Better Resets Handbook Towards Consumer Centric Network Proposals

December 2021

AUSTRALIAN ENERGY REGULATOR

Australian Government

Australian Competition and Consumer Commission
GPO Box 3131
Canberra ACT 2601

or publishing.unit@accc.gov.au

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Email: RegulatoryInnovation@aer.gov.au

AER Reference: 12781864

Amendment Record

Version	Date	Pages
Draft	September 2021	34
Final	December 2021	39

Contents

1 Introduction

1.1 Who we are

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable and affordable energy future for Australia. Energy is an essential service for Australian households and businesses, and a critical contributor to the long-term success of the Australian economy.

1.2 Purpose of this document

This document, the *Better Resets Handbook – Towards consumer centric network proposals* (the Handbook), seeks to encourage networks to better engage and have consumer preferences drive the development of regulatory proposals. If regulatory proposals also meet our expectations, they are more likely to be accepted by us, earlier in the assessment process and thereby create a more efficient regulatory process for all stakeholders. This gives effect to one of our 'tilt' priorities in the *AER Strategic Plan 2020–2025*, to achieve our objective of delivering efficient network regulation while incentivising networks to become platforms for energy services:

> *Incentivise proposals that reflect consumer preferences and are capable of acceptance, including through:*
>
> *– establishing a Statement of Expectations for networks that aligns with the National Energy Objectives/National Gas Objectives*
>
> *– enhanced consumer engagement*

The Handbook is the new name for the Statement of Expectations for Networks referred to in our Strategic Plan for 2020–2025.

1.3 Handbook consultation

On 21 September 2021 we published the draft Handbook for consultation. We held a stakeholder forum on the draft Handbook on the 6 October 2021 which was attended by over 90 participants, and we received 24 submissions. We have published an open cover letter alongside this Handbook which provides an overview of how we considered the feedback and submissions from stakeholders in finalising the Handbook. We have greatly valued the feedback from stakeholders and would like to thank them for their ongoing and extensive involvement in the consultation process on the Handbook.

1.4 Our role in regulating energy networks

As the economic regulator of energy networks in all states and territories except Western Australia, we play an important role in the energy transition[1]. We regulate 30 gas and electricity network businesses with a combined asset base of over $100 billion. Our primary role is setting the maximum revenue and prices that network businesses can recover from users of their networks. We aim to ensure consumers pay no more than necessary for safe and reliable energy, and we promote efficient supply and use of energy.

Our framework for regulating electricity networks is set out in the National Electricity Rules (Electricity Rules) and Law (Electricity Law). For natural gas pipelines, it is set out in the National Gas Rules (Gas

[1] The energy transition refers to the transition away from a centralised system of large coal and gas generation towards a mixture of smaller scale, widely dispersed wind and solar generation coupled with battery storage.

Rules) and Law (Gas Law). In this document when we refer to the Rules or the Law, we mean both the Electricity and Gas versions.

Network businesses submit regulatory proposals, which we assess against factors including:

- efficiency of costs
- quality of engagement with customers
- projected demand for energy
- age of infrastructure
- operating and financial costs
- network reliability and safety standards.

Our decisions on revenues generally apply for 5 years. To recover these revenues, network businesses adjust their prices annually, in accordance with the requirements in the Rules (including any relevant AER pricing decisions).

1.5 Evolving our approach to network regulation to meet future challenges

Our approach to regulating energy networks is evolving. One of the main themes of network regulation in the past decade has been the increased focus on consumer engagement. For the National Electricity Objective and National Gas Objective to be achieved, regulatory proposals and AER determinations must reflect the long-term interests of consumers. Consumers have gone from being outsiders to being an integral part of the regulatory process. We want to see this continue.

We established the Consumer Challenge Panel[2] in 2012 and, jointly with Energy Networks Australia and Energy Consumers Australia, trialled the New Reg approach to engagement across 2018 to 2021[3]. This Handbook builds on what we learned through the New Reg trial. We have also seen network businesses undertake their own innovative approaches on consumer engagement, especially since the removal of limited merits review in 2017. These are positive developments we want to encourage and build on as a best practice regulator.

We are in an environment where the energy system is rapidly changing, affecting customer preferences and how energy networks are used. Over the next 5–10 years we expect to see significant network investment to manage the impact of the energy transition. In this transition, it is more important than ever to ensure customer preferences drive outcomes and we continue to evolve how we regulate to ensure the long term interests of consumers are met.

Now is an important time to provide more clarity to consumers, network businesses and governments about our expectations. It is almost a decade since our Better Regulation reform program. The guidelines and decisions we have published since then provide a lot of information on what we expect from regulatory proposals. However, we recognise it is not easy for consumers or businesses to work through our decisions and identify our expectations. Providing additional clarity should benefit consumers and network businesses, and help make the regulatory process more efficient.

[2] The Consumer Challenge Panel is a panel of experts which advise the AER on whether the long-term interests of consumers are being appropriately considered in regulatory proposals and the AER's decision making, and provides an assessment of consumer engagement processes undertaken by network businesses.

[3] The New Reg project explored ways to ensure customers' preferences drive energy network proposals and regulatory outcomes.

2 Our Better Resets Handbook – Towards consumer centric network proposals

2.1 Objective of the Handbook

The Handbook aims to encourage networks to develop high quality proposals through genuine engagement with consumers and that meet our expectations. This will lead to a number of benefits, including regulatory outcomes that better reflect the long-term interests of consumers.

Networks that engage in genuine engagement with consumers are likely to result in better quality proposals being submitted to the AER. Proposals that reflect consumer preferences, and meet our expectations, are more likely to be largely or wholly accepted at the draft decision stage, creating a more effective and efficient regulatory process for all stakeholders. By encouraging network businesses to improve their consumer engagement, consumers will be central to the regulatory determination process. This will allow consumers to have a greater influence over the development of regulatory proposals by network businesses and, more importantly, ensure network businesses deliver outcomes valued by consumers.

We consider this will also lead to many other benefits including; improved relationships and understanding between networks and consumers, greater faith from all parties in regulatory processes, and the generation of new ideas and regulatory approaches that benefit both consumers and networks.

As the economic regulator of energy networks, we are required to make decisions that best advance the long-term interests of consumers, as expressed in the National Electricity Objective[4] and National Gas Objective[5]. If a network business meets our expectations this will increase the likelihood that its regulatory proposal advances the long-term interests of consumers, giving us the confidence to rely on a more targeted assessment to meet our obligations.

Network businesses will be rewarded for meeting our expectations set out in the Handbook. We will provide reputational and procedural incentives for networks to meet our expectations.

By providing greater clarity, and rewarding proposals that are developed through good customer engagement and are well-justified, there should be increased efficiency in the regulatory process. A high-quality proposal increases the likelihood that more issues can be settled at the draft decision stage or that proposals may be fully accepted. We would also expect further improvements in the quality of proposals from a network business in subsequent proposals for future regulatory control periods. The network businesses can then focus their resources on meeting the needs of their customers, rather than extended engagement with the regulator.

[4] To promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to: price, quality, safety and reliability and security of supply of electricity, and; the reliability, safety and security of the national electricity system.

[5] To promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

2.2 How it will work

2.2.1 Setting out our expectations

This Handbook:

- Sets out our expectations of how network businesses will engage with consumers and how outcomes of that engagement should be reflected in their proposals. These expectations are drawn from the consumer engagement framework first developed for the 2021–26 revenue determinations for the Victorian electricity distribution networks (see section 3).
- Sets out our expectations for capital expenditure, operating expenditure, regulatory depreciation and tariff structure statements (electricity distribution only). We focus on these topic areas as they tend to have the most significant impact on consumers in terms of price and service outcomes (see sections 4, 5, 6 and 7).

Our expectations for each topic area are drawn from the Rules, published guidelines, guidance notes, AER assessment tools and previous AER decisions. The expectations represent key features and supporting evidence required for a proposal to be considered well-justified. Meeting our expectations would allow us to undertake a more targeted review of the proposal and increase the likelihood that we can substantially accept the proposal at the draft decision stage.

2.2.2 Targeted review for proposals that meet expectations

Where a regulatory proposal substantially meets our expectations for one or more of the topics covered in this Handbook, we would be able to undertake a targeted review rather than our standard assessment approach. As part of our draft decision, we would highlight if one or more topics in a regulatory proposal satisfied our expectations and was subject to targeted review.

The Handbook, including the early signal pathway as discussed below, will operate within the regulatory framework set up by the Rules and Law. Our expectations are not in addition to these requirements, but rather our views on how a proposal can be better substantiated to meet the requirements of the Rules. Where our expectations are met, it will allow us to undertake a more efficient process to determine whether we can accept the relevant parts of a proposal – a targeted review.[6] This will also likely reduce the work required at the later stages of the regulatory process (namely, the revised proposal and final decision).

