

Australian Energy Market Commission

# **DRAFT RULE DETERMINATION**

National Electricity Amendment (Replacement expenditure planning arrangements) Rule 2017

Rule proponent Australian Energy Regulator

11 April 2017

CHANGE BUGE

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#### About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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# Summary

The Australian Energy Market Commission (AEMC or Commission) has made a draft rule to increase the transparency of network service provider decisions regarding investment in network assets. The draft rule has the effect of including network asset retirement and de-rating information in network service providers' annual planning reports. It also extends the current regulatory investment test framework to include replacement expenditure.

The draft rule has been made in response to a rule change request submitted by the Australian Energy Regulator (AER). While the draft rule is a more preferable rule, it incorporates many of the elements proposed by the AER.

#### Context

The AER proposed the rule change request in the context of a changing electricity environment. Specifically:

- there have been significant changes in the national electricity market and the broader energy industry that have spurred on a change in network planning and investment patterns, making replacement expenditure of greater relative importance than augmentation expenditure
- technological changes have emerged that suggest that non-network solutions are becoming more viable alternatives to replacement network investment
- there is now a greater focus on managing existing network assets in comparison to the historical focus on expanding networks due to the flattening of electricity demand growth.

As a result of these changes, the Commission considers that the current electricity network planning frameworks in the National Electricity Rules do not provide sufficient transparency on network asset retirement, de-rating and replacement decisions by network service providers. The draft rule has been made with the aim of addressing this deficiency.

In making the draft rule, the Commission has considered the primary purpose of the current framework of annual planning reports and regulatory investment tests. This purpose is to support the planning of, and decisions on investment in, a network by:

- creating incentives for network service providers to consider potential non-network solutions to network constraints or limitations
- establishing clearly defined planning and decision-making processes to assist network service providers in identifying the solutions to network issues in a timely manner

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• providing transparency on network planning activities to enable stakeholder engagement with those activities in order to support efficient investment in a network.

The purpose of the planning framework is not to regulate or direct which plans or decisions should be made, nor to determine what investment costs should be recoverable from regulated prices and revenues.

However, it does accompany an incentive-based economic regulatory framework. In this context, the planning information and investment decision-making process may also provide opportunities for the AER and other stakeholders to be more fully informed on the efficiency of network investment decisions. This in turn would be likely to support an outcome where consumers only pay for investments arising from efficient retirement and de-rating decisions.

#### The draft rule

The draft rule makes a number of amendments to the planning and investment framework with the aim of creating a set of requirements that will apply equally to all potential network capital investments regardless of the reason for the investment. The draft rule:

- specifies that information on all planned retirements in distribution and transmission networks, including the reasons for the retirements, is to be included in the distribution and transmission annual planning reports
- specifies that information on planned de-ratings that result in a constraint on a network, including the reasons for these, is to be included in the annual planning reports
- aligns reporting requirements on network needs and options to address these in a replacement context with those required in an augmentation context for transmission networks
- extends the distribution and transmission regulatory investment tests to network replacement expenditure decisions
- requires reporting on the approach to asset management to be included in the transmission annual planning reports
- clarifies that the regulatory investment test for transmission is to be undertaken again where there is a material change in circumstances (however, a network service provider can seek an exemption to undertake the test again from the Australian Energy Regulator)
- specifies that distribution annual planning reports will need to include information on investments in information technology and communications systems related to the management of network assets.

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A number of ancillary changes have also been made in the draft rule. These amended processes should support efficient network investment in the future and contribute to consumers paying no more than necessary for their electricity services.

#### Transitional arrangements

In considering the requirements set out in the draft rule, the Commission's view is that the following steps are likely to be appropriate for the implementation of a final rule, if made in July 2017.

- The new annual planning report requirements are to apply for the next scheduled annual planning reports. These reports are due, for distribution network service providers by 31 December 2017 and for transmission network service providers, by 30 June 2018.
- The new regulatory investment test requirements (for both distribution and transmission network capital expenditure) are to apply from 1 July 2018. Replacement projects that have been committed to by a network service provider before that date will not be required to be assessed under the new regulatory investment test process. Replacement expenditure investments that become committed projects after 1 July 2018 will be required to be assessed according to the regulatory investment test.

The AER should complete amendments to the regulatory investments tests and associated regulatory investment test application guidelines by 31 December 2017.

#### Next steps

Stakeholders are invited to make submissions in response to this draft rule determination and the draft rule. Submissions must be provided to the AEMC by Tuesday 6 June 2017.

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# 1 Australian Energy Regulator's rule change request

## 1.1 The rule change request

On 30 June 2016, the Australian Energy Regulator (AER) made a request to the Australian Energy Market Commission (AEMC or Commission) to make a rule regarding replacement expenditure planning arrangements (rule change request).

Specifically, the rule change request proposed to amend the National Electricity Rules (NER) to require transmission and distribution network service providers to include in their annual planning reports:

- information on planned asset retirements and de-ratings<sup>1</sup> (with a guideline to be prepared by the AER to determine the class of assets required to be reported on)
- options to address network needs, such as limitations and constraints, arising from these retirements and de-ratings.

The rule change request also proposed to extend the application of the regulatory investment tests to replacement capital projects. In doing so, the AER has proposed the inclusion of an exemption process so that a regulatory investment test is not required for "like-for-like" replacements.

A number of related secondary amendments to the NER have also been included in the rule change request. These changes are:

- amending clause 5.11.2 of the NER to explicitly require service providers to notify any affected registered participants and the Australian Energy Market Operator (AEMO) of technical limits that will be exceeded from planned asset retirements or de-ratings
- requiring transmission network service providers (TNSPs) to provide information on their asset management approach in the annual planning reports
- requiring transmission network service providers (TNSPs) to reapply the regulatory investment test for transmission (RIT-T) where there is a material change in circumstances since the publication of a project assessment conclusions report and the preferred option is no longer the preferred option and
- clarifying an existing requirement in Schedule 5.8(m) of the NER to require distribution network service providers (DNSPs) to provide information on information technology and communication systems in their distribution annual planning reports (DAPRs).

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<sup>&</sup>lt;sup>1</sup> The AER defines a de-rating as a reduction in the capability of a network asset. AER proposed rule drafting, p. 1.

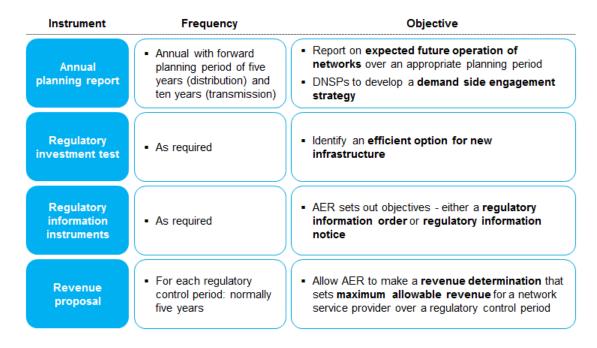
# 1.2 Current arrangements

#### 1.2.1 Overview of current planning requirements

Chapter 5 of the NER outlines provisions in relation to network connection, planning and expansions. The chapter is in two parts: Part A sets out rules on connections to distribution and transmission networks; and Part B includes the rules in relation to network planning and expansions. Part B is relevant to the AER's rule change request.

The primary objective of this national planning framework is to establish a clearly defined and efficient planning process for network investment. Having such a framework in place supports the efficient development of a network, and provides transparency regarding network planning and investment activities. This enables market participants to make efficient investment decisions and provides a framework for network service providers to consider non-network alternatives to network investments. Secondly, the framework is likely to assist the AER in performing its regulatory functions.

The context of this framework is set out in Figure 1.1. This figure identifies the various regulatory instruments that are relevant to network investment information and decision making in addition to their key objective.



#### Figure 1.1 Network investment regulatory instruments

Source: AEMC.

#### 1.2.2 Annual planning report requirements

Part B of Chapter 5 sets out planning and reporting requirements for network service providers. Under these requirements, each network service provider is to undertake an

annual planning review to identify emerging network constraints expected to arise over ten-year (for transmission networks) and five-year (for distribution networks) planning horizons.<sup>2</sup> The results of a review are then published in an annual planning report. The annual planning reports are to be published each year by 30 June (transmission) and 30 December (distribution).<sup>3</sup>

The details of the annual planning report requirements are slightly different between transmission and distribution.

In transmission, TNSPs are required to carry out an annual planning review and subsequently publish a transmission annual planning report (TAPR).<sup>4</sup> A TAPR must include information on forecast loads, planning proposals for connection points, forecast constraints and proposed solutions (which includes network and non-network options considered to address the constraints). A TNSP must include in the report information on whether the proposed solution may have a material impact on another network. A TAPR is also required to set out how proposed augmentations relate to the most recent national transmission network development plan (NTNDP) published by AEMO.

In distribution, a DNSP's annual planning review must include an assessment of the future operation of its network over the planning period. This includes:

- preparing maximum demand forecasts on different parts of the network
- identifying limitations on the network, including those caused by the requirement for asset refurbishment or replacement
- identifying whether any corrective action is required to address the identified limitations
- taking into account any jurisdictional electricity legislation.

Following the review, the DAPR is to set out information on:

- forecast loads on different parts of the network
- factors that may have an impact on the network
- system limitations for sub transmission lines, zone substations and certain primary distribution feeders including options that may address these limitations
- committed investments to be carried out within the forward planning period with an estimated capital cost within a cost threshold determination that are to address a refurbishment or replacement need or an urgent and unforseen network issue and alternative options that were considered.

<sup>2</sup> NER clauses 5.12.1 and 5.13.1.

<sup>&</sup>lt;sup>3</sup> NER clause 5.12.2 and 5.13.2.

<sup>4</sup> NER clauses 5.12.1 and 5.12.2.

Each DNSP is also required to provide information on their asset management approaches, and certain other matters.<sup>5</sup>

In addition and related to the DAPR, a DNSP is required to develop a demand side engagement strategy for engaging with non-network providers. This is to detail a DNSP's processes and procedures for assessing non-network options as alternatives to network expenditure.<sup>6</sup> As part of this, DNSPs are required to maintain a register of parties interested in being notified of distribution network planning and expansion developments.

## 1.2.3 Regulatory investment tests

The second key aspect of the planning and investment framework is the requirement for network service providers to carry out, subject to some exemptions, a regulatory investment test process to determine the most appropriate solution to a forthcoming network constraint or limitation. A regulatory investment test determines, through a cost benefit assessment, the preferred option (either a network or non-network solution) that maximises the net economic benefits to all those who produce, consume and transport electricity in the national electricity market (NEM). There are two tests: one for transmission projects (RIT-T) and one for distribution projects (RIT-D). Broadly, the tests are both focussed on projects that are addressing augmentation of the relevant network although some details differ. In general, network service providers are only required to undertake a regulatory investment test where:<sup>7</sup>

- the most expensive potential credible option to address a need is more than the specified cost threshold (currently \$6 million for transmission network investments and \$5 million for distribution network investments)
- the investment is not addressing an unforeseen and urgent network issue that would have an effect on reliability
- the investment does not relate to the replacement, maintenance (transmission) or refurbishment (distribution) of existing assets.

Regulatory investment test application guidelines are required to be developed and published by the AER.<sup>8</sup> These guidelines are to provide guidance and worked examples on the use of the regulatory investment tests.

A number of parties, including registered participants, the AEMC, AEMO and connection applicants, are able to raise a dispute in regard to the conclusions set out in

<sup>&</sup>lt;sup>5</sup> NER clauses 5.13.1, 5.13.2 and Schedule 5.8.

<sup>6</sup> NER clause 5.13.1(f).

<sup>7</sup> NER clauses 5.16.3 and 5.17.3.

<sup>&</sup>lt;sup>8</sup> NER clauses 5.16.2 and 5.17.2. AER, *Regulatory investment test for distribution guidelines*, 23 August 2013 and AER, *Regulatory investment test for transmission guidelines*, June 2010.

the project assessment final report published at the conclusion of a regulatory investment test process.9

Figures 1.2 and 1.3 provide an outline of the key events, or milestones, that arise during the application of a RIT-D and RIT-T.

