either appointed as the Infrastructure Planner or is exercising the functions of the Infrastructure Planner in the absence of any appointment. Guidelines for third parties appointed to Infrastructure Planner roles (other than EnergyCo) will be considered at a later date.

Part 5 of the EII Act requires the Infrastructure Planner for a REZ to assess and make recommendations to the Consumer Trustee about REZ network infrastructure projects required for the REZ.

In exercising its functions under Part 5, the Infrastructure Planner may have regard to:

- the Consumer Trustee's latest Infrastructure Investment Opportunities (IIO) Report;
- the REZ declaration;
- the Objects of the Ell Act;
- the perspectives of local councils and communities and stakeholders including AEMO, and network operators; and
- other factors the Infrastructure Planner considers relevant, including prospective generation projects.

This Part A provides detail on the approach the Infrastructure Planner intends to undertake in assessing and making recommendations for REZ network infrastructure projects under Part 5 of the EII Act.

# A.2 Considerations for recommending a project

The EII Act requires that the Infrastructure Planner must assess and recommend to the Consumer Trustee options for REZ network infrastructure projects to provide the intended network capacity for the REZ.<sup>7</sup>

The intended network capacity is for a REZ as a whole and can be addressed by a single or multiple REZ network infrastructure projects, for instance, in stages and/or by multiple network operators (see sections A.4 and A.5). The Infrastructure Planner may consider the REZ Declaration, Network Infrastructure Strategy and Development Pathway when defining projects for recommendation.

#### **REZ Declaration** A.2.1

The REZ declaration made by the Minister includes (amongst other things):<sup>8</sup>

- a specified geographical area (location) of NSW identified by a map
- specified planned or existing generation, storage or network infrastructure, and
- the intended network capacity of the network infrastructure in the REZ<sup>9</sup>.

The Infrastructure Planner must assess and make recommendations about the different options for REZ network infrastructure projects to provide the intended network capacity for the REZ. The Infrastructure Planner may consider opportunities to deliver additional capacity required for the REZ in making this assessment and recommendation.

# A.2.2 Network Infrastructure Strategy

The Infrastructure Planner may also have regard to the most recent Network Infrastructure Strategy report in making any assessment of recommendations under Part 5.

#### A.2.3 **Development Pathway**

The Infrastructure Planner may have regard to the Development Pathway set out in the Consumer Trustee's IIO Report.

The REZs identified in the Consumer Trustee's IIO Report are intended to deliver the Infrastructure Investment Objectives set out in the Ell Act in a way that meets the Objects of the Act. The Consumer Trustee's Development Pathway may also provide greater context regarding a particular REZ, the mix of generation planned to connect to it, and its relation to the broader NSW power system.

#### Assessing REZ network infrastructure project options A.3

Section 30(2) of the EII Act sets out what the Infrastructure Planner must assess and make recommendations about, including:

- the different options for REZ network infrastructure projects to provide the intended network capacity for the Renewable Energy Zone
- staging and sequencing of REZ network infrastructure projects
- funding, procurement and cost recovery for the recommended REZ network infrastructure ٠ projects
- other matters prescribed by regulation.

In developing its recommendations, the Infrastructure Planner is expected to consider how each of the options meets the Objects of the Ell Act. In some cases, there may be conflict between these Objects, which may require the Infrastructure Planner to balance or trade off various outcomes.

The Infrastructure Planner's process for this should be informed by community and other stakeholder consultation undertaken as part of any assessment process under Part 5 as well as a deep technical and practical understanding of the on-the-ground constraints and opportunities in a particular REZ.

<sup>8.</sup> Ell Act s19(1).

<sup>9.</sup> Ell Act s19(3)(b).

## A.3.1 REZ network infrastructure options assessment criteria

The Infrastructure Planner intends to undertake a multicriteria analysis to recommend options with the best balance of costs and benefits consistent with Objects and requirements under the Act. The Infrastructure Planner may seek advice from the Consumer Trustee on this matter, in accordance with section 60(4)(a) of the EII Act.

Different options may provide materially different ways of meeting the intended network capacity identified in the REZ declaration. The Infrastructure Planner may consider any relevant commercial, technical, social, environmental and economic factors and trade-offs. These will reflect the broader Objects of the Act and elements impacting financial value to consumers, including:

#### Table 2 Multicriteria factors for consideration when assessing options

Factor	Indicators
Affordability	<ul> <li>Financial value to consumers</li> <li>Total project cost</li> <li>Network cost per MW of generation capacity</li> <li>Network utilisation</li> </ul>
Network benefits and reliability	<ul> <li>Network capacity provided</li> <li>System strength remediation requirements and risks</li> <li>Unserved energy risk</li> </ul>
Timeliness	<ul> <li>Delivery timeframe</li> <li>Land use / environmental constraints and planning complexity</li> <li>Delay risks</li> </ul>
Social licence	<ul><li>Local community, landholder and regional stakeholder support</li><li>Outcomes of consultation</li></ul>
Flexibility	Optionality for future expansion of the REZ
Innovation	<ul> <li>Reduced or avoided need for conventional 'poles and wires' transmission or distribution infrastructure</li> <li>More efficient delivery, such as new construction, sequencing, third party procurement or other processes and techniques.</li> </ul>
Other relevant factors	As considered relevant by the Infrastructure Planner and specified in the recommendation.

# A.3.2 REZ network infrastructure options scope

The scope of and difference between REZ network infrastructure options may include:

- configurations and technical characteristics
- staging and sequencing of project delivery
- route corridors used for lines
- location of substations, switching stations and other network or related infrastructure
- operating voltages and circuit arrangements
- ancillary augmentations needed to enable intended network capacity
- use of grid-connected storage and other assets or services to complement or replace traditional network investment
- third party service contracting rather than from the Network Operator
- contestable, non-contestable and other Network Operator procurement alternatives
- other infrastructure, procurement or process innovations to lower delivery costs
- optionality to enable future REZ expansion when needed.

# A.4 Assessing staging and sequencing

The Infrastructure Planner may recommend REZ network infrastructure projects to be delivered in stages and specify particular sequencing. This may be a group of REZ network infrastructure projects recommended and carried out either concurrently or sequentially in a way that together meets the intended network capacity identified in the REZ declaration. These may be carried out by different network operators.

#### **Different network operators**

Different Network Operators for REZ network infrastructure projects may be recommended where some network investment is not readily separable. For instance, augmentation of an existing Network Operators network infrastructure may be impractical for any party other than the incumbent. However other new developments may be carried out by a different Network Operator.

#### **Staged delivery**

The Infrastructure Planner may recommend REZ network infrastructure projects options to be delivered in stages.

This can retain option value and flexibility to respond to changing market developments, opportunities or scenarios as they emerge, such as accelerated closure of existing generation. Staging may be prudent where there is material uncertainty and the option(s) the Infrastructure Planner is considering involves significant sunk or irreversible actions.