Our standard assessment approach entails us undertaking a detailed assessment of a proposal, with the level of assessment for each component of the proposal dependent on factors such as the materiality, sensitivity, and complexity of an issue. A targeted review differs to our standard approach in the following ways:

- as consumer engagement expectations are met, we will have greater certainty that the elements of a proposal reflect the preferences and desired outcomes of network consumers
- focusing our assessment on the key drivers and contentious aspects of the proposal, which are the issues that will have a greater influence on whether we accept or reject an element of the proposal

[6] The conditions outlined above do not displace any requirements in the Rules, including the requirement to publish a framework and approach paper prior to an electricity proposal being submitted. The Electricity Rules require the framework and approach paper to cover a number of prescribed issues. We consider this will largely continue to be the main purpose of the framework and approach paper. However, as we apply the early signal pathway process we will give consideration to whether and how the framework and approach paper could be better utilised.

- more easily and efficiently examining issues because the network business has followed our standard forecasting approaches, provided supporting evidence in line with our expectations, and consulted with its consumers
- less use of bottom up analysis where expectations are met.

In determining whether a topic should be subject to a targeted review, we intend to take a holistic rather than a "checklist" type approach. This will accommodate some deviation from our expectations, particularly where it is supported by genuine consumer engagement. This will be assessed on a case-by-case basis. Ultimately a targeted review will require that our expectations are substantially met, as deviations from our expectations may necessitate a more intensive review.

Case study 1: Example of targeted review – Powerlink 2022–27 draft determination

An example of a targeted review is how we assessed Powerlink's regulatory proposal for the 2022–27 period. Powerlink put forward a well-informed proposal, underpinned by significant consumer engagement and its overarching goal of lodging an initial proposal that is acceptable to its consumers and the AER. Because of the high-quality proposal, we were able to undertake a targeted review, focusing on the key areas of concern raised by stakeholders and our own assessments. Ultimately, in our draft decision for Powerlink's 2022–27 period we accepted all major aspects of Powerlink's regulatory proposal.

2.2.3 Early signal pathway

To further encourage the development of high-quality regulatory proposals through genuine engagement, this Handbook introduces a new process – the early signal pathway. This offers an alternative process for networks to engage with us, allowing them to get earlier formal feedback on aspects of their regulatory proposal – such as at the issues paper stage, in exchange for certain commitments. While this process is currently optional, our aim is that the early signal pathway approach eventually becomes part of the business-as-usual approach to regulation.

Under the early signal pathway, we will commit to provide feedback on topics covered in the Handbook to support the engagement process between network businesses and their consumers in the development of the regulatory proposal. The level and timing of AER staff feedback will vary depending on the consumer engagement process being undertaken and the availability of information and data.

One of the key commitments a network business would need to make to be given access to the early signal pathway is to publish a detailed draft regulatory proposal for consultation that incorporates the findings of its consumer engagement and shows how the draft proposal meets the expectations set out in the Handbook, including providing supporting models, data and analysis.

Under the early signal pathway, once a regulatory proposal has been submitted, we would assess the proposal and where it substantively meets our expectations for the topics covered in this Handbook (see sections 3, 4, 5, 6 and 7), we will:

1. Publicly recognise the proposal has achieved this early in our formal assessment process prior to the draft decision stage. This provides the network business with additional reputational benefits because it receives an early indication from the regulator on the quality of the proposal and its consumer engagement efforts.
2. State our intention to undertake a targeted review rather than our standard assessment approach. This commitment will be subject to stakeholder submissions and any material changes in circumstances which would influence our assessment. This provides a procedural benefit for the network business,

because it now receives an earlier indication of the proposed nature of the AER's review and the issues that will be of focus.

See Figure 1 for more detail about how the early signal pathway is different to our standard approach to assessing proposals.

Figure 1: Early signal pathway compared to standard regulatory determination process

		CURRENT	EARLY SIGNAL PATHWAY
Pre-lodgement steps	Start pre-lodgement engagement	Network business commences pre-lodgement engagement with consumers. AER staff observe engagement process. Limited Consumer Challenge Panel involvement.	Network business commences pre-lodgement engagement with consumers and applies to AER to seek access to the early signal pathway. Network businesses which can access the early signal pathway will be informed via a letter from the AER Chair.
	AER pre-lodgement engagement	Network business may seek preliminary AER staff views on issues as it develops regulatory proposal or invite AER to attend customer engagement processes. AER staff may provide advice on an ad-hoc basis.	Network business engages with its consumers, identifying outcomes and preferences and how to give effect to those in the regulatory proposal. AER staff to support the engagement process and provide feedback on issues to the network business and consumers. Feedback will be dependent on what information is made available to AER staff and when it is provided.
	Draft regulatory proposal	A network business may publish a draft proposal to consult on.	Network business publishes a detailed draft proposal for consultation, showing how consumer views have been incorporated, and include supporting data, models and information.
Post-lodgement steps	Regulatory proposal	Network business submits proposal for AER assessment.	Network business submits proposal for AER assessment. Proposal must show how consumer feedback on the draft proposal has been accounted for. Proposal to also include an independent consumer report. AER may commission the Consumer Challenge Panel to provide an assurance report on the quality and outcomes of the engagement process.
	Early signaling		In electricity, this could occur at the issues paper stage. AER would provide a view on: 1. which aspects of the proposal have met our expectations and can be subject to a targeted review 2. for topics subject to a targeted review, signal which areas will be of particular focus and which are not 3. which topics will be subject to standard assessment approach.
	Forum and submissions	Seek stakeholder feedback on proposal. Issues paper highlights AER view of key themes and issues raised by a proposal.	Seek stakeholder feedback on proposal and AER issues paper positions on whether to undertake a targeted review for parts of the proposal.
	AER Draft decision	Draft decision to accept or not accept and substitute for individual proposal components as required by the Rules. AER uses its discretion in determining the extent of assessment required, including any elements within the proposal that can be subject to a targeted review. Draft decision to outline whether any parts of the proposal have met the Handbook expectations and subject to a targeted review.	If there are no stakeholder concerns and/or other material changes, AER will undertake a targeted review as outlined in the issues paper for the relevant components of the draft decision. Proposals which meet our expectations on consumer engagement and building block topics will more likely be substantially accepted at the draft decision stage. We will also highlight if a proposal is exemplary and has been accepted in its entirety.
	Revised proposal / AER final decision	Standard assessment process using our full range of assessment tools, including on new issues raised in the revised proposal.	Highly targeted review of any outstanding issues.

2.2.4 Access to the early signal pathway

To access the early signal pathway, we request network businesses provide an expression of interest (EOI). An EOI allows us to assess the network business's commitments and engagement plans against our own capacity to meet our commitments under the early signal pathway.

We have set out in section 2.2.4.1 the content that a network would need to provide in its EOI. In assessing EOIs, we would exercise a degree of flexibility to account for different engagement models, timelines and the availability of information needed to provide an early signal.

2.2.4.1 Expression of interest requirements

Networks seeking access to the early signal pathway should provide an EOI application that includes:

1. A commitment from the CEO and/or the Board, expressing an interest in obtaining an early signal on the elements of its regulatory proposal as set out in this Handbook.
2. A commitment to publish a draft regulatory proposal for consultation that incorporates the findings of its consumer engagement and shows how the draft proposal meets the expectations set out in the Handbook, including supporting models, data and analysis. The EOI could also indicate other content that is intended to be covered in the draft regulatory proposal.
3. Its consumer engagement plan which includes how it intends to meet the expectations for consumer engagement set out in section 3 of this Handbook and how it has/intends to engage customers on their desired outcomes. This plan should include its expectations for AER staff involvement, particularly what type of feedback will be sought and how AER staff can provide feedback to the network business and its customers.
4. What data and information can be provided to the AER during the course of pre-lodgement engagement to facilitate AER staff feedback to networks and consumers in accordance with the consumer engagement plan. The level of feedback and assistance that AER staff can provide during the course of pre-lodgement engagement to networks and consumers will depend on timely provision of relevant information. We will discuss the proposed data and information, along with proposed dates for provision, with businesses that express interest in the early signal pathway.
5. A commitment to submit an independent consumer report on the development of the regulatory proposal, to be submitted with the regulatory proposal, to the AER. Further details about the independent consumer report can be found in section 3.4.2 of the Handbook.
6. A commitment to not diverge from analytical methods and techniques consistent with the Handbook, and relevant AER guidelines and guidance material, to develop building block topics without first seeking the input of consumers and feedback from AER staff.

Network businesses that can access the early signal pathway will be notified by a letter from the AER Chair, which will also be published on the AER website. The letter will confirm our commitments to the network business and their customers, and outline AER staff and the Consumer Challenge Panel's involvement in the pre-lodgement engagement process.

2.2.5 AER and Consumer Challenge Panel's role in early signal pathway pre-lodgement engagement

Under the early signal pathway, AER staff commit to support pre-lodgement engagement discussions between networks and consumers, including providing feedback on the development of proposal topics covered in the Handbook. For example, we would commit to feedback sessions with the networks and consumers if this is desired and would be of value to the engagement process. The level of feedback AER staff can provide will be dependent on the models, information and data available to the AER and

consumers during the pre-lodgement process. The provision of information and associated timing of that information is something that would be agreed between the AER, the network business and other parties, recognising the different engagement processes that various networks may adopt.

AER staff involvement in pre-lodgement engagement processes under the early signal pathway would be more active, dedicated and structured than compared with our usual involvement in pre-lodgement engagement processes.

While we will take a more active role in pre-lodgement under the early signal pathway, we consider pre-lodgement engagement is primarily a process between the network business and consumers. Our expectation is that networks will ensure their consumers are appropriately equipped and informed to meaningfully participate (see section 3 for further discussion). As stated above, our involvement in the pre-lodgement phase will be to support the engagement process between the networks and their consumers.

