



ELECTRICITY INFRASTRUCTURE ROADMAP

Network Infrastructure Projects (Part 5 of the Electricity Infrastructure Investment Act 2020)

Policy paper



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Shortened forms

Term	Meaning
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Department	NSW Department of Planning, Industry and Environment
EII Act	<i>Electricity Infrastructure Investment Act 2020</i>
EnergyCo	Energy Corporation of NSW
ISP	Integrated System Plan
LTES Agreement	Long-Term Energy Service Agreement
PTIP	Priority transmission infrastructure project
REZ	Renewable Energy Zone
RIT-T	Regulatory investment test for transmission
TET	Transmission Efficiency Test
TNSP	Transmission network service provider

Executive summary

The Electricity Infrastructure Roadmap (the Roadmap) is the NSW Government's plan to transform our electricity sector into one that is cheap, clean and reliable. It is enabled by the *Electricity Infrastructure Investment Act 2020* (EII Act), which passed into law with strong bi-partisan support in December 2020. The Roadmap will facilitate the declaration of Renewable Energy Zones (REZ), authorise new network infrastructure, and encourage private investment in new generation, long duration storage and firming infrastructure.

The intent of these reforms is to:

- address the 'chicken and egg' problem, where both new REZ network investment and new generation investment need certainty of the other before they can go ahead
- bring forward replacement generation and supporting REZ network investment to avoid price shocks that may result from the retirement of existing generation assets, and
- enable important network projects to progress to development in a faster timeframe than has traditionally occurred.

The EII Act introduces a new framework to identify, develop and deliver network infrastructure projects in New South Wales, and to determine the costs for these projects that can be recovered from electricity consumers. It also creates new functions for the Minister and creates new roles and entities, such as the Infrastructure Planner and the Consumer Trustee, to give New South Wales greater oversight of the electricity REZ network planning and investment processes.¹

The EII Act also provides for reliability-based approval processes for 'priority transmission infrastructure projects' in response to likely breaches of the energy security target. This paper focuses on 'REZ network infrastructure projects', not priority transmission infrastructure projects or other transmission projects being actioned under the Australian Energy Market Operator's Integrated System Plan.

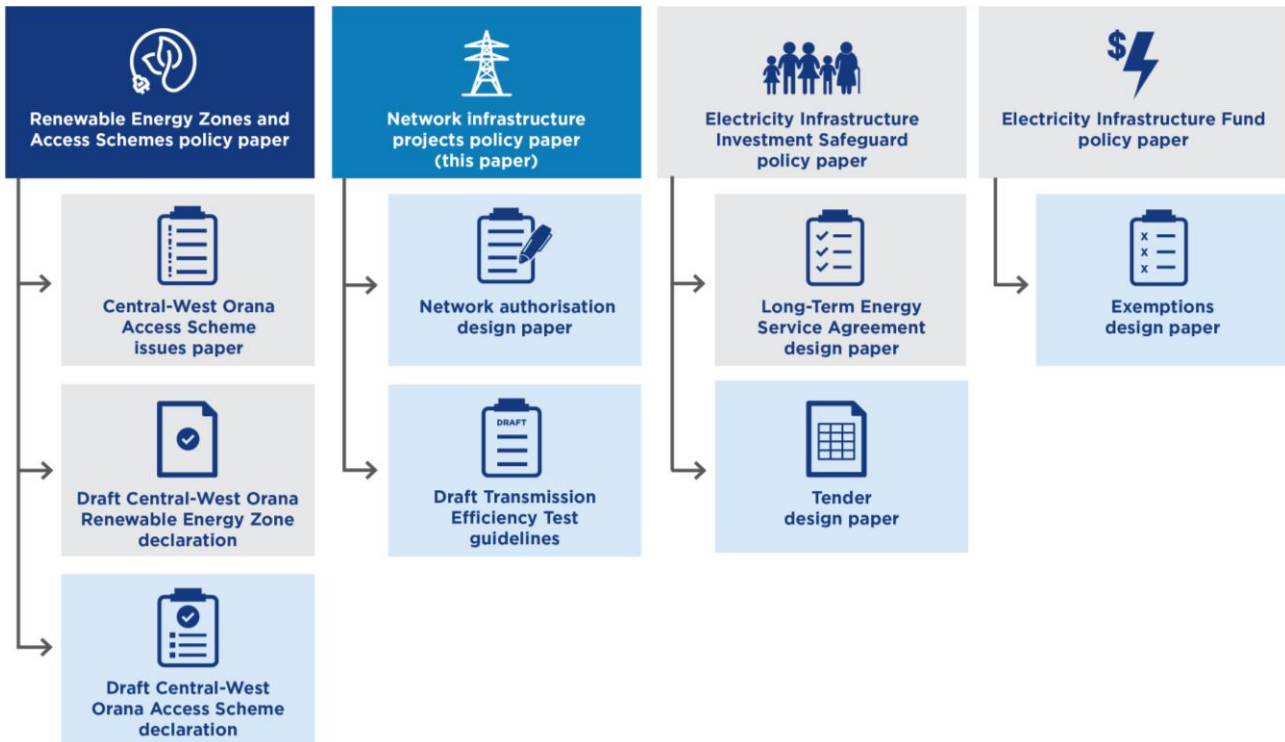
The NSW Department of Planning, Industry and Environment (the Department) is developing recommendations for regulations needed under the EII Act in three tranches throughout 2021. The first tranche of regulations, specific to the Renewable Energy Sector Board, were made in March 2021. The Department consulted on tranche two, relating to urgent and mechanical policy details, in May 2021. The third tranche (to which this paper relates) will seek feedback to inform the development of regulations under the EII Act.

To see how this paper fits into the Department's other consultations on the Roadmap, see the Overview Paper.

The focus of this paper is the role of REZ network infrastructure projects in implementing the Roadmap and supporting the objectives of the EII Act. It also sets out the scope of the policy issues relating to how REZ network infrastructure projects are proposed to be assessed, selected and to earn a regulated return. We actively seek and will value feedback on this paper.

¹ A person or body has not yet been appointed by the Minister to the role of the Regulator under the EII Act. Under section 64 of the EII Act, the Regulator must be the Australian Energy Regulator, the NSW Independent Pricing and Regulatory Tribunal or a person prescribed by the regulations.

Figure 1 Papers for stakeholder feedback including administrative detail or draft statutory instruments. Papers in grey boxes are publicly available.



Summary of REZ network infrastructure projects under the EII Act

Role of 'Network Operator' under the EII Act

The EII Act allows for the introduction of a contestable tendering process for the delivery of 'REZ network infrastructure projects'. The Network Operator or Network Operators that will develop, build, own (or lease), and finance new network infrastructure will be authorised by the Consumer Trustee or Minister on a project-by-project basis. This will mean the incumbent transmission or distribution Network Operator will not automatically have the exclusive right to develop, build, own (or lease) and finance assets that provide shared REZ network infrastructure services necessary for a REZ. Instead, the delivery of REZ network infrastructure projects could be competed for by multiple companies to help drive the most efficient outcome for NSW consumers. References to Network Operator in this paper are to the role described in this paragraph.

Notwithstanding the introduction of contestability, responsibility for transmission system operation will remain with Transgrid as the primary transmission network system provider in New South Wales.

Many REZ network projects will include augmentation of existing assets both inside and outside the geographic area of a REZ. It is expected those works will be developed, built, owned and maintained by the owners of those networks.

Regulator determination under the EII Act

Under the new framework, a Transmission Efficiency Test (TET) will be applied by the Regulator to calculate the prudent, efficient and reasonable capital costs incurred by a Network Operator for the development and construction of priority transmission infrastructure projects (PTIPs) and REZ network infrastructure projects. In parallel with calculating the TET, the Regulator will undertake a process to make a determination (drawing on the outcome of any contestable tender process if

relevant) of the overall costs the Network Operator will be paid to carry out the project, including costs for construction, operation and maintenance. The establishment of the EII Act provides the opportunity to consider which elements of the national regulatory framework should apply to relevant NSW network infrastructure projects, and which elements should change or apply in modified form. As an overarching principle, it is proposed that the AER, if appointed as the Regulator for the EII Act, would take a similar approach to the one it takes in the national framework, allowing for appropriate adaptations to accommodate contestability where relevant.

Below, we outline some of the key issues to be addressed in the design of this framework. Building on the roles and processes set out in the EII Act, we propose a framework for how the REZ network infrastructure project assessment, selection and revenue determination processes could be designed to address these issues. A summary of the proposed processes is provided in Figure 2 below.

A number of policy issues could be addressed through developing regulations or guidelines that prescribe or guide the discretion of the Infrastructure Planner, the Consumer Trustee, the Minister or the Regulator when making decisions under the EII Act. We seek stakeholder feedback on these matters via this paper.

Figure 2 Summary of proposed authorisation process for identifying, developing, authorising and making regulatory determinations for a REZ network infrastructure project



Summary of questions for stakeholders

In this policy paper, stakeholder feedback is sought on policy issues relating to REZ network infrastructure projects. The purpose of seeking this feedback is to inform the development of regulations, guidelines and other policy matters that will shape how the high-level framework under the EII Act is to be implemented. For convenience, these questions are collated below to align with sections of this paper.

Question related to the guiding principles

Question 1: Do you agree with the proposed guiding principles? Are there additional principles that should be considered?

Questions related to classification of REZ network infrastructure

Question 2: What are your views on the proposed approach to defining classes of network infrastructure?

Question 3: Are there any risks to the effective delivery of a REZ if the necessary system strength services are not included as a class of network asset under the EII Act?

Question related to the funding and financing of preparatory activities and development works

Question 4: Does the proposed method appropriately balance the transparency of costs recovered through the Scheme Financial Vehicle against the certainty needed to conduct preparatory activities and development works to deliver timely REZs?

Questions related to network infrastructure project authorisation

Question 5: What information relating to network options do LTES Agreement and access rights tender participants require to provide sufficient certainty and confidence to participate in the bid processes?

Question 6: What eligibility criteria should apply for Network Operators that may be authorised to carry out a REZ network infrastructure project?

Question 7: What factors should be considered by the Consumer Trustee in recommending that the Minister direct, and by the Minister in directing, a Network Operator to carry out a REZ network infrastructure project under the EII Act?

Questions related to the Transmission Efficiency Test and the Regulator's determination

Question 8: How can consumer and stakeholder input be considered in the TET and revenue determination processes?

Question 9: Is clarification required with regard to the principles to be taken into account by the Regulator and the objects of the Act, and are there any additional principles that should be considered by the Regulator?

Question 10: What views do you have on these elements and is there any other guidance that should be included in the TET guidelines to be developed by the Regulator?

Question 11: Should financeability concerns be addressed in the NSW framework?

Question 12: What views do you have on these elements and is there any other guidance that should be included in the guidelines regarding the revenue determination to be developed by the Regulator?

Question 13: Are there any elements of the AER's approach to assessing and setting regulated revenue requirements that should be modified or added to when considering the framework that will be applied under the EII Act in New South Wales?

Question 14: What do you think about an incentive scheme to ensure the availability of projects and the timely connection of generators to a REZ by Network Operators? How could that be designed?

Questions related to reviewing a revenue determination

Question 15: Do you agree there should be limited circumstances under which the Consumer Trustee directs the Regulator to review and remake a revenue determination outside of the five-yearly cycle?

Question 16: Do you agree with the proposed circumstances under which the Regulator may adjust a revenue determination during the five-yearly cycle?

Question 17: Is there a need to clarify the process for transitioning of assets between the NSW and national frameworks?

Question 18: Is there a need to clarify the circumstances under which a transfer of network infrastructure from a Network Operator to another person may occur under the EII Act?

Call for submissions

The Department invites submissions on the Network Infrastructure Projects policy paper.

Please provide your feedback as direct responses to the questions in this paper. This will help us incorporate your responses into our policy development process. You are encouraged to provide evidence to support your feedback.

Preferred option: You can respond to questions in the Network Infrastructure Projects policy paper by using the online form on the [Electricity Infrastructure Investment Regulations webpage](#).

Alternative options: Alternatively, you may fill in and return the submission form (Word document) available on the [Electricity Infrastructure Investment Regulations webpage](#). The Department also welcomes free form submissions instead of, or in addition to, the submission form. Please email your form and/or free form submission to Electricity.Roadmap@dpie.nsw.gov.au with '**Your Name – Part 5 Policy Paper – Submission**' in the subject line.

Please identify if you would like your submission to be confidential or anonymous.

Please note participation is voluntary, not assessable, and does not in any way include, exclude, advance or diminish any entity from any future procurement or competitive process in regard to Renewable Energy Zones, Long-Term Energy Service Agreements under the NSW Electricity Infrastructure Investment Safeguard, or any other NSW programs.

The Department is committed to an open and transparent process, and all survey responses and submissions will be made publicly available, except those requested to be kept confidential. **The Department will redact personal details from submissions made by individuals to protect personal information.** If a submission author regards any content of their submission as revealing protectable corporate intellectual property, they should clearly note and define this in their submission. In the absence of an explicit declaration, the Department will assume that information provided by respondents is not considered intellectual property of the respondent.

If you wish for your written submission to remain confidential (except to Department project staff and advisors, who are subject to appropriate confidentiality arrangements), please clearly state this in your submission, and only your organisation's name will be published.

The Department may disclose confidential information provided by you to:

- NSW Government departments, NSW Ministers and Ministers' Offices
- the NSW Ombudsman, Audit Office of NSW or as may be otherwise required for auditing purposes or Parliamentary accountability
- the Energy Security Board, Australian Energy Market Operator, Australian Energy Market Commission, Australian Energy Regulator, Independent Pricing and Regulatory Tribunal or the Australian Competition & Consumer Commission
- the Clean Energy Finance Corporation or the Australian Renewable Energy Agency
- the entities appointed or to be appointed by the Consumer Trustee, Financial Trustee, Scheme Financial Vehicle, and the Regulator under the EII Act
- other parties where authorised or required by law to be disclosed.

Where the Department discloses information to any of these parties, it will inform them that it is strictly confidential. The Department may publish or reference aggregated findings from the consultation process in an anonymised way that does not disclose confidential information.

Context, policy intent and scope of this policy paper

This section provides the strategic and policy context with respect to the role of network infrastructure projects in implementing the Electricity Infrastructure Roadmap (the Roadmap) and supporting the objectives of the *Electricity Infrastructure Investment Act 2020* (EII Act). In particular, network investments will be required to support the delivery of infrastructure that generates at least the same amount of electricity in a year as 12 gigawatts of new renewable generation capacity by 2030.² There is another minimum objective to develop 2 gigawatts of long duration storage infrastructure across New South Wales by 2030.