# A.5 Procurement of a Network Operator

# A.5.1 Nominating a network operator for authorisation

The Infrastructure Planner's recommendation is to include the nomination of a Network Operator/s to carry out the REZ network infrastructure project.

Authorised Network Operators are to carry out the REZ network infrastructure project through building, owning (or leasing) and financing the network infrastructure.

Assessment and recommendation of Network Operator procurement is likely to include whether a contestable process is feasible and, if not, how the incumbent Network Operator will be recommended. The Infrastructure Planner may also separate REZ network infrastructure into projects with both contestably procured and incumbent Network Operators.

The Infrastructure Planner may conduct market sounding, Expression of Interest processes or similar tests for the feasibility of contestable Network Operator selection. This may also occur at multiple stages of network design as the scope and interest of providers is refined.

Infrastructure Planner consideration of contestable process feasibility will include:

- whether the required network infrastructure is readily separable from the existing transmission system, distribution systems or other REZ network infrastructure projects;
- whether there is a sufficient market of appropriately qualified and resourced potential providers, for example, to create the competitive tension required to drive efficient bids;
- whether the incumbent Network Service Provider can deliver the REZ network infrastructure project within the required timeframe and within reasonable cost estimates;
- the cost of the network infrastructure project relative to the cost of running a contestable procurement process (particularly in the case of relatively low value projects); and
- any timing constraints that a contestable process may place on project delivery timeframes.

The Infrastructure Planner intends to follow relevant guidelines and best practices to ensure procurement processes are conducted fairly and provide value for money. In particular, the Infrastructure Planner will follow the NSW Procurement Policy Framework<sup>10</sup> and, where a non-contestable approach is used, the NSW Direct Dealing Guidelines.<sup>11</sup>

## A.5.2 Contestable Network Operator approach

Where a contestable approach is feasible, the Infrastructure Planner intends to seek competitive bids with appropriate oversight and design to ensure the probity and integrity of outcomes.

The Infrastructure Planner may submit a procurement strategy to the Regulator. The strategy will enable the Regulator to assess whether the proposed design of the competitive procurement process is capable of producing prudent, efficient and reasonable outcomes. The procurement strategy will include the rules to be followed in the procurement process, minimum requirements a proposal must comply with as well as the criteria to be applied by the Infrastructure Planner in nominating a network operator to the Consumer Trustee.

The Regulator may set out its approach to assessing the procurement strategy in the Transmission Efficiency Test and Revenue Determination Guidelines.

## A.5.3 Non-contestable approach

The Infrastructure Planner may identify and select the incumbent Network Service Provider as the Network Operator through a non-contestable process compliant with the NSW Direct Dealing Guidelines.<sup>12</sup> The incumbent is considered to be the existing Network Operator that owns or leases a part of the transmission or distribution system to which the REZ Network Infrastructure project will connect or augment.

<sup>10.</sup> NSW Government, Procurement Policy Framework, August 2021. https://buy.nsw.gov.au/policy-library/policies/procurement-policy-framework.

<sup>11.</sup> NSW Government, Direct Dealing Guidelines, June 2021. https://buy.nsw.gov.au/resources/direct-dealing-guidelines.

<sup>12.</sup> NSW Government, Direct Dealing Guidelines, June 2021. https://buy.nsw.gov.au/resources/direct-dealing-guidelines.

Under a non-contestable approach, the Infrastructure Planner may be more prescriptive in the technical and performance requirements that the Network Operator must meet. This is because there is no market competition to encourage innovation or price competitiveness in proposed expenditure for the Regulator's assessment of efficient of the proposed revenue expenditure.

# A.5.4 Third-party procurement

The Infrastructure Planner may recommend some assets or services to be owned, built or provided by a third party or existing asset other than those provided by a Network Operator. For example, this could include a procurement process for a demand response provider the Network Operator must include in the REZ network infrastructure project, or a requirement that the Network Operator run its own procurement process for a third party demand response provider as part of its design work.<sup>13</sup>

The Infrastructure Planner retains discretion regarding the ultimate selection of a third-party provider, such as to select and provisionally enter into the necessary contracts itself or defer to the selected Network Operator.

# A.5.5 First Nations Guidelines and Renewable Energy Sector Board Plan conditions

The Infrastructure Planner's recommendation will include conditions for the Network Operator that should be applied to align with the First Nations Guidelines and Renewable Energy Sector Board Plan. These conditions should be reflected in the relevant project deeds. The Consumer Trustee is to consider the First Nations Guidelines and the Renewable Energy Sector Board Plan when authorising a Network Operator. The Consumer Trustee may impose conditions on an authorisation to give effect to the First Nations Guidelines and the Renewable Energy Sector Board Plan.

# A.6 Assessing funding and cost recovery

The Infrastructure Planner is to assess and make recommendations about funding and cost recovery.<sup>14</sup> This may include investment that is authorised under either the EII Act or under the National Electricity Rules.

Investment that is authorised under the National Electricity Rules will need to pass the Regulatory Investment Test for Transmission (RIT-T) if it meets the criteria outlined in the National Electricity Rules of being greater than \$6 million.

Investment that is authorised under the EII Act must pass through the Transmission Efficiency Test (TET). These investment costs could be recovered by way of the Scheme Financial vehicle (SFV).

<sup>13.</sup> For instance, this could include contracting for services with an existing grid-connected storage facility rather than requiring the Network Operator to build new assets as part of the REZ network infrastructure project to meet system security requirements.
14. EII Act s30(2)(c).

# A.6.1 Assessing costs of a REZ Network Infrastructure Project

In considering the Infrastructure Planner's recommendations about REZ network infrastructure projects, the Consumer Trustee must act in the long-term financial interests of NSW electricity customers under section 60(3) of the EII Act and have regard to other statutory considerations. A fundamental input to this consideration is the Infrastructure Planner's quantitative and qualitative assessment of costs and benefits.

There may be material uncertainty regarding the costs of an option at the time of the Infrastructure Planner's assessment. For example, the direct costs of an option may be uncertain because they depend on variables such as exchange rates or the price of key components or materials.

In such cases, the Infrastructure Planner intends to seek to transparently reflect this uncertainty in the expected cost. For instance, the Infrastructure Planner may conduct a probability-weighted present value of the direct cost of the option under different cost assumptions.