Screening test notice	Non-network options report	Project assessment draft report	Project assessment final report
Reasons for determination that there is no non- network option	Description of identified need and underlying assumptions	Description of identified need and underlying assumptions	Summary of submissions to the project assessment draft report
Methodologies and assumptions	Technical characteristics of identified need	Summary of submissions to the non-network options report	
	Summary of all credible options	Description of each assessed <b>credible option</b>	
	Technical characteristics of each <b>credible option</b>	Market benefit for each credible option	
	Construction timetable and commissioning date for each credible option	Breakdown of operating and capital expenditure for each credible option	
	Indicative capital and operating costs for each credible option	Methodologies used in quantifying each class of cost and market benefit	
	Information to assist non- network providers to submit a <b>non-network proposal</b>	Net present value analysis of each credible option	
		Technical characteristics , costs and timetable for <b>preferred option</b>	

#### Figure 1.2 **RIT-D process milestones**

Source: AEMC.

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<sup>9</sup> NER clauses 5.16.5 and 5.17.5.

#### Figure 1.3 RIT-T process milestones

Project specification consultation report	Project assessment draft report	Project assessment conclusions report
Description of <b>identified need</b> and underlying assumptions	Description of each assessed credible option	Summary of <b>submissions to the</b> project assessment draft report
Technical characteristics of <b>identified</b> need	Summary of submissions to the project specification consultation report	
Description of all <b>credible options</b>	Breakdown of operating and capital expenditure, and material market benefit for each <b>credible option</b>	
Technical characteristics of each credible option	Description of methodologies used in quantifying each class of material market benefit and cost	
Whether each <b>credible option</b> has a material inter-network impact	Net present value analysis of each credible option	
Classes of immaterial network options and justification for each credible option	Identification and technical characteristics of <b>preferred option</b>	
Construction timetable and commissioning date for each credible option	Construction timetable and commissioning date for <b>preferred</b> option	
Indicative capital and operating and maintenance costs for each credible option		

Source: AEMC.

#### 1.3 Rationale for the rule change request

In its rule change request, the AER provided its rationale for the proposed rule. In summary, the AER considered that in the current environment of low electricity demand growth combined with non-network alternatives increasingly providing viable alternatives to network solutions, the electricity network planning frameworks in Chapter 5 of the NER do not adequately focus nor provide sufficient transparency on network asset replacement decisions by network service providers.<sup>10</sup>

Similarly, the AER noted that there is little transparency around a network service provider's decision to retire an asset. It acknowledged that Chapter 5 of the NER currently requires a network service provider's annual planning report to briefly outline projects that address replacement needs, including options. However, the AER does not consider this information is sufficient. In its view, the annual planning reports should include detailed information on asset retirement decisions and the asset management approach taken.

Broadly, the reason that the AER has proposed to widen the scope of the annual planning reports and the regulatory investment test processes is "to ensure that the Chapter 5 framework adapts to the changing external environment and continues to promote efficient network investment outcomes".<sup>11</sup> The AER has noted that:<sup>12</sup>

6 Replacement expenditure planning arrangements

<sup>10</sup> AER rule change request, p. 1.

<sup>11</sup> AER rule change request, p. 1.

- there have been significant changes in the NEM and broader energy industry that have spurred on a change in network planning and investment patterns
- technological changes have emerged that have challenged the previous presumption of like-for-like replacement
- there has been stagnation of electricity demand and consumption in the NEM due to increased penetration of solar photovoltaic, energy efficiency and reduced usage in response to rising network costs
- there is now a greater focus on managing existing network assets in comparison to the historical focus on expanding networks.

The AER noted that AEMO's 2015 NTNDP reported that over the next twenty years, transmission networks will focus on replacement rather than augmentation. The AER also stated that recent transmission and distribution determinations show that replacement expenditure is now a significant part of capital expenditure. In the AER's view, the consequences are expected to be:<sup>13</sup>

- a stronger economic case for the use of non-network solutions as investment in long-life network assets can be deferred until there is a more certain need
- increased uncertainty about the optimal capital investment strategy.

## 1.4 Solution proposed in the rule change request

The AER has proposed amendments to Chapter 5 of the NER "to mirror the augmentation capital expenditure reporting and planning requirements for replacement capital expenditure".<sup>14</sup>

It has proposed to strengthen the reporting requirements under the annual planning reports and broaden the scope of the RIT-D and RIT-T to include replacement expenditure by removing existing exemptions relating to replacement. The AER considered that these changes are consistent with the purpose of the regulatory investment test, and with the broader network planning framework that promotes efficient investment outcomes.

Specifically, the AER has proposed that Chapter 5 of the NER be amended to:<sup>15</sup>

• introduce new reporting requirements in both transmission and distribution annual planning reports to require network businesses to provide information on planned asset retirement and de-rating decisions and the development of credible options to address network needs arising from these decisions

15 AER rule change request, p. 3.

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<sup>12</sup> AER rule change request, p. 5.

<sup>13</sup> AER rule change request, pp. 6-7.

<sup>14</sup> AER rule change request, p. 3.

- introduce a new guideline on replacement capital expenditure which will determine the types of replacement assets captured in the annual planning reports and set out principles that network service providers must follow in deciding whether to retire or de-rate assets
- extend the application of the RIT-T and RIT-D to replacement expenditure, including an exemption framework to exclude like-for-like replacement projects.

The AER also included proposed amendments to clause 5.11.2 of the NER that would explicitly require a network service provider to notify affected registered participants and AEMO of technical limits that will be exceeded as a result of planned asset retirements and de-ratings.<sup>16</sup> The AER has not included a rationale for this specific amendment in its rule change request.

In addition, the AER proposed amendments to the TAPR and RIT-T to mirror provisions introduced to the DAPR and RIT-D in the 2012 distribution network planning and expansion rule. These changes are:

- introducing a RIT-T re-application clause mirroring the re-application clause for the RIT-D
- introducing a clause requiring TNSPs to provide information on their approach to asset management, mirroring current reporting requirements for DNSPs.

Lastly, the AER has also sought to clarify an existing requirement in Schedule 5.8(m) of the NER to require DNSPs to provide information on IT and communication systems in their DAPRs.

# 1.5 Relevant background

The transmission planning framework has been in place since the introduction of the NER in 2005. A framework was also part of the National Electricity Code. Many of the components of this current framework originate from the AEMC's reviews on national transmission planning arrangements (completed on 30 June 2008), and a national framework for distribution network planning and expansions (completed on 23 September 2009). The then Ministerial Council on Energy submitted rule change requests seeking to implement recommendations made in those reviews. These resulted in the introduction of a:

- RIT-T framework<sup>17</sup>
- national distribution planning framework that included the creation of the RIT-D and the distribution annual planning arrangements.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> AER proposed rule drafting, p. 1.

<sup>&</sup>lt;sup>17</sup> AEMC, Rule determination, Regulatory investment test for transmission, 25 June 2009.

<sup>&</sup>lt;sup>18</sup> AEMC, Rule determination, Distribution network planning and expansion framework, 11 October 2012.

The 2008 review also led to the establishment of AEMO as the national transmission planner in the NEM.  $^{19}\,$ 

The AEMC proposed changes to the transmission planning framework as part of its design and testing of the optional firm access model, a concept that was developed as part of its transmission frameworks review. While the Commission considered that the optional firm access model should not be implemented at that time, it recommended amending the NER to increase transparency regarding the level of coordination of transmission and generation in the NEM. In particular, the Commission recommended extending the application of the RIT-T to relatively major network replacements on key transmission flow paths.<sup>20</sup>

In addition to this rule change request from the AER, a number of processes are underway, or have recently concluded, that consider issues related to the current planning and network investment arrangements in the NER. In particular:

- local generation network credits. This rule change process resulted in rules made that required DNSPs to publish specific information on expected system limitations in accordance with a template specified by the AER.<sup>21</sup>
- transmission connection and planning arrangements. The rule change process is underway and is considering changes to the processes for connecting to a transmission network and the planning arrangements for transmission networks.<sup>22</sup>
- contestability of energy services. Two rule change requests are under consideration by the AEMC which aim to promote greater contestability for a range of energy services: one from the COAG Energy Council and the other from the Australian Energy Council. Relevantly, the Australian Energy Council rule change request includes proposed changes to the RIT-D.<sup>23</sup>
- alternatives to grid-supplied network services. An assessment of this rule change request, submitted by Western Power, is yet to be commenced.

In addition, the COAG Energy Council tasked officials to review the effectiveness of the RIT-T in the current market environment, particularly in relation to NEM interconnector investment. The AEMC was part of the working group for this review. The working group published a report on 6 February 2017, which found that the RIT-T was an appropriate mechanism for facilitating new transmission infrastructure is that is in the long term interests of consumers.<sup>24</sup>

<sup>&</sup>lt;sup>19</sup> AEMC, *National transmission planning arrangements*, final report, 30 June 2008.

<sup>&</sup>lt;sup>20</sup> AEMC, *Optional firm access, design and testing,* final report - volume 1, 9 July 2015.

<sup>&</sup>lt;sup>21</sup> AEMC, *Rule determination, Local generation network credits,* 8 December 2016.

AEMC, Draft rule determination, Transmission connection and planning arrangements, 24 November 2016.

<sup>&</sup>lt;sup>23</sup> AEMC, Consultation paper, Contestability of energy services, 15 December 2016.

<sup>&</sup>lt;sup>24</sup> COAG Energy Council, *Review of the regulatory investment test for transmission*, 6 February 2017.

The COAG Energy Council report also made recommendations to improve existing arrangements including to ensure that: system security and emission reduction goals are adequately considered; low probability but high impact events like the South Australian system black event in September 2016 are appropriately taken into account; and information about transmission networks is more accessible to support more effective engagement by non-network providers.<sup>25</sup>

## 1.6 The rule making process to date

On 27 October 2016, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the AER's rule change request. A consultation paper identifying specific issues for consultation was also published. Submissions closed on 24 November 2016.

The Commission received 25 submissions in this first round of consultation. The issues raised in submissions are discussed and responded to throughout this draft rule determination.

In addition to considering written submissions, AEMC staff invited stakeholders that made a submission to discuss the rule change request. The issues raised in these discussions have also been considered in making this draft rule determination.

# 1.7 Consultation on draft rule determination

The Commission invites submissions on this draft rule determination by Tuesday 6 June 2017.

Any person or body may request that the Commission hold a hearing in relation to the draft rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 18 April 2017.<sup>26</sup>

Submissions and requests for a hearing should quote project number ERC0209 and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

<sup>25</sup> ibid.

<sup>&</sup>lt;sup>26</sup> In accordance with s. 101(1a) of the NEL. A public hearing is a formal requirement for the Commission to appear before the applicant to enable the applicant to make a presentation to the Commission.

# 2 Draft rule determination

The Commission's draft rule determination is to make a more preferable draft rule. Consistent with the intent of the AER's proposed rule, the more preferable draft rule has the effect of:

- including retirement information for all network assets in network service providers' annual planning reports
- including de-rating information for those network asset de-ratings that cause a network constraint in network service providers' annual planning reports
- aligning reporting requirements on network needs and options to address these in a replacement context with those required in an augmentation context for transmission networks
- extending the regulatory investment tests to include replacement capital expenditure
- requiring reporting on the approach to asset management to be included in the transmission annual planning reports
- clarifying that the regulatory investment test for transmission is to be undertaken again where there is a material change in circumstances (however, a network service provider can seek an exemption to undertake the test again from the Australian Energy Regulator)
- clarifying that distribution annual planning reports will need to include information on investments in information technology and communications systems related to the management of network assets.

A number of ancillary changes have also been made in the draft rule.

The Commission's reasons for making this draft rule determination are set out in section 2.4 below.

This chapter outlines:

- the rule making test for changes to the NER
- the more preferable rule test
- the assessment framework for considering the rule change request
- the Commission's reasons for making a more preferable draft rule against the national electricity objective.

Further information on the legal requirements for making this draft rule determination is set out in Appendix A.

# 2.1 Rule making test

#### 2.1.1 Achieving the national electricity objective

Under the NEL, the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO).<sup>27</sup> This is the decision making framework that the Commission must apply.

The NEO is:<sup>28</sup>

"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:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system."

The Commission considers that the most relevant aspect of the NEO for the purposes of this rule change request is the efficient investment in and operation of electricity services.