It also sets out the scope of the policy issues contained in this paper relating to how Renewable Energy Zone (REZ) network infrastructure projects are proposed to be assessed, selected and to earn a regulated return.

Context for REZ network infrastructure projects

National framework

Prior to recent rule changes, the national framework³ was taking three to four years to progress large transmission infrastructure projects through regulatory approvals.⁴ This includes the regulatory investment test for transmission (RIT-T) to select the project, and the revenue determination (or contingent project determination) to approve regulated cost recovery through transmission charges.

In the RIT-T, the transmission network service provider (TNSP) is the project proponent responsible for developing and assessing all credible options under a reasonable range of plausible states of the world, selecting a preferred option, obtaining relevant planning approvals and applying to the national regulator for revenue approval. The RIT-T process involves three stages:

- Project Specification Consultation Report for consultation with all registered participants, the Australian Energy Market Operator (AEMO) and interested parties on the need for the project
- Project Assessment Draft Report for consultation with all registered participants, AEMO and interested parties on the net market benefits on the options
- Project Assessment Conclusions Report to respond to stakeholder feedback with revised analysis and identify the preferred option.

This process can take up to four years (with the pre-construction and construction work occurring sequentially thereafter) and involves a significant degree of uncertainty as to the eventual outcome.

Under the national framework, Network Operators of large projects have typically needed to commence pre-construction planning works and incurred significant costs prior to the revenue or contingent project determination. This encourages Network Operators either to reduce the amount of pre-construction planning and costs (which could increase later construction costs through less thorough upfront planning), defer some pre-construction costs until there is more certainty on the regulatory cost allowances, or seek government underwriting to address this risk.

² EII Act, Part 6, section 44.

³ For the purposes of this paper, the 'national framework' refers to the National Electricity Law and the National Electricity Rules, as they apply in New South Wales.

⁴ Energy Security Board 2020, [ESB Fact Sheet: Transmission Network Service Provider Interaction with Proposed ISP Rules Framework \(PDF 392KB\)](#).

The recent national reforms to fast-track some Integrated System Plan projects are designed to shorten timeframes for specific ‘actionable’ projects to under two years⁵ and allow projects to be considered in stages. These reforms allow costs for some pre-construction works to be approved for recovery before construction is complete.

The Central-West Orana REZ network is the only NSW REZ network project currently identified as ‘actionable’ in AEMO’s 2020 Integrated System Plan.

The Department of Planning, Industry and Environment (the Department) also notes that the Australian Energy Market Commission (AEMC) is currently undertaking projects relevant to the issue of transmission planning and development, including a review into transmission planning and investment.⁶

Intent of the Roadmap

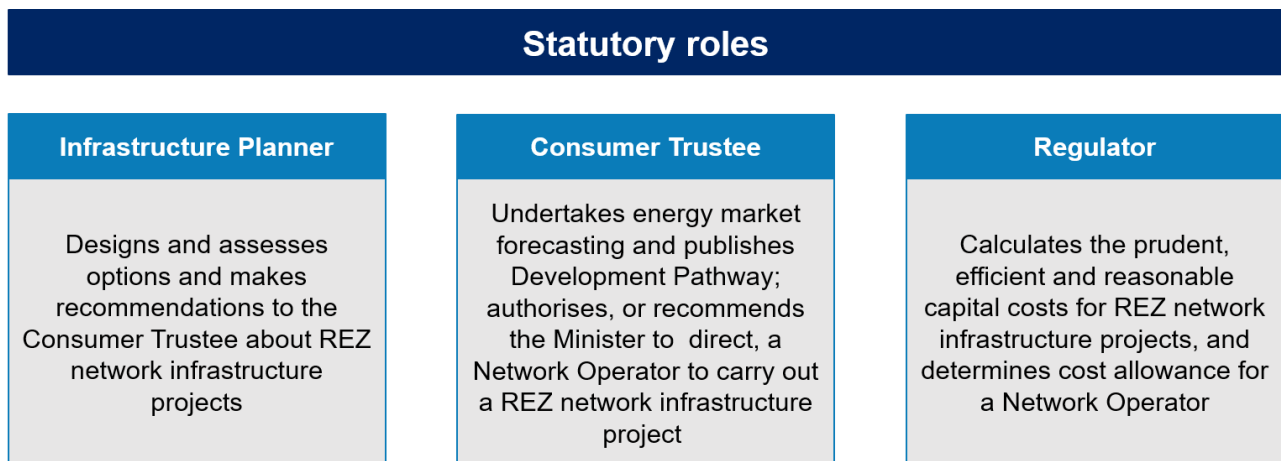
The Roadmap is intended to coordinate investment in new network infrastructure with investment in new energy generation, long duration storage and firming infrastructure. This infrastructure is expected to be developed primarily within REZs, though some projects may be located outside a REZ.

Network infrastructure is needed to ensure the electricity produced within the REZs can supply load centres. This network infrastructure includes both greenfield infrastructure connecting REZ generation to the existing network, and augmentation of existing network infrastructure. Network infrastructure includes transmission and distribution infrastructure, such as power lines and substations, as well as other technologies that provide system strength, enhance transfer capacity or other system security services.

Part 5 of the EII Act establishes a NSW-specific framework for selecting network infrastructure projects (the authorisation process), calculating their prudent, efficient and reasonable capital costs (the Transmission Efficiency Test or TET) and determining the overall costs that can be recovered from consumers (the determination process).

The framework under Part 5 of the EII Act introduces key roles for several new statutory roles, summarised below in Figure 3.

Figure 3 Roles under Part 5 of the EII Act



⁵ Energy Security Board 2020, [ESB Fact Sheet: Transmission Network Service Provider Interaction with Proposed ISP Rules Framework \(PDF 392KB\)](#).

⁶ AEMC, Transmission Planning and Investment Review, Consultation paper, 19 August 2021.

The intent of the framework under Part 5 of the EII Act is to:

- address the ‘chicken and egg’ problem where new network and new generation projects both need certainty of each other before investments can be made
- bring forward supporting network investment so replacement generation can connect before the retirement of existing power stations, and
- enable important network infrastructure projects to progress through pre-construction, construction and operation in a faster timeframe than has historically occurred.

These reforms are also intended to provide the NSW Government with greater oversight of network infrastructure project assessments to remove the need for ad hoc government underwriting and intervention.

This may allow for a broader suite of costs and benefits – including environmental externalities, fostering local community support, financing arrangements and other factors – to be taken into account in determining whether to proceed with a project, how projects should be staged and funded, and how costs should be recovered.

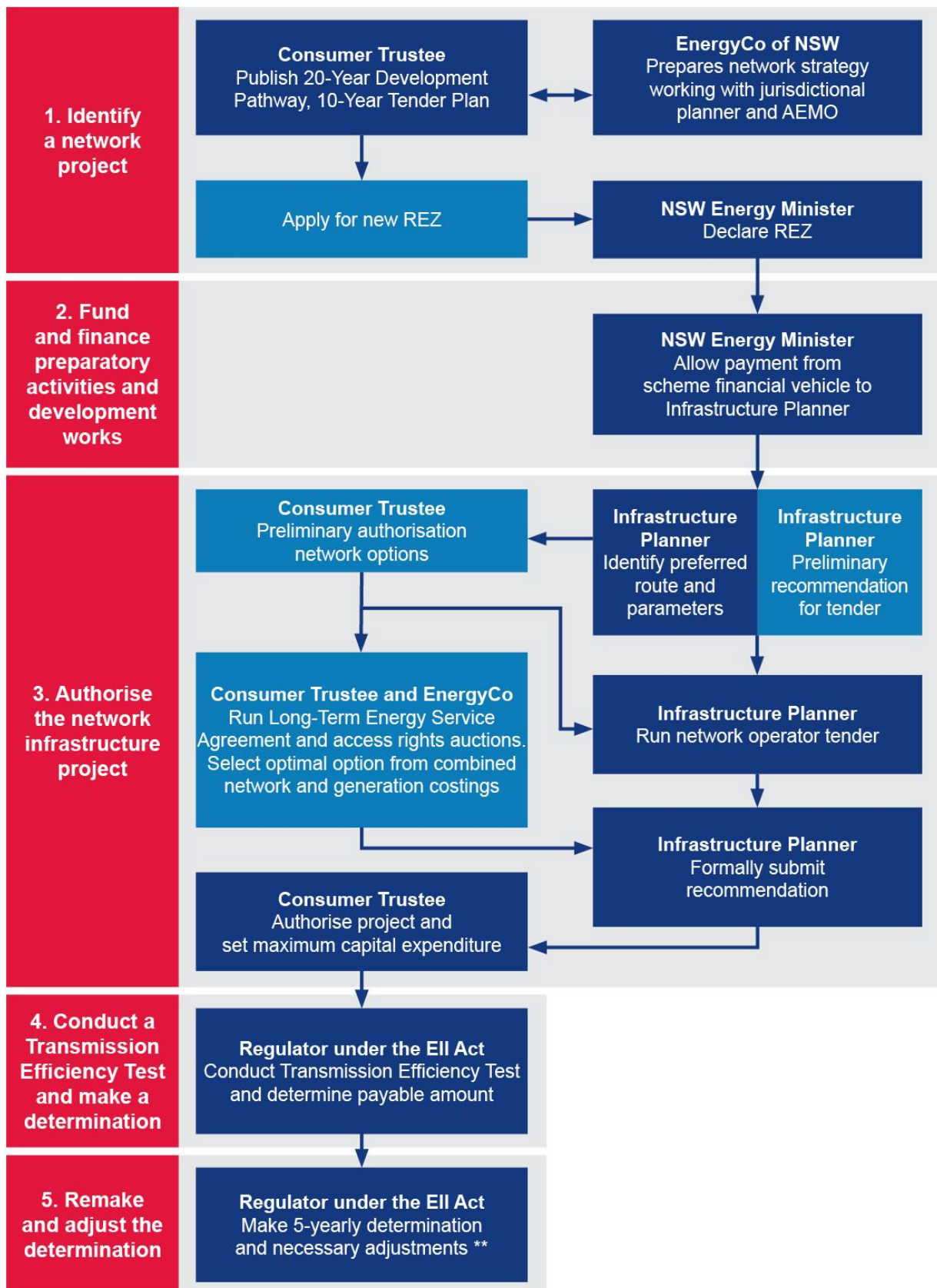
Overview of the REZ network authorisation process

Part 5 of the EII Act sets out a high-level process for identifying, developing and delivering REZ network infrastructure projects. Specific detail of the process is to be defined through regulations under the EII Act and through guidelines to be developed by the Infrastructure Planner, the Consumer Trustee, and the Regulator. The proposed REZ network authorisation process is summarised in Figure 4 and described below.

We envisage that throughout the process the Consumer Trustee and Infrastructure Planner will engage collaboratively as they work to deliver REZ network infrastructure projects. To enable the Infrastructure Planner and the Consumer Trustee to perform their functions, a significant exchange of information will occur on an ongoing basis and throughout the authorisation process. These interactions are intended to be set out and managed via a set of guidelines to be developed and agreed by both parties (the Network Authorisation Guidelines).

Each of the key components of the proposed REZ network authorisation process is discussed further in the sections below.

Figure 4 Summary of proposed authorisation process for identifying, developing, authorising and making regulatory determinations for a REZ network infrastructure project



*Mid blue boxes are optional steps that may not occur prior to Consumer Trustee authorisation for all REZ network infrastructure projects

**Remaking and adjusting revenue determinations will have a narrower scope where a Network Operator has been chosen through a contestable process (eg: applying incentive schemes and CPI adjustments)

Step 1. Identify a network project

The process to identify a network infrastructure project under the EII Act begins with the Consumer Trustee, which is required to prepare a report every two years about the infrastructure investment objectives. The Infrastructure Investment Objectives Report must contain:

- a 20-Year Development Pathway setting out the generation, long duration storage infrastructure and (as required) firming infrastructure required to be constructed over the following 20 years to achieve the infrastructure investment objectives, and
- a 10-Year Tender Plan for competitive tenders for Long-Term Energy Service Agreements (LTES Agreements) over the following 10 years to give effect to the Development Pathway.

The Department intends that the Consumer Trustee's reports will be informed by a network strategy, prepared by the Energy Corporation of NSW (EnergyCo) as Infrastructure Planner, through a joint planning process involving AEMO and the Jurisdictional Planning Body (Transgrid), and which will set out the network infrastructure investments necessary to give effect to the Development Pathway.

The identification of a network project is discussed further under *Identifying a network infrastructure project* below.

Step 2. Fund and finance preparatory activities and development works

The Infrastructure Planner will identify and assess options for the network infrastructure necessary to deliver a REZ. This includes undertaking preparatory activities and development works for the project, like planning studies and community engagement, to finalise its recommendation to the Consumer Trustee and the timely delivery of the REZ network infrastructure.

To avoid delays that often arise under the national framework, the Department proposes that these preparatory activities and development works be undertaken by the Infrastructure Planner prior to the authorisation of a Network Operator to carry out a project. This is discussed further under *Funding and financing preparatory activities and development works* below.

Step 3. Authorise the network project

The Infrastructure Planner will develop recommendations regarding REZ network infrastructure projects and provide these to the Consumer Trustee.

Under the Department's proposed process, the Infrastructure Planner will have the option of developing a preliminary (or indicative) recommendation, which may be submitted to the Consumer Trustee for preliminary authorisation prior to any LTES Agreement and access rights tenders for generation infrastructure in the relevant REZ. A preliminary authorisation is not final but is intended to provide confidence to bidders regarding the network infrastructure in the REZ and enable the provision of more detailed and competitive offers. The Department does not expect that LTES Agreement and access rights tenders will always be linked to the selection of a final technical option for the REZ network infrastructure project. Tenders will be open to all projects connected to the NSW National Electricity Market region and will not be REZ specific. However, the access rights available in any tender will be limited to those REZs with declared access schemes and available access rights.

Where beneficial and practical, the Department expects the Infrastructure Planner⁷ will run a contestable process to procure a Network Operator to recommend to the Consumer Trustee to

⁷ The Department expects that regulations will be made under section 30(2) of the EII Act requiring the Infrastructure Planner to select and recommend a Network Operator to the Consumer Trustee.

carry out the REZ network infrastructure project.⁸ This may take the form of a tender, but in certain circumstances contestable provision may be unfeasible and an incumbent Network Operator (such as Transgrid) may be recommended.

Where a REZ network infrastructure project is not to be informed by the results of an LTES Agreement tender, the Infrastructure Planner could simply provide its recommendation (with no prior 'preliminary recommendation') to the Consumer Trustee for authorisation prior to that tender being conducted.