Cost assessment may consider the items in Table 3:

 Table 3 Cost considerations for assessing REZ network infrastructure projects

Cost Consideration	Description
Development costs	Upfront establishment and development costs incurred
Construction and related costs	<ul> <li>Estimated present value of direct construction and related costs incurred in delivering the project, including:</li> <li>'brownfield' upgrades to existing infrastructure by incumbent Network Service Providers through non-contestable processes</li> <li>new 'greenfield' development.</li> </ul>
Operating and maintenance costs	Operating and maintenance costs over the option's operating life, including planned maintenance, removing and disposing of existing assets, and asset replacement projects and programs.
Compliance with relevant laws and regulations	This includes the costs of complying with conditions in the Project Deed. In some cases, the Network Operator may lawfully choose to pay a financial amount rather than undertake some action otherwise necessary to comply with the relevant law, regulation or administrative requirement. If the financial amount is smaller than the costs of undertaking some other action, the financial amount may be considered part of the costs. The Infrastructure Planner may include compliance costs associated with NSW planning and environmental legislation, such as biodiversity offset costs and planning agreement contributions.
Compliance with the First Nations Guidelines and Renewable Energy Sector Board Plan	The costs of efficiently meeting the relevant recommendations from the First Nations Guideline and Renewable Energy Sector Board Plan. Where detailed cost estimates are not practical to be developed at this stage, such as for meeting local content requirements more appropriately considered when sourcing options, the Infrastructure Planner may use up-to-date estimates and reasonable margins of error.
Treatment of land	The cost of acquiring land necessary for a REZ network infrastructure project. The Infrastructure Planner should use reasonable endeavours to establish the market value of land necessary for each option. This may be higher than the fair value. The market value of land already acquired or under option may be included in the assessment - this land may not be treated as a sunk cost to the extent that it can otherwise be sold.

Community engagement, environmental and social licence costs	Reasonable costs necessary to foster local community support for investment in new network and related infrastructure. This may include undertaking community and stakeholder engagement and delivering community and environmental benefits.
	This may also include indirect costs incurred to account for the views of local communities and stakeholders, such as the cost difference between market and fair value of land.
	The Infrastructure Planner is not expected to quantify costs of all impacts on the environment or to any party.
Discount rates	The Infrastructure Planner may consider it appropriate to use discount rates for any present value calculations consistent with those used in the most recent IIO Report. The discount rate must be consistent with cash flows being discounted. If the Infrastructure Planner decides to vary from the discounted rate, the Infrastructure Planner may provide reasons for this decision in its recommendations to the Consumer Trustee. If the discounted rate is not applied, the present value calculations must use a commercial discount rate appropriate for the analysis of a private enterprise investment in the electricity sector. Where such adjustments are used, these are expected to vary between intended network capacities rather than between options to address the same intended network capacity. It will typically be best practice to capture the relative riskiness of different options through scenario analysis rather than by using different discount rates.
Innovation	<ul> <li>The Infrastructure Planner options may consider innovations to lower REZ network infrastructure project costs, including:</li> <li>technologies to reduce or avoid new poles and wires transmission or distribution infrastructure, such as grid-scale batteries to provide network services to reduce the need for new transmission lines</li> <li>third party-providers</li> <li>processes or techniques to deliver needed infrastructure more efficiently, such as new construction or sequencing techniques.</li> <li>The Infrastructure Planner may specify innovations in the options, or seek innovation proposals from prospective or appointed Network Operators through design submissions or bids (if appointment is contestable).</li> </ul>

# A.6.2 Assessing consumer benefits of a REZ network infrastructure project

The Infrastructure Planner's assessment need not include an assessment of the consumer interests as the EII Act provides for this assessment to be undertaken by the Consumer Trustee in deciding whether to authorise a recommendation (as set out in Part B).

However, the Infrastructure Planner may conduct detailed modelling to quantify and compare the benefits of options which provide access to renewable energy resources which are materially different in terms of their nature (i.e. resource type) and value (i.e. resource strength), or deliver a materially different quantum or timing of transfer capacities from a REZ.

EnergyCo's Network Infrastructure Strategy will set out the options across REZ's to be considered. The Infrastructure Planner may request that the Consumer Trustee conduct this assessment to quantify the benefits as an advice request under section 60(4) of the Act.

# A.6.3 Setting maximum capital cost

The Infrastructure Planner recommendation must specify all costs to deliver the REZ network infrastructure project. This may help inform the Consumer Trustee in setting a maximum capital cost amount.

# A.6.4 Cost recovery

Once a REZ network infrastructure project is authorised, the Regulator must determine the amount payable to the relevant Network Operator/s for carrying out the project. The Network Operator will then be entitled to recover that amount from the Scheme Financial Vehicle.

In the future, regulations may also enable the Infrastructure Planner to consider additional pathways for funding and cost recovery such as through the national RIT-T framework, generator funding or a mix.

Other considerations for the Infrastructure Planner's assessment of cost recovery should include:

- Any component of the project financed / funded by parties other than the Network Operator (e.g. government) and therefore not subject to cost recovery under Part 5 of the EII Act
- Whether / how costs of the Infrastructure Planner's development works will be recovered under the EII Act
- Whether / how the Infrastructure Planner's administrative costs and Network Operator tender participant bid costs will be recovered
- Whether Network Operator should be paid (e.g. for certain services) under the NEL rather than by the SFV (subject to regulations).

# A.7 Consultation on REZ network infrastructure projects

In assessing and making recommendations about REZ network infrastructure projects, the Infrastructure Planner must consult with following:

- AEMO;
- relevant operators in the REZ; and
- each local council in the REZ.<sup>15</sup>

Consultation will include seeking advice and considering feedback on the project scope, options considered as well as social licence considerations. Further, views from local communities, including First Nations groups and other relevant stakeholders, including prospective generation projects and consumer advocates will be considered.

# A.7.1 Community engagement principles and requirements

The Infrastructure Planner's recommendation is to include how local communities and stakeholders were consulted through the options assessment process and how their feedback was considered.

#### **Engagement principles**

In seeking the views of local communities and other stakeholders, the Infrastructure Planner will be guided by the following principles:

- engage early and often with a broad range of stakeholders and local communities- including potentially affected landholders, local First Nations communities, special interest groups and local Councils;
- tailor communications materials and engagement methods to meet the needs of different stakeholders and facilitate meaningful participation;

15. Ell Act s30(3).

- be responsive and respectful in dealings with stakeholders and local communities; and
- provide project information that is clear, accurate, relevant, and up-to-date.

#### **Engagement requirements**

To meet these principles and demonstrate how the views of local communities and stakeholders have been taken into account in assessing and making recommendations about REZ network infrastructure projects, the Infrastructure Planner will use its best endeavours to implement the following core engagement requirements:

- establish an engagement approach and communications framework that is tailored to the needs and values of local communities and stakeholders;
- provide opportunities for local communities and stakeholders to meaningfully participate in the transmission route planning process;
- provide clear, transparent and publicly accessible information that outlines how the outcomes of community and stakeholder engagement have informed decision-making about transmission route planning; and
- Inform communities and stakeholders about how and when they will be engaged and how the Infrastructure Planner will take feedback into account.