### 2.1.2 Additional rule making tests - Northern Territory

From 1 July 2016, the NER, as amended from time to time, apply in the Northern Territory, subject to derogations set out in Regulations made under the Northern Territory legislation adopting the NEL.<sup>29</sup> Under those Regulations, only certain parts of the NER have been adopted in the Northern Territory.<sup>30</sup> As the proposed rule relates to parts of the NER that currently do not apply in the Northern Territory, the Commission has not assessed the proposed rule against additional elements required by Northern Territory legislation.<sup>31</sup>

## 2.2 Making a more preferable rule

Under s. 91A of the NEL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that,

<sup>27</sup> Section 88 of the NEL.

<sup>28</sup> Section 7 of the NEL.

<sup>29</sup> National Electricity (Northern Territory) (National Uniform Legislation) (Modifications) Regulations.

<sup>&</sup>lt;sup>30</sup> For the version of the NER that applies in the Northern Territory, refer to: http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/National-Electricity-Rules-(No rthern-Territory).

<sup>&</sup>lt;sup>31</sup> National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NEO.

In this instance, the Commission has made a draft rule which is a more preferable rule. This draft rule requires reporting on all network asset retirements, and reporting on de-ratings of network assets that cause network limitations or constraints (individually or in groups for asset retirement or de-rating programs), both of which are to be included in network service providers' annual planning reports. This approach removes the need for the AER's proposed guideline on asset retirement and de-ratings.

The draft rule also extends the regulatory investment tests to include replacement capital expenditure, while clarifying that maintenance is exempt from both the RIT-T and the RIT-D.

While the Commission's draft rule is a more preferable rule it incorporates many of the elements proposed by the AER. The key difference between the draft rule and the proposed rule is the approach taken to achieve the desired outcomes.

Section 2.4 below sets out a summary of reasons for the draft rule and differences to the approach taken between the more preferable draft rule and the proposed rule by the AER, as well as how the draft rule will, or is likely to, better achieve the NEO than the proposed rule.

# 2.3 Assessment framework

As required, the AER's rule change request has been assessed against the NEO. The most relevant aspect of the NEO for the purpose of this rule change request is the efficient investment in, and operation of electricity services – namely the electricity transmission and distribution networks in the NEM. In particular, the Commission has considered the following:

- Transparency. Whether sufficient and relevant information about a network is available to enable non-network providers to engage with network service providers and propose feasible and credible alternatives to address network needs. In addition, information about a network may assist connection applicants make more efficient decisions about where and when to connect. Publicly available information regarding the investment plans for a network may also assist the AER in making its regulatory decisions and stakeholders to engage in regulatory processes. Information provision may therefore lead to more efficient network investment decisions.
- Technology neutrality. Whether the NER is sufficiently flexible to adapt to changes in technology over time and not stifle innovation and investment.
- Regulatory and administrative burden. That the administrative costs of any new regulatory requirements should not outweigh the benefits that may emerge from the application of those requirements.

• Clarity and certainty. Whether the requirements of the NER are clear and certain, enabling network service providers to comply with their obligations. In addition, whether the requirements support consistent network planning processes and provide certainty for investment into the future.

The Commission has also considered the overall purpose of the planning and investment framework currently set out in the NER as well as its relationship with the incentive-based economic regulatory framework applied to electricity networks.

# 2.4 Summary of reasons

The more preferable draft rule made by the Commission is published with this draft rule determination. The key features are set out below and in Chapters 3 to 6 of this draft rule determination.

In making the draft rule, the Commission has considered the overall purpose of the current framework of annual planning reports and regulatory investment tests. As stated in the AEMC's determination on distribution planning and expansions, the framework (for both transmission and distribution):<sup>32</sup>

- creates incentives for network service providers to consider potential non-network solutions to network constraints or limitations
- establishes clearly defined planning and decision-making processes to assist network service providers in identifying the solutions to network issues in a timely manner
- provides transparency on network planning activities to enable stakeholder engagement with those activities and ultimately support efficient investment in a network.

These points encompass the primary purpose of the framework: to support the planning of and decisions on investment in a network. Its purpose is not to regulate or direct which plans or decisions should be made, nor to determine what investment costs should be recoverable from regulated prices and revenues.

However, it does accompany an incentive-based economic regulatory framework. In this context, the planning information and investment decision-making process is likely to provide opportunities for the AER and other stakeholders to be more fully informed on the efficiency of investment decisions. This in turn is likely to assist the AER in making network service provider revenue determinations. It is also likely to assist stakeholders to engage in revenue determination processes. As acknowledged in

<sup>32</sup> AEMC, Rule determination, Distribution network planning and expansion framework, 11 October 2012, pp. iv-v.

the distribution planning and expansions rule determination, these outcomes are also benefits of the planning and investment framework.<sup>33</sup>

It should be noted that the AER is not dependent on the planning and investment framework to obtain information on the activities and decisions of network service providers. The NEL provides extensive information gathering powers to the AER in the form of regulatory information notices and regulatory information orders.<sup>34</sup> These are the appropriate instruments for the AER to obtain information it requires for making revenue determinations for network service providers.

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied that the more preferable draft rule will, or is likely to, better contribute to the achievement of the NEO. In the context of the planning framework, this is because the draft rule is likely to:

- Improve transparency regarding retirement and de-rating decisions made by network service providers:
  - The draft rule specifies that information on all planned retirements in distribution and transmission networks is to be included in the annual planning reports. In addition, information on planned de-ratings that result in a limitation or constraint on a network are to be included. This information is broader than that proposed by the AER. While the current NER requires network service providers to include some information relating to retirements and de-ratings in annual planning reports, the effect of the draft rule would be to have a similar level of information available for retirements and certain de-ratings as is currently available in the context of load that drives a need for augmentation of an electricity network. As a result, the draft rule provides a greater level of transparency than in the proposed rule.
  - The greater transparency regarding retirements and de-ratings including the reasons, methodologies and assumptions used in making these decisions (while considering factors such as age and condition of network assets) is expected to be used by non-network providers in engaging with network service providers and the consideration of their own investment opportunities in the electricity networks. Second to this, the information may also assist the AER in its regulatory decision-making processes such as making revenue determinations. Greater transparency of network planning information may also assist stakeholders in engaging in network and regulatory processes.
- Improve transparency regarding replacement investments considered by network service providers:

AEMC, Rule determination, Distribution network planning and expansion framework, 11 October 2012, pp. 37 & 39.

<sup>&</sup>lt;sup>34</sup> See Part 3, Division 4 of the NEL.

- Under the draft rule the distribution and transmission regulatory investment tests will apply in the context of replacement decisions as well as in the context of augmentation of a network. The draft rule includes a broader set of replacement decisions than proposed by the AER. This has the effect of applying a transparent, consultative decision-making process to many network service providers' considerations of replacing network assets. This provides a framework in which non-network providers can be informed on and engage in decisions regarding investment in networks. It is anticipated that as a result of the process and the greater involvement of non-network providers, more efficient network investment decisions can be made.
- Application of the regulatory investment test to decisions on the replacement of network assets may also provide relevant information to the AER for consideration in the context of making a revenue determination for an electricity network.
- Be technology neutral:
  - Consistent with the current provisions of the NER, the draft rule does not specify any particular technological requirements for potential investment projects. The planning reports and, particularly, the regulatory investment test have been established to consider all relevant network and non-network solutions that may be used to address any constraints or limitations arising in electricity networks.
- Minimise the regulatory burden for network service providers, the AER and stakeholders:
  - The draft rule does not include the proposed rule's feature of an exemption process, and publication of a new exemption report, for "like-for-like" replacements within the regulatory investment test framework. The Commission considers that as a result, the draft rule should be easier to administer and less burdensome for stakeholders to engage with network planning and investment processes. The draft rule extends the current NER framework to all potential replacement investments without any additional process that would only apply to some investments. Network service providers will use the same process for all replacement investments without having to identify which investments would meet the criteria for the exemption process. As a result, the draft rule is likely to better contribute to the achievement of the NEO than the proposed rule.
  - The proposed rule included requirements that the AER would develop a guideline that would set out the assets a network service provider must report on in its annual planning report and the principles that network service providers should follow when making retirement and de-rating decisions. The draft rule does not include this requirement. As a result, the Commission considers that the draft rule has a smaller regulatory burden

than the proposed rule because the regulatory and administrative processes required to create, maintain and comply with an up-to-date guideline on retirement and de-rating decisions will not be required. The Commission is satisfied that the current incentive framework under which regulated electricity service providers operate is sufficient to achieve an outcome where consumers only pay for investments arising from efficient retirement and de-rating decisions.

- Provide clarity and certainty for network planning and investment processes:
  - In making the draft rule, the Commission has sought to apply the current NER provisions to replacements as relevant. This has been done to the extent possible in preference to inserting new and specific provisions as in the proposed rule. The Commission anticipates this approach will assist in clarity and certainty that the current provisions for annual planning reports and regulatory investment tests apply equally to all potential capital investments regardless of the reason why the relevant constraint or limitation has occurred.
  - The draft rule requires network service providers to report on all planned asset retirements, and all de-ratings that result in a constraint or limitation. This provides more clarity and certainty for stakeholders than the proposed rule which would have required the AER to develop a guideline to set out which asset types should be reported on in a replacement context. This attribute of the draft rule should assist network service providers in making decisions and establishing relevant business processes that will enable them to comply with the NER with greater certainty over time than under the proposed rule. This approach to the draft rule is expected to contribute better to the achievement of the NEO than the proposed rule.

## 2.5 Strategic priority

This rule change request relates to the AEMC's strategic priority to encourage efficient investment and flexibility in markets and networks. More specifically, the purpose of this strategic priority is to allow transmission and distribution networks to evolve to accommodate changes, such as those driven by technology and consumers, while still being able to operate and invest in the infrastructure and services required. The draft rule is expected to improve the information and processes relevant to network planning and investment activities. These amended processes should support efficient network investment in the future and contribute to consumers paying no more than necessary for their electricity services.

# 3 The changing electricity environment

This chapter discusses the AER's views on the changing electricity environment and the consequent need to make amendments to the NER that include replacement capital expenditure in the regulatory investment test processes and retirements and de-ratings in the annual planning reports.

# 3.1 AER's view

The AER regards the annual planning reports and the regulatory investment test processes as providing a continuum of information to interested parties regarding planned distribution and transmission network investment. Moreover, the regular updating of network plans assists the effectiveness of the regulatory determination process for network service providers, stakeholders and the AER. In addition, the AER has stated that another key purpose of the planning framework is to facilitate meaningful engagement between the network service providers and a range of interested parties, which assists in achieving efficient planning outcomes.<sup>35</sup>

However, the current framework focuses on augmentation, or demand driven, capital expenditure. Current annual planning reporting information requirements on replacement capital expenditure are minimal compared to augmentation information requirements. Replacement capital expenditure is specifically excluded from the RIT-T and RIT-D. Historically, it has been considered that to require a network service provider to undertake a regulatory investment test in these circumstances would result in an unnecessary regulatory burden. It was also considered that viable alternatives to like-for-like replacement were unlikely and so the planning processes would not yield more efficient options or outcomes.

In the AER's view, the environment in which network service providers now operate is significantly different since the introduction of the transmission and distribution network planning frameworks. As a result, for the network planning framework to continue to promote efficient network development, the AER has argued that it must be amended to provide an increased focus on replacement expenditure.<sup>36</sup>

In particular, the AER has noted the following changes in the environment:<sup>37</sup>

- electricity demand and consumption in the NEM has stagnated, and in some cases fallen (although there may be pockets in a network where demand is growing)
- AEMO's 2015 NTNDP forecasts transmission networks will focus on replacement capital expenditure rather than augmentation expenditure in the future

<sup>&</sup>lt;sup>35</sup> AER rule change request, p. 4.

<sup>&</sup>lt;sup>36</sup> AER rule change request, p. 5.

AER rule change request, pp. 5-7.

- recent transmission and distribution revenue determination processes have highlighted that replacement capital expenditure is becoming a greater proportion of total capital expenditure
- more viable alternatives to like-for-like replacement expenditure are emerging as the value of deferring major network investment increases in a climate of flat demand
- there is the potential for greater technological changes to impact on the operation of electricity networks in the future as new technologies become more cost effective and accessible.