Once received, the Consumer Trustee will consider whether to authorise the Network Operator to carry out the REZ network infrastructure project under section 31 of the EII Act. In other words, it is the role of the Infrastructure Planner to prepare a pipeline of REZ network infrastructure projects, necessary to create opportunities for new generation; it is the role of the Consumer Trustee to decide *which* of these projects should proceed and *when*.

The Consumer Trustee will make this decision having regard to:

- its Infrastructure Investment Objectives Report (prepared by the Consumer Trustee under section 45 of the EII Act), which amongst other things, sets out objectives to deliver certain amounts of generation infrastructure over time, and
- its duty to act in the long-term financial interests of consumers, which requires it to balance ensuring sufficient network capacity is available so generation LTES Agreement tenders are competitive, with ensuring network charges are not excessive.

If the Consumer Trustee authorises the Infrastructure Planner's recommendation, 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. The purpose of this cap is to set an amount for the network infrastructure project above which the costs would no longer justify the project. In practice, this will require the Consumer Trustee to consider the circumstances that would justify discontinuing a project and authorising an alternative project.

The proposed authorisation process is discussed further under *Network infrastructure project authorisation* below.

Step 4. Conduct a Transmission Efficiency Test and make a determination

The Regulator will conduct a Transmission Efficiency Test (TET) to determine a prudent, efficient and reasonable capital cost for the development and construction of the network infrastructure project. The Regulator will also determine the amount payable to the Network Operator for the project consisting of return on capital costs, return of capital costs, and an allowance for operating and other costs. The amount determined by the Regulator under the TET must not exceed the maximum amount set by the Consumer Trustee.

The use of a contestable process to select the Network Operator for a project will necessarily require a modified scope and process for the TET and revenue determination to use the costs and other information provided in the successful tender proposal.

Once the Regulator has made its revenue determination, the Scheme Financial Vehicle is required to pay the Network Operator the amount the Network Operator is entitled to recover in accordance with the Regulator's determination.

The TET and the Regulator's determination are discussed further under *Transmission Efficiency Test and the Regulator's determination* below.

⁸ Appointment of a Network Operator as a result of a contestable market tender process would grant a right to own (or lease), develop, construct and finance the new REZ network infrastructure project. The right to operate and maintain the assets will have reference to the AEMC's new rules for 'designated network assets'. Transmission system operation will remain the responsibility of Transgrid as the NSW primary transmission network system provider.

Step 5. Remake and adjust the determination

The EII Act outlines that the Regulator is to remake a revenue determination once every five years or when directed by the Consumer Trustee. In addition, the Regulator may review and remake a determination at any other time prescribed by regulation. The intention of making a revenue determination and having clarity on when it is reviewed is to provide certainty to Network Operators, consumers and other stakeholders, and therefore it is prudent to clarify the circumstances for this process. The parameters which may be reviewed may be limited to those related to external factors, for example inflation or the corporate tax rate.

The circumstances in which the Regulator's determination may be reviewed and/or remade is discussed further under *Reviewing a revenue determination*.

Priority transmission infrastructure projects

This policy paper focuses on the delivery of REZ network infrastructure projects under the EII Act. The EII Act also establishes a process for delivering priority transmission infrastructure projects (PTIPs).

There are limited circumstances in which the Minister may authorise or direct a Network Operator to carry out a PTIP and feedback on the policy for REZ network infrastructure projects will inform the development of PTIP policy. The process for these projects is outlined at a high level below and we would welcome stakeholder feedback on this.

Roles and responsibilities

PTIPs refer to transmission projects that are located in New South Wales and identified in, or form part of, a NSW infrastructure project identified in the most recent Integrated System Plan published by AEMO. This means PTIPs are not necessarily related to a REZ; rather, they are those projects within the Integrated System Plan that are then identified by the Minister as an appropriate response to address forecast breaches of the NSW Energy Security Target.⁹

Before this, the Minister must consult with several stakeholders, including the Minister for Planning and Public Spaces, AEMO, the Regulator, and distribution businesses and TNSPs.

A Network Operator may carry out a PTIP that is authorised by the Minister, and must carry out such a project on the direction of the Minister. The Regulator is required to apply the TET and determine the prudent, efficient and reasonable costs of carrying out the PTIP.

Proposed process

The way a PTIP is identified and authorised or directed to be carried out is different to a REZ network infrastructure project, but the way costs are recovered through the regulatory process is the same. This process is outlined at a high level in Figure 5 below.

Under the EII Act, the NSW energy security target monitor identifies whether there is a shortfall of firm capacity to meet the Energy Security Target. The Minister may respond to an identified shortfall by deciding (amongst other things) to progress with a PTIP. The EII Act requires that a PTIP must be identified in whole or as part of a NSW project in AEMO's most recent Integrated System Plan.

The Minister must be satisfied of a number of conditions (e.g. the PTIP is an appropriate response to the forecast shortfall) and must consult specific stakeholders (i.e. the Minister for Planning and Public Spaces, AEMO, the Regulator, distribution businesses and TNSPs).

⁹ The Energy Security Target is the target set by the energy security target monitor in accordance with section 12 of the EII Act.

Figure 5 PTIP process



Cost recovery by the Network Operator for carrying out the PTIP follows the same regulated process of the TET and determination as outlined under *Transmission Efficiency Test and the Regulator's determination* below.

Scope of the paper

This paper is one of many the Department is releasing to support the detailed policy design and implementation of the Roadmap framework.

Figure 1 shows papers that have been consulted on recently or that will be released over the coming months.

This paper includes proposed approaches to various policy design issues related to REZ network infrastructure projects and is structured as follows:

- **This section** – Provides the strategic and policy context for the role of network infrastructure projects in implementing the Roadmap and supporting the objectives of the EII Act.
- **Guiding principles** – Details the principles to be used by the Department to consider policy positions relating to network infrastructure projects under Part 5 of the EII Act. In assessing the issues and options raised in this paper, one or a number of these guiding principles may be applicable.
- **Classes of network infrastructure** – Discusses how a REZ network infrastructure project is a network infrastructure project forming part of a REZ and may consist of various classes of network infrastructure prescribed by the regulations.
- **Identifying a network infrastructure project** – Considers the coordinated approach under the EII Act to identify network infrastructure projects for a REZ.
- **Funding and financing preparatory activities and development works** – Outlines the mechanism for cost recovery under the EII Act in relation to preparatory activities and development works undertaken ahead of the broader authorisation and revenue determination for project construction.
- **Network infrastructure project authorisation** – Discusses provisions in the EII Act that require the Infrastructure Planner to assess and make recommendations to the Consumer Trustee about REZ network infrastructure projects, as well as the Consumer Trustee's role in authorising a Network Operator to carry out a recommended REZ network infrastructure project.
- **Transmission Efficiency Test and the Regulator's determination** – Sets out matters related to the nature and scope of the Transmission Efficiency Test and revenue determination the Regulator will undertake for a network infrastructure project.
- **Reviewing a revenue determination** – Sets out issues related to how the Regulator may review and adjust revenue determinations made under the EII Act.

Although the focus of this paper is on the NSW process as it applies to REZ network infrastructure projects, we note the EII Act establishes a separate process for progressing PTIPs referenced above. To direct or authorise a PTIP, the Minister must be satisfied it is an appropriate response to a forecast breach of the NSW Energy Security Target and is in the public interest. The PTIP regime is out of scope of this paper but is briefly examined above under *Priority transmission infrastructure projects*.

Guiding principles

This section lists the guiding principles to be used by the Department to consider policy positions relating to network infrastructure projects under Part 5 of the EII Act. In assessing the issues and options raised in this paper, one or a number of these guiding principles may be applicable.

Table 1 Guiding principles network infrastructure projects under Part 5 of the EII Act

Principle	Key requirements
Timely implementation	<ul style="list-style-type: none"> • Enable network infrastructure projects to be developed and delivered in the same or faster timeframe than traditionally achieved under the national framework
Maintain existing roles in reliability and system security	<ul style="list-style-type: none"> • Avoid changes from the existing national framework which would disperse existing governance of system operations so that existing responsibilities for security and reliability remain intact
Consumer interests	<ul style="list-style-type: none"> • Protect the long-term financial interests of NSW electricity customers
Address key risks and barriers to network investment	<ul style="list-style-type: none"> • Promote the coordinated delivery of network infrastructure and renewable generation under the EII Act that delivers the lowest cost to NSW consumers including realising the benefits of coordination for system security • Ensure projects required under the NSW framework are financeable by Network Operators • Provide for contestable delivery options where feasible and beneficial • Maintain the social licence to build and operate network infrastructure in New South Wales
Legislative consistency	<ul style="list-style-type: none"> • Ensure consistency with the objects of the EII Act¹⁰ • Support the infrastructure investment objectives of the EII Act¹¹ • Integrate the design and allocation of access rights and LTES Agreements
Facilitate appropriate cost and risk sharing arrangements	<ul style="list-style-type: none"> • Allow for sharing of costs and risks between generators, consumers, Network Operators, contractors and other stakeholders such that risks are allocated to parties best able to manage them
Regulatory efficiency	<ul style="list-style-type: none"> • Reduce administrative burden and regulatory confusion by aligning with the national framework where beneficial and feasible

Question for stakeholders

1. Do you agree with the proposed guiding principles? Are there additional principles that should be considered?

¹⁰ Section 3 of the EII Act.

¹¹ Section 44 of the EII Act.

Classes of network infrastructure

Scope and purpose

The EII Act defines a REZ network infrastructure project as a network infrastructure project that forms part of a REZ and consists of classes of network infrastructure prescribed by the regulations.¹² This means that only network infrastructure projects that form part of a REZ and consist of network infrastructure of a class prescribed by the regulations can be subject to Part 5 of the EII Act.

The purpose of these classes of network infrastructure is to clarify further and to define the types of network infrastructure (defined under the EII Act as transmission infrastructure and distribution infrastructure) that can make up a REZ project that is potentially subject to assessment, authorisation or direction (and ultimately regulation) under Part 5 of the EII Act.

Background

In the issues paper titled *Tranche two regulations to support the Electricity Infrastructure Roadmap* released in April 2021, the Department set out a preliminary identification of the nature of regulations relating to the classification of network infrastructure.

In response to the issues paper, stakeholders supported an approach that was broadly consistent with the National Energy Rules definitions as this would maintain consistency between REZs and the broader electricity network. Stakeholders also supported further consultation, including clarification on the treatment of different types of assets (such as non-network options). Another key issue raised by stakeholders was the relationship between REZ assets and the broader existing transmission or distribution network.

Proposed position

We have taken account of stakeholder feedback and propose to develop classes of network infrastructure in regulations that are consistent with definitions in the National Electricity Rules. It is expected that the types of network infrastructure that can make up a project to be carried out under the EII Act will be similar to the types of network infrastructure delivered under the National Electricity Rules. There may be exceptions to this, and the Department intends to work through this further as it develops regulations. For example, it may be appropriate to clarify that dedicated connection assets will not be considered network infrastructure under the EII Act (as they provide connection services under the National Electricity Rules).

The Department is doing further work to develop a policy position on whether there is a need to clarify the relationship between the classes of infrastructure and the services they provide. This is relevant in particular for the network infrastructure that will be subject to economic regulation under Part 5 of the EII Act, as the Regulator requires an understanding of what service the asset is providing and for what purpose. This would be consistent with the approach in the National Electricity Rules. The classes being considered are outlined in Table 2 below.

¹² See the definition of REZ network infrastructure project in the Dictionary of the EII Act.

Table 2 A description of the proposed approach to classes of network infrastructure

Class	Types of assets
Class 1 – Transmission	Transmission assets as defined in the National Electricity Rules ¹³
Class 2 – Distribution	Distribution assets as defined in the National Electricity Rules ¹⁴
Class 3 – Network infrastructure (services)	Non-network options to meet transmission or distribution network needs other than by investment in assets described in classes 1 or 2 ¹⁵
Class 4 – System security	Plant or services providing system security support for a REZ

Box 1 – System strength rule change

System strength has become increasingly critical as the power system transitions to a higher proportion of renewable generators connected via inverters, and synchronously connected generation plant exits the market.

The AEMC is currently progressing a rule change, *Efficient management of system strength on the power system*, that sets a new framework under the National Electricity Rules for the provision of system strength. The AEMC published its draft rule on 29 April 2021.

Under the draft rule, a new standard for system strength would be defined in the National Electricity Rules and AEMO would be responsible for declaring system strength nodes where the standard is to apply. The TNSP that is the Jurisdictional Planning Body for the region would then be obligated to meet this standard for system strength as part of its network planning responsibilities as a regulated transmission service. While the TNSP may coordinate with other network businesses and AEMO, it would be primarily responsible for providing system strength services.

The Department is considering the way in which the new national framework for system services will integrate with NSW REZs and specifically whether system strength services need to be included as a class of network assets for REZ projects, or may instead be delivered under the national framework.

¹³ The apparatus, equipment and plant, including transmission lines and substations of a transmission system (definition used in National Electricity Rules network planning and investment rules in the context of RIT-T and Integrated System Plan projects).

¹⁴ The apparatus, equipment and plant, including distribution lines, substations and sub-transmission lines, of a distribution system (definition used in National Electricity Rules network planning and investment rules in the context of RIT-T and Integrated System Plan projects).

¹⁵ Modified form of the National Electricity Rules definition of ‘non-network options’ used in National Electricity Rules network planning and investment rules in the context of RIT-T and Integrated System Plan projects.

Relationship to the functions of the Regulator

The sections below entitled *Transmission Efficiency Test and the Regulator's determination* and *Reviewing a revenue determination* outline the scope, purpose and responsibilities in regulating projects under Part 5 of the EII Act. Under the national framework, the Australian Energy Regulator (AER) regulates network businesses under the National Electricity Rules based on the services assets provide. The Department is considering whether there is a need to create a similar link between the classes of network infrastructure that comprise a project and the services those assets provide for the purposes of regulation under Part 5 of the EII Act.

Questions for stakeholders

2. What are your views on the proposed approach to defining classes of network infrastructure?
3. Are there any risks to the effective delivery of a REZ if the necessary system strength services are not included as a class of network asset under the EII Act?

Identifying a network infrastructure project

Scope and purpose

Network constraints have been identified as a critical roadblock to the development of new renewable generation capacity in New South Wales. The process for developing new network infrastructure under the National Electricity Rules has, until recently, been mostly driven by the incumbent transmission providers. The regulatory framework imposes a lengthy process that favours the development of transmission infrastructure on an incremental and 'just in time' basis.