In particular, AER staff involvement in pre-lodgement engagement will be focused on:

- providing support to consumers where appropriate to ensure they can meaningfully participate
- outlining potential concerns regarding consumer engagement processes at the earliest possible stage
- providing feedback, at the AER staff level, to the network business where development of the capital expenditure, operating expenditure, depreciation and tariff structure statement proposals appears to deviate from, or be substantially inconsistent with, the expectations set out in this document
- providing feedback or guidance on the nature or type of information a network business could provide to support a particular aspect of its proposal.

Any feedback or guidance provided to a network business will also be shared with consumers participating in the engagement process.

Importantly, at the pre-lodgement phase AER staff will not provide advice or guidance, implicitly or tacitly, on:

- whether an aspect of a draft proposal is likely to meet our expectations and/or qualify for targeted review
- how the AER Board would likely substantively decide on an issue.

The key role of the Consumer Challenge Panel in the pre-lodgement phase would be assessing the quality and robustness of a network's consumer engagement processes and outcomes. This would likely be provided as an assurance report to the AER shortly after the proposal has been submitted. We would expect Consumer Challenge Panel advice to detail how well consumer preferences and desired outcomes have been incorporated into specific elements of the proposal (for example, how consumer preferences have influenced or been incorporated into the capital or operating expenditure forecast). However, the role undertaken by the Consumer Challenge Panel would depend on the specific circumstances of the pre-lodgement engagement, including the type and forms of consumer engagement being implemented by the network business.

For each pre-lodgement process we intend to outline the role of the Consumer Challenge Panel in the open letter to the network business that confirms their entry into the early signal pathway. This will ensure role clarity and minimise any duplication between the Consumer Challenge Panel and other consumer panels involved in the pre-lodgement process.

2.2.6 Who the Handbook applies to

The expectations outlined in this Handbook generally apply to all regulated network businesses (electricity distribution, electricity transmission, gas distribution and gas transmission). However, certain expectations are specific to particular network types, as specified.

2.2.6.1 First application of the early signal pathway

We consider the first full application of the early signal pathway process will apply to proposals due from January 2023. This is because the pre-lodgement consumer engagement processes for proposals that are due earlier have already commenced and are likely to be well-advanced.

We emphasise, though, that a network business that strives to meet the expectations in this Handbook is likely to see benefits in terms of the quality of its proposal and our response even where the full application of the process is not possible.

2.2.6.2 Application of the early signal pathway to electricity

For electricity proposals, we would provide an early signal and indicate our intention to undertake a targeted review at the issues paper stage.

2.2.6.3 Application of the early signal pathway to gas

For gas proposals, the Gas Rules do not include a prescribed issues paper stage. However, we consider that the Gas Rules contain sufficient flexibility to allow an early signal to occur at a similar time. To accommodate this, it will be particularly important that gas network businesses seeking access to the early signal pathway engage with us at the start of their pre-lodgement engagement processes. Discussion of how we can gain sufficient levels of familiarity with a proposal prior to submission will be critical in order to incorporate an issues paper or reasonable equivalent within the shorter consultation and assessment timeframes available under the Gas Rules (8 to 10 months for gas compared with 15 months for electricity).

These shorter timeframes also mean that the implications of uncertainty and the potential for material changes in circumstance, discussed in section 2.2.6.4 below, are more significant in our consideration of the early signal pathway for gas. It will be important to signal the potential for any such changes, and the implications they may have for the workability of the early signal pathway process. If there is the potential for material changes between an initial proposal and draft decision, or between draft decision and revised proposal, this should be made visible to stakeholders as early as possible and considered as part of the engagement process to maximise the time available for consultation.

2.2.6.4 Change in circumstances which materially impacts a proposal submitted to the AER

We recognise that between a proposal being submitted and the draft decision being published there may be changes in circumstances, beyond the control of the network business, which could materially impact our assessment of a proposal. Where this occurs, we would need to assess whether it is still possible to undertake a targeted pathway review for some elements of the proposal, or whether the change in circumstances means such an approach is no longer possible.

If a network business wants to update its proposal in light of the changed circumstances beyond its control, we would expect it to engage with consumers on the proposed changes in accordance with our expectations for consumer engagement.

Changes in circumstances beyond the control of the network business could also occur late in the regulatory assessment process, such as after the draft decision or even after the revised proposal is submitted. If this occurs, we would similarly expect a network business to engage with its consumers on proposed changes in accordance with our expectations for consumer engagement.

However, if a network business wants to make material changes to a proposal that are not driven by circumstances beyond its control after it has been submitted to the AER, it will no longer be eligible for a targeted review of the elements of its proposal affected by the change.

3 Our expectations on consumer engagement

3.1 Overview

The networks we regulate are natural monopolies that supply an essential service. High quality consumer engagement is essential for ensuring that networks provide the services that meet the needs of their consumers, at a price that is affordable and efficient. We have observed material improvements in consumer engagement as part of regulatory processes over the past 5 years. We acknowledge the significant commitment and progress that both network businesses and consumer representatives have made to date. We want to see this continue as the nature of the energy system evolves and the needs and preferences of consumers change over time.

Our expectations on consumer engagement are principles-based and build on our current learnings. They cover:

- the nature of engagement
- the breadth and depth of engagement
- clearly evidenced impact of this engagement.

Our expectations do not prescribe any particular form or model of consumer engagement and can be applied across all network types in developing their regulatory proposals. They are targeted at the outcomes we want to see from engagement. Importantly, we want networks to own their engagement approaches and tailor their engagement to best suit the needs and circumstances of their consumers.

Our expectations are a baseline that represents what we think is good practice under the Rules. Some networks are already exceeding these expectations. We expect this to continue and for the learnings from new initiatives shared across the sector to raise expectations over time. We include case studies of good practice engagement that we have observed to illustrate these principles.

The onus for high-quality consumer engagement ultimately rests with the network businesses. That being said, we will look to support consumers, where networks cannot provide this support themselves, in their engagement with a network business. The support provided would be tailored to the network's engagement activities and the circumstances of the engagement. This may include the review of a network business's proposals, participation in consultation and the provision of written advice. The resources we would be able to commit to each pre-lodgement engagement process would vary depending on the circumstances and AER staff capacity. In particular, we would provide a greater level of support to pre-lodgement engagement processes where a network business is under the early signal pathway process. Our involvement in the pre-lodgement engagement process should increase the likelihood that we can undertake a targeted review of key elements of the proposal once it is submitted, reducing the assessment we would otherwise need to undertake.

3.2 Nature of engagement

The nature of engagement is about *how* networks engage with their consumers. Our expectations are that network businesses will sincerely partner with consumers and equip them to effectively engage in the development of their proposals.

3.2.1 Sincerity of engagement

We want network businesses to sincerely engage with consumers to understand and reflect their preferences in regulatory proposals. Sincerity of engagement relates to the intent of a network business and is not easily quantified. We can qualitatively assess sincerity by observing a network business's commitment to engagement through its actions and the confidence they provide consumers. Sincere engagement recognises that consumers often face challenges in engaging with complex regulatory matters

and puts measures in place to address this. Sincere engagement provides consumers with confidence that they are genuinely being heard.

Sincere engagement requires:

- genuine commitment from network businesses extending down from their Boards and Executives to giving effect to consumer preferences
- openness to new ideas and a willingness to change
- ongoing engagement with consumers about outcomes that matter to them, which allows consumers to 'set the agenda'
- ensuring consumer confidence in the engagement process and alleviating concerns consumers may have

Case study 2: Jemena's 'People's Panel'

Jemena's 'People's Panel' approach to engagement with its customers, which won the 2019 ENA/ECA consumer engagement award, exemplifies the principles outlined above, with good buy-in and attendance at engagement activities by senior executives and Board members. Jemena demonstrated it is customer-driven and open to new ideas and change by adopting all recommendations made by the People's Panel.

Jemena's approach provided us a good line of sight for issues that had been the subject of consultation with stakeholders and how consumer preferences had directly influenced the development of its regulatory proposal.

3.2.2 Consumers as partners

We want consumers to be partners in forming proposals rather than simply being asked for feedback on a proposal. Network businesses should collaborate with and, where appropriate, empower consumers in developing regulatory proposals.

In addition, consumer engagement should be a continuous business-as-usual process, not a one-off process only undertaken in preparing for regulatory proposals. Consumers should not have to wait for a once-in-5-year regulatory proposal to be heard.

3.2.3 Equipping consumers

Equipping consumers is about ensuring consumers can effectively engage with and provide informed feedback to network businesses. This principle ensures consumers, or committees/panels that represent them, are effective counterparties in the engagement process. Consumers cannot genuinely guide the development of a regulatory proposal unless they are appropriately equipped, informed and supported to do so.

To equip consumers, networks must provide them with accurate and unbiased information necessary to meaningfully participate.

How consumers should be equipped depends on the engagement approach applied by the network business. It may include engaging with qualified and experienced consumer representatives, providing impartial support to consumers – including the ability to source independent expert advice and research and ensuring consumers are appropriately remunerated for their contribution to the development of proposals.