# 3.2 Stakeholder views

The Energy Networks Australia (ENA) stated that it generally agreed with the AER on the changes in the external environment that had been identified in the rule change request. It expressed support for the intent of increasing the transparency of network asset replacement planning. However, the ENA did note that a balance was required between additional regulatory burden and the assessment of investments.<sup>38</sup>

The Energy Consumers Australia (ECA) and Consumer Utilities Advocacy Centre (CUAC) also stated that they generally agreed with the AER's characterisation of the current environment. Consequently, they also agreed with the need to 'update' the requirements on network service providers in relation to replacement of network assets.<sup>39</sup>

On the changing enviroment, Energex commented:<sup>40</sup>

"... the operating environment is dynamic, with energy usage patterns shifting due to changes in customers' responses to economic pressures, rising electricity prices, energy efficiency initiatives and the continued rapid deployment of distributed generation."

In response to the AER's view that replacement expenditure has become relatively more important for network service providers, a number of stakeholders made comments.

AEMO commented that its analysis indicates that replacement expenditure accounts for an increasing share of overall network capital expenditure as electricity demand has slowed. In its view, relatively low levels of augmentation capital expenditure are likely to continue into the future. In particular:<sup>41</sup>

<sup>&</sup>lt;sup>38</sup> ENA, first round submission, p. 3.

<sup>&</sup>lt;sup>39</sup> First round submissions: ECA, p. 3; CUAC, p. 2.

<sup>40</sup> Energex, first round submission, p. 4.

<sup>&</sup>lt;sup>41</sup> AEMO, first round submission, p. 1.

"Where augmentation is required, it is likely to be to reinforce specific regional requirements driven by changing location of generation and changing patterns of demand. Overall growth predictions are low, suggesting that when augmentation is required in one area this is offset by lower network requirements in other areas."

Other stakeholders also agreed with the premise of the AER's rule change request. For example, AGL stated:  $^{42}$ 

"As network capital expenditure is increasingly related to the replacement or refurbishment of aging infrastructure, it is important that non-network solutions are assessed alongside network options when such expenditure decisions are being made."

Red Energy and Lumo commented that energy storage and distributed generation are becoming more cost competitive to network augmentations and so should also be considered in the context of replacement capital expenditure.<sup>43</sup>

Some stakeholders also responded to AER's view that non-network options are becoming more viable as alternatives to network solutions to asset replacement scenarios. The Energy Users Association of Australia (EUAA) commented that:<sup>44</sup>

"The combination of changes in technology availability and cost and changes in demand patterns across the networks mean that non-network solutions are increasingly viable alternatives for both network replacement and augmentation."

EnerNOC noted that non-network options can be as relevant to a network asset replacement context as an augmentation context because "the fundamental principle" is the same although it noted some assets (such as switching relays) are unlikely to be addressed with non-network solutions.<sup>45</sup>RES Australia (RES) and the Total Environment Centre also considered that non-network solutions were suited to replacing particular categories of assets.<sup>46</sup>

AGL also considered that non-network alternatives may be more viable for replacement than augmentation. AGL considered that established customers on a part of the network that is being replaced can be engaged in the design and delivery of a non-network solution.<sup>47</sup>

However, network service providers were more cautious on the potential of non-network options. CitiPower and Powercor stated that they did not consider that

<sup>42</sup> AGL, first round submission, p. 2.

<sup>43</sup> Red Energy and Lumo, first round submission, p. 1.

<sup>44</sup> EUAA, first round submission, p. 3.

<sup>&</sup>lt;sup>45</sup> EnerNOC, first round submission, p. 2.

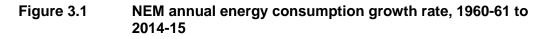
<sup>46</sup> RES, first round submission, p. 2.

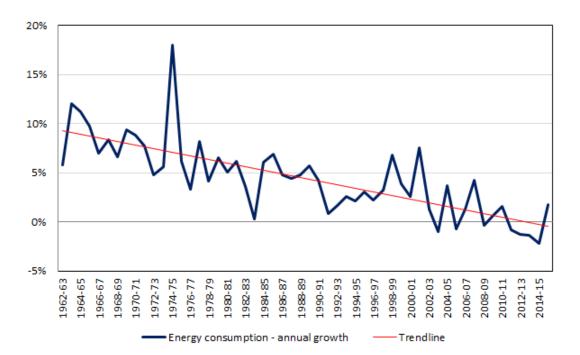
<sup>47</sup> AGL, first round submission, p. 1.

non-network alternatives were viable for the vast majority of assets.<sup>48</sup> Similarly, Energex commented that the potential for non-network solutions to be viable alternatives for like-for-like replacements "will generally be restricted to higher voltage assets".<sup>49</sup> SA Power Networks submitted that replacements generally have shorter planning timeframes and involve more individual and low cost works with no alternatives to like-for-like replacement. AEMO noted that in some ageing network assets are deeply embedded within the network, and there would be no viable alternative to replacing these assets on a like-for-like basis. Ergon and Jemena similarly commented that the potential for non-network solutions was limited.<sup>50</sup>

#### 3.3 Analysis and conclusion

Three key points were made by the AER in regard to the environment in which the electricity network service providers are operating. First, that electricity demand growth has flattened across much of the NEM. This is illustrated by the figure below which provides a long term view of electricity consumption growth for the NEM. This long term view is consistent with data, as noted by the AER, from network service providers.<sup>51</sup>





Source: AEMC analysis of data from Office of the Chief Economist, Department of Industry, Innovation and Science, 2016 Australian energy statistics update, October 2016.

51 AER rule change request, p. 6.

<sup>48</sup> CitiPower and Powercor, first round submission, p. 1.

<sup>&</sup>lt;sup>49</sup> Energex, first round submission, p. 4.

<sup>&</sup>lt;sup>50</sup> First round submissions: SA Power Networks, p. 3; AEMO, p. 3; Ergon, p. 4; Jemena, p. 3.

Information on forecast demand for the NEM is included in AEMO's national electricity forecasting report. The 2016 report included data on maximum demand for summer and winter from 2016-2017 to 2035-2036.<sup>52</sup> An analysis of this information is set out in Figure 3.2 and Figure 3.3. In summer, the forecast is that the demand in most jurisdictions will be flat. Only Queensland is expected to experience some demand growth over the forecasting period. While winter electricity demand is forecast to grow in New South Wales, Victoria and Queensland, it is expected to remain flat for Tasmania and South Australia.

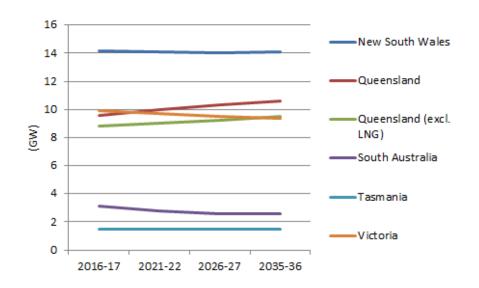
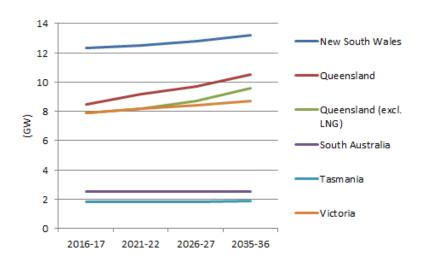


Figure 3.2 Forecast summer maximum demand by state

Source: AEMC analysis of data from AEMO, *National electricity forecasting report for the national electricity market*, June 2016, p. 6.





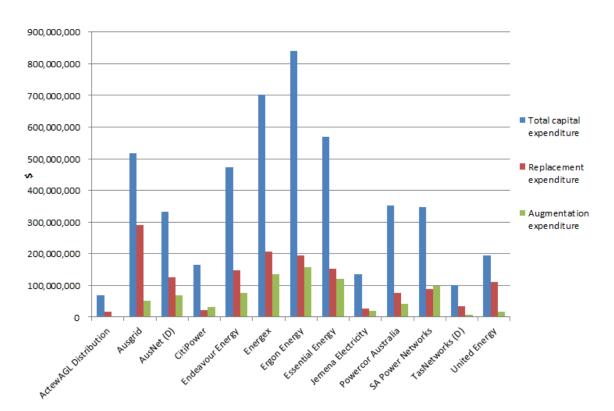
Source: AEMC analysis of data from AEMO, National electricity forecasting report for the national electricity market, June 2016, p. 6

<sup>&</sup>lt;sup>52</sup> AEMO, National electricity forecasting report for the national electricity market, June 2016, p. 6.

The second point made by the AER in regard to the current and expected environment was that replacement capital expenditure has been a growing proportion of total capital expenditure.<sup>53</sup> The AEMC has considered network service provider capital expenditure data. This data, as illustrated in the figures below, is consistent with the AER's conclusion: replacement capital expenditure is a more significant proportion of total capital expenditure than augmentation capital expenditure.

As demand growth stagnates and network service providers focus more on the management of the existing electricity networks rather than growth, it is likely that replacement expenditure will continue to form a larger proportion of capital expenditure than it has in the past. In addition, as submitted by the AER, in a low electricity grid demand growth environment there is likely to be a stronger economic case for non-network solutions. This is because investment in long lived assets can be deferred until there is a more certain need, reducing the risk of stranded assets.

In addition, the technological shifts that have enabled recent improvements in the feasibility of non-network replacement options are also likely to continue.



#### Figure 3.4 DNSP capital expenditure breakdown, 2015

Note: Total capital expenditure is not the sum of network replacement and augmentation expenditure as it includes non-network capital expenditure such as expenditure on buildings.

Source: AEMC analysis of AER data compiled from DNSP responses to regulatory information notices.

<sup>&</sup>lt;sup>53</sup> AER rule change request, p. 6.

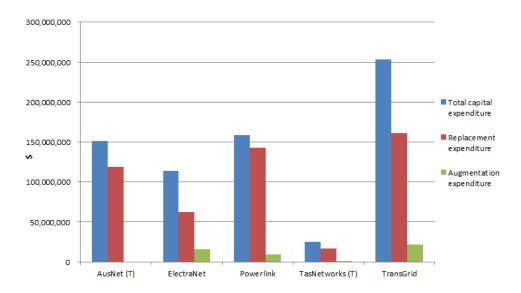
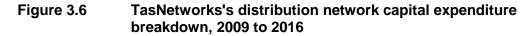
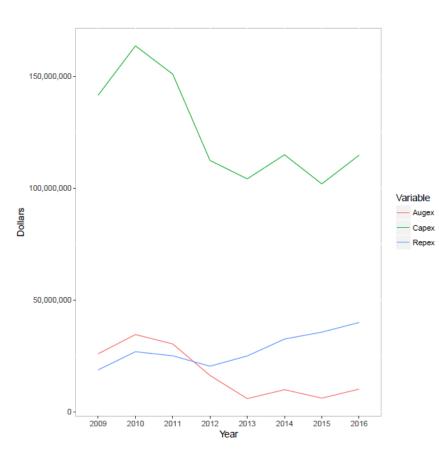


Figure 3.5 TNSP capital expenditure breakdown, 2015

Note: Total capital expenditure is not the sum of network replacement and augmentation expenditure as it includes non-network capital expenditure such as expenditure on buildings.

Source: AEMC analysis of AER data compiled from TNSP responses to regulatory information notices.

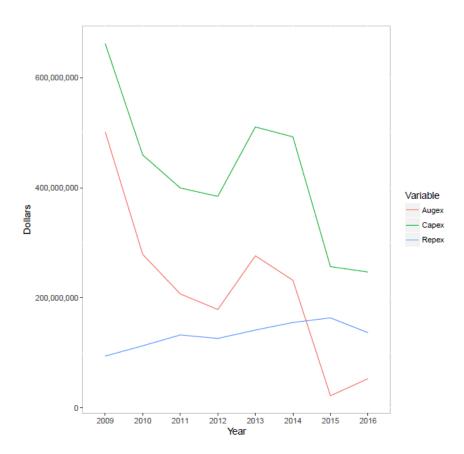




Note: Total capital expenditure is not the sum of network replacement and augmentation expenditure as it includes non-network capital expenditure such as expenditure on buildings.