The EII Act provides a more coordinated approach than the process that occurs under the national framework for the identification of network infrastructure projects for a REZ via centralised network planning. New government-appointed entities will assume network planning responsibilities for REZs, which would otherwise fall to network businesses. This will allow for a greater degree of coordination between investment in, and development of, network and generation infrastructure in line with the objectives of the EII Act.

The Minister is required to appoint an Infrastructure Planner for each REZ to assess and make recommendations regarding network infrastructure. The EII Act also requires the Minister to appoint other bodies that will be involved in network planning, including the Consumer Trustee, the energy security target monitor and the Regulator – at the date of this paper, most of these appointments have not yet been made, although the Minister has announced that the Consumer Trustee will be a subsidiary of AEMO.¹⁶ The EII Act further introduces changes to the roles of existing parties in the network planning process, such as the Minister and AEMO.

Roles and responsibilities

National framework

Under the current national framework, the Primary TNSPs are responsible for network planning in each jurisdiction, with AEMO taking a more proactive role in system planning recently through its Integrated System Plan. The relevant TNSP conducts annual network planning reviews and identifies projects required to address system limitations. The Primary TNSP is then the proponent of the identified project and is responsible for assessing credible project options and selecting a preferred option to deliver.

Roadmap

The EII Act re-allocates network planning functions for REZs with the objective of ensuring closer coordination of investment in generation and REZ network assets to meet the targets set in the EII Act and detailed in the Infrastructure Investment Objectives Report. TNSPs do not have formal REZ network planning responsibilities under the EII Act. Instead, two new entities are introduced – the Infrastructure Planner and the Consumer Trustee – with key roles in planning and decision-making for REZ network infrastructure projects.

The Consumer Trustee's legislated planning responsibilities include the preparation of a plan, known as the Infrastructure Investment Objectives Report, for coordinated and timely investment in generation, long duration storage and firming infrastructure, similar to AEMO's role developing the Integrated System Plan.¹⁷ The Department proposes that this plan be supplemented by a network strategy for network infrastructure published by EnergyCo. Like the other components of the

¹⁶ See Electricity Infrastructure Investment Amendment (Consumer Trustee) Regulation 2021. Consistent with section 60(3) of the EII Act, the intention of this appointment is to ensure the Consumer Trustee can exercise its functions independently of government.

¹⁷ Under section 45 of the EII Act, the Consumer Trustee is required to prepare a report on these matters every two years.

Consumer Trustee's Infrastructure Investment Objectives Report, this will be both an input to, and draw upon, AEMO's Integrated System Plan and Transgrid's Transmission Annual Planning Report as jurisdictional planner. Network plans for the NSW distribution businesses will also be taken into account.

Under the EII Act, the Minister is required to appoint EnergyCo as the Infrastructure Planner for the delivery of the Central-West Orana, Illawarra, New England, South West and Hunter-Central Coast REZs. The Infrastructure Planner's network planning responsibilities under the EII Act include assessing and making recommendations to the Consumer Trustee on the REZ network infrastructure projects required to meet an identified network need for the relevant REZ. The Infrastructure Planner will also undertake preparatory activities and development works (including community consultation and land acquisition) to inform its recommendations.

Proposed process

The EII Act requires the Consumer Trustee to prepare a report every two years about the infrastructure investment objectives. The report must contain a 20-Year Development Pathway setting out the generation, long duration storage and firming infrastructure required to be constructed over the following 20 years to achieve specified infrastructure investment objectives. This report has similarities with AEMO's Integrated System Plan; iterations of the Integrated System Plan will incorporate the most recent Development Pathway and inform future Development Pathways.

The 20-Year Development Pathway may demonstrate or identify the need for REZ network infrastructure projects. The Consumer Trustee's report will also include a 10-Year Tender Plan for competitive tenders for the award of LTES Agreements over the following 10 years to give effect to the Development Pathway.

Box 2 – Infrastructure investment objectives

The EII Act establishes a set of infrastructure investment objectives, which include certain minimum objectives required to be met by the end of 2029 as well as overall objectives.

The minimum objectives are:

- construction of generation infrastructure that generates at least the same amount of electricity in a year as 3 gigawatts of generation capacity from the Central-West Orana REZ, 8 gigawatts of generation capacity from the New England REZ and one additional gigawatt of generation capacity, and
- construction of long duration storage infrastructure with 2 gigawatts capacity.

The overall objectives are:

- construction of generation infrastructure necessary to minimise electricity costs for NSW electricity customers
- construction of long duration storage infrastructure necessary to meet the legislated reliability standard,¹⁸ and
- construction of firming infrastructure necessary to meet the legislated Energy Security Target and the reliability standard.

¹⁸ The reliability standard is the standard implemented by AEMO under the National Electricity Rules and prescribed by the regulations.

The Consumer Trustee is required to consider the latest 20-Year Development Pathway when exercising its functions to authorise or recommend that the Minister direct a REZ network infrastructure project.

We propose that EnergyCo develop a network strategy to set out the network infrastructure investments that could give effect to the Consumer Trustee's 20-Year Development Pathway. This will become an input to the Consumer Trustee's biennial report. We propose that EnergyCo develop the network strategy with AEMO, in its capacity as national transmission planner, Transgrid, as the Jurisdictional Planning Body for New South Wales, the NSW distribution businesses and other parties as relevant.

The identification through this process of additional network infrastructure needed to deliver REZs may trigger an application to the Minister to formally declare a new REZ or amend an existing declaration to include this network infrastructure (if required). Such an application is not necessary to declare the five REZs already identified in the EII Act.¹⁹

The Minister must formally declare a REZ before a REZ network infrastructure project is authorised by the Consumer Trustee, and the Regulator makes a revenue determination, under the EII Act. The Minister's REZ declaration must, amongst other things, specify the geographic location of the REZ, the intended network capacity for network infrastructure within the REZ, and the Infrastructure Planner for the REZ.

¹⁹ Section 23 of the EII Act.

Funding and financing preparatory activities and development works

Scope and purpose

The EII Act provides a mechanism for cost recovery in relation to preparatory activities and development works undertaken ahead of the broader authorisation and revenue determination for project construction being completed. Preparatory activities and development works include those activities required for the Infrastructure Planner to develop a preliminary recommendation for a specific REZ network infrastructure project with sufficient detail and certainty to:

- enable the Infrastructure Planner to recommend to the Consumer Trustee a Network Operator to undertake such projects (such as through a competitive tender), and
- enable the Consumer Trustee to conduct tenders for LTES Agreements and determine access fees for generation and storage infrastructure.

Development works undertaken by or for the Infrastructure Planner may include conducting route selection and land acquisition, network studies, community engagement, planning approvals and carrying out a competitive process to select a Network Operator.

EnergyCo, as the Infrastructure Planner, intends to conduct these preparatory activities and development works prior to the Consumer Trustee's authorisation of a project to allow the Infrastructure Planner to present more detailed recommendations to the Consumer Trustee and to facilitate more timely commencement of project construction following authorisation.

As already noted, the national framework has created challenges for network service providers progressing pre-construction development works ahead of the entire project being approved and revenue determined. Network service providers can commence work at risk, governments can step in and underwrite the risk, or the works will be delayed until the revenue is determined. Delays to pre-construction works can result in delays to the entire project development timeline. We note the AEMC is currently considering this issue in the context of the national framework.

Facilitating pre-construction development works for projects progressing under the EII Act will be important to ensure early community engagement and timely project delivery. Enabling more works to be undertaken earlier in the process could also help refine and detail the proposed project, resulting in more accurate cost forecasts.

The EII Act provides options for facilitating these works, including cost recovery options for the Infrastructure Planner. A key issue will be facilitating pre-construction development works into the network identification and authorisation processes, and how to implement this to achieve the most efficient outcomes.

Roles and responsibilities

National framework

Under the national framework TNSPs can submit contingent project applications to the AER to recover forecast costs associated with early design and planning works for actionable Integrated System Plan projects. TNSPs are also required to conduct low-cost preparatory activities for actionable Integrated System Plan projects. A subsequent contingent project application may allow TNSPs to recover the construction and commissioning costs for the project.

Roadmap

Under the EII Act, the Infrastructure Planner, rather than a TNSP, will conduct preparatory activities and development works for REZ network infrastructure projects. These activities are expected to take place prior to the selection of a Network Operator and project authorisation by the Consumer Trustee. We propose that the Infrastructure Planner would ultimately recover the costs associated with these activities from the Network Operator once they are awarded the rights to develop the network infrastructure project and the Regulator makes its determination.

Until the Regulator makes its revenue determination, we expect that certainty regarding the funding for these preparatory activities and development works would be provided to the Infrastructure Planner using the Minister's power under section 66(4) of the EII Act to underwrite the relevant costs and pay for the interest on any finance required to pay for these works. There may be cases where the underwrite is called on so that the works are funded by the Scheme Financial Vehicle to the Infrastructure Planner, in which case these costs would not be recovered from the Network Operator ultimately selected to carry out the project.

In this process, the Infrastructure Planner would submit to the Minister what level of funding, or alternative financing arrangement, is necessary to conduct the preparatory activities and development works for the REZ. The Minister or their delegate will be responsible for determining any amount to be paid to the Infrastructure Planner under section 66(4) of the EII Act. That money would be drawn down by the Infrastructure Planner to fund the preparatory activities and development works as those works take place.

Proposed process

The Department intends that EnergyCo, when acting as an Infrastructure Planner, will recover its costs for early development works in one of two ways:

- **Recovery from the Network Operator** – Under this model, the Network Operator authorised to carry out a project would be required to reimburse EnergyCo for the costs of the development works. This would then be recovered by the Network Operator via the Regulator's revenue determination process. Prior to recovery from the Network Operator, EnergyCo may seek a determination under section 66(4) of the EII Act for an underwrite of its costs and to pay the interest on any finance EnergyCo needs to pay for the early development works.
- **Recovery directly from the Scheme Financial Vehicle** – In some cases, EnergyCo may seek a determination under section 66(4) that development works be funded directly by the Scheme Financial Vehicle.

The approach above to underwriting and paying the interest on finance for early development works may also be used to enable the REZ network infrastructure to be expanded in future to a higher network transfer capacity (i.e. an overbuild). This would enable the infrastructure planner to provide real options for future REZ network infrastructure projects at lower costs to consumers.

Section 66(4) of the EII Act provides the power for the Minister to allow payments from the Scheme Financial Vehicle in accordance with regulations under the Act. Regulations are intended to be made regarding governance of the Minister's powers under this section, including specifying the matters to which the Minister will have regard in determining these payments.

The Department intends that the Infrastructure Planner's costs for conducting the preparatory activities and development works will be recovered from the Network Operator selected to carry out the REZ network infrastructure project. The Network Operator will ultimately recover its costs after the Regulator has made its determination regarding the REZ project. We are currently considering how the costs of development works will be covered by the Regulator's revenue determination.

In some circumstances, a separate application to the Minister may be necessary to recover any costs the Infrastructure Planner has incurred for conducting preparatory activities and development works should the REZ project not be authorised (or recommended for direction) by the Consumer Trustee.

Question for stakeholders

4. Does the proposed method appropriately balance the transparency of costs recovered through the Scheme Financial Vehicle against the certainty needed to conduct preparatory activities and development works to deliver timely REZs?

Network infrastructure project authorisation

Scope and purpose

The EII Act requires the Infrastructure Planner to assess and make recommendations regarding REZ network infrastructure projects to the Consumer Trustee. The Consumer Trustee may authorise, or recommend to the Minister to direct, a Network Operator to carry out a recommended REZ network infrastructure project.

The Infrastructure Planner's recommendation must cover the:

- different options for REZ network infrastructure projects to provide the intended network capacity for the REZ
- staging and sequencing of REZ network infrastructure projects, and
- funding, procurement and cost recovery for the recommended REZ network infrastructure projects.

Other matters may be specified in the regulations.

The project assessment and selection processes for REZ network infrastructure projects under the EII Act will replace the role the RIT-T currently plays in relation to such projects within New South Wales.

Roles and responsibilities

The EII Act aims to enable network infrastructure development in shorter timeframes than has typically been possible under the national framework, via a more coordinated approach that balances timely implementation with the long-term financial interests of electricity consumers. This may well involve taking a longer-term view of the most effective network project scope and design.

Once a need has been identified through the network planning processes and set out in a REZ declaration, and the Infrastructure Planner has undertaken preparatory activities and development works to appropriately scope a project, the Infrastructure Planner will provide a recommendation to the Consumer Trustee regarding a REZ network infrastructure project and how it should be carried out. In some cases, the Infrastructure Planner may initially provide a 'preliminary recommendation', which reflects the Infrastructure Planner's preliminary position, subject to the relevant LTES Agreement tender.

This preliminary recommendation would be used by the Consumer Trustee and the Infrastructure Planner to conduct competitive tenders to award LTES Agreements and access scheme rights for the associated REZ, and by the Infrastructure Planner to identify the preferred Network Operator or Network Operators to carry out the project.

The NSW process introduces the opportunity for competition in the provision of network infrastructure, requiring the Network Operator to be selected on a project-by-project basis. By using the term 'Network Operator', the EII Act also enables the development of either transmission or distribution network assets under the NSW process.²⁰ Transgrid is currently the primary operator and manager of the high voltage transmission network in New South Wales.²¹ However, there may

²⁰ For example, it may be appropriate for a distribution business to operate distribution network assets as part of a REZ.

²¹ Ausgrid, while primarily a distributor, also owns some regulated transmission network assets. Further, under the national framework, transmission interconnectors can be constructed by unregulated third parties, called market network service providers. These market network service providers earn their revenue through price arbitrage of market prices between the two connecting regions, rather than earning regulated revenue. However, while several market network service provider-led interconnectors were built in the early days of the National Electricity Market, most have been converted to regulated status with no recent market network service provider-led interconnectors constructed.

be a market for additional providers that may be authorised to build, own and finance a REZ network infrastructure project. The Infrastructure Planner will likely use a contestable process to identify the preferred Network Operator(s), unless circumstances support a different approach such as if the network investment is not readily separable from the existing system.

Government procurement rules (which apply to EnergyCo as Infrastructure Planner) also mean there would need to be compelling reasons not to go to competitive tender for network infrastructure projects. A good example of where a tender is unlikely to be practicable is where part of a REZ network infrastructure project requires augmentation of existing network assets of Transgrid or a distribution business such as Essential Energy.