While equipping consumers is necessary for a network business to obtain genuine consumer perspectives, we consider it is important that the network business does so in a manner that maintains the independence and integrity of consumer engagement processes. This will allow us to place appropriate weight on any submissions and reports that consumers provide on proposals. To ensure independence:

- consumer representatives should clearly declare any interests that may be perceived to conflict with those of the consumers they're representing and provide details on how they're managing any conflicts of interest
- networks and consumer representatives should transparently set out all governance arrangements covering their interactions in the development of a regulatory proposal, including arrangements in place to ensure the independence of consumer representatives.
- networks should publicly declare all renumeration arrangements, benefits and financial support provided to consumer representatives.

Case study 3: Demonstrating independence in the New Reg trial

A key characteristic of the New Reg trial was that the Customer Forum should be a credible counterparty, capable of independently and transparently acting on behalf of all consumers. This was demonstrated through:

- the recruitment of suitably qualified and experienced panel members
- the support and guidance the AER provided to the Customer Forum
- the ability of the Customer Forum to commission its own analysis
- the provision of independent funding arrangements
- the ability of the Customer Forum to meet independently of the Network.

These measures gave us confidence in the independence of AusNet Services' Customer Forum.

3.2.4 Accountability

Our expectation is that network businesses' ongoing engagement should also cover their delivery of commitments to consumers, particularly in relation to outcomes. Transparent reporting and consultation on the delivery of commitments will improve relationships and understanding between networks and consumers and increase faith in regulatory processes. It will also allow for ex-post evaluation of consumer engagement, regulatory proposals and our determinations.

3.3 Breadth and depth

Breadth and depth relate to the scope of engagement with consumers and the level of detail at which network businesses engage on issues. The breadth and depth of engagement also covers the variety of avenues used to engage with consumers.

3.3.1 Accessible, clear and transparent engagement

It is important that network businesses transparently set out their engagement plans. This includes outlining objectives, engagement issues/topics and the level of participation and influence consumers can expect on the regulatory proposal.

Consultation time frames should have regard to the complexity of the issues in the regulatory proposal and provide consumers with adequate time to understand and assess the regulatory proposal. Engagement on different aspects of the same issue may require different engagement methods.

3.3.2 Consultation on desired outcomes and then inputs

Our expectation is that consumers should guide, and be seen to guide, the development of proposals. This means that consumers should be consulted on the outcomes that they want from the proposal and how they would like network businesses to engage with them in the development of a proposal to give effect to those outcomes. This may then guide later consultation on the individual components of a proposal.

Importantly, the consultation with consumers on outcomes should be focused on long-term outcomes, and not be confined to outcomes desired for the period covered by the regulatory proposal. Many decisions taken by a network business, such as on capital investment or depreciation, in one period will have long-term impacts on outcomes for consumers.

Our regulatory framework has an input focus, and in this Handbook we set out our expectations of networks in developing forecasts of inputs (like capex and opex). However, we expect that networks will consult with their consumers on their desired outcomes and then craft the inputs of regulatory proposals to deliver the desired outcomes. We commit to giving effect to customers' desired outcomes to the extent that we are able to under our regulatory framework. For example, we have developed a Customer Service incentive scheme under which we are able to apply bespoke incentives – see case study 4.

Additionally, consultation on a regulatory proposal should not end with the submission of that proposal. If circumstances change and it is necessary to update a proposal, we expect networks to engage with consumers on those changes.

Where consumers are consulted on their desired outcomes, engagement may go beyond the individual components of regulatory proposals and the usual considerations of reliability, affordability and sustainability, to explore a consumer's lived experience within the energy system – including customer services and interactions with the network. Outcomes from such engagement can then be reflected in the regulatory proposal.

Case study 4: AusNet's Customer Service Incentive Scheme

One successful example of a network business consulting on more than the building blocks of their proposal is from the New Reg trial. The Customer Forum identified a 'blind spot' in the regulatory framework in relation to service standards and other outcomes that customers would like their network to deliver. This resulted in the delivery of numerous customer service improvements, the development and implementation of a Customer Service Incentive Scheme, along with the introduction of an annual report to track progress of AusNet Services' delivery against customer service commitments.

3.3.3 Multiple channels of engagement

No single avenue of engagement is perfect. Consumer panels, surveys, forums, direct meetings, workshops, focus groups and 'deep dives' are suited to certain types of issues and have their downsides. To gain a comprehensive understanding of consumer preferences multiple complementary channels are necessary.

We expect networks will directly engage with their consumers as well as engaging with consumer representatives. Direct engagement is particularly important where consumers aren't well represented.

Direct engagement is also important where consumer representatives don't know or cannot provide evidence of what consumers' preferences may be on an issue.

Different consumers will have different preferences in how they engage in the development of regulatory proposals and participants should have input into designing how they participate. For example, a network business's approach to engaging with vulnerable consumers and culturally and linguistically diverse consumers would be quite different to its approach to engaging with commercial and industrial consumers.

A network business should aim to understand, represent and balance the interests of all its consumer cohorts. Where network businesses identify competing interests, they should seek to develop agreed positions with consumers. If this isn't possible, then network businesses should set out the competing interests in relation to elements of their proposals.

3.3.4 Consumers' influence on the proposal

Engagement should consider the IAP2 Spectrum of Public Participation, in particular the different levels of participation and range of influence (ranging from inform to empower) consumers have on the regulatory proposal. We consider that network businesses and consumers should consult with each other on the range of issues consumers can have influence over. Issues over which consumers will have more influence should be at the upper (empower) end of the IAP2 spectrum.

Network businesses should encourage consumers to test assumptions and processes that underpin the proposal. Where consumers aren't well equipped to do so, this may entail providing them with additional resources and supporting them to commission independent analysis.

3.4 Clearly evidenced impact

Clearly evidenced impact is about how a proposal represents and is shown to represent consumer views.

3.4.1 Proposals linked to consumer preferences

There needs to be a clear link between consumer research and engagement, a network business's representation of the outcomes desired by consumers, and how the proposal gives effect to those outcomes. Networks need to provide evidence of consumer preferences – for example through independent surveys, research or focus groups.

Where consumer views on an issue are diverse, network businesses need to set out those views and how they were balanced in developing their regulatory proposal. Network businesses should seek to find mutually acceptable solutions where there are divergent consumer views.

A network business won't be able to engage with all its consumers in the development of its proposal. To allow an opportunity for all stakeholders to comment, a network business should release a comprehensive draft regulatory proposal for stakeholder comment. The regulatory proposal submitted to the AER should set out how it has responded to the submissions received on the draft regulatory proposal.

In testing customer perspectives on a draft regulatory proposal, we expect networks to engage with consumers beyond those they consulted with in preparing their draft proposal.

Case study 5: ElectraNet's 'capable of acceptance' regulatory proposal

In March 2017, ElectraNet submitted a regulatory proposal that the AER accepted almost in its entirety – including the capex and opex forecasts.

ElectraNet's proposal reflected the preferences of its customers. ElectraNet undertook an open and collaborative consultation on its proposal in the 18 months prior to submission. ElectraNet also had a clear vision for its proposal that was linked to customer preferences – 'it will deliver affordable and reliable power supplies that support customer choices for a sustainable future'. ElectraNet's consumer engagement program won the inaugural ENA/ECA consumer engagement award.

ElectraNet's engagement wasn't without its challenges. On 28 September 2016, South Australia experienced a total loss of electricity supply (a system black event). This occurred 4 months prior to when ElectraNet was due to submit its proposal and when ElectraNet was well into its consultation on the proposal. In these circumstances we allowed ElectraNet extra time to develop, consult on and lodge its proposal. We assessed ElectraNet's proposed expenditure in response to the system black event as considered and proportionate.

We consider that ElectraNet's engagement demonstrates that, despite unexpected events, it is possible for networks to develop proposals that are largely capable of acceptance.

3.4.2 Independent consumer support for the proposal

We want consumers to express support for proposals developed by network businesses. This support may be demonstrated through submissions on a draft regulatory proposal or an independent report setting out consumer perspectives on a proposal as lodged to the AER. An independent report is mandatory if a network business is seeking the early signal pathway (see section 2).

The purpose of the report is to help us assess the quality of the engagement process and the extent to which a proposal reflects consumer preferences and desired outcomes. The independent report should provide a consumer view of the effectiveness of the pre-engagement lodgement process in identifying consumer preferences and outcomes and how they have been incorporated into the proposal. We expect that the independent report would contain the outcomes that networks are proposing to deliver in their regulatory proposals and whether customers support those outcomes.

The independent consumer report can also provide views on technical issues in the proposal in the case where consumers feel capable of putting forward positions on these elements of the proposal.

We aren't prescribing who or how the independent report should be drafted. However, to ensure the integrity of the report we expect that:

- the process for drafting the report and selection of an appropriately qualified and experienced author of the report is transparent and not subject to any material objections by consumers.
- prior to their engagement by the network business, the author(s) will clearly declare any conflicts of interest, whether actual, potential or perceived, and provide details on how any conflicts of interest will be managed.

Where consumers aren't supportive of areas of a draft regulatory proposal, we expect that network businesses will seek to improve these areas to align with consumer preferences, or have a feedback loop that explains to consumers why they can't align, which can also be reflected in the independent report.