Source: AEMC analysis of AER data compiled from TNSP responses to regulatory information notices.

Figure 3.7 TransGrid's capital expenditure breakdown, 2009 to 2016



Note: Total capital expenditure is not the sum of network replacement and augmentation expenditure as it includes non-network capital expenditure such as expenditure on buildings.

Source: AEMC analysis of AER data compiled from TNSP responses to regulatory information notices.

The breakdown of capital expenditure over time is provided for two network service providers as examples. The Commission has observed a similar pattern of an increasing amounts of replacement expenditure over time compared to the amount of augmentation expenditure across all network service providers.

The third point that the AER made is that technological changes are challenging the previous presumption of like-for-like replacement. The Commission considers there may be alternatives to replacing network assets with a like-for-like replacement. This may take the form of:

- non-network alternatives such as batteries, embedded generators and demand management alone
- non-network alternatives combined with a network option (a hybrid solution), or
- a more efficient network configuration.

However, there may still be some instances where the only option is to replace the asset with the same asset or a modern day equivalent. This is more likely to be the case where assets are deeply embedded within a network or operational equipment such as switchgear.

As the cost of storage and embedded generation declines and the penetration of these technologies increases, non-network and hybrid network and non-network solutions may become more cost effective alternatives to network capital investment.

In light of the environment in which the electricity networks are currently, and likely to be, operating under the limited planning information available on retirements and de-ratings of network assets as well the exclusion of replacement projects from the regulatory investment test processes do appear to be gaps in the regulatory framework that should be addressed.

# 4 Annual reporting requirements

This chapter considers the AER's proposal to expand the annual planning reporting requirements for replacement expenditure and stakeholder views on this proposal.

### 4.1 AER's view

The AER considered that the NER does not currently require a network service provider to provide a sufficient level of information in its annual planning report on network replacement expenditure.<sup>54</sup> In addition, it submitted that annual planning reporting requirements for network replacement expenditure are minimal compared to those for augmentation expenditure.<sup>55</sup>

To address this problem, the AER proposed amendments to the NER to require a network service provider to provide information on planned asset retirements and de-ratings in its annual planning report. In particular:

- a brief description of the asset, including location, being retired or de-rated
- a detailed summary of the justification for the asset to be retired or de-rated
- the date from which the asset will be retired or de-rated and an explanation of why this has changed from the previous annual planning report (if relevant).<sup>56</sup>

In addition, the AER proposed that the NER require network service providers to provide information on options to address any network needs arising from these retirements and de-ratings. In particular:

- an overview of the identified need
- the proposed solution to address the need, including the cost of this solution
- other options which have been considered by a network service provider to address the need and the cost of these options
- the technical characteristics a non-network option would be required to deliver to partially or fully address the identified need
- when the network service provider intends to commence a RIT consultation process if this is required to be undertaken
- whether the proposed solution selected from the options will have a material inter-network impact (transmission only).<sup>57</sup>

<sup>&</sup>lt;sup>54</sup> An outline of the current annual planning report requirements in the NER are set out in section 1.2.2.

<sup>&</sup>lt;sup>55</sup> AER rule change request, pp. 10-11.

<sup>&</sup>lt;sup>56</sup> ibid, p. 13 and Attachment pp. 2-4.

The AER considered that the reporting of this information would promote efficient network investment by, for example, assisting non-network providers to identify efficient network investment opportunities and assisting the AER to assess network service providers' revenue proposals as part of their revenue determination processes.<sup>58</sup>

While the AER considered there should be more reporting of replacement planning decisions, it submitted there are some assets which can only be replaced on a like-for-like basis. The AER proposed that these assets be excluded from the reporting requirements because there would be limited benefit in reporting on them. The AER therefore proposed that the NER require it to develop a guideline setting out the types of assets network service providers are to report on.<sup>59</sup>

To achieve this, the NER would set out some principles that the AER would be required to follow in developing the guideline.<sup>60</sup> Among other matters, the AER would be required to consider:

- whether a type of network asset is likely to be retired individually or part of a broader asset replacement program
- the ability of a network service provider to provide the information and whether the costs of providing the information outweigh the benefits of the information being reported on in the annual planning reports
- whether there are likely to be alternatives to like-for-like replacement.<sup>61</sup>

In addition, so that asset retirement decisions reflect prudent and efficient replacement expenditure, the guideline would set out principles and a broad approach that network service providers would be required to follow when planning the retirement or de-rating of network assets.<sup>62</sup> The AER would develop and update the guideline in accordance with the transmission and distribution consultation procedures in the NER.<sup>63</sup>

The AER submitted that its proposed reporting requirements would not result in an onerous burden for network service providers.<sup>64</sup> It noted that information on asset retirement and de-rating decisions is already provided to the AER as part of the revenue determination processes.<sup>65</sup> In addition, it submitted that requiring reports on

- <sup>59</sup> AER rule change request, pp. 15-16.
- 60 ibid.
- 61 ibid.
- 62 ibid. p. 16.
- <sup>63</sup> ibid. p. 15.
- <sup>64</sup> ibid. p. 14.
- 65 ibid.

<sup>&</sup>lt;sup>57</sup> ibid, p. 13 and Attachment pp. 3-4.

<sup>&</sup>lt;sup>58</sup> ibid, pp. 14-15.

a sub-set of assets as specified in the AER's guideline would reduce the regulatory burden.  $^{66}$ 

# 4.2 Stakeholder views

#### Gaps in the reporting requirements

Network service providers generally considered the existing annual reporting requirements for replacement expenditure are sufficient. They noted existing information that is publicly available, including the network opportunity maps developed by the Institute of Sustainable Futures.<sup>67</sup> However, TransGrid submitted there is room to provide more information to the market in relation to network asset replacements.<sup>68</sup> Similarly, Jemena considered forecasts of future network capacity changes in the DAPR could provide useful information for non-network providers.<sup>69</sup>

Non-network providers, retailers and consumer groups generally considered that there are information gaps in the NER relating to replacement expenditure and that these should be filled.<sup>70</sup>

Specifically, RES submitted that the following information would assist efficient market engagement and appraisal of non-network options:

- capacity shortfall if the existing asset is retired or de-rated (under system normal and contingency conditions for a defined peak demand forecast)
- indicative costs of network options that have been considered
- description of the network topology
- whether a non-network option would need to supply an islanded system under system normal or contingency conditions
- timing requirements.

EnerNOC noted the AER's proposal to include information on the technical characteristics a non-network solution would be required to provide to address a network need is critical for non-network service providers.<sup>71</sup>

AEMO also considered the information required by the NER on replacement expenditure is currently insufficient.<sup>72</sup> It stated that network service providers have

<sup>&</sup>lt;sup>66</sup> ibid. pp. 14-15.

<sup>&</sup>lt;sup>67</sup> First round submissions: Ausgrid, pp. 5-6; ENA, pp. 10-11; CitiPower and Powercor, pp. 1-2; Ergon, p. 6; Energex, p. 6.

<sup>&</sup>lt;sup>68</sup> TransGrid, first round submission, p. 3.

<sup>&</sup>lt;sup>69</sup> Jemena, first round submission, Attachment 1, p. 1.

<sup>&</sup>lt;sup>70</sup> First round submissions: AGL, pp. 4-5; EnerNoc, pp. 2-3; EUAA, pp. 3-4; AEC, pp. 2-3; RES, p. 2.

<sup>&</sup>lt;sup>71</sup> EnerNOC, first round submission, p. 3.

interpreted their obligations in a range of different ways. As a result, the information published often lacks the practical details required in order for commercial parties to seriously pursue non-network options.<sup>73</sup> In addition, AEMO suggested the following information be required to be reported in the annual planning reports:

- a forecast demand trace or summary statistics such as a duration curve that sets out the expected frequency and duration of system limitations
- required response times.<sup>74</sup>

#### Additional information in the annual planning reports

As set out above, the AER proposed that the following information be included in annual planning reports:

- planned asset retirements and de-ratings
- options to address any network needs that arise from retirements or de-ratings.

In general, network service providers did not support the AER's proposed reporting requirements. The reasons given included: the information is already reported; the current reporting of information is sufficient; and the proposed information would be of limited value.

More specifically, some network service providers noted they are not able to define exact quantities or locations of all asset retirements and de-ratings at the start of each year and that providing this information in the annual planning reports could mislead stakeholders.<sup>75</sup>

In addition, network service providers considered that the definition of "de-rating" needs to be clarified.<sup>76</sup> Ausgrid submitted it should not extend to "reactionary de-ratings" which are made in response to equipment suffering damage or where routine testing indicates that the equipment is not performing to its design specifications.<sup>77</sup> TransGrid submitted that the de-rating of an asset is generally not planned but could be reported after the event has occurred.<sup>78</sup> Ergon and Energex considered incremental planned de-ratings should not be reported on as rating changes are an ongoing operational function of a network.<sup>79</sup> Jemena considered it appropriate

- 74 ibid.
- <sup>75</sup> First round submissions: SA Power Networks, p. 4; Ergon, p. 8.
- <sup>76</sup> First round submissions: Ausgrid, p. 8; ENA, p. 11.
- 77 Ausgrid, p. 8.
- 78 TransGrid, first round submission, p. 3.
- 79 First round submissions, Ergon, p. 9; Energex, p. 10.

AEMO, first round submission, pp. 3-5.

<sup>73</sup> ibid.

that the reporting requirements extend to asset de-ratings but that the NER already requires this information to be reported.  $^{80}$ 

Non-network providers, retailers, consumer groups and AEMO supported the reporting requirements proposed by the AER.<sup>81</sup> RES submitted that de-ratings may be reported retrospectively if undertaken as a result of emergency risk mitigation.<sup>82</sup>

#### What level of reporting should be required for replacement expenditure

A number of network service providers considered that reporting on retirements and de-ratings and options to address any need arising from these should be limited to high value assets. Alternatively, reporting should be limited to those that have the greatest potential to be replaced with non-network solutions such as high voltage transformers and sub transmission lines.<sup>83</sup>

Of those that considered reporting should be limited to high value assets, Ergon put forward a cost threshold similar to that in Schedule 5.8(g) of the NER (\$2 million). SA Power Networks suggested a threshold of \$5 million.<sup>84</sup> Alternatively, CitiPower and Powercor recommended a cost threshold of \$5 million and where there is viable possibility of efficient non-network alternatives. It submitted that defining asset types that can only be replaced on a like-for-like basis is difficult as the assets may change over time.<sup>85</sup>

Network service providers that considered reporting should be limited to assets that have the greatest potential to be replaced with a non-network alternative also submitted there are no alternatives to assets such as protection and communication systems, poles, switchgear, fire systems, IT assets and buildings. They considered there are no benefits in reporting on these assets and these asset types should be excluded from any new obligations.<sup>86</sup>

In contrast, AEMO considered single site-specific projects relating to primary network assets (substations and lines) should be reported in the annual planning reports. This is because such work comprises over 60 per cent of the total cost of TNSPs' proposed replacement and renewal programs. The remaining 40 per cent relates to programs of work occurring over multiple sites.<sup>87</sup>

<sup>&</sup>lt;sup>80</sup> Jemena, first round submission, Attachment 1, p. 2.

<sup>&</sup>lt;sup>81</sup> First round submissions: AGL, p. 5; AEMO, p. 5; EnerNoc, pp. 3-4; EUAA, p. 4; RES, p. 3.

<sup>&</sup>lt;sup>82</sup> RES, first round submission, p. 3.

<sup>&</sup>lt;sup>83</sup> First round submissions: ENA, p. 11; Ausgrid, p. 8; Energex, p. 10; Ergon, p. 9; CitiPower and Powercor, p. 3; Jemena, Attachment 1, p. 3; SA Power Networks, p. 3.

<sup>&</sup>lt;sup>84</sup> First round submissions: Ergon, p. 9; SA Power Networks, p. 3.

<sup>&</sup>lt;sup>85</sup> CitiPower and Powercor, first round submission, p3.

<sup>&</sup>lt;sup>86</sup> First round submissions: ENA, p. 11; Ausgrid, p. 8; Jemena, Attachment 1, p. 3.

AEMO, First round submission, p. 5.