The conduct of these competitive processes by the Infrastructure Planner and the Consumer Trustee is expected to yield important information that may assist in selecting the optimal REZ network infrastructure project (that is, where the network solution will be dependent to some extent on the technology mix for generation and storage in the REZ). Based on these outcomes, the Infrastructure Planner will submit a final recommendation to the Consumer Trustee.

Under the EII Act, the Consumer Trustee may then authorise the Network Operator to carry out the project. While the Consumer Trustee may choose not to authorise a Network Operator, it will not be able to develop or propose an alternative project itself.

For any project the Consumer Trustee has authorised, the Consumer Trustee will also set the maximum amount the Regulator may determine can be recovered by the Network Operator in respect of the capital costs for development and construction of the REZ network infrastructure project. The EII Act requires that the Consumer Trustee and the Regulator not disclose this amount to any person.

The purpose of this provision is to clearly establish, but not to broadcast to bidders, the maximum capital cost envelope that is consistent with the Consumer Trustee's assessment of what would be in the long-term interests of consumers to achieve the outcomes of the project. This constrains the Regulator not to approve a project where its costs exceed that envelope and keeps pressure on the Infrastructure Planner and prospective Network Operators to innovate and drive down costs to consumers.

It is important to highlight a number of aspects to this process: first, it should not be regarded as analogous to a RIT-T options assessment. The RIT-T assessment has regard to alternatives to transmission such as new generation. The Consumer Trustee's authorisation is concerned with authorising the best network infrastructure projects – not generation projects. It is also concerned with protecting the long-term financial interests of consumers – and hence its assessment is not that of the market but of consumer interest.

Second, the assessment of network infrastructure options occurs within the statutory framework of the EII Act and its objects set out in section 3 of that Act. In this framework, the Consumer Trustee publishes a regular Infrastructure Investment Objectives Report that sets out how much generation is required; the Consumer Trustee conducts regular LTES Agreement tenders for generation infrastructure consistent with that report; generation in REZ will be privileged over generation infrastructure outside REZ in those auctions; and REZ access rights will place legal controls on the amount of generation that can connect to network infrastructure within a REZ. So understood, the Consumer Trustee will need to authorise sufficient network infrastructure to ensure there is sufficient grid capacity, especially within a REZ, to enable competitive tenders and meet the targets and timing set out in the EII Act and Infrastructure Investment Objectives Report.

Third, practically, once the Consumer Trustee has authorised a project, the cap on capital costs the Consumer Trustee sets will need to have regard to the next best alternative – i.e. how much would the cost of the authorised network project need to be for it to be better to stop that project and authorise another. This analysis would need to have regard to the transaction costs and impact on achieving the infrastructure investment objectives.

Proposed process

Options identification

The process of identifying options for REZ network infrastructure projects is not defined in the EII Act but is likely to entail the assessment of a number of network options required for the REZ. Optionality is likely to be greatest in relation to the technical parameters for a project, but the Infrastructure Planner may also consider different options in relation to the staging, sequencing, funding, procurement and cost recovery for a project.

The optionality for the technical parameters is expected to include different combinations of network and non-network investments as well as variations in the route and timing of the infrastructure. The network modelling is expected to build upon that used for the network strategy but will also incorporate more up-to-date and project-specific variations.

At the heart of the process is the coordination of generation and transmission investment around the targets and development pathways set out in the Infrastructure Investment Objectives Report. A key tool will be network optimisation based on expression of interest (EOI) outcomes.

The EII Act requires the Infrastructure Planner, in assessing and making recommendations, to consult with AEMO and existing and potential Network Operators, as well as relevant local councils. The Infrastructure Planner will also consult as required to inform its analysis.

It may be prudent for the Infrastructure Planner to consult to identify and assess potential options to remediate system strength or other issues – including both network and non-network options. This may include actively seeking EOI for non-network options to reveal market capability and costs.

In considering proposed infrastructure options, the Infrastructure Planner should have regard to promoting effective and appropriate engagement with local communities, including Aboriginal communities, affected by the proposed solutions. This could include direct and proactive engagement with these communities to identify relevant parties and understand the potential impacts of the proposed infrastructure options. The Infrastructure Planner must also take into account the Plan for the NSW Renewable Energy Sector Board defined in section 8(1) of the EII Act.

As well as assessing the optimal technical parameters for a project, the Infrastructure Planner must assess how it is delivered. Some projects may consist of multiple stages, or the Infrastructure Planner may recommend separate projects to the Consumer Trustee. The Infrastructure Planner will also need to consider how the costs of an authorised project should be recovered.

We anticipate that the Infrastructure Planner may use both contestable and non-contestable processes (depending on the circumstances of a particular project and REZ) to select a Network Operator or Network Operators to recommend to the Consumer Trustee for the construction, ownership and financing of a REZ network infrastructure project. Some portions of the necessary network investment may be efficiently delivered by a contestable process while other portions will not – for example, if a project is not readily separable from the existing shared transmission network.

In this case, the Infrastructure Planner may recommend the project as two separate REZ network infrastructure projects under the EII Act – one with a contestably procured Network Operator and the other to be delivered by the incumbent Network Operator. Both projects would progress in parallel through the network authorisation process outlined in this paper.

Preliminary recommendation by the Infrastructure Planner

We anticipate that, following scoping activities and development works, there may be circumstances where the Infrastructure Planner could prepare a preliminary or indicative recommendation for the Consumer Trustee's consideration. The Department is considering how

this optional step in the process could be used where the final technical solution for a project would benefit from a more certain understanding of the generation and storage mix that will be constructed in the REZ (provided timing allowed for this).

We propose that the preliminary recommendation would address the matters required under section 30(2) of the EII Act, but may include some optionality in relation to the technical parameters for a project. This step is not a legislated requirement; however, it would be used to inform the conduct of competitive tender processes for the grant of LTES Agreements and access scheme rights under Part 6 of the EII Act and would form part of the process by which the ultimate statutory decision is made. Confirmation of the generation and storage mix in a REZ will then enable the Infrastructure Planner to settle on the final technical parameters for a network project.

The Department does not expect that LTES Agreement and access rights tenders will always be linked to the selection of a final technical option for the REZ network infrastructure project. This issue will largely be determined by the:

- available technical options in the REZ network design – the less realistic technical options with material differences, the less benefit in leaving the options open
- need to provide certainty for the local community
- administrative complexity of having multiple design parameters open at the time of the LTES Agreement tender (for both the Consumer Trustee and the generation bidders), and
- perceived competition benefits of setting the REZ network infrastructure based on the tender.

Because the benefits of having design options determined following an LTES Agreement and access rights auction only arise at the beginning of a new REZ or stage of a REZ, only auctions at these points (i.e. immediately before a new REZ or REZ stage is decided) will have a bearing on network design.

In preparing its preliminary (or final) recommendation, we expect the Infrastructure Planner would have regard to the network strategy as well as undertaking network modelling with more up-to-date or project-specific variations. A degree of public consultation is also likely to be required with relevant stakeholders (including local and Aboriginal communities) and potential solution providers.

Box 3 – Variation of technical options in a preliminary recommendation

We anticipate that the technical specifications in a preliminary recommendation will vary only to the extent required to efficiently respond to different generation technology mixes within the REZ (that is, those matters to be determined via the conduct of LTES Agreements and access scheme tenders). Any greater degree of variation could negatively impact the efficient and competitive conduct of LTES Agreements and access scheme tenders and undermine the certainty required by participants.

This could potentially include some limited optionality on additional substations, the type and size of any system strength remediation investment required or some line and transformer capacities.

Aspects such as line route, substation location, timing, staging, cost recovery and the procurement approach (for selection of the Network Operator) are expected to be fixed (to the extent practicable) at the time the Infrastructure Planner makes its preliminary recommendation.

The Infrastructure Planner's preliminary recommendation may also need to include which stages and parts of a REZ network infrastructure project it recommends be subject to contestable delivery and those that will necessarily be provided by the incumbent transmission provider.

We are considering whether, once the Infrastructure Planner has identified its preferred positions on these matters, it could prepare and submit the preliminary recommendation (including associated cost estimates) to the Consumer Trustee. This information may also be used by the Infrastructure Planner in selecting a preferred Network Operator or Network Operators to recommend to the Consumer Trustee to undertake the REZ network infrastructure project, where it has determined to use a contestable process and/or where part of the project includes augmentation of existing network assets by the owner of those assets.

Preliminary authorisation by the Consumer Trustee

Under Part 6 of the EII Act, the Consumer Trustee will conduct competitive tenders for the award of LTES Agreements. We expect that these tenders may also be used to award access rights for a REZ. To ensure a seamless interface with the Roadmap for project proponents, we anticipate tenders will be conducted in consultation with the Infrastructure Planner. Bids may be sought on various matters in relation to the LTES Agreement and access rights, including the network infrastructure (and where the Infrastructure Planner has provided the Consumer Trustee with a preliminary recommendation, there may be options as to the network infrastructure).

The outcome of an LTES Agreement and access scheme tender will assist in determining the technology mix in a REZ. As described above, the Department is considering whether the Infrastructure Planner could provide a preliminary recommendation to the Consumer Trustee that will inform the final technical solution in the Infrastructure Planner's formal recommendation on a REZ network infrastructure project.

Where the Infrastructure Planner has only provided a preliminary recommendation and the Consumer Trustee has not authorised a Network Operator to carry out a REZ network infrastructure project ahead of an impacted LTES Agreement and access scheme tender, the Consumer Trustee will need to provide LTES Agreement and access scheme tender participants with sufficient certainty as to the network infrastructure in the REZ.

The Department is considering whether one way to provide this certainty may be for the Consumer Trustee to provide a preliminary or indicative authorisation of the options put forward by the Infrastructure Planner as part of its preliminary recommendation. Such a preliminary authorisation would not be intended to bind the Consumer Trustee in the exercise of its discretion but would reflect its preliminary intentions. This approach could also be complemented by the LTES Agreements being conditional on the Consumer Trustee later authorising a certain network infrastructure project. Like the Consumer Trustee's authorisation decision, considerations by the Consumer Trustee in a preliminary authorisation would include whether the preliminary recommendation is best able to deliver in the long-term financial interests of NSW consumers out of the network solutions open to the Consumer Trustee, including having regard to the development pathways it has set.

The Consumer Trustee could then proceed to include those technical network options it is prepared to authorise when requesting bids as part of an LTES Agreement or access scheme tender. Given the Consumer Trustee's interest in conducting an efficient tender that yields actionable projects, tender participants can have confidence that one of the technical options included as part of a tender is likely able to proceed.

This preliminary authorisation step by the Consumer Trustee would only be necessary where the Infrastructure Planner has provided a preliminary recommendation and the Consumer Trustee has not authorised a final network project ahead of the LTES Agreement and access rights tenders. Where network infrastructure for a REZ is to be delivered in multiple stages, there may be merit in aligning subsequent tenders with the authorisation process for the subsequent network projects.

Once the Consumer Trustee has provided its preliminary authorisation of the options within the Infrastructure Planner's preliminary recommendation, it would proceed to conduct the LTES Agreement and access scheme tenders. Proponents of generation or storage projects would

submit bids taking into account the network options. We anticipate that the Consumer Trustee would seek the optimal generation or long duration storage projects to give effect to its 20-Year Development Pathway, while the Infrastructure Planner would identify the best technical option to give effect to it (and recommend this option to the Consumer Trustee in accordance with the process in the following sections).

Question for stakeholders

5. What information relating to network options do LTES Agreement and access rights tender participants require to provide sufficient certainty and confidence to participate in the bid processes?

Role and selection of a Network Operator

As noted previously, the NSW Roadmap introduces the opportunity for competition for the selection of a Network Operator in certain circumstances. Unless determined to be inefficient or inappropriate, the Infrastructure Planner is expected to undertake a competitive market tender process to select the preferred Network Operator or Network Operators to deliver some or all of the project. It is currently intended that a Network Operator appointed as a result of a contestable market tender process would be granted a right to own, construct and finance the new REZ network infrastructure assets. Transmission system operation will remain the responsibility of Transgrid as the primary transmission network service provider.

As part of many if not most REZ network infrastructure projects there will be some level of augmentation required to existing networks inside and outside the REZ. It is not proposed that these be subject to contestability (other than in procurement for construction of the works) – where an existing network requires augmentation that will be done by the owner of that network.

The Network Operator tender would likely be based on delivering the technical requirements to be recommended in the Infrastructure Planner's recommendation to the Consumer Trustee, such that most design decisions would be locked-in, including route selection, most substation locations, the project's operational date, functional specifications and minimum technical or safety requirements. However, network operator proponents may have discretion to vary specific aspects in their proposal such as the precise schedule of construction works, construction methodologies and some material or equipment used. Proposals may identify improvements through innovation in design or delivery of the network solution while meeting technical specifications.²²

To assist the tender process and drive more competitive offers from providers, the Infrastructure Planner may seek to develop a shortlist of providers to encourage the shortlisted providers to develop more competitive proposals, and reduce administrative costs of running the tender by avoiding the need to assess uncompetitive tender proposals.

The successful proposal is expected to be binding in large part (with limited scope for any variations) on the Network Operator. It would inform the Infrastructure Planner's recommendation to the Consumer Trustee for authorisation and be used by the Regulator in making its determination for allowed cost recovery should the REZ network infrastructure project reach that stage. This is discussed further under *Transmission Efficiency Test and the Regulator's determination*.

In some cases, the Infrastructure Planner may decide not to conduct a contestable process for delivering the REZ network infrastructure project and may instead identify a preferred Network

²² Any variation in the material or equipment used would still need to meet safety, performance and interoperability standards.

Operator without running a tender. This is most likely to occur where all or the vast bulk of the project involves augmentation of an existing Network Operator's assets. The project would still need to be authorised by the Consumer Trustee and its cost approved by the Regulator under the TET, but consistent with the existing regulatory determination for the Network Operator. Alternatively, Part 5 of the EII Act also contains a process to enable an incumbent network operator to recover costs through a regulatory determination under the National Electricity Rules. We expect the new greenfield REZ network infrastructure would be part of a separate regulated asset base under the EII Act.

Question for stakeholders

6. What eligibility criteria should apply for Network Operators that may be authorised to carry out a REZ network infrastructure project?

Box 4 – Contestability in selection of the Network Operator

There are a range of potential models for contestability with their key differences being the scope of activities subject to competition, the timing of when in the project development process to go to the market (early versus late models), and the risk management under the contractual arrangements. Contestability by itself does not necessarily guarantee better outcomes for customers and the effectiveness of the approach will depend on the design of the tendering and procurement arrangements.

Ensuring ongoing reliability of the system and the assets connected to it remains the overarching consideration including accountability for delivering that reliability on the relevant parties. Consistent with reliability of the system being the first priority, it is intended that accountability for transmission system operation will remain with Transgrid as the NSW primary transmission network system provider.