Case study 6: Australian Gas Networks 2018-22 (Victoria and Albury) Access Arrangement - capable of acceptance

In January 2017, Australian Gas Networks (AGN) submitted an access arrangement proposal that the AER accepted almost in its entirety.

AGN exhibited a strong commitment to delivering for customers, consistent with the National Gas Objective, through an effective consumer engagement plan with the objective of developing a proposal that was 'capable of being accepted by the AER'. Submissions on AGN's proposal largely supported those outcomes, as well as the engagement process that led to its development. AGN also requested stakeholder submissions on its draft plan, which influenced development of the final plan.

4 Our expectations on capital expenditure forecast proposals

4.1 Overview

Capital expenditure refers to the money required to build, maintain or improve the physical assets a network needs to provide standard control services.

We assess forecast capital expenditure which is one of the building blocks of a network business's total revenue. A network business recovers approved revenue from customers for using its network services through tariffs. Generally, a business will recover capital expenditure over several regulatory control periods because most capital assets have long lives.

The Rules set out the regulatory framework we apply when assessing capital expenditure forecasts. In electricity, we must decide whether or not we are satisfied that this forecast reasonably reflects prudent and efficient costs and a realistic expectation of future demand and cost inputs. In gas, capital expenditure must reflect what would be incurred by a prudent business, acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing the network services.

Our assessment of forecast capital expenditure seeks to ensure that consumers are provided with safe, reliable and good quality services that meet their needs at an efficient price.

The AER provides guidance on its assessment approach to electricity distribution and transmission capital expenditure proposals in the following documents:

- Expenditure Forecast Assessment Guidelines[7]
- Regulatory Investment Test for Distribution and Transmission (RIT-D and RIT-T) Guidelines[8]
- Asset Replacement Industry Note[9]
- Information and Communication Technologies (ICT) Guidance Note[10]
- Regulation of Actionable Integrated System Plan Projects Guidance Note[11]
- AER outline of the replacement expenditure (repex) model[12]
- Guideline note (draft) on Distributed Energy Resources Integration Expenditure.[13]

7 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/expenditure-forecast-assessment-guideline-2013.
8 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rit-t-and-rit-d-application-guidelines-minor-amendments-2017.
9 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/industry-practice-application-note-for-asset-replacement-planning.
10 https://www.aer.gov.au/communication/aer-publishes-guidance-on-non-network-ict-capital-expenditure-assessment-approach.
11 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/regulation-of-large-transmission-projects/final-decision.
12 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/repex-model-outline-for-electricity-distribution-determinations.
13 https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/assessing-distributed-energy-resources-integration-expenditure/draft-decision

For electricity distribution proposals, the AER also:

- has regard to modelling outcomes from the AER's repex model when assessing an electricity business's proposed modelled replacement expenditure
- encourages the use of its standardised standard control services capex model when submitting its regulatory proposal. The model is currently out for consultation.[14]

4.2 Our expectations on capital expenditure

Having regard to the Rules and drawing from the comprehensive suite of guidance and tools, the AER has developed 4 expectations of a network business' capital expenditure proposal. A business that meets these 4 expectations will have the benefit of a targeted review of its capital expenditure proposal.

4.2.1 Top-down testing of the total capital expenditure forecast and at the category level

4.2.1.1 Total capex forecast

Comparing a network business's total capital expenditure forecast against actual spend over the current regulatory period can be a reasonable starting point for a top-down test. This is generally the case where an electricity or gas business has been responding to the incentives created by the capital efficiency sharing scheme. In those circumstances:

- we expect businesses to demonstrate that forecast total capital expenditure is not materially above current period actual spend – in particular, we would question whether a step up in forecast capex is required if network performance metrics like SAIDI[15] show that it is able to maintain its network well on its efficient revealed spending levels
- where there is material underspend in the current period as well as a forecasted step up in total capital expenditure, we would question why forecasting a step up is required from its revealed efficient level
- if material incentive benefits are being claimed, there is well-justified reasons for this and these have been explained to customer groups.

There are circumstances where a business's actual total capital expenditure is a less useful top-down test of the forecast. For instance, this may be the case where capital expenditure is predominately made up of large non-recurrent projects or where a capital efficiency sharing scheme is not in place. Where this is the case, we expect businesses to provide quantitative cost benefit analysis to demonstrate that the major project/programs driving the total forecast maximises net benefits.

We will also have regard to the impact that the business's proposed total capex forecast will have on the capital expenditure service level outcomes. In particular, we expect the business to engage with consumer groups on how it has been performing against the capital expenditure service level outcomes historically and how its forecast will impact its current performance levels, including any potential trade-offs. We will have regard to how a business has explained and incorporated feedback from consumer groups on how its proposed forecast total capital expenditure will achieve the capital expenditure service level outcomes.

[14] https://www.aer.gov.au/communication/aer-invites-submissions-on-the-preliminary-standardised-scs-capex-model.

[15] System Average Interruption Duration Index (SAIDI) is commonly used as a reliability indicator.

4.2.1.2 Capital expenditure category level

Capital expenditure categories generally include replacement expenditure, augmentation, connections, information and communications technology (ICT), property and fleet. Replacement expenditure is largely recurrent and some categories like ICT have both a recurrent and non-recurrent component. Generally, we can rely on revealed actual spend over the current period to undertake a top-down test of forecast recurrent expenditure. We expect network businesses to demonstrate to us and consumer groups that the recurrent components of its forecast are not materially different from its current spend levels and if it is, the reasons for it. As noted below, we will also have regard to cost-benefit analysis in support of key recurrent project and program forecasts. For non-recurrent capital expenditure categories, we generally place less weight on a comparison between the historical spend and the forecast, focusing more on supporting cost benefit analysis provided by the business.

For electricity distribution, the AER's repex model also allows us to undertake a top-down assessment of recurrent expenditure by comparing the business's forecast modelled replacement expenditure against other businesses. Box 1 provides a short description of the AER's repex model[16]. We expect businesses to demonstrate that the modelled forecast replacement expenditure is not materially higher than the replacement expenditure model threshold or provide reasons if it is above the threshold.

We are also cognisant that a business's capital expenditure make up can evolve over time, such that new capital expenditure categories are introduced. For instance, distributed energy resources (DER) related expenditure has been included in capital expenditure proposals in the recent electricity revenue determinations. We expect businesses to explain to us and consumers why the new capital expenditure category is required.

Box 1: The AER's replacement expenditure (repex) model in electricity distribution revenue reviews

The AER's repex model is a statistical predictive modelling tool that informs us where to target a more detailed bottom-up review. There are 6 broad asset groups modelled: poles, overhead conductors, underground cables, service lines, transformers and switchgears.

The model analyses the age of asset already in commission and calculates the time at which a distributor will replace them based on historical replacement practices.

The repex model sets a threshold against which we compare the electricity distribution business' forecast repex. Where a DNSP's forecast exceeds the threshold, we will seek further information to understand the difference.

4.2.2 Evidence of prudent and efficient decision-making on key projects and programs

For capital expenditure categories that are a material proportion of the total forecast, we expect businesses to demonstrate prudency and efficiency in its decision-making by providing the following for key recurrent and non-recurrent projects and programs:

1. Identification and evidence of the network's need (prudency of the proposal). For electricity distribution and transmission, businesses are expected to provide evidence that the expenditure is needed to achieve the capital expenditure objectives – for example, to meet and manage expected demand, comply with regulatory obligations, maintain quality, safety, reliability and security of supply. We expect

[16] https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/repex-model-outline-for-electricity-distribution-determinations.

a business to explain to the AER and to customer groups the effect of the proposed expenditure on the service level outcomes especially having regard to its historical performance.

2. Quantitative cost benefit analysis assessing all feasible options to show that the preferred option maximises net benefits. This includes consideration of non-network options.
3. Where relevant, evidence of fully accounted for trade-offs between capital expenditure and operating expenditure to show that the preferred option is prudent and efficient. For instance, we have accepted ICT capex proposals as delivering a maximum net benefit because the business provided evidence of corresponding savings (offsetting reductions) in operating maintenance.

4.2.3 Evidence of alignment with asset and risk management standards

We consider alignment with industry standards on good asset and risk management demonstrates prudent and efficient decision-making. We expect network businesses to provide evidence that their asset and risk management are consistent with well-established relevant Australian industry standards (such as ISO 55000 and ISO 31000).

4.2.4 Genuine consumer engagement on capital expenditure proposals

We expect evidence of genuine customer engagement as set out in this Handbook. That engagement should include a discussion about the business's capital expenditure proposal and the impact that proposed capital expenditure will have on the regulatory asset base (RAB) and the long-term price outcomes for consumers.

For capital expenditure proposals, we expect businesses to engage with consumers on why the expenditure is required over the forecast period and outline to consumers what other options are available. For instance, in electricity proposals, we expect businesses to explain why a proposed capital expenditure program is required to meet service level outcomes like maintaining reliability of supply, and the cost to consumers to fund this program compared with other viable options available to address the service level outcome.

There may be circumstances where outcomes from our capital expenditure assessment do not appear to align with what businesses state their customers want. In these circumstances, we would expect to see clear evidence that businesses have fully informed affected consumers about any implications of the proposed capex including trade-offs in the short and long term.