Non-network providers, retailers and consumer groups generally considered there should be fewer limitations to the reporting requirements.<sup>88</sup> The EUAA considered all assets should be reported on.<sup>89</sup> AGL noted there may be some asset replacements for which a non-network solution is unlikely to be a potential substitute, such as protection equipment and switchgear. It commented that it may be appropriate that reporting on these assets could be less detailed.<sup>90</sup>

RES suggested that assets where the highest cost network option exceeds \$5 million are reported on an individual basis and lower cost assets are reported on from a program perspective.<sup>91</sup> It considered that as a minimum the reporting requirements should extend to underground cables, overhead lines, transformers and reactive plant.<sup>92</sup> In addition, RES submitted that it is unlikely that non-network options can provide feasible alternatives to the replacement of switchgear or secondary systems at this stage but it may be feasible to develop an efficient network, non-network hybrid solution for a large group of switchgear.<sup>93</sup>

#### Proposed AER network retirement reporting guideline

There were differing views on the proposed AER network retirement reporting guideline to set out the types of asset a network service provider must include when reporting on asset retirements and de-ratings. Ergon, EnerNOC and PIAC supported the guideline which would set out the types of asset to be included in reports of asset retirements and de-ratings.<sup>94</sup> Similarly, AGL submitted there may be merit in introducing the guideline for this purpose.<sup>95</sup> Alternatively, SA Power Networks considered that decisions on which assets are unlikely to have alternatives to like-for-like should be left with network service providers rather than being prescribed in a guideline which is likely to need constant amendment.<sup>96</sup>

If a guideline were to be required, some stakeholders supported the principles that the AER proposed it be required to follow in developing and updating the guideline.<sup>97</sup>The ENA submitted that the NER should set out clear principles and appropriate guidance to the AER to avoid regulatory uncertainty.<sup>98</sup>

However, a number of stakeholders put forward alternatives for setting out the types of asset that must be included in reports on asset retirements and de-ratings. RES

- <sup>90</sup> AGL, first round submission, p. 5.
- 91 RES, first round submission, p. 4.
- <sup>92</sup> ibid.
- 93 ibid.

95 AGL, first round submission, p5.

- 97 First round submissions: Ergon, p. 10; AEMO, p. 6.
- 98 ENA, first round submission, pp. 11-12.

<sup>&</sup>lt;sup>88</sup> First round submissions: EnerNoc, p. 4; EUAA, p. 4; AGL, p. 5.

<sup>89</sup> EUAA, first round submission, p. 4.

<sup>&</sup>lt;sup>94</sup> First round submissions: PIAC, pp. 3-4; EnerNOC, p. 4; Ergon, p. 9.

<sup>&</sup>lt;sup>96</sup> SA Power Networks, first round submission, p. 2.

considered an alternative option is the inclusion of an appropriate template in the annual regulatory information notice made by the AER.<sup>99</sup> TransGrid suggested that a network service provider identify the assets which should be exempt in the regulatory determination process.<sup>100</sup> AEMO supported a dynamic framework that could evolve as circumstance change.<sup>101</sup>

The AER had proposed a second role for the guideline, this being to set out principles and a broad approach to be followed in making retirement and de-rating planning decisions.<sup>102</sup>

Network service providers generally opposed this on the basis that the AER should not prescribe business and asset management practices.<sup>103</sup> Jemena considered it would be useful but the principles and broad approach would have to be set at very high level to accommodate various approaches to asset management practices.<sup>104</sup> AGL submitted the network service providers were best placed to consider when assets would most appropriately be retired although overarching principles may offer a useful guide and enhance the predictability of network planning decisions.<sup>105</sup> EnerNOC considered the most important thing is that a network service provider gives some visibility into their employed principles and methodologies in their annual planning reports.<sup>106</sup>

#### Regulatory burden of additional reporting requirements

Network service providers had mixed views on the amount of additional reporting that they would be required to undertake under the AER's proposed rule. TransGrid submitted that it did not expect the extension of the annual planning report requirements to network asset replacement decisions to result in a significant additional burden.<sup>107</sup> Alternatively, Ausgrid considered the AER's proposal would impose significant additional reporting requirements, with the magnitude of the impact dependant on the precise form of the requirements.<sup>108</sup> Similarly, CitiPower and Powercor did not consider the benefits of the additional reporting would be likely to outweigh its costs.<sup>109</sup> Jemena estimated the AER's proposal would increase its reporting effort by approximately 20 per cent.<sup>110</sup>

<sup>99</sup> RES, first round submission p. 4.

<sup>100</sup> TransGrid, first round submission, p. 4.

<sup>101</sup> AEMO, first round submission, p. 6.

<sup>102</sup> AER rule change request, p. 16.

<sup>&</sup>lt;sup>103</sup> First round submissions: ENA, p. 12; Ausgrid, p. 9; Ergon, p. 10; Energex, p. 11; CitiPower and Powercor, p. 4.

<sup>&</sup>lt;sup>104</sup> Jemena, first round submission, Attachment 1, p. 4.

<sup>&</sup>lt;sup>105</sup> AGL, first round submission, pp. 5-6.

<sup>106</sup> EnerNOC, first round submission, p. 4.

<sup>&</sup>lt;sup>107</sup> TransGrid, first round submission, p. 3.

<sup>&</sup>lt;sup>108</sup> Ausgrid, first round submission, p. 9.

<sup>109</sup> CitiPower and Powercor, first round submission, p. 4.

<sup>&</sup>lt;sup>110</sup> Jemena, first round submission, Attachment 1, p. 4.

Where commented, other stakeholders generally did not consider the additional reporting by network service providers required in the proposed rule would be significant given that they should already have access to the information.<sup>111</sup> RES submitted that reporting requirements including the annual planning reports and AER regulatory information notices be reviewed holistically to ensure that the reporting burden is not significantly increased.<sup>112</sup>

# 4.3 Analysis and conclusions

#### Reporting on retirements and de-ratings

The draft rule requires network service providers to identify in their annual planning reports:

- all planned network asset retirements over the forward planning period (a minimum of five years for distribution networks and ten years for transmission networks)
- all planned asset de-ratings which result in a network constraint over the forward planning period.<sup>113</sup>

In particular, network service providers are to provide:

- a brief description of the asset, including its location
- the reasons, including methodologies and assumptions used for deciding that it is necessary or prudent for the network asset to be retired or de-rated taking into account factors such as the age and condition of the asset
- the date from which the asset will be retired or de-rated and if this has changed from the previous annual planning report an explanation of why.<sup>114</sup>

The information required to be provided is largely in line with the information requirements in the AER's proposed rule. However, the drafting of the draft rule to achieve this differs from that proposed by the AER.

As identified by the AER, information on a network service providers' planned asset retirements and de-ratings is the equivalent to information on demand forecasts in an augmentation context.<sup>115</sup> This is because asset retirements and de-ratings lead to a need for network replacement expenditure where as demand is a key driver for augmentation expenditure. As a network service provider is currently required to

<sup>&</sup>lt;sup>111</sup> First round submissions: AGL, p. 6; EUAA, p. 4.

<sup>112</sup> RES, first round submission, p. 4.

<sup>&</sup>lt;sup>113</sup> Draft rule 5.12.2(c)(1A) and Schedule 5.8(b1).

<sup>&</sup>lt;sup>114</sup> Draft rule 5.12.2(c)(1A) and Schedule 5.8(b1).

<sup>115</sup> AER rule change request, p. 14.

provide information on its demand forecasts, the draft rule aligns the reporting requirements for replacement with augmentation in this regard.

Requiring a network service provider to provide information on planned network asset retirements and de-ratings provides greater transparency of these decisions. This may facilitate greater confidence in network replacement needs identified from non-network providers and other energy market stakeholders and facilitate the identification of opportunities to invest in the network. This information will also assist the AER and stakeholders in the assessment of network service providers' regulatory proposals as part of the revenue determination process. Network service providers will also be able to use this information to prepare their regulatory proposals.

For completeness, the draft rule also clarifies that transmission network service providers are to consider the:

- age and condition of network assets
- the potential for replacement of network assets to provide a net economic benefit to all those who produce, consume and transport electricity in the market as part of its annual planning review.<sup>116</sup>

These amendments align the review requirements with the new replacement reporting requirements in the draft rule and reflect that the annual planning review should consider all investment needs regardless of the cause.

# Level of reporting required

In its rule change request, the AER proposed that each network service provider be required to report on planned retirements and de-ratings for a sub-set of its assets. It proposed that the types of assets that would be subject to the reporting requirements would be set out in a network retirement reporting guideline to be prepared by the AER.

The draft rule has not adopted this approach. Instead, it requires the reporting of all planned asset retirements. Requiring reporting of all asset retirements allows for the benefits of providing the information to be fully realised in a simple and efficient way. It also provides clarity for a network service provider on what information is to be reported. The additional regulatory burden is not likely to be significant as network service providers will have this information to hand.

Network service providers may often make incremental changes to the ratings of assets to operate them efficiently. It would not be appropriate for network service providers to be required to report on all planned de-ratings. Information on de-ratings is therefore only required to be provided when a network need arises as a result of a de-rating.

<sup>&</sup>lt;sup>116</sup> Draft rule clauses 5.12.1(4) and 5.12.1(5).

An AER network retirement reporting guideline setting out the types of assets that must be reported on is not included in the draft rule. Nor does the draft rule include a cost threshold as proposed by network service providers.

An AER network retirement reporting guideline is not required by the draft rule because:

- Reporting of all asset retirements allows for the benefits of providing the information to be fully realised in a simpler and more efficient way. It also provides greater ongoing clarity on what information is to be reported. This approach also gives non-network providers, who are best placed, the opportunity to decide whether a non-network option is viable.
- It is difficult to specify the types of assets for which there will be no alternative options to the current network asset as it may not always be clear where there will be alternatives and where there will not.
- The development and potentially frequent updating of a guideline would impose an administrative burden on the AER and stakeholders. This is particularly relevant in the changing energy environment where there is an increasing possibility that an alternative to the current network asset may be viable.

An asset cost threshold is not included in the draft rule as retirements of lower cost projects may also be of interest to non-network providers and other energy market stakeholders. The Commission considers that without a cost threshold, information will be available to all non-network providers accommodating a wide range of technology options. There is therefore a benefit in reporting this information in the annual planning reports.

As identified above, the draft rule provides that all asset retirements and all de-ratings that result in a network constraint planned over the forward planning period must be included in the annual planning reports. However, in some cases the retirement or de-rating of an asset is part of a replacement program across a network (such as poles). These assets should be reported on but it would reduce the regulatory burden and be more efficient if such assets were grouped together. To allow this to occur the draft rule allows a network service provider to report assets together where assets of the same type are to be replaced across more than one location in the same calendar year and where the replacement cost of each individual asset is expected to have a capital cost of \$100,000 or less.<sup>117</sup>

The purpose of the cost threshold is to prevent network service providers from grouping together significant individual assets across multiple locations which may be replaceable with a non-network alternative. As there may be non-network alternatives, the Commission considers there are benefits in these assets being reported individually. A value of \$100,000 was selected as the replacement cost threshold as it was considered that assets valued above this amount may be more likely to be

<sup>&</sup>lt;sup>117</sup> Draft rule clauses 5.12.2(c)(1B) and Schedule 5.8(b2).

replaceable with a non-network option and assets below this are less likely to have a viable non-network solution.

The draft rule does not require additional reporting on non-network capital expenditure such as IT and communication systems as proposed by some consumer groups.<sup>118</sup> The reasons for this are twofold:

- This information would not benefit non-network providers seeking to invest in the network or other energy market stakeholders interested in the plans for the network.
- Information on IT and communication systems expenditure is primarily assessed in the revenue determination process and so is more appropriately collected and reported on by the AER. This approach is supported by the AER.<sup>119</sup>

Consideration was also given to whether network service providers should report on unplanned asset retirements and de-ratings that occurred in the preceding 12 months. Doing so would result in a complete picture of asset retirements and de-ratings. However, there are limited benefits for non-network providers from reporting unplanned retirements and de-ratings that have occurred given a solution would have been put in place. In addition, information on urgent and unforeseen investments will still be reported under existing provisions in the NER. This requirement includes sufficient information on unplanned retirements and de-ratings for the purpose of the annual planning reports.<sup>120</sup> Accordingly, the Commission has not included the suggested amendments in the draft rule.