Selecting a model for the competitive procurement of a Network Operator for a REZ network infrastructure project must balance various other objectives including reducing barriers faced by non-incumbent network developers without ignoring the real advantages of incumbent network service providers, and encouraging innovative solutions to network needs that provide lower costs/higher value without unfairly shifting risk to customers or regulated incumbents.

Authorisations to carry out network infrastructure projects

Once the Infrastructure Planner has identified the preferred Network Operator, the Infrastructure Planner will submit a formal recommendation to the Consumer Trustee. Where the Infrastructure Planner has provided a preliminary recommendation, this final recommendation will be informed by the insights gained from the first LTES Agreement and access rights tender for a REZ as to the technology mix expected to connect within the REZ.

The EII Act specifies matters that must be addressed by the Infrastructure Planner in its recommendation to the Consumer Trustee; however, we expect the Consumer Trustee may require additional information from the Infrastructure Planner to assess whether it should authorise the carrying out of a project. We expect this can be managed via the Network Authorisation Guidelines, which will be developed and reviewed through public consultation to help provide transparency and build confidence in key stages of the process.

It is possible the regulations or relevant guidelines could specify a maximum timeframe in which the Consumer Trustee must decide whether to authorise a REZ network infrastructure project following receipt of the Infrastructure Planner's recommendation. However, the Consumer Trustee is likely to be incentivised to act quickly in any case to finalise the associated LTES Agreement and access scheme tender.

The EII Act states that the Consumer Trustee, on receipt of a recommendation from the Infrastructure Planner, may authorise, or recommend that the Minister direct, a Network Operator to carry out the recommended REZ network infrastructure project. The Consumer Trustee will not be able to develop or propose an alternative project itself.

Where the Infrastructure Planner makes a recommendation regarding a single stage of a REZ network infrastructure project, the Consumer Trustee will consider the recommendation as part of the Infrastructure Planner's intention for the full REZ. The Consumer Trustee's authorisation or the Minister's direction is limited to the specific stage the Infrastructure Planner's recommendation relates to, not the full REZ. The Consumer Trustee may also attach conditions to an authorisation in respect of consultation with Aboriginal communities and matters under the Renewable Energy Sector Board Plan.²³ The Department is considering whether regulations should be made governing such conditions.

Under the Roadmap, it is likely there may be multiple REZs being developed concurrently so the Consumer Trustee may receive more than one recommendation at the same time. In such a case, while the Consumer Trustee must still decide whether to authorise each individual recommendation, it may also determine to progress one REZ ahead of another.

The Consumer Trustee's biennial Infrastructure Investment Objectives Report under section 45 of the EII Act will contain the proposed sequencing of multiple REZs and associated LTES Agreement and access scheme rights tenders that it considers are in the long-term financial interests of NSW electricity customers. However, delivering multiple REZs at the same time may deviate from this optimal pathway. For example, it may risk building network infrastructure too early for generators to use, which in turn creates risks of inefficient prices and fluctuations being passed on to consumer bills. It is convenient, at this point, to make some observations regarding the statutory functions of the Consumer Trustee and the Infrastructure Planner in making decisions regarding network infrastructure projects: *first*, the Consumer Trustee and the Infrastructure Planner exercise powers under a unitary statutory framework legislated for the purpose of coordinating infrastructure investment. The powers conferred by this statutory framework should be exercised in a coherent, harmonious manner.

Second, the statutory framework is clearly directed to the achievement of the infrastructure investment objectives.

Third, the Consumer Trustee is primarily responsible for protecting the long-term financial interests of consumers.

Fourth, the Infrastructure Planner is primarily responsible for developing network solutions that support local community outcomes, are in consumers' interests and would support the infrastructure investment objectives.

Understood in this way, the Infrastructure Planner only recommends the network infrastructure solutions that can carry the local community, while protecting consumers' financial interests as far as reasonably possible. The Consumer Trustee's power is a power to determine *which* network infrastructure project should be authorised *when*, having regard to the relative merits of recommended network infrastructure projects and the upgrades required to achieve the infrastructure investment objectives. It is a power to stop network infrastructure upgrades being built too early and in the wrong sequence.

²³ See sections 4(5) and 9(4) of the EII Act.

In protecting the long-term financial interests of consumers and giving effect to the infrastructure investment objectives it is also open to and incumbent on the Infrastructure Planner to recommend, the Consumer Trustee to authorise and the Regulator to approve network infrastructure projects that provide for network solutions that look at lowest cost over the long term.

It is important that these parties have regard, in their respective roles, to the infrastructure investment objectives and the need to earn and maintain local community support for network projects. This may, for example, mean building more capacity than what is the minimum immediately needed. This could reduce corridor duplication to minimise adverse impacts on communities and other land uses. This in turn could help future-proof the network to create greater optionality and price competition for LTES Agreements over time. The Roadmap policy and the recent Dinawan upgrade on Project Energy Connect identified clear concerns about the ability of the existing transmission investment regime to take account of the need for wider coordination of generation and transmission investment over more than just the short term. To that end the Roadmap policy has expressly provided options for low cost finance options so network project scopes can be optimised to align with the long-term interests of consumers and host communities.

The Consumer Trustee's authorisation power is not a power to *review or vary* recommendations of the Infrastructure Planner. Parliament conferred the function of recommending network infrastructure solutions on the Infrastructure Planner, and did not confer the power to propose network infrastructure solutions on the Consumer Trustee.

Box 5 – Hypothetical example

The Consumer Trustee receives recommendations from the Infrastructure Planner for both REZ A and REZ B simultaneously. The Consumer Trustee assesses both, including how each REZ contributes to achieving the 20-Year Development Pathway, infrastructure investment objectives and the 10-year Tender Plan for LTES Agreements and access scheme rights under the Consumer Trustee's biennial report under section 45 of the EII Act. While the Consumer Trustee considers both REZs are in the long-term financial interests of NSW electricity customers, progressing both at the same time would not be.

The Consumer Trustee decides to progress REZ A immediately and delay progressing REZ B, in this case by 12 months to better align with the 10-year plan for LTES Agreement tenders. The Consumer Trustee authorises the network project for REZ A but does not authorise the network project for REZ B until it is ready to proceed.

The network infrastructure for REZ A then progresses through the TET and revenue determination process as normal. REZ B progresses 12 months later once the Consumer Trustee provides its authorisation.

There is no statutory requirement that an authorised Network Operator carry out a project. However, the Department is considering whether this should be managed contractually (with any obligation to carry out the project subject to the finalisation of the Regulator's revenue determination).

The Consumer Trustee is also required to set a maximum amount for capital costs for development and construction costs for the project, by submitting a written notice to the Regulator. This amount represents the point at which the project should no longer be pursued and is an upper limit for the Regulator's determination under the TET (discussed in the next section).

Directions to carry out REZ network infrastructure projects

If the Consumer Trustee elects to recommend the Minister direct the Network Operator to carry out a REZ network infrastructure project, it will submit its recommendation to the Minister accordingly. This process will only be used in very rare cases, most likely as a last resort.

We expect the Consumer Trustee's recommendation would include the reasons why it is necessary for the Minister to direct the Network Operator and a clear articulation of why it is in the public interest to do so. The Minister is only able to make a direction if satisfied this would be in the public interest and consistent with the objects of the EII Act. If the Minister elects to direct the Network Operator, the Minister will then publish his or her decision. Any direction requires that the Network Operator be paid appropriately.

The Consumer Trustee's recommendation to the Minister is expected to be based on the advice of the Infrastructure Planner. The EII Act, through section 32(3), requires that the Minister consult with the relevant Network Operator prior to giving a direction.

Box 6 – Legislative requirements for Ministerial directions

The EII Act requires that a Ministerial direction to a Network Operator to carry out a REZ network infrastructure project must specify the following:

- the Network Operator required to carry out the infrastructure project
- the location and description of the infrastructure project
- the requirements for the development and construction of the infrastructure project
- the staging and sequencing of the planning, design and construction of the infrastructure project
- the date by which the Network Operator, taking all reasonable steps, is to complete the planning, design and construction stages of the infrastructure project
- that the Network Operator will receive the prudent, efficient and reasonable costs determined by the Regulator
- other matters prescribed by the regulations.

A key difference between authorising a REZ network infrastructure project to be carried out under the EII Act and a direction to carry out a project under the EII Act relates to compliance. The EII Act specifies that a Network Operator to which a direction is given under section 32 must not, without reasonable excuse, fail to comply with the direction.

As noted in the Tranche Two Issues Paper, the Department does not consider that offences under section 35 of the EII Act should be penalty notice offences.

Question for stakeholders

7. What factors should be considered by the Consumer Trustee in recommending that the Minister direct, and by the Minister in directing, a Network Operator to carry out a REZ network infrastructure project under the EII Act?

Transmission Efficiency Test and the Regulator's determination

Scope and purpose

This section sets out issues relating to the nature and scope of the TET and revenue determination the Regulator will undertake for a network infrastructure project.

The EII Act creates the role of the Regulator and sets out its role and functions. It is possible more than one Regulator will be appointed to undertake these functions if it is considered appropriate. Under section 64 of the Act, the Regulator must be either the AER, the NSW Independent Pricing and Regulatory Tribunal, or a person prescribed by the regulations. The Minister intends to appoint the AER as the Regulator for the functions under Part 5 of the EII Act that relate to undertaking the TET and revenue determination for a network infrastructure project.

The enactment of the EII Act provides the opportunity to consider which elements of the national framework should apply to relevant NSW network infrastructure projects, and which elements should change or apply in modified form. We are interested in stakeholder feedback on this; however, it is proposed that the AER, if appointed as the Regulator for the EII Act, would take a similar approach to assessing proposed expenditure to that which it takes in the national framework, allowing for appropriate adaptations to accommodate contestability where relevant.

Regulations will provide further clarification on the scope, timing and process to be followed by the Regulator in undertaking the TET and revenue determinations under the EII Act. Guidelines will also be developed by the Regulator with further detail on the process and approach the Regulator will undertake under the TET and revenue determination process. In terms of the process, the TET and revenue determination process could be undertaken in parallel by the Regulator, as the TET is a key input to the Regulator's revenue determination.

As mentioned in earlier sections of this paper, the Department is considering the scope and design of a contestable process to determine the costs required to carry out projects under the EII Act. An example of a similar process used in the Australian gas sector is outlined in Box 7, to assist stakeholders in understanding the nature of the model being contemplated.

For projects authorised following a tender process, the TET and revenue determination may be limited to ensuring the costs provided to the Regulator by the Network Operator are in line with the successful tender bid. This may mean, for example, that tenderers could bid on capital costs (including the rate of return) and operating costs, but incentive schemes (if relevant and any other relevant costs prescribed in regulations) and the overall revenue requirement could be determined by the Regulator as part of the revenue determination.

The detailed design and implementation of the TET and revenue determination will be set through regulations, in guidelines or may, where permitted by the EII Act, be for the Regulator to decide.

In terms of the scope of the revenue determination, the TET is a key input into the Regulator's revenue determination on the amount payable to a Network Operator to carry out a project under the EII Act. The EII Act requires that the revenue determination include the following minimum components, or building blocks:²⁴

- repayment of capital costs as determined under the TET
- the return on capital costs that have not been repaid, and
- an allowance for operating costs.

²⁴ Section 38(2) of the EII Act.

The EII Act also specifies that other components, or building blocks, can be prescribed by the regulations. Potential options to add additional components or building blocks may include:

- a corporate income tax building block, depending on the regulatory treatment of tax and basis of returns
- an incentive scheme building block(s), for the inclusion of incentive payments or penalties.

Box 7 – Case study of the contestable tender process for the Central Ranges Gas Network

The Central Ranges Pipeline project, developed in the early 2000s, encompassed a new gas transmission pipeline and gas distribution network for the Tamworth region in New South Wales. The project was constructed as a regulated asset under the Gas Code, following a contestable tender process for developing, owning and operating the assets.

Under the Gas Code (superseded by the National Gas Law and Rules in 2008), an independent entity – comprised of a grouping of regional councils – was able to propose to the transmission and distribution regulators that it run a competitive process for the new Central Ranges Pipeline project. The contestable tender process was proposed as a way to select the company that could build, own and operate the infrastructure at the lowest sustainable tariffs for consumers over the economic life of the project. This was assessed based on two key components of the tenders:

- average tariffs (\$/GJ) proposed for the initial regulatory period, and
- forecast residual value of the pipeline at the end of the initial regulatory period.

Following the competitive process, a number of elements of the successful tender were adopted directly into the access arrangements for the pipeline as deemed components. This included the final transmission and distribution tariffs (\$/GJ) the project would recover from consumers, which were proposed in the tender as total figures rather than broken down into building blocks, and assumed to be inclusive of capital, non-capital, returns and other expenses.

Other deemed components included:

- a methodology for how these tariffs would change over time
- the duration for which the initial arrangements would be locked (up to 15 years), and
- the revenue and volume risk-sharing arrangements between users and the owner.

Because a competitive process was used to select the successful tenderer, these fixed elements were considered efficient and were not assessed by the regulators. The remaining elements of the access arrangement that weren't fixed through the tender process were then developed through the standard regulatory process with regulator assessment and approval.

This contestable process provides a useful example when considering the role of contestability for REZ infrastructure networks under the NSW framework; in particular, how some elements of the final arrangements are fixed by the tender outcomes while others are determined by the regulator.

Roles and responsibilities

National framework

The AER is responsible for the economic regulation of electricity transmission and distribution networks in the National Electricity Market. Regulated electricity network businesses periodically apply to the AER to assess their revenue requirements (typically, every five years).

Roadmap

The EII Act creates the role of the Regulator and sets out its role and functions in relation to economic regulation of network operators under Part 5 of the EII Act. These functions are similar to the functions of the AER in the national framework. A key difference is that under the EII Act, the Regulator is undertaking a TET and revenue determination for a single project, whereas in the national framework the AER makes revenue determinations in relation to the recovery of revenue for the provision of all economically regulated services provided by a network service provider. In this regard, the revenue determination process under the EII Act is similar to the AER's assessment of contingent projects under the national framework. Under the contingent project process the AER assesses applications by network service providers to amend their revenue determination to include the revenue required for a single (contingent) project.

Another key difference between the national framework and the NSW framework is that the Regulator's role under the EII Act is focused only on the assessment of costs to carry out a network infrastructure project. The Regulator does not have a role in assessing and authorising the network infrastructure project to be carried out – this is undertaken by the Infrastructure Planner and the Consumer Trustee as discussed in the previous sections of this paper.