# A.8 Recommending REZ network infrastructure projects

After assessing and consulting on items set out in section 30(2) of the EII Act and detailed above, the Infrastructure Planner will make a written recommendation on REZ network infrastructure projects, including nominated Network Operators, to meet the intended network capacity to the Consumer Trustee for authorisation. The contents of the recommendation are in the Table 4 below.

The Infrastructure Planner may recommend for authorisation multiple or future staged options that are consistent with the Objects of the EII Act.

Category	Recommendation scope
A. Options for REZ network infrastructure projects to provide	1. Identified network capacity, including justification for deviation from an existing Declaration
intended network capacity	2. The preferred technical configuration and physical components that are necessary to deliver the REZ network infrastructure
	<ol><li>Definition of the REZ network infrastructure project/s to provide the intended network capacity of the REZ including description of:</li></ol>
	transmission and/or distribution assets
	classes of assets and
	regulated services to be provided.
	4. An overview of other options considered and why they were not preferred, having regard to the objects of the EII Act and other factors identified in these guidelines.
B. Staging and sequencing	1. Proposed staging
	2. Sequencing of build for the stages
	3. Latest date for commissioning of the network infrastructure.

#### Table 4 Scope of a Recommendation for a REZ network infrastructure project

C. Funding, procurement and cost recovery	1.	Estimated project costs (subject to D(2) below), including costs specific to both brownfield and greenfield development (where relevant)
	2.	Estimated consumer benefits, if relevant
	3.	Any component of the project financed / funded by parties other than the Network Operator (e.g. government) and therefore not subject to cost recovery under Part 5 of the EII Act
	4.	Whether / how costs of the Infrastructure Planner's development works will be recovered under the EII Act
	5.	Whether / how the Infrastructure Planner's administrative costs and Network Operator tender participant bid costs will be recovered
	6.	Whether Network Operator should be paid (e.g. for certain services) under the NEL rather than by the SFV (subject to regulations)
D. Network Operator	1.	Recommended Network Operator/s to carry out project/s, and options considered to make recommendation
	2.	Relevant details of the preferred Network Operator's proposal that may be necessary to substantiate other elements of the recommendation such as (but not limited to) project costs, sequencing of build or consistency with the objects of the Ell Act
E. Other	1	How the recommendation is consistent with the objects of the Ell Act
	י. כ	
	Ζ.	Consideration to the First Nations Guidelines and Renewable Energy Sector Board Plan



Consumer Trustee consideration of recommended REZ network infrastructure projects



# B.1 Overview and overall approach

Part B of the Guidelines sets out the process and approach the Consumer Trustee intends to undertake in considering and responding to recommendations for REZ network infrastructure projects from an Infrastructure Planner.

The Consumer Trustee must consider the Infrastructure Planner's recommendations about REZ network infrastructure projects. After considering the recommendations, the Consumer Trustee may authorise a recommended Network Operator to carry out a project, or recommend the Minister give a direction to a recommended Network Operator to carry out a project.<sup>16</sup>

If the Consumer Trustee authorises a Network Operator, it must set a maximum amount for the prudent, efficient and reasonable capital costs for development and construction of the REZ network infrastructure project that may be determined by the Regulator. This requirement does not apply if the Consumer Trustee recommends that the Minister direct a Network Operator to carry out a project.

In considering the Infrastructure Planner's recommendations about REZ network infrastructure projects, the Consumer Trustee:

- acts independently and in the long-term financial interests of NSW electricity customers;<sup>17</sup>
- acts in a manner that is consistent with the Objects of the EII Act<sup>18</sup>, including by considering the First Nations Guideline<sup>19</sup> and any approved Renewable Energy Sector Board Plan;<sup>20</sup>
- considers the Development Pathway in the Consumer Trustee's latest IIO Report<sup>21</sup> and the Infrastructure Investment Objectives;<sup>22</sup>
- considers whether the recommended REZ Network Infrastructure Project, its timing and the identity of the Network Operator can achieve the Infrastructure Investment Objectives; and
- considers other relevant matters, which may include the REZ declaration made by the Minister, and the perspectives of local communities and stakeholders including AEMO, prospective network operators, and prospective generation and long duration storage proponents.

The Consumer Trustee does not intend to engage in its own fact-finding exercises as a substitute for considering the contents of the Infrastructure Planner's recommendations.<sup>23</sup>

Prior to making a recommendation, the Infrastructure Planner may request that the Consumer Trustee provide advice in relation to proposed and required REZ network infrastructure projects under section 60(4)(a) of the EII Act to help inform developing a recommendation. This is discussed further in Section B.4.7.

The Consumer Trustee retains discretion to apply the Guidelines flexibly to reflect unique circumstances of each REZ in order to meet the Objects of the Act and other requirements set out in the EII Act. While the precise application may differ on a case-by-case basis, the Guidelines should provide stakeholders greater clarity and predictability in how the functions may be performed.

<sup>16.</sup> Section 31(1) Ell Act.

<sup>17.</sup> Section 60(3) Ell Act. 18. Section 3(3) Ell Act.

<sup>19.</sup> Section 4(5) Ell Act.

<sup>20.</sup> Section 9(1) Ell Act.

<sup>21.</sup> Section 31(5) Ell Act.

<sup>22.</sup> Section 44 EII Act.

<sup>23.</sup> To be clear, this does not prevent the Consumer Trustee from conducting its own engagement or modelling.

# **B.2** Time requirements

The Consumer Trustee expects to make a decision regarding a recommended REZ network infrastructure project within 60 business days from the later of:

- a. the date the Consumer Trustee receives the recommendation, and
- b. the date the Consumer Trustee receives any additional information requested from the Infrastructure Planner.

Where additional time for consideration is required, the Consumer Trustee intends to notify the Infrastructure Planner of this in writing and may also notify other stakeholders as appropriate.

Where the Consumer Trustee considers additional information is required it may request this in writing, including justification as to why the additional information may be necessary for the Consumer Trustee to make a decision. In considering whether to make a request, the Consumer Trustee may consider the costs to the Infrastructure Planner of collecting this information.

As noted previously, while the Infrastructure Planner and Consumer Trustee each perform distinct roles under the EII Act and approach these statutory functions independently, they intend to work collaboratively on a 'no surprises' basis. This is intended to minimise the need for requesting additional information and provide advanced notice if additional time is required in a manner that does not compromise the independence of the respective bodies.

# B.3 Stakeholder input and perspectives

The Consumer Trustee's consideration of the Infrastructure Planner's recommendation may be informed by the consultation and engagement that the Infrastructure Planner has already conducted with stakeholders and local communities in developing its recommendation.