Recently, there have been considerable efforts undertaken by businesses to better understand their customers' preferences on capital expenditure. Case study 7 provides a recent example of a business bringing customer preferences into its capital expenditure decision making.

Case study 7: Aligning customer preferences with a business's capital expenditure proposal - AusNet Services (Transmission)

In August 2020 AusNet Services Transmission undertook a deep dive with its stakeholders on its forecast capex addressing deliverability risk as well as the impact of deferrals.

In light of stakeholder feedback on the high value placed on both reliability and affordability, AusNet smoothed the forecast to prioritise supply risk (the risk of supply being lost to customers due to an asset failure) and market impact risk (the risk that due to an outage the lowest-cost generators cannot supply the National Electricity Market) over other risks to reflect customers' views. Projects were ranked to minimise supply risk and market impact risk. Having regard to customer views and other factors, AusNet Services (Transmission) capital expenditure proposal deferred 5 major station projects to address deliverability risk without compromising the reliability and safety of the network

Reference: AusNet Transmission Group, 29 October 2020, Revenue proposal, 2023-27 Transmission Revenue Reset, pp.128-9

4.3 Targeted review of capital expenditure

If a business satisfies the capital expenditure expectations, we anticipate a targeted review of the capital expenditure proposal. This means a focus on select outstanding issues that are likely to be on projects and programs:

- that are driving the forecast
- have strategic significance in the proposal
- that relate to a change from business-as-usual practices
- that are a new category or program of works.

5 Our expectations on operating expenditure forecast proposals

5.1 Overview

The AER also assesses the business's forecast operating expenditure which is another of the building blocks of a network business's total revenue. Operating expenditure includes a wide range of non-capital costs incurred by a network business serving its customers, such as vegetation management, maintenance, emergency response, network support and corporate overheads. In contrast to capital expenditure, which is recovered over the life of the asset, a network business will recover operating costs as and when they are incurred. In this way, operating expenditure has a more immediate impact on network revenues than capital expenditure.

The Rules set out the regulatory framework the AER applies when assessing operating expenditure forecasts. Broadly, we must decide whether or not we are satisfied that the operating expenditure forecast proposed reasonably reflects prudent and efficient costs required by a network business to deliver the required levels of service to customers.

Our general approach is to assess the efficiency of a business's proposed operating expenditure forecast at a total level, rather than to assess individual operating expenditure projects or programs. To do so, we develop an alternative estimate of total operating expenditure using the top down 'base-trend-step' approach set out in the Expenditure Forecast Assessment Guideline[17]. We compare our alternative estimate with the network business' operating expenditure forecast to determine whether we can accept that forecast. Where we are not satisfied a business's forecast reasonably reflects the criteria – for example, if our alternative estimate is materially lower than the network business's, then we will not accept the operating expenditure proposal and substitute our alternative estimate.

The 'base-trend-step' forecasting approach consists of the following elements:

- Forecasting an operating expenditure base using a recent year as a starting point. Operating expenditure is largely stable and recurrent, making past expenditure an appropriate starting point if it is efficient. We use various assessment techniques, including benchmarking (see Box 2 later in this section), to confirm a base year is not materially inefficient and can be used as a starting point. Where historical operating expenditure is not efficient, we will use a base year opex only after making an efficiency adjustment.
- Forecasting trend to escalate base year operating expenditure annually over the forecast period to account for any required changes in efficient costs. Typically we will adjust for changes to services provided by businesses (output growth), real changes in input prices (price growth) and improvements in productivity (productivity growth).
- Forecasting step changes in costs that are not compensated by base operating expenditure and trend, and are required to ensure the operating expenditure forecast meets the criteria in the Rules. Examples include cost increases associated with new regulatory obligations and trade-offs between capital expenditure and operating expenditure.
- In addition to base, trend and step, we independently forecast costs specific categories of operating expenditure. We only include costs in this category where required to be consistent with our decision on

[17] https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/expenditure-forecast-assessment-guideline-2013.

other parts of a proposal (such as debt raising costs) or where it would make total operating expenditure forecast using ‘base-step-trend’ too volatile.

Under the regulatory framework, network businesses have incentives to continuously reduce costs below their operating expenditure forecast each year by making efficiency gains over time. This reflects that network businesses are generally subject to incentive schemes, known as the efficiency benefit sharing scheme in electricity and efficiency carryover mechanism in gas. These efficiency gains are shared with consumers.

5.2 Our expectations on operating expenditure

Drawing from the Rules, our guidelines and previous decisions, the AER’s expectations for a business’s operating expenditure proposal, which we will assess a proposal against to determine whether to apply a targeted review, are set out below.

5.2.1 Opex forecasting approach

Operating expenditure is forecast using the 'base-trend-step' approach set out in the Expenditure Forecast Assessment Guideline.

We expect the inputs and assumptions used to forecast opex are consistent with those used to calculate opex incentive scheme (Efficiency Benefits Sharing Scheme in electricity and the Efficiency Carryover Mechanism in gas) carryover amounts.

5.2.2 Base opex

Forecast opex uses a base year for which audited actual opex is available and that a network business can demonstrate is not materially inefficient. In electricity, this demonstration of base opex not being materially inefficient should be based on analysis in the latest available annual benchmarking report[18].

- For electricity distribution, a business should show that it has efficiency scores greater than 0.75 (see Box 2). If its average efficiency score is less than 0.75, then a more detailed efficiency assessment will be required as part of the proposal. This should involve the use of the AER’s benchmarking roll-forward model[19], to either demonstrate the efficiency of its base year opex or inform the size of any proposed efficiency adjustment. As part of this more detailed assessment, the business should identify and quantify any operating environment factors it considers would impact (both negatively and positively) its benchmarking performance. In these situations, the business should consult with the AER prior to submitting.
- For gas distribution, we will rely on the benchmarking studies undertaken by consultants.

[18] We also operate an ongoing program to review and incrementally refine elements of its electricity benchmarking methodology and data. The aim of this work is to maintain and continually improve the reliability and applicability of the benchmarking results we publish and use in our network revenue determinations. Our Annual benchmarking reports identify benchmarking development priorities and future work we will be undertaking, generally in consultation with the businesses.

[19] We publish the benchmarking roll-forward model when we use them as part of our base year assessment for a regulatory determination. At the time of publication of this Handbook, the latest benchmarking roll-forward models we have published were for Jemena’s 2021–26 electricity distribution network determination and can be found at: https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20-%20Jemena%20distribution%20determination%20-%202021-26%20-%20Opex%20benchmarking%20-%20Roll%20forward%20model%20-%20short%20-%20April%202021.xlsx (short period model) and https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20-%20Jemena%20distribution%20determination%20-%202021-26%20-%20Opex%20benchmarking%20-%20Roll%20forward%20model%20-%20long%20-%20April%202021.xlsx (long period model).

- We expect that a network business would use the equation in the AER's Expenditure Forecast Assessment Guideline to estimate opex in the final year of the current control period.
- Where a business seeks to make further adjustments to base opex (for example, to reflect the impact of a change in accordance with its cost allocation or capitalisation method[20]), it should consult with the AER prior to submitting.

Box 2: How we benchmark to assess the efficiency of electricity distribution operating expenditure

In our electricity distribution operating expenditure decisions, we draw on efficiency scores from our econometric operating expenditure cost function modelling (set out in our Annual benchmarking report) to assess the efficiency of historical opex and base year opex and determine any efficiency adjustments. We do this by comparing the efficiency scores of individual electricity distribution networks against a benchmark comparison score of 0.75 (rather than 1.0), which reflects the upper quartile of possible efficiency scores by electricity distribution networks. In our efficiency assessment, we adjust the benchmarking comparison scores further to take account of operating environment factors not already captured in the modelling.

5.2.3 Trend

Forecast opex incorporates a trend that adopts our approach to output, price and productivity growth. We expect that a reasonable trend forecast would be consistent with:

- output growth forecast
  - for electricity distribution and transmission networks, using the AER's preferred output specification, including output weights, as set out in our latest Annual benchmarking report
  - for gas distribution, output growth net of productivity growth should be no greater than mid-point of the reasonable range based on econometric analysis
  - adopting AEMO's forecasts of consumption and demand
  - forecasting customer number growth consistent with the historic trend
- price growth forecast
  - for electricity distribution and transmission networks, using the AER's input price weights, as set out in our latest Annual benchmarking report
  - forecasting zero real non-labour price growth
  - using an average of 2 state-specific utilities industry wage price index growth forecasts for forecast real labour price growth, including one engaged by the AER.
- productivity growth forecast

[20] At the time of publication of the Handbook, we have just commenced a consultation process in relation to how we assess the impact of capitalisation on benchmarking results. This can be found at: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/how-the-aer-will-assess-the-impact-of-capitalisation-differences-on-our-benchmarking-%E2%80%93-guidance-note.

- for electricity, using a forecast no less than the AER's preferred productivity growth forecast, which is currently:
  - the industry average opex productivity growth for electricity transmission[21]
  - 0.5% per year for electricity distribution.[22]
- for gas distribution, see output growth forecast.

5.2.4 Step changes

The number of forecast step changes is limited to a few well justified ones, or none at all. Step changes should be explored with customers. Our expectations for step change by category proposals is set out in Box 3. Case study 8 provides an example of a step change which has been well justified.