The Regulator will apply the TET to assess capital costs for the development and construction of a REZ network infrastructure project once a Network Operator has been authorised by the Consumer Trustee, or directed or authorised by the Minister to carry out that project. The TET will be undertaken in accordance with the TET guidelines developed by the Regulator.

The revenue determination will be made by the Regulator, and include the outcomes of the TET. The Regulator will seek information from the Network Operator and may seek information from other stakeholders in making the revenue determination.

In addition to the TET guidelines, there will be a role for other guidelines relating to the Regulator's determination, given the breadth of matters for regulation. These elements are discussed later in this section. We note that under the national framework there are several guidelines that apply to AER five-yearly revenue determinations.

Proposed process for the TET

The TET is a key input to the Regulator's revenue determination. This revenue determination process is outlined at a high level in Figure 6 below.

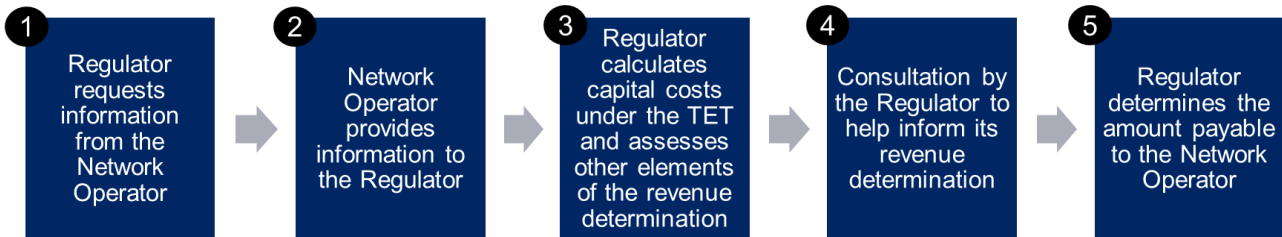
The proposed process for the TET will start with the Network Operator providing information to the Regulator in accordance with the TET guidelines and any additional requests for information from the Regulator. The TET guidelines developed by the Regulator will clarify the specific requirements regarding the Network Operator providing information to the Regulator (including if the Network Operator is to be selected through a contestable process). Timeframes for this process will also be clarified in regulations and guidelines.

By way of comparison, the TET is intended to achieve a similar objective to the assessment of forecast capital expenditure under the national framework.

The TET guidelines will also clarify how the Regulator will assess information provided by a Network Operator in its assessment of costs and the timeframes for undertaking the TET, including any public consultation.

Under the national framework, the AER must first consider a total capital expenditure forecast proposal submitted by the transmission network service provider, and the AER must accept the transmission network service provider's total capital expenditure forecast if it reasonably reflects the capital expenditure criteria specified in the National Electricity Rules.

Figure 6 High-level overview of the proposed process for making a revenue determination under the EII Act



Question for stakeholders

8. How can consumer and stakeholder input be considered in the TET and revenue determination processes?

Regulatory principles and objects of the Act

In undertaking the TET and making a revenue determination under the EII Act, the Regulator will focus on assessing the prudent, efficient and reasonable costs for a project, and determine the amount payable to a Network Operator for a network infrastructure project (see Box 8).

The National Electricity Law has a single legislative object focused on the long-term interests of electricity consumers, whereas the EII Act has a broader set of objectives including the sustainability of electricity supply, the creation of employment and promoting local industry. Further discussion on this is outlined in Box 8 below.

It may be helpful to clarify some aspects of the principles the Regulator is to take into account when making a determination under the EII Act. Of particular interest are stakeholder views on the following:

1. the definition of 'prudent, efficient and reasonable costs' under section 37(1)(a)
2. the scope of 'incentives' under section 37(1)(b), and
3. whether 'other principles' should be prescribed under section 37(1)(e).

Regarding item 1. above, under the National Electricity Rules²⁵ the AER is required to accept a proposed forecast of capital expenditure if it reasonably reflects:

- the *efficient* costs of achieving the capital expenditure objectives in the National Electricity Rules (essentially, the delivery of network services, including to meet demand, comply with all regulatory obligations and requirements relating to the provision of network services and to maintain the quality, reliability, security and safety of those services and the transmission or distribution system)
- the costs that a *prudent* Network Operator would require to achieve the objectives, and
- a *realistic* expectation of the demand forecast, and cost inputs required to achieve the objectives.

²⁵ Sections 6.5.7 and 6A.6.7 of the National Electricity Rules.

Regarding item 2. above, the use of incentives is discussed later in this section. We welcome stakeholder feedback on the appropriateness of the existing incentive schemes in the national framework being applied to Network Operators under this NSW framework.

Regarding item 3. above, we are seeking stakeholder feedback on whether other principles should be taken into account by the Regulator that are not prescribed in the EII Act and not currently considered in the national electricity framework.

Box 8 – Regulator to take into account principles and objects in the EII Act

Principles in the Act

There are a number of principles the Regulator is to take into account in exercising its functions under section 37 of the EII Act:

- a. A Network Operator is entitled to recover the prudent, efficient and reasonable costs incurred by the Network Operator for carrying out the infrastructure project.
- b. Incentives should be given to Network Operators to promote economic efficiency.
- c. A Network Operator is entitled to revenue for the ongoing ownership, control and operation of an infrastructure project that is commensurate with the regulatory and commercial risks to the Network Operator.
- d. A Network Operator is entitled to be informed of material issues being considered by the Regulator under this Division.
- e. Other principles prescribed by the regulations.

The principles prescribed in the EII Act are broadly consistent with the revenue and pricing principles in the National Electricity Law that the AER must take into account when making a transmission or distribution determination under the national framework.²⁶

Objects of the Act

Decisions made under the EII Act must be consistent with the objects specified in the EII Act. These objects are broader than the National Electricity Objective and other principles applied in the national transmission investment process. For example, there are objects to improve the affordability, reliability, security and sustainability of electricity supply as well as foster local community support, support local economic development, and create employment, including employment for Aboriginal and Torres Strait Islander people.

The Department is also considering what would need to be clarified in the Regulator's approach if projects are authorised following a competitive tender process. For example, the costs proposed in the successful tender bid may already be prudent, efficient and reasonable by virtue of having been identified through a competitive process, and the Regulator's role in applying the TET and determining the revenue allowance for the contestable cost components could be limited to ensuring the costs put forward by the Network Operator are consistent with those in the successful tender bid.

In terms of considering all the objects of the EII Act, the Department is considering regulatory solutions that minimise the extent to which the Regulator may be required to choose between prioritising different objects, such as affordability and prioritising local and Indigenous employment, if and where these are in conflict. This is a values-based trade-off that an economic regulator may not be well-equipped to make, and this would also be a departure from equivalent processes in the national framework.

²⁶ Section 7A of the National Electricity Law.

The TET and revenue determination process could be designed to focus on the principles under section 37 of the EII Act and this could be the primary consideration of the Regulator for Part 5 of the EII Act. Other objects will be achieved across the breadth of functions under the EII Act and do not need to be specifically addressed in the regulatory process. The Department is considering options to provide clarity on this including in regulations or as part of the recommendations of the Infrastructure Planner and the Consumer Trustee authorisation process.

In the case of projects identified and selected through a contestable process, consistency with the objects of the EII Act could be a criterion for the evaluation of bid proposals by the Infrastructure Planner and the authorisation process of the Consumer Trustee.

Question for stakeholders

9. Is clarification required with regard to the principles to be taken into account by the Regulator and the objects of the Act, and are there any additional principles that should be considered by the Regulator?

Guidelines for the TET

The EII Act requires the Regulator to publish guidelines about the TET on its website. These guidelines will provide stakeholders with an understanding of how the TET process will be undertaken and how capital costs will be assessed. The scope of these guidelines may be clarified in regulations. Guidelines are generally published to inform stakeholders of the Regulator's approach to obligations set out in legislation and subordinate rules or regulations.

Some of the elements that the TET guidelines could cover include the following:

- timeframes for undertaking the TET, including public consultation
- requirements on the Network Operator to provide information to the Regulator
- how the Regulator will consider information provided by a Network Operator
- the process and approach by which the Regulator will undertake a capital cost assessment
- how the Regulator will apply the TET if the Network Operator is selected through a contestable process, and
- how the Regulator will treat confidential or sensitive information (including information provided during any contestable process if applicable).

Question for stakeholders

10. What views do you have on these elements and is there any other guidance that should be included in the TET guidelines to be developed by the Regulator?

Proposed process for determining the revenue allowance

We propose that the TET and revenue determination process could be undertaken in parallel by the Regulator, as the TET is a key input to the Regulator's revenue determination. This process is outlined at a high level in Figure 6 above.

The proposed process for the revenue determination will start with the Network Operator providing information to the Regulator in accordance with a request for information from the Regulator and all guidelines relevant to making a revenue determination under the EII Act.²⁷

The Regulator will next undertake an assessment of the relevant components of a revenue determination. The approach of the Regulator in undertaking this assessment will be clarified at a high level in regulations and in a more detailed manner in relevant guidelines. To the extent possible, this will be consistent with the national arrangements.

The Regulator's guidelines are expected to clarify how the Regulator will assess information provided by a Network Operator in its determination of the amount payable under the EII Act. The timeframes for undertaking the decision-making process, including consultation, will be clarified in regulations or relevant guidelines.

Scrutiny of costs by the Regulator

Under Part 5 of the EII Act, the Regulator's determination is focused only on the costs to carry out a network infrastructure project. The assessment and authorisation of a network infrastructure project to be carried out is undertaken by the Infrastructure Planner and Consumer Trustee as outlined in the previous sections of this paper.

The Regulator determines the amount payable to a Network Operator for carrying out a project (including the different components of a determination).²⁸ The extent to which the Regulator is required to calculate the 'building block' components of the revenue determination will depend on the extent to which these costs have already been assessed in the preceding processes (such as a contestable process if applicable).

If network infrastructure projects are selected contestably, some costs are expected to be identified through the tender process and therefore the Regulator's role may be more limited to reflecting those costs along with determining other cost components in the revenue determination. In considering the design of a contestable process, the Department is also considering how the Regulator's determination processes should treat confidential and sensitive information provided during the tender process.

The role of Network Operators

The Network Operator provides detailed information about the project to the Regulator so the Regulator can make a revenue determination. The information the Regulator requires is expected to be clarified in guidelines and by written notice to the Network Operator. The Network Operator will provide information about the project to the Regulator in its regulatory proposal, to satisfy these information requirements. Information provided by the Network Operator could include a breakdown of expenditure forecasts and methodologies used to arrive at the forecast, or network asset data.

In its proposal, the Network Operator could identify any data or information it has provided to the Regulator that it assesses to be confidential or commercially sensitive. All other information provided to the Regulator by the Network Operator could be available for publication at the Regulator's discretion.

If the project has been through a contestable process, the role of the Regulator may be limited and, for example, directed to determining whether the relevant cost components are consistent with a competitive tender outcome.

²⁷ See section 38(7) of the EII Act.

²⁸ Section 38(2) of the EII Act.

Financeability and regulatory cashflows

Recently, some network businesses have raised concerns about the risk of large network infrastructure investments being unfinanceable under the current national framework²⁹. The following key concerns were raised with the national process:

- It defers network revenue recovery into the future. This is achieved through CPI indexation of the regulated asset base and recovery of depreciation not commencing until infrastructure is commissioned, rather than as incurred.
- The AER's determination process does not account for the increased risk and cost of the financial structuring required to deliver significant new projects. The AER assumes financial structuring, and therefore risk and cost, remains consistent with the AER's benchmark efficient entity.

The AEMC considered these issues as part of rule change requests by Transgrid and ElectraNet but did not change the National Electricity Rules as it was not satisfied the proposed changes would promote the National Electricity Objective.³⁰

The Department is of the view that the risk of Network Operators not being able to finance NSW REZ network infrastructure projects, potentially delaying or preventing the delivery of these projects, is a factor requiring careful consideration in the policy design of the NSW framework. The Department also notes that the AEMC recently commenced a review into transmission planning and investment, and is monitoring the progress of that review.³¹

Options to address financeability in the EII Act could include prescribing a financeability principle that must be taken into account by the Regulator in each determination, and empowering the Regulator to make adjustments to the building blocks to alleviate any financeability concerns determined by the Regulator. It is anticipated that financeability would be satisfactorily addressed where capital costs and rate of return (including the repayment schedule) are determined through a contestable process, because potential Network Operators would bid costs for which they are willing and able to deliver the project if selected.

Question for stakeholders

11. Should financeability concerns be addressed in the NSW framework?

Further matters taken into account by the Regulator

The EII Act provides that the regulations can identify any further matters the Regulator is to take into account in making a determination. This could, for example, include any loans or other financial arrangements entered by the Network Operator for the purposes of carrying out the network infrastructure project. Financing arrangements with government agencies would likely be included under this provision. The Department is considering how these kinds of matters could be clarified in regulations or in other documents such as the recommendations of the Infrastructure Planner and authorisation documents of the Consumer Trustee.

²⁹ Transgrid and ElectraNet 2020, Rule Change Proposals, Participant derogation – financeability of ISP projects (Transgrid and ElectraNet).

³⁰ AEMC, Participant derogation – financeability of ISP projects (Transgrid), Rule determination, 8 April 2021; AEMC, Participant derogation – financeability of ISP projects (ElectraNet), Rule determination, 8 April 2021.

³¹ AEMC 2021, Transmission Planning and Investment Review, Consultation paper, 19 August 2021.

Guidelines for the revenue determination

We anticipate the Regulator will develop guidelines to provide stakeholders with an understanding of how the revenue determination process will be undertaken and how costs will be assessed. The scope of these guidelines will be clarified in regulations.

It is possible the Regulator may develop an overarching guideline to cover both the TET and revenue determination process to be followed under the EII Act and also refer to other guidelines if relevant. Some of the elements these guidelines could cover include:

- timeframes for undertaking the determination, including public consultation
- requirements on the Network Operator to provide information to the Regulator
- how the Regulator will consider information provided by a Network Operator
- the process and approach by which the Regulator will undertake a cost assessment
- how the Regulator will make a revenue determination if the Network Operator is selected through a contestable process, and
- how the Regulator will treat confidential or sensitive information (including information provided during any contestable process if applicable).

Question for stakeholders

12. What views do you have on these elements and is there any other guidance that should be included in guidelines regarding the revenue determination to be developed by the Regulator?