In addition, the Consumer Trustee may, where it considers appropriate, seek additional stakeholder feedback to inform its consideration of the Infrastructure Planner's recommendation. It may also be informed by broader stakeholder input and consultation outside of the authorisation process including via engagement activities related to:

- the Consumer Trustee's IIO Report;
- EnergyCo's Network Infrastructure Strategy;
- these Network Authorisation Guidelines; and
- the Consumer Trustee's functions more generally.

These processes are illustrated in Figure 2 in the Overview section at the start of these Guidelines.

Any stakeholder feedback and consultation will not act as a substitute for the recommendations of the Infrastructure Planner and will be assessed consistent with the long-term financial interests of NSW electricity customers.

After conducting an initial review of the recommendation, the Consumer Trustee may decide to conduct further consultation, which may include:

- engaging in targeted consultation with key stakeholders (the identity of whom is likely to be dependent on both the nature of the project and the consultation conducted to date by the Infrastructure Planner); and/or
- publishing an Issues Paper for public feedback, which outlines the key matters the Consumer Trustee is seeking stakeholder input on.

The Consumer Trustee may also publish all or some the Infrastructure Planner's recommendation to assist stakeholders to provide more informed feedback and to increase transparency. Sections of the recommendation may be withheld, including to protect confidential or commercially sensitive

material. Determining what contents may be published or otherwise made available to stakeholders will generally be made in consultation with the Infrastructure Planner to ensure that the Infrastructure Planner's planning or procurement processes (such as for land and/or a Network Operator) are not unduly affected.

The Consumer Trustee intends, where practicable, to seek to conduct any consultation transparently and publish stakeholder submissions. Where relevant, the Consumer Trustee intends to make clear how stakeholder input was incorporated into its decision-making.

# **B.4** Authorisation

Under the EII Act, the Consumer Trustee must consider recommendations submitted to it by the Infrastructure Planner about REZ network infrastructure projects. The Consumer Trustee does not develop or propose an alternative project itself or vary elements of the Infrastructure Planner's recommendation. Rather, the Consumer Trustee's role is to determine whether authorising the recommended project would be consistent with the long-term financial interest of NSW electricity customers.<sup>24</sup>

In determining this, the Consumer Trustee will consider the Infrastructure Planner's recommendation and intends to:

- assess whether authorising the recommended REZ network infrastructure project is consistent with the Objects of the EII Act;
- conduct a cost-benefit analysis by determining the total benefits of the recommendation to NSW electricity customers through a modelling exercise and confirming that the forecast costs do not exceed the modelled benefits;
- consider the Development Pathway in the Consumer Trustee's latest IIO Report;<sup>25</sup>
- consider whether the recommended REZ Network Infrastructure Project, its timing and the identity of the Network Operator can achieve the Infrastructure Investment Objectives;
- consider other relevant matters, which may include the REZ declaration made by the Minister, and the perspectives of local communities and stakeholders including AEMO, network operators, and prospective generation and long duration storage proponents; and
- consider whether the Infrastructure Planner's recommendation otherwise contains all relevant information as required by the EII Act or Regulations.

In authorising a project, the Consumer Trustee may impose conditions including relating to the First Nations Guidelines (under s4(5)(b) of the EII Act) and/or the Renewable Energy Sector Board Plan (under s9(4) of the EII Act).

If the Consumer Trustee decides to authorise a Network Operator to carry out a recommended project, the EII Act requires the Consumer Trustee to also set a maximum amount for the prudent, efficient and reasonable capital costs for the development and construction of the project. This amount is intended to reflect the total value to NSW electricity customers from the REZ network infrastructure project compared to a counterfactual scenario and is described further in Section B.4.5.

The Consumer Trustee may also decide not to authorise the Infrastructure Planner's recommendation. This is discussed further in Section B.4.6.

<sup>24.</sup> Section 60(3) Ell Act. 25. Section 31(5) Ell Act.

## B.4.1 Assessing consistency with Objects of the Act

All entities established or appointed under the EII Act are required to exercise their functions in a way that is consistent with the Objects of the EII Act.

In practice, the Consumer Trustee intends to meet its statutory requirement by undertaking a review of the Infrastructure Planner's decision-making process and in particular that:

- the recommendation demonstrates that the Infrastructure Planner has considered each of the Objects of the EII Act; and
- the Infrastructure Planner's process for balancing the Objects of the EII Act was robust and defensible and the way in which trade-offs are made is justified and, where relevant, informed by stakeholder perspectives.

Where the Consumer Trustee is satisfied the Objects of the Act have been considered and addressed by the Infrastructure Planner, the Consumer Trustee does not intend to undertake a wholly separate rebalancing of the Objects of the Act or interrogate the basis upon which the Infrastructure Planner arrived at its decision.<sup>26</sup>

# B.4.2 Assessing long term financial interest

In its role considering recommendations for REZ network infrastructure projects, the Consumer Trustee will assess whether the recommendation is in the long-term financial interests of NSW electricity customers.

As part of this consideration, the Consumer Trustee intends to:

- determine that the recommendation is consistent with the Development Pathway contained in the latest IIO Report (or that the recommendation otherwise presents an improved means of achieving the infrastructure investment objectives set out in the EII Act); and
- conduct a cost-benefit analysis to assess whether the forecast costs of the recommended project are lower than the overall benefits that the project provides to NSW electricity customers.<sup>27</sup>

# B.4.3 Authorisation decision

If the Consumer Trustee decides to authorise a Network Operator to carry out a REZ network infrastructure project recommended to it by the Infrastructure Planner, the Consumer Trustee proposes to:

- inform the Infrastructure Planner of its decision;
- inform the Regulator of its decision and the maximum capital cost amount the Consumer Trustee has set for the project under s31(2) of the EII Act; and
- publish its decision. This may include high level details of the REZ network infrastructure project that has been authorised including the Network Operator authorised to carry it out. Certain aspects of the project, such as details of the estimated cost and the details of the Network Operator's bid may be kept confidential.

<sup>26.</sup> To be clear, this does not prevent the Consumer Trustee from conducting its own engagement or modelling where necessary such as in assessing the long-term financial interests of NSW electricity customers.

<sup>27.</sup> This is effectively a 'consumer surplus' approach and differs from the approach under the RIT-T, which seeks to optimise overall system costs when assessing transmission investment. The approach is intended to be the same as described in Section B.4.5.