[21] We provide updated productivity growth figures each year when we publish our Annual Benchmarking Report. The relevant productivity growth figure is the industry average opex multilateral partial factor productivity growth over the longest possible period, which is usually found in the consultant's report accompanying our Annual Benchmarking Report.

[22] https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-our-approach-to-forecasting-opex-productivity-growth-for-electricity-distributors.

Box 1: Expectations for step changes by category and examples from previous AER decisions

New regulatory obligation step change

- It is clearly linked to the new regulatory obligation and represents a major upward step to comply with it.
- It will have an impact on the costs of providing prescribed network services and it can be demonstrated that it is not capable of being managed otherwise under forecast opex through in-built provisions under output, price and productivity growth.
- No double counting of costs.

Capex/opex substitution step change

- It is supported by thorough cost-benefit analysis.
- The avoided capex is estimated accurately and it more than offsets the increase in opex in net present value terms (that is, efficient substitution).
- No double counting of costs.

Step change driven by major external factor(s) outside the control of a business

- It will have an impact on the costs of providing prescribed network services and it can be demonstrated that it is not capable of being managed otherwise under forecast opex, including through inbuilt provisions under output, price and productivity growth.
- Where it involves incurring costs in complex areas or markets, it is accompanied by an expert report (including analysis of options, market outlook and opinion on the reasonableness of the proposed step change).
- No double counting of costs.

Case study 8: Example of a previous step change we have included that would meet our expectations of being well-justified – increasing insurance premiums

In recent years insurance premiums have increased due to the withdrawal of capacity in the global bushfire insurance market. A number of network businesses have included step changes for insurance premium increases. In the 2021–2026 Victorian electricity distribution determinations, we included step changes for insurance premium costs for Jemena, AusNet Services distribution, Powercor and United Energy. These businesses were able to provide expert reports detailing the magnitude of forecast increases. This provided sufficient information for us to verify with our consultant the magnitude of forecast increases and the drivers of them. In these circumstances, we were satisfied the magnitude of these increases, relative to total opex, could not be otherwise managed with the opex forecast.

5.2.5 Category specific forecasts

Category specific forecasts should be limited to cost categories that have been included as category specific costs in previous AER decisions. If a network business considers new cost categories are warranted, this should be discussed with consumers and the AER.

5.2.6 Genuine consumer engagement on operating expenditure forecasts

There should be evidence of genuine consumer engagement, consistent with the expectations set out in this Handbook, on the proposed forecast of operating expenditure. This includes:

- the impact that the business's proposed total operating expenditure forecast will have on the service level outcomes – we will have regard to how a business has explained and incorporated feedback from consumer groups on how its proposed forecast total operating expenditure will achieve service level outcomes.
- detailing how the proposed forecast operating expenditure is consistent with, or takes into account consumer preferences and outcomes identified in the course of consumer engagement.
- where the proposed forecast is developed in a way that departs from our base-trend-step approach and/or the expectations set out above, there should be evidence that the deviation in approach has been discussed with consumers, and how consumer views have been taken into account. This includes where a network business proposes a smaller efficiency adjustment (including no adjustment) than suggested by the AER's latest benchmarking analysis

Additionally, the proposal should highlight the parts of the opex proposal that are either not supported by customers or have not been the subject of customer engagement.

5.3 A targeted review of operating expenditure

A targeted review of operating expenditure would entail an initial top down assessment and, if necessary, a focused review of select issues, taking into account factors such as whether an issue:

- has strategic significance (either within the context of the proposal or more broadly)
- has been identified by consumers as an issue that would benefit from detailed AER assessment
- could have a material impact on our alternative estimate of total opex
- deviates from the base-trend-step approach and/or expectations set out above – in particular for electricity distribution, where the base year proposed has an efficiency score less than 0.75 and the efficiency adjustment (including no adjustment) is less than suggested by the AER's latest benchmarking analysis
- has not been supported by consumers or discussed as part of the customer engagement undertaken by the network business.

6 Our expectations on regulatory depreciation

6.1 Overview

Network businesses invest in costly sunk assets. The regulatory regime under the Rules supports the recovery of sunk costs as regulatory depreciation. No more or less than the real value of the asset should be recovered through regulatory depreciation over the economic life of the asset in net present value terms.[23]

We generally employ an approach where regulatory depreciation is recovered evenly over an asset's useful life.[24] We have prepared a fact sheet on indexation of the RAB to explain how our approach promotes such an outcome.[25] The approach is consistent with the observed desire from consumers for relative price stability.[26]

As a general proposition, economic theory suggests sunk costs be recovered in the least distortionary way. An even profile of recovery over the life of the asset supports this idea, because it does not encourage consumers/businesses to either bring forward or delay consumption/replacement simply due to the depreciation profile.[27]

The networks we regulate are generally mature businesses. They do not typically face factors that might justify front or back-loaded depreciation profiles, such as significant and persistent trends in expected demand or real replacement costs.[28] Demand is typically relatively stable in mature industries, although there have been exceptions in the area of gas. We have accepted that some gas networks may have a finite life under new emissions standards and prohibition of new connections. Therefore, smoothing the price impact of a declining demand profile on the recovery of the cost of existing assets may warrant a change in the depreciation profile for these assets.[29] There is also often little reason to expect real

[23] This condition is referred to as NPV neutrality. However, NPV neutrality and efficiency are not necessarily synonymous. There are essentially limitless recovery profiles of regulatory depreciation that achieve NPV neutrality, but only a limited number of profiles that may be considered efficient in given circumstances. Accordingly, NPV neutrality is not sufficient for determining an efficient recovery profile. Other factors need to be considered.

[24] The use of straight-line depreciation, and the use of a combination of an indexed regulatory asset base with a nominal rate of return and offsetting indexation adjustment, promote a relatively even recovery profile. It also reduces the price shocks when assets are replaced. In this regard, when an asset is replaced, the return of capital applies to the full replacement cost of the asset, which will be many times larger than the depreciated historical cost of the asset it has replaced.

[25] Available at: https://www.aer.gov.au/system/files/Fact%20sheet%20-%20Indexation%20of%20the%20regulatory%20asset%20base.pdf

[26] Consumers' desires are somewhat asymmetric in that, if there are significant reductions in costs, they do generally want these reductions to be reflected in a lower price. Otherwise, they prefer stability of prices.

[27] For the same reason, we consider that regulatory depreciation should not be used to offset other cost trends – for example, a lower rate of return on capital. To do so, notwithstanding the difficulties in forecasting such trends, would distort the market signal that those costs are sending to consumers/businesses. The depreciation profile will also no longer reflect the asset's economic life. It could lead to either full depreciation of the asset well before its economic life ends or require the recovery of depreciation to continue to occur even after the asset has been replaced/removed from service. This could distort replacement decisions and lead to potentially unsustainable long run positions, where a significant reset in prices is then needed.

[28] For example, if it is expected that real replacement costs will continuously rise, a backload depreciation profile may be efficient to reduce the potential for price shocks when assets are replaced. The rising depreciation charges in a back loaded profile then reflect the expected rising trend in real replacement costs, and prices based on this profile would provide a consistent signal on the direction of future costs.

[29] The replacement of assets would largely have to cease to enable such an approach to be effective in smoothing prices. We have recently published an information paper on regulating gas pipelines under uncertainty which is available at

replacement costs will change dramatically in a particular direction, in part due to the traditional slow rate of technology change in these industries. While new technological opportunities and challenges are arising, particularly for electricity distribution networks, given existing connections it is still likely to be some time before most networks change in a fundamental way. Much of the network replacement will therefore continue to occur using existing technologies with relatively stable unit costs.[30]

6.2 Our expectations on regulatory depreciation

The asset bases of the network businesses we regulate are large with a broad mix of old and new assets. In itself, this characteristic provides a certain stability to the regulatory depreciation profile (and to a network business's revenues) over time. To adjust the regulatory depreciation in a broad way would potentially distort replacement and consumption incentives in both the short and long run. Accordingly, we have not accepted broad changes to the depreciation approach that would bring forward costs to consumers.[31] However, we have accepted more targeted approaches to determine changes in the economic lives of assets.

6.2.1 Asset lives

Determining an asset's economic life can be a challenge. It is typically associated with the technical life of the asset. In approving capital expenditure, we usually expect the assets to provide a service until they are eventually replaced. In this regard, demand considerations often sit in the background in determining the economic life of an asset.[32]

We review expected technical lives and sometimes make adjustments to the remaining asset lives of existing assets if new information warrants such a change. Otherwise, we encourage consistency in technical lives across regulatory periods and businesses, again because the technology is relatively stable and proven. If it becomes likely that an asset will stop being used before the end of its technical life due to falling demand (and therefore not replaced), the economic life could be changed to reflect these circumstances. However, in such circumstances, more significant questions beyond the depreciation profile are likely to become relevant.[33] Case study 9 provides a recent example of a change to economic lives.

https://www.aer.gov.au/system/files/AER%20Information%20Paper%20-%20Regulating%20gas%20pipelines%20under%20uncertainty%20-%2015%20November%202021.pdf.

30 There is also no reason to expect new technologies would necessarily be cheaper or more expensive than existing technologies in the long run. The nature of the service that customers receive may also change in time.