# Information on network needs arising from retirements and de-ratings and options to address these

In its rule change request, the AER proposed that network service providers be required to provide certain information on network needs arising from each retirement and de-rating reported on in the annual planning report.

In sum, the draft rule:

- Aligns the reporting requirements for augmentation and replacement in transmission in relation to reporting on options considered as a result of a planned asset retirement or de-ratings.<sup>121</sup>
- Does not provide additional requirements on DNSPs to provide information on options considered as a result of network needs arising from planned asset

<sup>118</sup> It should be noted that NER Schedule 5.8(m) requires DNSPs to report on metering or information technology. Some minor clarifications have been made to this clause in the draft rule. These are discussed in Chapter 6.

<sup>&</sup>lt;sup>119</sup> AER rule change request, Attachment, p. 5.

<sup>&</sup>lt;sup>120</sup> NER clause 5.12.2(c)(8) and S.5.8(g)(2).

<sup>&</sup>lt;sup>121</sup> Draft rules 5.12.2(c)4(iv), 5.12.2(c)(5) and 5.12.2(c)(6).

retirements and de-ratings. This is because the NER already requires DNSPs to report this information. $^{122}$ 

The Commission considers that network service providers should report on any network needs arising from planned asset retirements and de-ratings as well as options to address these needs. Requiring this information will facilitate non-network providers and other energy market stakeholders to identify opportunities to invest in the network. The information required should be consistent with the requirements for the augmentation context for simplicity and clarity.

Information requirements on network needs, including those arising from asset retirements and de-ratings, and options to address these are already provided for in relation to distribution networks.<sup>123</sup> In particular, DNSPs are required to provide information on limitations and options to address these for sub transmission lines, zone substations and certain primary distribution feeders.<sup>124</sup>

The current arrangements are different for transmission networks. While the NER requires TNSPs to report on network needs including those arising from asset retirements and de-ratings, information on options to address these needs are slightly different to those for augmentation.<sup>125</sup> The draft rule therefore extends the relevant augmentation provisions to replacement such that the same information is required for augmentation and replacement investments.<sup>126</sup>

Specifically, the draft rule:

- Extends NER clause 5.12.2(c)(4)(iv) so that a TNSP is required to provide a statement of whether it plans to issue a request for proposals for replacements of network assets as a result of its annual planning review. Currently TNSPs are only required to provide this information for augmentations or non-network options.
- Extends NER clause 5.12.2(c)(5), which requires TNSPs to provide information on network needs and options to address these for all proposed augmentations to the network, to also cover all proposed replacements of network assets. The information to be provided under this clause is:
  - the project/asset name and the month and year in which it is proposed that the asset will become operational

NER clauses S5.8(c)&(d) and National Electricity Amendment (Local Generation Network Credits) Rule 2016 No. 12, new clause 5.13.3(c).

<sup>123</sup> NER clauses S5.8(c)&(d) and National Electricity Amendment (Local Generation Network Credits) Rule 2016 No. 12, new clause 5.13.3(c).

<sup>&</sup>lt;sup>124</sup> A network service provider is to report on limitations and options to address these limitations for a primary distribution feeder where it has been practicable to forecast maximum demand for the feeder and where the feeder is currently experiencing an overload, or is forecast to experience an overload in the next two years. NER clauses S.5.8(c)&(d).

<sup>125</sup> NER clause 5.12.2(c)(5).

<sup>&</sup>lt;sup>126</sup> Draft rules 5.12.2(c)4(iv), 5.12.2(c)(5) and 5.12.2(c)(6).

- the reason for the actual or potential constraint, if any, or inability, if any to meet the network performance requirements set out in Schedule 5.1 of the NER or relevant legislation or regulations of a participating jurisdiction, including load forecasts and all assumptions used
- the proposed solution to the constraint or inability to meet the network performance requirements identified, if any
- the total cost of the proposed solution
- whether the proposed solution will have a material inter-network impact
- other reasonable network options and non-network options considered to address the actual or potential constraint or inability to meet the network performance requirements, if any.
- Amends NER clause 5.12.2(c)(6) so that a TNSP is required to report on the manner in which proposed augmentations and replacements relate to the most recent NTNDP. Currently, this clause only relates to proposed augmentations. This amendment aligns reporting requirements with the existing augmentation reporting requirements in the NER for transmission networks<sup>127</sup>

The resulting information requirements for DNSPs and TNSPs are in line with those proposed by the AER with a few exceptions:

- All network service providers are only required to report on the cost of the proposed option, not the cost of each option it has considered as proposed by the AER. This is appropriate as information on the proposed option is the most useful information for non-network providers. In addition, this approach minimises the regulatory burden on network service providers.
- The level of reporting on network limitations and options to address these is slightly different in the draft rule to the proposed rule for DNSPs. As set out above, the draft rule retains the existing NER requirements for the reporting of this information for sub transmission lines, zone substations and certain primary distribution feeders. In contrast, the AER proposed this information be provided for all proposed asset retirements and de-ratings. The existing level of reporting this information is appropriate in distribution due to the nature of a distribution network. No change to the NER is therefore required to meet the intent of the rule change request. In addition, this approach retains the consistent reporting of information between augmentation and replacement.
- There is no requirement for a TNSP to report when it intends to commence a RIT consultation process for replacement projects, if required, as proposed by the AER. This would result in different reporting requirements for replacement projects to augmentation projects which is not appropriate. The Commission cannot amend the NER to require network service providers to report when it

<sup>&</sup>lt;sup>127</sup> Draft rules 5.12.2(c)(4)(iv), 5.12.2(c)(5) and 5.12.2(c)(6).

intends to commence a RIT consultation process for augmentation projects as this is out of scope of this rule change request.

• TNSPs are required to report on constraints over one, three and five years in transmission as opposed to over the forward planning period (ten years) as proposed in the AER's rule change request. The Commission considers reporting on constraints over a five year period is sufficient. In addition, under the draft rule where a TNSP proposes to replace an asset it must provide certain information including information on the constraint related to the replacement.<sup>128</sup> This information must be provided for the ten year forward planning period.<sup>129</sup>

In addition to these amendments, the draft rule:

- Removes NER clause 5.12.2(7) which requires TNSPs to provide certain information on all proposed replacement transmission network assets. The information required by this clause will instead be required under NER clause 5.12.2(c)(5) of the draft rule.
- Removes NER clause S.5.8(g)(1) which requires DNSPs to provide a summary of all committed investments to be carried out within the forward planning period with an estimated capital cost of \$2 million or more (as varied by a cost threshold determination) that are to address a refurbishment or replacement need. This clause has been removed as this information is required by other NER clauses.<sup>130</sup> In addition, replacement and refurbishment expenditure would no longer be excluded from the RIT-D under the draft rule.<sup>131</sup>

In first round submissions, some network service providers noted the information on network issues was available in the network opportunity maps developed by the Institute of Sustainable Futures.<sup>132</sup>

Given the value of the information to providers of non-network solutions, the Commission views that publishing this information in the annual planning reports should be a mandatory requirement. The draft rule does not prevent network service providers and other stakeholders from developing a complementary mechanism, or continuing to publish a resource such as the network opportunities maps. However, these maps are only one example of the way the information contained in the annual planning reports can be used. The annual planning reports will allow the development of other tools that will build upon and operate in concert with the annual planning

<sup>&</sup>lt;sup>128</sup> Draft rule clause 5.12.2(c)(5).

<sup>&</sup>lt;sup>129</sup> Draft rule clause 5.12.2(c)(5).

<sup>130</sup> NER clauses S5.8(c)&(d) and National Electricity Amendment (Local Generation Network Credits) Rule 2016 No. 12, new clause 5.13.3(c).

<sup>&</sup>lt;sup>131</sup> NER clause S.5.8(g)(1) was introduced because the RIT-D did not apply to replacement and refurbishment expenditure. See AEMC, *Review of national framework for electricity distribution network planning and expansion,* final report, 23 September 2009.

<sup>&</sup>lt;sup>132</sup> First round submissions: Ausgrid, p. 6; ENA, pp. 3 & 6; Citipower and Powercor, p. 2; Ergon, p. 2.

reports; if the market determines that there is the need for such tools. By the same token, network service providers can voluntarily publish more information than they are required to include in the annual planning reports. The Commission is aware that some are already doing that.

#### AER guideline on the approach to asset management

The draft rule does not require the AER to develop a guideline to prescribe the principles a network service provider must follow when deciding on whether to retire or de-rate assets as proposed by the AER. The Commission does not consider it is necessary for the AER to develop this guidance.

Firstly, there could be more than one asset management approach which represents best practice and this may change over time – there is no one size fits all approach to making retirement and de-rating decisions. The Commission considers that requiring a network service provider to provide information on the reasons including the methodology and assumptions for deciding that it is necessary or prudent for the asset to be retired or de-rated is important and this is included in the draft rule. However, the Commission does not consider that the method must be the same for all network service providers. In addition, there are international standards in relation to asst management. The Commission would expect any network service provider undertaking its activities consistent with good industry practice would have regard to these.

Secondly, a network service provider is best placed to make decisions about asset retirements and de-ratings in light of its particular circumstances and other relevant factors such as jurisdictional and safety requirements. Prescribing a particular approach could prohibit network service providers from trying new and potentially better methods.

Finally, a guideline is not necessary as the economic regulatory framework provides incentives for a network service provider to make efficient retirement and replacement decisions. If a network service provider fails to retire or de-rate its assets efficiently, then it does not get to recover inefficient costs from consumers.

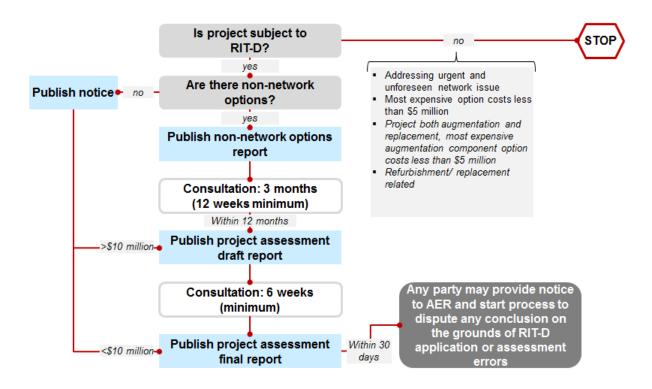
# 5 Regulatory investment tests

This chapter considers the AER's proposal to extend the regulatory investment tests to replacement expenditure.

## 5.1 AER's view

Currently, regulatory investment tests only apply to augmentation capital projects.<sup>133</sup> Replacement expenditure is currently explicitly excluded from the regulatory investment tests. In addition, refurbishment expenditure is explicitly excluded from the RIT-D and maintenance expenditure is explicitly excluded from the RIT-T. The current regulatory investment test processes are set out in Figure 5.1 and Figure 5.2. The box on the right hand side of each figure sets out investments which are explicitly excluded from the tests.

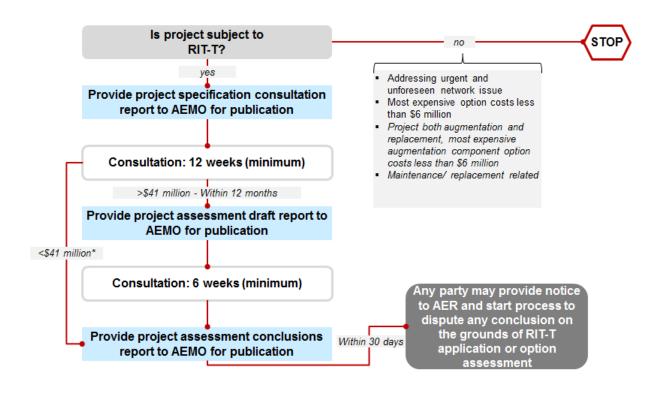
#### Figure 5.1 Current RIT-D process



Source: NER.

<sup>&</sup>lt;sup>133</sup> NER clauses 5.16.3 and 5.17.3. Further information about the current regulatory investment tests can be found in Appendix B.2.