The Consumer Trustee will not publish or otherwise disclose to any person other than the Regulator the maximum capital cost amount it has set for the REZ network infrastructure project.<sup>28</sup>

# B.4.4 Contents of an authorisation decision

The contents of a Consumer Trustee's authorisation are likely to contain the following:

- the identity of the Network Operator authorised to carry out the REZ network infrastructure project;
- a high-level technical configuration of the project the Network Operator is authorised to carry out. This may contain information on the substation locations, line routes, the transfer capacity of the network, the interface(s) to the existing network, operating voltages and minimum requirements relating to safety, security and reliability;<sup>29</sup>
- the applicable regulated class(es) of assets, as defined in regulations under s32(5), that the REZ network infrastructure project comprise;
- any components of the REZ network infrastructure project related to achieving specific objects of the EII Act (e.g.: compensation payments or biodiversity offsets); and
- any terms and conditions the Consumer Trustee considers necessary to deliver the authorised project. For example, these may include:
- requirement for the authorised Network Operator to enter into a Project Deed (and any other agreements) with the Infrastructure Planner for the purpose of carrying out the authorised project;
- when the authorisation commences and ceases to apply (or lapses). An example of this could be if a Project Deed is no longer in effect between the Network Operator and the Infrastructure Planner;
- conditions relating to the First Nations Guidelines (under s4(5)(b) of the EII Act) and/or the Renewable Energy Sector Board Plan (under s9(4) of the EII Act);
- requirements for the authorised Network Operator to hold a licence under the *Electricity Supply Act 1995*, be registered by AEMO as a Network Service Provider under the National Electricity Law and Rules or comply with other legislative or regulatory obligations.

# B.4.5 Maximum capital cost amount

Section 31(2) of the EII Act provides "If the consumer trustee authorises a network operator under subsection (1)(b), the consumer trustee must, by written notice to the Regulator, set a maximum amount for the prudent, efficient and reasonable capital costs for development and construction of the REZ network infrastructure project that may be determined by the Regulator under section 38(4)."

The maximum capital cost amount set by the Consumer Trustee as part of an authorisation plays an important role in protecting consumer interests. The Consumer Trustee's discretion to authorise a recommended REZ network infrastructure project is informed by the Infrastructure Planner's best estimate at the time of what the project is likely to cost to carry out. While a project may be in consumers' financial interests, it is not necessarily in their financial interests to carry it out at any cost.

<sup>28.</sup> As per the requirement in section 31(3) of the EII Act that "The consumer trustee or the regulator must not disclose the maximum amount to any person". 29. More detailed functional specifications for the REZ network infrastructure project, project milestones and service or commercial arrangements may be contained in another document referenced in the authorisation, such as the Project Deed between the Network Operator and Infrastructure Planner.

It is important to note that the maximum capital cost amount does not replace any of the Regulator's functions in setting the amount a Network Operator is able to recover for carrying out the infrastructure projects. The Regulator is still required to run a Transmission Efficiency Test and to determine revenue amounts the Network Operator can recover that are prudent, efficient and reasonable.<sup>30</sup>

Instead, the maximum capital cost amount set by the Consumer Trustee sets the maximum the regulator may determine in a Transmission Efficiency Test for development and construction costs of the REZ network infrastructure project.<sup>31</sup>

The maximum capital cost amount relates to the initial development and construction costs of a REZ network infrastructure project, and so does not apply to or cover any costs for the ongoing operation and maintenance of a project.

The Consumer Trustee will set a maximum capital cost amount through a benefit-based assessment against a counterfactual scenario. This approach is described further below.

Importantly, the Consumer Trustee must not publish or otherwise disclose to any person other than the Regulator the maximum capital cost amount it has set for the REZ network infrastructure project.<sup>32</sup>

#### B.4.5.1 Methodology

The Consumer Trustee proposes to assess the maximum capital cost as the capital cost above which the REZ network infrastructure project would no longer deliver benefits to consumers relative to a counterfactual without the REZ network infrastructure project (as described in Figure 2). In order to reach the point of submitting a recommendation, the Infrastructure Planner may have incurred costs in assessing and developing options. The Consumer Trustee may also include an amount in its maximum capital cost amount to reflect the similar costs, and potentially delays, may be incurred if the recommended project were not to progress and in having to develop alternatives.

<sup>30.</sup> These functions are intended to be covered by guidelines developed and published by the Regulator.

<sup>31.</sup> Section 31(2) Ell Act.

<sup>32.</sup> As per the requirement in section 31(3) of the EII Act that "The consumer trustee or the regulator must not disclose the maximum amount to any person".



Figure 2 Illustration of basis for setting a maximum capital cost amount

#### B.4.5.2 Benefits-based assessment

The Consumer Trustee intends to adopt an approach under which the maximum capital cost amount set by the Consumer Trustee reflects the total benefits or value to NSW electricity customers from the REZ network infrastructure project (as opposed to an assessment of likely costs).

Benefits considered include those that:

- directly accrue to NSW electricity customers;
- are materially different between the proposed REZ network infrastructure project and the counterfactual scenario (discussed in Section 0); and
- are reasonably and robustly quantifiable in both the proposed REZ network infrastructure project and the counterfactual scenarios.

While some types of benefits may be of a material amount, they may only be marginally different between the proposed REZ and under the counterfactual scenario. For instance, where both scenarios are defined to meet the same trajectory of renewable energy generation, the benefits of emissions reduction benefits may be largely identical between the scenarios. These are not included as such types of benefits would not assist in comparing the benefits of a REZ project against the counterfactual and hence would not meaningfully inform the maximum capital cost amount.

Some types of benefits may require more resource-intensive or time-consuming analysis to robustly quantify. This may occur where more detailed and site-specific modelling would be required to quantify the benefits under the counterfactual scenario (for instance the cost of achieving the necessary planning approvals for the individual, uncoordinated projects under the counterfactual scenario). It is expected these benefits would only be included if its likely impact on the maximum capital cost amount was justified by or proportionate to the resources required to quantify it.

Where the Consumer Trustee calculates projects benefits, these may reflect the benefit to consumers over the full life of the REZ network infrastructure project. As noted earlier, the

maximum capital cost amount the Consumer Trustee sets under section 31(2) of the EII Act relates only to the development and construction costs of the project. When setting such an amount, the Consumer Trustee may appropriately adjust its calculated project benefits to account for expenditure such as operating and maintenance expenditure (i.e. for project expenditure beyond development and construction costs). This would assist the Regulator to make a like-for-like comparison between the capital costs for development and construction costs under the Transmission Efficiency Test and the maximum capital cost amount set by the Consumer Trustee.

Renewable Energy Zones may be comprised of multiple REZ network infrastructure projects. In some cases, the benefits delivered by individual projects will be easily attributable to individual projects, such as an extension or expansion to connect more generation and storage projects. In other cases, benefits may be unable to be easily attributable, such as an enabling brownfield project which gives rise to a greenfield project. In the latter case, the benefit that cannot be separated is intended to be allocated between these projects on a pro-rata basis reflecting relative capital costs. This cost allocation may also be adjusted if certain projects are likely to have a higher delivery risk than others. This will be reflected in the maximum capital cost amount that may be set for each project to deliver the REZ as a whole.

#### B.4.5.3 Definition of the counterfactual

The counterfactual is the scenario against which the REZ network infrastructure project being considered is compared in order to determine the net benefit. The choice of counterfactual plays an important role in determining both the scope and the quantum of benefits and costs that are considered, and hence the maximum capital cost amount determined.