The AER's approach to setting regulated revenue requirements

Chapters 6 and 6A of the National Electricity Rules lay out the framework the AER must apply in undertaking its economic regulation of electricity distribution and transmission networks, respectively. The AER's approach is also governed by the National Electricity Law and in particular section 16, which requires the AER to:

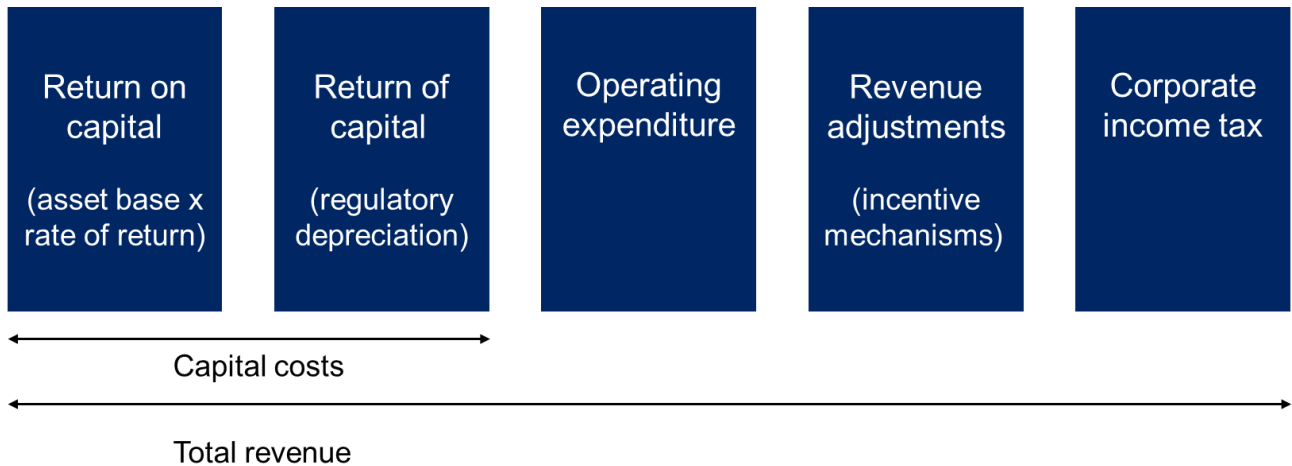
- perform or exercise its power in a manner that will or is likely to contribute to the achievement of the national electricity objective, and
- take into account the revenue and pricing principles (section 7A of the National Electricity Law).

In determining the revenues or prices that a network business can charge, the AER forecasts how much revenue a business needs to cover its efficient costs (including operating and maintenance expenditure, capital expenditure, asset depreciation costs and taxation liabilities) and a return on capital in accordance with the Rate of Return Instrument. The National Electricity Rules also require the AER to develop and publish certain guidelines, models and schemes to be applied to distribution and transmission networks service providers.

This approach is outlined at a high level in Figure 7 below.

The AER's approach under the national framework is outlined further in this section. We are interested in feedback on whether there are any elements of this approach that should be amended in the framework to be applied to projects under the EII Act.

Figure 7 The AER’s building block approach to setting regulated revenue



Overarching framework

The AER sets a cap on the revenue or prices that a regulated network business may earn over each 5-year regulatory period, based on forecast costs at the start of the regulatory period. The building block costs are then ‘smoothed’ over the regulatory period in a Net Present Value neutral way. Regulated revenue or prices are adjusted each year of the regulatory period based on actual inflation and the smoothing factor or ‘X-factor’, which helps minimise price variation year-on-year for a revenue profile.³² Some other annual or ad hoc adjustments may also be made.

Form of regulation

Another key element of regulatory design is the mechanism that determines the regulated revenue. In the national framework, the AER applies a revenue cap approach that places a cap on the total revenue that can be earned by a regulated network business each year. This approach provides revenue certainty and is a well-understood approach used in the national electricity framework.

The intent of the EII Act is that the Regulator will apply a similar approach, as the Regulator is to determine the amount payable to a Network Operator (that is, a total revenue requirement) and then the Scheme Financial Vehicle is required to pay the Network Operator the amount the Network Operator is entitled to in accordance with the Regulator’s determination.

Basis of returns and treatment of tax

In the national framework, the AER determines annual revenue and the total revenue requirement, which is then adjusted for inflation.

The AER applies the building block model on a post-tax basis, which compensates a regulated network business by adding a separate tax building block.

Approach to setting the regulated rate of return

A regulated rate of return is used by a regulator to forecast the cost of funds that a regulated business requires to attract investment. To estimate this cost, a regulator will consider the cost of the two sources of funds for investments – equity and debt. The allowed rate of return then provides the regulated business funds to service the interest on its loans and give a return to shareholders.

³² The AER applies an X-factor to an unsmoothed revenue requirement to reduce significant variations or to smooth revenue in each year of a regulatory period. Holding other things constant, a positive X-factor implies a real revenue decrease and a negative X-factor implies a real revenue increase.

The estimation of the rate of return is important and complex as it is a significant driver of regulated revenue. The AER determines how the rate of return for regulated network businesses will be calculated and this is reflected in the Rate of Return Instrument it must make under the National Electricity Law. The Rate of Return Instrument is a binding instrument the AER reviews every four years.

Incentive mechanisms

In the national framework, the AER applies incentive schemes in relation to capital expenditure, operating expenditure, service performance incentives and demand management (noting that the demand management scheme applies to distribution only). These schemes are outlined at a high level in Table 3 below.

The Department is considering what incentive schemes may be appropriate to apply to projects carried out under the EII Act, including whether there is scope for new incentive schemes to apply in the NSW framework (for example, to incentivise the timely delivery and availability of projects and connection of generators, which is discussed in the section below).

Table 3 Incentives schemes in the national framework

Scheme	Purpose
Capital efficiency benefit sharing scheme	Financial incentive to act efficiently in each year of the regulatory period regarding capital expenditure
Operating efficiency benefit sharing scheme	Financial incentive to act efficiently in each year of the regulatory period regarding operating expenditure
Service target performance incentive scheme	Financial incentive to reduce the quantity and duration of outages for network users and incentivising service performance for consumers
Demand management incentive scheme	Financial incentive to encourage efficient expenditure on relevant non-network options relating to demand management

Access fees and connecting generators

Under the EII Act, generators may be required to pay access fees to connect to network infrastructure projects in REZs under declared REZ access schemes.³³ Fees paid by participants in an access scheme will be paid into the Electricity Infrastructure Fund administered by the Scheme Financial Vehicle. The details of REZ access schemes and the processes for determining access fees and allocating access rights are still being developed.

The revenue determination made by the Regulator on the prudent, efficient and reasonable costs to carry out a REZ network infrastructure project (including the TET) will be determined independently of the access fees that are set for access to the network infrastructure in the relevant REZ. However, it may be desirable to incentivise Network Operators to ensure the availability of network infrastructure and coordinate the timely connection of generators. One way this could be incorporated is through the introduction of a new incentive scheme to ensure the availability of projects and the timely connection of generators to the REZ by the Network Operator.

³³ See sections 24 and 26 of the EII Act.

Questions for stakeholders

13. Are there any elements of the AER's approach to assessing and setting regulated revenue requirements that should be modified or added to when considering the framework that will be applied under the EII Act in New South Wales?
14. What do you think about an incentive scheme to ensure the availability of projects and the timely connection of generators to a REZ by Network Operators? How could that be designed?

Reviewing a revenue determination

Scope and purpose

This section sets out issues relating to how the Regulator will review and adjust revenue determinations made under the EII Act.

As outlined in the previous section, the Regulator determines the amount payable to the Network Operator for a REZ network infrastructure project.³⁴ The EII Act outlines two circumstances in which the Regulator is to review a revenue determination: once every five years and at any time when directed by the Consumer Trustee.³⁵ In addition, the Regulator may review and remake a determination at any other time, subject to the regulations. It is proposed that regulations clarify that the Regulator may only adjust a revenue determination based on this third reason in circumstances that would permit an adjustment under the National Electricity Rules.³⁶ This is discussed further below.

The purpose of a revenue determination under the EII Act is to provide Network Operators, consumers and other stakeholders with certainty on the allowed revenue a Network Operator may earn from delivering a project. As such, there may be benefit in clarifying in the regulations the circumstances in which the Consumer Trustee may direct the Regulator to review and remake a revenue determination, and the circumstances in which the Regulator may review and remake a revenue determination outside of the five-yearly cycle. It is proposed that doing so will provide important certainty and transparency to Network Operators, consumers and other stakeholders.

Roles and responsibilities

The Regulator is to remake a revenue determination every five years or when directed by the Consumer Trustee. The Consumer Trustee can direct the Regulator to remake a revenue determination outside of this five-yearly cycle and the circumstances for when this is likely to occur are outlined in the next section.

The Network Operator carrying out the project is expected to be required to provide information to the Regulator for the purposes of reviewing and remaking a revenue determination. The Department intends to clarify in regulations that the only other time for a review and remaking of a revenue determination is to adjust an existing determination for reasons consistent with those under the National Electricity Rules. This is discussed further below.

Proposed process for reviewing a revenue determination

A common feature of regulatory frameworks is that the regulator periodically reviews and reassesses the revenue requirements of the regulated entity. In the national framework, this typically occurs every five years.

The EII Act provides that the Regulator is to review and remake a revenue determination every five years or at any time the Consumer Trustee directs.

If a contestable process is used to select a Network Operator for a REZ network infrastructure project, it is expected that the elements that were bid as part of the contestable process would reflect the outcome of the successful tender (including any detail on schedules and adjustments if applicable). Only the elements not determined by the contestable process, such as the application of incentive mechanisms, would be subject to review by the Regulator. The potential to review a revenue determination outside of a pre-determined cycle risks introducing material uncertainty for

³⁴ Section 38 of the EII Act.

³⁵ Section 40(1) of the EII Act.

³⁶ Section 40(2) of the EII Act.

consumers, Network Operators and their investors. It could also make it difficult for Network Operators to plan and efficiently manage their costs and operations. This is because unknown timing of revisions would mean allowed revenue for the coming few years would not be locked in with certainty and could change earlier than anticipated.

Therefore, it is proposed that there be limited circumstances under which the Consumer Trustee is to direct the Regulator to review and remake a revenue determination outside of the five-yearly cycle. Two reasons for which it may be appropriate for the Consumer Trustee to direct the Regulator to review and remake a revenue determination outside of this five-yearly cycle are outlined below.

For existing Network Operators under the National Electricity Law and National Electricity Rules, there may be an administrative benefit to align the five-year determination cycle under the EII Act with its existing five-year regulatory period under the national framework, particularly if the AER is appointed as the Regulator under the EII Act. This alignment could result in administrative cost savings for the Regulator and the Network Operator and may enable more effective stakeholder consultation. This may also help the Network Operator to plan and manage costs and revenue across its portfolio and could streamline any future consolidation of national and NSW regulated asset bases.

It may also be beneficial to remake a revenue determination outside the five-yearly cycle to align the determinations of multiple projects under the EII Act where these projects are carried out by the same Network Operator.

Question for stakeholders

15. Do you agree there should be limited circumstances under which the Consumer Trustee directs the Regulator to review and remake a revenue determination outside of the five-yearly cycle?

Proposed process for adjusting a revenue determination

As mentioned earlier, the Regulator may review and remake a determination at any other time, subject to the regulations. It is proposed that regulations clarify that the reasons for adjusting an existing revenue determination under the EII Act are made consistent with the well-established process in the national framework (noting there may not be a need for a contingent project process to adjust a Regulator's revenue determination on projects delivered under the EII Act).

Under the national framework, there are three reasons for the AER to reopen and adjust elements of a revenue determination:

1. a material error was made in the original determination
2. a cost pass-through event occurs, which is generally related to an unforeseen event beyond the reasonable control of the Network Operator (or a capital expenditure reopener or network support pass-through occurs for transmission), or
3. a contingent project for transmission is triggered.

Other adjustments

There may be a need for other adjustments, such as the adjustment of amounts on the basis of differences between the estimated and actual capital costs or to account for incentive scheme bonuses and/or penalties if relevant. It is expected the scope of this would be consistent with the AER's approach under the national framework where relevant.

Question for stakeholders

16. Do you agree with the proposed circumstances under which the Regulator may adjust a revenue determination during the five-yearly cycle?

Transitioning assets into the national framework

The EII Act allows for the possibility that a Network Operator's asset base under the EII Act could be transitioned into a Network Operator's regulatory asset base under the national framework (that is, into the regulatory asset base determined by the AER under the National Electricity Rules).³⁷

The Department notes that any potential transition of assets into the national framework would likely need to be considered on a case-by-case basis but we are interested in stakeholder feedback on whether clarification is required on how this may occur. Any decision on whether to roll NSW-specific assets into the national framework is likely to be dependent on: (a) who the Network Operator is, and (b) how similar the two frameworks and methodologies for regulating are. For example, detailed modelling may be required as cost impacts on customers may change if different cost recovery mechanisms are applied under both frameworks.

One circumstance where this may be appropriate is if Transgrid is the Network Operator carrying out the network infrastructure project under the EII Act. Transgrid operates and manages a transmission network that is regulated by the AER under the national framework, so it may be prudent, once a determination is made, to transfer the ongoing regulation of the project into the national framework for administrative simplicity.

A decision to transition assets into the national framework could be made at the Regulator's discretion, providing certain criteria are met (which could be prescribed in the regulations), including the Network Operator approving the transition and the Regulator assessing that the transition is in the interests of NSW electricity consumers.

Under both approaches, it would be important to ensure the Network Operator agrees (if not initiates) the transition. This will provide the Network Operator and investors with certainty of how their assets will be treated, thereby reducing their risk exposure.

If the assets are transitioned into the national framework, the transmission pricing methodology may need to be reviewed to consider any differences in the NSW framework. It will be important that this continues to be accounted for in a way that does not lead to over-recovery or under-recovery of costs.

While the EII Act allows for this process, it is not a requirement, and the assets could remain under the NSW framework permanently if this were deemed the most appropriate course of action.

Question for stakeholders

17. Is there a need to clarify the process for transitioning of assets between the NSW and national frameworks?

³⁷ Section 41(1)(c) of the EII Act.

Transfer of network infrastructure

The EII Act provides for the transfer of network infrastructure by a Network Operator to another person to enable the revenue allowances for network infrastructure projects to be novated to new owners – for example, in the event they are sold.³⁸ The Department is considering whether there is a need to clarify in regulations the circumstances in which this may occur under the NSW framework.

Question for stakeholders

18. Is there a need to clarify the circumstances under which a transfer of network infrastructure from a Network Operator to another person may occur under the EII Act?

³⁸ Section 42 of the EII Act.