31 The AER has not supported other forms of accelerated depreciation such as un-indexing of the regulatory asset base or the adoption of a diminishing value approach for calculating depreciation. These issues were considered and discussed in detail in previous decisions where they were proposed by the service providers.

32 The gas rules explicitly recognise one situation where demand considerations can come to the fore. They allow for a significant deferral of depreciation on greenfield investments, so prices are not so high as to discourage network economies from emerging as more people join the network with the relatively lower prices.

33 For example, should new capex be approved if demand is expected to cease before the technical life of the asset expires? The cost-benefit balance of such an investment is likely to be significantly affected in such circumstances.

Case study 9: Evoenergy final decision

In the AER's 2021 Evoenergy final decision we accepted that new pipeline assets in the ACT would have shorter economic lives than their technical lives due to the ACT Government's policies to move away from gas use, despite uncertainties about the ACT Government's path to net zero emissions. At the same time, we accepted the proposal for no new connection capex in this decision, which also reflected the ACT Government's position on this matter.

As a result of the information provided by Evoenergy on the elevated risk of network closure and a substantial reduction in demand, we considered our decision was a reasonable assessment of the economic life of the network as a whole.

Other factors can also unexpectedly cut short an asset's remaining life. In cases where assets have been destroyed, such as by a cyclone or bushfire, it is clear that both an asset's technical and economic life have come to an end, and it would be inappropriate for the residual value of these assets to distort consumption decisions well into the future. In these circumstances, removing the residual value of these assets from the asset base by way of accelerated depreciation is appropriate and consistent with the requirements in the Rules.

We have observed a trend towards more targeted accelerated depreciation proposals by network businesses. While we see targeted approaches as generally preferable to broader ones, these proposals need to be well-justified. Proposals to separate existing assets from a broader asset class require detailed assessments. We would expect to see a spreadsheet provided with the proposal which would include (but is not limited to):

- volumes and commissioning date/age of the assets in question.
- calculation of the residual cost of asset – ideally this value would be based on actual historical costs (with relevant indexation). However, proxies that use discounted replacement unit costs may also be possible. The unit costs should be well justified and consistent with the capex proposal.

In other cases, proposals for accelerated depreciation flow from decisions to replace or decommission assets before the end of their technical lives. For assets that will be replaced early, there should be a reconciliation with the volume of forecast replacement capex being proposed. In such a case, the amount of accelerated depreciation being accepted is likely to be proportional to our decision on the future replacement capex program. When asset decommissioning occurs in a particular area, we expect the business to consider the possibility of reusing some of the assets in other areas of the network if it is economic to do so.

Until recently, network businesses have typically not consulted with customers on proposals for accelerated depreciation. However, in a number of cases, the price impacts of proposed changes have been significant and this should be discussed with customers in pre-lodgement engagement.[34] There is scope for consumers to challenge a business's motivation for selecting certain assets for accelerated depreciation including whether the proposal naturally fits with other aspects (such as replacement considerations) or has been motivated by perceived problems with the regulatory regime (such as a desire for greater cash flow). Case study 10 provides a recent example of engagement with consumers by a business on its changes to depreciation.

[34] A case of particular importance for engagement is if a network proposes both significant new capex and accelerated depreciation to address stranding risk. The cost-benefit balance of new investments is likely to be significantly affected in such circumstances, and we would expect particularly robust consumer engagement on the potential options available.

Case study 10: Powerlink's year-by-year tracking depreciation approach

Powerlink's proposal in 2021 to move to year-by-year tracking depreciation would have raised prices in the near term, which concerned customers during its engagement with them. Powerlink contacted the AER to discuss the feasibility of a possible response to this concern. Powerlink reviewed its asset base and found an asset class where it was reasonable to extend its remaining asset life, which mitigated the price impact of the move to year-by-year tracking. We agreed that the extension was reasonable under the Rules. Powerlink then presented this to customers, who were supportive. Long-run refinements to the depreciation schedules were thereby achieved with limited short-run impact on customers.

6.3 Targeted review of regulatory depreciation

In determining whether we will undertake a targeted review of a network business' regulatory depreciation proposal, we would expect:

- that the business would use the AER's post-tax revenue model, roll forward model, and depreciation tracking module (where relevant) without amendments[35]
- the asset classes would be unchanged from the last regulatory determination and the asset lives would also reflect those approved in previous decisions.

This means any changes to the models, asset classes, asset lives and/or proposals for accelerated depreciation of assets would require us to conduct a more detailed assessment. We would also expect the network business to discuss these changes with consumers.

[35] The regulatory depreciation amount ultimately approved will also depend on other decisions regarding the regulatory asset base, expected inflation, and capex.

7 Our expectations on tariff structure statements (electricity distribution only)

7.1 Overview

Tariff structure statements set out electricity distribution network tariffs for a given 5-year regulatory control period. They are submitted to the AER for assessment by distribution networks as an element of their broader regulatory proposals. Once approved, a tariff structure statement becomes a compliance document against which annual tariff proposals submitted to the AER by a network are assessed.

Tariff structure statements are the means by which distributors progressively reform their tariffs to better signal to customers the cost of providing network services. By better aligning tariffs to their costs, networks allow customers to minimise their bills at the same time as reducing network investment pressures by moderating their network use. Reforming network tariffs is an incremental process, whereby we expect ongoing improvements in tariff structures across successive tariff structure statements.

7.2 Our expectations on tariff structure statements

In determining whether we will undertake a targeted and proportionate review of a network business's tariff structure statement, the AER would expect the network business to demonstrate:

1. progression of tariff reform consistent with the network pricing objective and pricing principles set out in the Electricity Rules
2. incorporation of its tariff strategy in its overall business plan
3. demonstration of significant stakeholder engagement and broad stakeholder support
4. insight into and management of any adverse customer impacts.

7.2.1 Progressing tariff reform

An electricity distributor's tariff structure statements should progressively improve the cost reflectivity of its tariffs over time, accounting for the network's circumstances and customers' ability to respond. Tariffs must be based on long run marginal cost and balance efficiency against the need to manage customer impacts.

Case study 11: Tariff reform's network pricing principles

The pricing principles set out in the Electricity Rules are foundational to tariff reform and guide both tariff structure statement development by distributors and AER assessment. The most important pricing principles require tariffs to be based on the long-run marginal cost of providing services and require customer impacts to be taken into account.

Long-run marginal cost is the forward-looking additional cost of providing network services in response to network use. Tariffs should signal future network investment costs in the event that network use doesn't change. For example, tariffs should make energy use more expensive during times of the week when networks are congested, to signal that further use during those times will drive future network investment. Conversely, tariffs should be low when networks are not congested to incentivise network use during those periods.

Accounting for customer impacts drives networks to model the effect of new tariffs. Networks then design strategies to progressively introduce tariffs or provide a choice from which customers may select a tariff that best suits them. The customer impact principle also drives networks to tightly target peak charging periods at times when network investment pressures are greatest, allowing customers to lower their bills by shifting network use away from those peak periods.

7.2.2 Stakeholder engagement and support

In assessing tariff structure statement proposals we place significant weight on stakeholder views and on the nature of a network business's stakeholder consultation. Where network businesses can demonstrate broad understanding of, and support for, their tariff structure statement proposal amongst stakeholders, we will recognise that achievement in our assessment. We assign weight to engagement that enhances customer insight and builds customers' capacity to understand tariff reform objectives and considerations.

7.2.3 Managing customer impacts

Adverse customer impacts may be managed through transitional arrangements or through complementary measures by state and territory governments. In particular, we see customer impact modelling as a critical tool for network businesses to demonstrate they understand those impacts and are managing them appropriately. It is also key to effective stakeholder engagement by allowing customers to understand how network tariff proposals may translate to retail bills. Customer impact modelling can also guide governments in developing or redesigning existing subsidy programs to assist customers in managing their energy use by making energy efficiency initiatives more affordable.

Case study 12: An example of good customer engagement in tariff reform

In assessing SA Power Networks' tariff structure proposal for the 2020–25 regulatory period we learned that it was supported by a wide range of stakeholders.

Based on written submissions to the AER from stakeholders and our bilateral discussions with many of them, it became clear that SA Power Networks had effectively explained its objectives, convinced people of the merits of its approach, and succeeded in harnessing significant support.

While we undertook our standard technical assessment of the proposal, including reviewing tariff structures, levels and options in light of the pricing principles, stakeholder support contributed to the AER's decision to approve the proposal at the earliest opportunity (the draft decision stage of our assessment process).

We consider SA Power Networks' tariff structure proposal is a good example of how networks may explain to stakeholders the challenges networks face, how those challenges may be addressed and how customer interests can be safeguarded.

7.3 Targeted review of a tariff structure proposal

We anticipate that a targeted review means we will focus our tariff structure assessment on select issues, taking into account factors such as whether an issue:

- fails to progress the cost reflectivity of network price signals
- elicited significant stakeholder objections in written submissions or other representations to the AER
- would lead to significant customer impacts which have not been otherwise addressed
- means that the tariff structure proposal is incomplete in terms of meeting the Rules' requirements.

We will also take into account whether an issue reduces the number of tariffs customers may choose from, noting that transitioning to more efficient price signals requires a range of considerations to be balanced.