The Consumer Trustee intends to adopt the following approach to the counterfactual.

The counterfactual scenario would assume that the particular REZ network infrastructure project being considered is not carried out.

The intended counterfactual would also not contemplate the REZ network infrastructure project being deferred and instead the equivalent generation must connect in NSW outside of a REZ and under the national framework.

The Consumer Trustee is likely to conclude that it is not appropriate to use a counterfactual where the REZ network infrastructure project AND the corresponding renewable generation that is planned to connect to it is never built. This counterfactual would fail to meet the Objects of the EII Act as well as the specific renewable energy generation and long duration storage objectives set out in section 44 the EII Act.

Instead, the counterfactual used is likely to meet the same trajectory of renewable energy as outlined in the most recent Development Pathway. This ensures that the renewable energy and long duration storage objectives are met. It also means that the most preferable trajectory to meet these targets, as determined by the IIO report modelling, is also followed.

The necessary generation projects would generally have to connect using either:

the existing available network infrastructure,

- new network infrastructure that has already been recommended to the Consumer Trustee by an Infrastructure Planner, or
- potential new network infrastructure for REZs that EnergyCo has notified the Consumer Trustee may reasonably be considered such as through publication in the Network Infrastructure Strategy or provided as inputs to modelling for the IIO Report.

While this does not exclude later generators connecting to separate REZ projects, generators connecting outside of a REZ would proceed under the current open access regime used in the national framework and not benefit from the efficiencies and coordination that REZs provide.

It is intended that this counterfactual reflects many of the problems currently experienced in the National Electricity Market due to the lack of coordination between network infrastructure and future generation projects – such as inefficient levels of congestion and generation curtailment as

well as challenges in unlocking favourable generation resources that are further from the existing network. Comparing against this scenario reflects the benefits that REZs provide to consumers through more efficient and coordinated build out of the energy system.

## B.4.6 Decision not to authorise

The Consumer Trustee may decide not to authorise a recommendation from the Infrastructure Planner if it considers the factors discussed above in Section 0 (such as consistency with the Objects of the Act including affordability of electricity supply and the long-term financial interests of NSW electricity customers) have not been met.

Illustrative (and non-exhaustive) examples of this are provided below.

#### Illustrative example 1

The Consumer Trustee considers that the Infrastructure Planner's assessment of REZ Network Infrastructure project options has not adequately included the range of technical configurations to deliver the REZ and this has likely resulted in a materially less-preferable option being recommended, having regard to the long-term financial interests of consumers and the objects of the Act.

For example, if non-network alternatives for the REZ network infrastructure project, such as storage facilities to provide network services, have not been adequately considered by the Infrastructure Planner, then the Consumer Trustee may decide not to authorise.

In this case, the use of a storage facility to provide network services would offset or avoid the need for investment in some traditional network infrastructure and may also enable other revenue streams, reducing the net cost of the REZ network infrastructure project to NSW electricity customers. If the difference in cost between these options could reasonably be expected to have been material, the Consumer Trustee may decline to authorise.

#### Illustrative example 2

The Consumer Trustee considers the Infrastructure Planner's recommendation does not contain the information required such as under the EII Act or regulations.

For instance, if the recommendation does not contain project costing information, the Consumer Trustee would be unable to assess whether the project provides a net benefit to NSW electricity customers.

In this example, the Consumer Trustee would likely request additional information from the Infrastructure Planner. If the necessary information was not forthcoming, the Consumer Trustee may then decline to authorise the recommendation.

#### Illustrative example 3

The Consumer Trustee considers the Infrastructure Planner's recommendation has not properly justified how it has made trade-offs between the different Objects of the Act.

This could occur where the recommendation may not adequately demonstrate how the Infrastructure Planner has considered each of the Objects of the Act and any necessary tradeoffs were made in a robust and defensible way. Alternatively, the Consumer Trustee may consider undue preference had been given to meeting one of the Objects at the material expense of the others. While the Consumer Trustee does not intend to conduct its own exercise to balance the Objects of the Act, a situation may arise where it is evident a material and inappropriate imbalance has been made.

In this case, the Consumer Trustee may conclude that authorising the Infrastructure Planner's recommendation would not be consistent with the Objects of the Act as a whole or in long-term financial interests of consumers.

#### Illustrative example 4

The Consumer Trustee considers it likely that the recommended project's costs will exceed the benefits to NSW electricity customers.

The maximum capital cost amount, described in 0, reflects the benefits that NSW electricity customers would receive from the recommended project compared to the defined counterfactual. If the recommended project's costs were likely to exceed this amount, NSW customers would no longer receive a net benefit from the project and it would not be in their interests to authorise it.

Where the Consumer Trustee decides not to authorise a Network Operator to carry out a REZ network infrastructure project which was recommended by an Infrastructure Planner, the Consumer Trustee expects to:

- inform the Infrastructure Planner of its decision not to authorise the relevant project; and
- provide its reasoning (to the extent the Consumer Trustee considers appropriate).

The reasoning will not include information that would result in disclosure of the maximum capital cost amount that may have been set by the Consumer Trustee had the recommendation been authorised.<sup>33</sup>

The Infrastructure Planner may resubmit an amended recommendation for the REZ network infrastructure project. The Consumer Trustee intends to treat an amended recommendation as a new recommendation and consider it in full, including setting a new maximum capital cost amount as appropriate.

## B.4.7 Advice on consumer benefits

To assist in forming its REZ network infrastructure project recommendations, the Infrastructure Planner may request the Consumer Trustee's advice under section 60(4)(a) of the EII Act.<sup>34</sup>

For example, advice may be sought where the network options being considered by the Infrastructure Planner have materially different consumer benefits from each other. In this case, the Consumer Trustee may conduct modelling and similar assessments to give an indication of the consumer benefits of these options and whether they may be in the long-term financial interests of NSW electricity customers.

Typically, this advice will be provided prior to the Infrastructure Planner making its recommendation. Notwithstanding, any advice provided under this power does not in any way fetter the Consumer Trustee's discretion or decision-making in exercising its functions under section 31 of the EII Act if the Infrastructure Planner submits a recommendation for a REZ network infrastructure project.

# B.5 Lapsing of an authorisation

It is likely an authorisation will include provisions for the expiry or lapsing of the authorisation as this may be necessary for the long-term financial interests of NSW electricity customers. For example, to facilitate scenarios where a substantial Network Operator failure has occurred, such as if the Project Deed between the Network Operator and the Infrastructure Planner has been terminated.

<sup>33.</sup> Under section 31(3) of the EII Act, the Consumer Trustee and Regulator must not disclose the maximum capital cost amount to any person.
34. Section 60(4)(a) provides the Consumer Trustee to "advise the Minister and the infrastructure planner in relation to proposed and declared renewable energy zones and proposed and required REZ network infrastructure projects".

# B.6 Recommendation for Ministerial direction

After considering the Infrastructure Planner's recommendations in relation to a REZ network infrastructure project, the Consumer Trustee may, in accordance with section 31(1) of the EII Act, recommend the Minister direct a Network Operator to carry out a REZ network infrastructure project (a direction recommendation). The Consumer Trustee intends to only make a direction recommendation if the Infrastructure Planner recommends a Network Operator is directed rather than authorised and the Consumer Trustee considers doing so would be consistent with the long-term interests of NSW electricity customers.

If the Consumer Trustee makes a direction recommendation to the Minister then it intends to follow the process below, rather than that described in Sections B.4 and B.5.

The option to have a Minister direct a Network Operator to carry out a REZ network infrastructure project is intended as a last resort to ensure consumer benefits from a project are delivered. Once directed by the Minister, section 35 of the EII Act provides the Network Operator must not, without reasonable excuse, fail to comply with the direction. The Consumer Trustee's authorisation is intended to be the primary pathway for progressing REZ network infrastructure projects.

In considering whether to make a direction recommendation, the Consumer Trustee intends to:

- consider the same matters as for an authorisation as set out in Section 0 (including assessing consistency with the Objects of the Act and assessing consumer benefits) with the exception of setting a maximum capital cost amount for the prudent, efficient and reasonable capital costs of the project; and<sup>35</sup>
- be satisfied that a Minister's direction is reasonably necessary to meet the infrastructure investment objectives.

Before making a direction recommendation, the Consumer Trustee also intends to have regard to the Minister's ability to make such a direction under the EII Act. For instance, section 32(4) of the EII Act states the Minister must give a direction only if satisfied it is in the public interest and consistent with the Objects of the Act.

The Consumer Trustee will not generally recommend the Minister direct the Network Operator to carry out a REZ network infrastructure project where such a recommendation will, or is reasonably likely to, distort the outcome of a competitive network operator tender.

If a Consumer Trustee decides to recommend the Minister make a direction, it will submit to the Minister a recommendation containing:

- the details of the REZ network infrastructure project and the Network Operator recommended to be directed by the Minister to carry it out. To the extent possible, the Consumer Trustee will include the same matters as for an authorisation as set out in Section B.4.4, and
- details of how the Consumer Trustee is satisfied of the matters specified above specifically that:
  - an authorisation is inappropriate in these circumstances and insufficient to deliver the REZ network infrastructure project within the necessary timeframe, and
  - that a Ministerial direction is reasonably necessary and the requirements of the EII Act for a direction are reasonably likely to be satisfied.

35. Unlike in the case of granting an authorisation, the EII Act does not require the Consumer Trustee to set a maximum amount for the prudent, efficient and reasonable capital costs of the project where it recommends the Minister direct a Network Operator to carry out a REZ network infrastructure project.



# Definitions and interpretations

Term	Definition or interpretation
Consumer Trustee (CT)	The Consumer Trustee is an entity appointed under the EII Act to act independently and in the long-term financial interests of NSW electricity customers to improve the affordability, reliability, security and sustainability of electricity supply. Its functions include considering recommendations for REZ network infrastructure projects from the Infrastructure Planner as well as publishing the IIO report. The Minister appointed AEMO Services Ltd as the NSW Consumer Trustee.
Development Pathway	The development pathway prepared by the Consumer Trustee for the infrastructure required to be constructed over the following 20 years to achieve the infrastructure investment objectives
Ell Act	The NSW Electricity Infrastructure Investment Act 2020
Energy Corporation of NSW (EnergyCo)	The Energy Corporation of New South Wales constituted by section 7 of the Energy and Utilities Administration Act 1987. The EII Act requires EnergyCo to be the Infrastructure Planner for the five NSW Renewable Energy Zones set out in section 23 of the EII Act.
First Nations Guidelines	The Guidelines issued by the Minister under section 4 of the EII Act about consultation and negotiation with the local Aboriginal community in relation to relevant projects
Infrastructure Planner (IP)	A person authorised to exercise the functions of an infrastructure planner under section 63 of the Ell Act. It functions include preparing recommendations for network operators to carry out REZ network infrastructure projects to submit to the Consumer Trustee. The Ell Act requires these functions be carried out by EnergyCo at any time during which a person is not appointed.
Infrastructure Investment Objectives (IIO) Report	The report prepared by the Consumer Trustee under section 45 of the EII Act.
Infrastructure Planner's recommendation	The recommendation for a Network Operator to carry out a REZ network infrastructure project prepared by the Infrastructure Planner under section 30 of the EII Act.
Consumer Trustee's authorisation	An authorisation of a recommendation from the Infrastructure Planner made by the Consumer Trustee under section 31 of the EII Act. The authorisation is based on a recommendation from the Infrastructure Planner and relates to a network operator to carry out a REZ network infrastructure project.
LTES Agreements	Long-Term Energy Service Agreements defined in section 46 of the Ell Act.
Maximum capital cost amount	The maximum amount for the prudent, efficient and reasonable capital costs for the development and construction of a REZ network infrastructure project that may be determined by the Regulator, as determined by the Consumer Trustee under section 31(2) of the EII Act.
Network Infrastructure Strategy (NIS)	A document prepared by EnergyCo intended to create a transmission infrastructure development plan which coordinates within-REZ and downstream network augmentations to enable the most cost-effective building out of renewable generation.
Network Operator	A person who owns, controls or operates, or proposes to own, control or operate, network

	infrastructure. This may include either transmission or distribution network infrastructure.
Objects	The objects of the EII Act specified in section 3(1) and (2) of the EII Act (see Appendix).
Roadmap	The Electricity Infrastructure Roadmap is the NSW Government's plan to transform the NSW electricity sector into one that is cheap, clean and reliable. It is enabled by the EII Act.
Regulator	A person or body appointed under s. 64 of the EII Act to exercise the functions of a regulator. The Australian Energy Regulator (AER) has been appointed as a Regulator for the purposes of Part 5 of the EII Act.
Regulations	Electricity Infrastructure Investment Regulation 2021
Renewable Energy Sector Board Plan	The plan developed by the Renewable Energy Sector Board under section 7(4) of the EII Act.
REZ	Renewable Energy Zone
REZ Network Infrastructure Project	A network infrastructure project that (a) forms part of a REZ and (b) consists of network infrastructure of a class prescribed by the Regulations.
Transmission Efficiency Test (TET)	The Regulator's test to calculate the prudent, efficient and reasonable capital costs for development and construction of a REZ network infrastructure.
TET and Revenue Determination Guidelines	The Regulator's guidelines setting out its approach in making a revenue determination under the EII Act including conducting the TET.

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