#### Figure 5.2 Current RIT-T process in NER



\*Other requirements are: no material market benefit, the TNSP has identified its preferred option in the consultation report, and submissions on the consultation report did not identify any additional credible options which could deliver a market benefit.

Source: NER.

In light of the changing energy environment discussed in Chapter 3, the AER proposed to extend the application of the regulatory investment tests to replacement projects.<sup>134</sup>

Consistent with the current tests, the AER proposed that a network service provider would not be required to undertake the relevant test (transmission or distribution) where a replacement project is expected to be less than a specified cost threshold. In relation to this, the AER proposed that the same thresholds apply for replacement projects as currently apply for augmentation projects. The thresholds are currently defined by the estimated capital cost of the most expensive credible option. The current thresholds are \$6 million for transmission investments and \$5 million for distribution investments.<sup>135</sup>

In addition, the AER proposed a network service provider would not have to undertake the relevant test where it has determined on reasonable grounds that the only viable alternative is "like-for-like" replacement.<sup>136</sup> In these circumstances, to remove itself from the requirement to apply a regulatory investment test, a network service provider would have to publish on its website an "exemption report". This

<sup>134</sup> AER rule change request, pp. 16-19.

<sup>&</sup>lt;sup>135</sup> ibid. pp. 18-19.

<sup>&</sup>lt;sup>136</sup> The AER did not provide a definition of like-for-like in its rule change request.

report would be required to set out the reasons why a like-for-like replacement of an asset is the only viable option to address the network need that is forecast to occur.<sup>137</sup> Interested parties would be able to raise a formal dispute on the conclusions of the exemption report with the AER.<sup>138</sup>

In its proposed rule, the AER also removed the explicit exclusion of projects related to the refurbishment or maintenance of assets.<sup>139</sup> Projects related to the refurbishment of assets are currently explicitly excluded from the RIT-D and projects related to the maintenance of assets are currently explicitly excluded from the RIT-T.<sup>140</sup>

The AER also proposed to remove provisions in the NER which clarify that a network service provider is to consider the augmentation component of an investment where replacement, refurbishment or maintenance expenditure also relates in augmentation to the network.<sup>141</sup>

Figure 5.3 sets out what the RIT-D process would be under the AER's proposed rule.

The key proposed change by the AER to the existing RIT-D process can be seen within the dotted area on the right hand side of the figure. Importantly, where a replacement project is above the \$5 million capital cost threshold and the network service provider publishes an exemption report determining the network need can only be addressed by a like-for-like replacement, then the project is excluded from the RIT-D. A party can raise a dispute on the DNSPs decision that a like-for-like replacement is the only viable option.

All other replacement projects above the cost threshold would be subject to the existing RIT-D process. These projects would be subject to the same RIT-D process as augmentation projects.

<sup>&</sup>lt;sup>137</sup> The AER identified specific information to be provided in the regulatory investment test exemption reports. See AER proposed rule drafting, pp. 9 & 13.

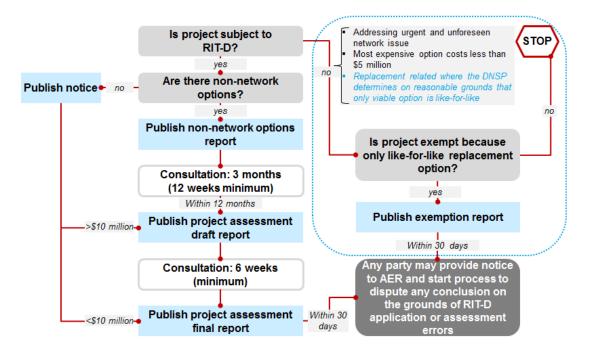
<sup>138</sup> AER rule change request, p. 18.

AER proposed rule drafting, pp. 8&12.

<sup>&</sup>lt;sup>140</sup> NER clauses 5.17.3(a)(5) and 5.16.3(a)(3).

<sup>141</sup> AER proposed rule drafting, pp. 8 & 12.

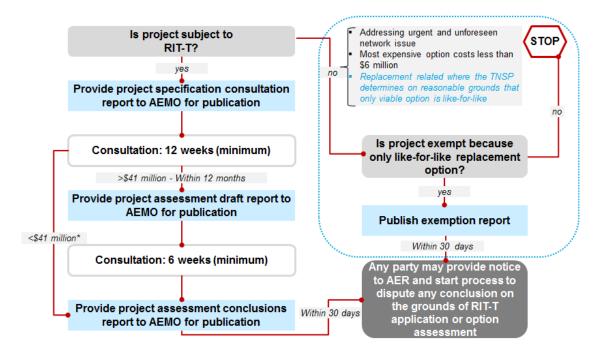
#### Figure 5.3 AER proposed rule RIT-D process



Source: AER rule change request.

As noted above, the current RIT-T process is different in detail to the RIT-D. The application of the proposed rule to transmission investments is illustrated in Figure 5.4. The key changes to the RIT-T process arising from the AER's proposed rule are within the dotted box of this figure. The key changes are the same as those in the RIT-D context.

#### Figure 5.4 AER proposed rule RIT-T process



\*Other requirements are: no material market benefit, the TNSP has identified its preferred option in the consultation report, and submissions on the consultation report did not identify any additional credible options which could deliver a market benefit.

Source: AER rule change request.

#### 5.2 Stakeholder views

Many network service providers supported extending the regulatory investment tests to replacement in principle but noted there is a need to balance any benefits with the compliance burden.<sup>142</sup> However, others did not consider that the benefits of extending the regulatory investment tests would outweigh the costs of doing so.<sup>143</sup>

In contrast, non-network providers, retailers and consumer groups supported extending the regulatory investment tests to replacement expenditure.<sup>144</sup> AEMO also supported extending the regulatory investment tests to replacement expenditure.<sup>145</sup>

#### Cost threshold

If the regulatory investment tests were to be extended to replacement, the majority of network service providers considered the cost thresholds for replacement expenditure

<sup>&</sup>lt;sup>142</sup> First round submissions: ENA, p. 12; TransGrid, p. 3; Ausgrid, p. 9; SA Power Networks, pp. 1-2.

<sup>&</sup>lt;sup>143</sup> First round submissions: CitiPower and Powercor, p. 4; Jemena, Attachment 1, pp. 4-5; Ergon, pp. 10-11; Energex, p. 12.

<sup>&</sup>lt;sup>144</sup> First round submissions: Energy Consumers Australia, p. 3; AGL, p. 6; EnerNOC, p. 5; EUAA, p. 5; TEC, p. 4.; MEU, p. 9; PIAC, p. 1; RES, p. 4; Red Energy and Lumo, p. 1.

<sup>145</sup> AEMO, first round submission, p. 6.

should be the same as those for as augmentation.<sup>146</sup> They also supported the existing thresholds of \$5 million for distribution investments and \$6 million for transmission investments.<sup>147</sup>Ergon sought clarification on how the cost threshold would be applied to the regulatory investment test where a project entailed a combination of replacement and augmentation expenditure.<sup>148</sup>

Other stakeholders also considered that the cost thresholds for replacement and augmentation should be the same.<sup>149</sup> However, a number of these stakeholders expressed support for a lower cost threshold for the regulatory investment tests more generally.<sup>150</sup> EUAA considered a \$3 million cost threshold for transmission investments and \$2 million for distribution investments would be appropriate.<sup>151</sup> PIAC recommended a cost threshold in the range \$500,000 to \$1 million with a "mini RIT" process for smaller projects.<sup>152</sup> This idea was supported by CUAC.<sup>153</sup> The TEC expressed a similar view.<sup>154</sup>

#### Exemptions

A number of other comments were made in relation to limiting the scope or application of the regulatory investment test processes:

- Network service providers considered it appropriate that they be exempt from the requirement to undertake a regulatory investment test where a network service provider considers a like-for-like replacement is the only viable option given the compliance cost.<sup>155</sup> Similarly, AEMO considered network service providers should be exempt from the regulatory investment test if there is no alternative to a like-for-like investment, so long as there is a rigorous and transparent process associated with the decision.<sup>156</sup>
- While the Energy and Water Ombudsman South Australia supported exempting replacement projects where a like-for-like replacement was the only viable option, AGL, CUAC and EUAA did not.<sup>157</sup> AGL and CUAC considered all

<sup>&</sup>lt;sup>146</sup> First round submissions: ENA, pp. 12-13; Ergon, p. 12; Energex, p. 13; Jemena, Attachment 1, p. 5.

<sup>&</sup>lt;sup>147</sup> First round submissions: Energex, p. 13; Jemena, p. 2; SA Power Networks, p. 2; Ausgrid, p. 11.

<sup>&</sup>lt;sup>148</sup> Ergon, first round submission, pp. 11-12.

<sup>&</sup>lt;sup>149</sup> First round submissions: AEMO, p. 7; EUAA, p. 5; RES, p. 5.

<sup>&</sup>lt;sup>150</sup> First round submissions: AGL, pp. 6-7; PIAC, p. 3; EUAA; p. 5; Red Energy and Lumo, p. 1.

<sup>&</sup>lt;sup>151</sup> EUAA, first round submission, p. 5.

<sup>&</sup>lt;sup>152</sup> PIAC, first round submission, p. 3.

<sup>&</sup>lt;sup>153</sup> CUAC, first round submission, pp. 4-5.

<sup>&</sup>lt;sup>154</sup> TEC, first round submission, pp. 4-5.

<sup>&</sup>lt;sup>155</sup> First round submissions: ENA, p. 13; Ausgrid, p. 11; Ergon, p. 12; CitiPower and Powercor, p. 5; Jemena, Attachment 1, p. 5.

<sup>156</sup> AEMO, first round submission, p. 8.

<sup>&</sup>lt;sup>157</sup> First round submissions: EWOSA, p. 1; AGL, p. 7; EUAA, p. 6.

projects above the cost threshold should be subject to the regulatory investment tests without exception.<sup>158</sup>

There were mixed views from stakeholders on the AER's proposed exemption report process as a means of excluding projects where there is only one a like-for-like replacement option. Some stakeholders supported this process.<sup>159</sup> CitiPower and Powercor, Ausgrid and Ergon did not.<sup>160</sup>

Some network service providers raised concerns that the proposed exemption reporting and associated appeals process could lead to uncertainty and unnecessary delay in undertaking necessary replacement expenditure.<sup>161</sup> Energex queried the need for the exemption report process given existing processes.<sup>162</sup> Non-network providers, retailers and consumer groups supported the proposal for the exemption report to be subject to dispute.<sup>163</sup>

A number of stakeholders put forward alternative methods to the AER's exemption report process:

- Ausgrid submitted that categories of assets which are exempt from regulatory investment tests could be defined up front.<sup>164</sup> It considered this would provide greater regulatory certainty, reduce compliance costs and avoid extensive disputes.<sup>165</sup>
- CitiPower and Powercor suggested that like-for-like exemptions be summarised in annual planning reports. They noted that the reports provide an overview of planned large replacement projects including explanations for not considering other options where that is the case.<sup>166</sup> This stakeholder also submitted this would mean that all the information is kept in the same report and as part of a bigger picture.<sup>167</sup> The ENA also noted the information already provided in the annual planning reports was relevant.<sup>168</sup>
- RES supported the requirement for network service providers to provide public notification if exemption is sought. However, it proposed that a simplified mechanism such as an exemption register, be established with the intent of

- 167 ibid.
- 168 ENA, first round submission, p. 13.

<sup>&</sup>lt;sup>158</sup> First round submissions: AGL, p. 7; CUAC, pp. 3-4.

<sup>&</sup>lt;sup>159</sup> First round submissions: Jemena, Attachment 1, p. 5; EnerNOC, pp. 5-6; AEMO, pp. 8-9; EUAA, pp. 6-7; AGL, p. 7

<sup>&</sup>lt;sup>160</sup> Ergon, p. 13; Ausgrid, pp. 11-12; CitiPower and Powercor, p. 5.

<sup>&</sup>lt;sup>161</sup> First round submissions: Ausgrid, p. 11; TransGrid, pp. 3-4

<sup>162</sup> Energex, first round submission, p. 14.

<sup>&</sup>lt;sup>163</sup> First round submissions: RES, p. 5; AGL, p. 8; EUAA, pp. 6-7.

<sup>&</sup>lt;sup>164</sup> Ausgrid, first round submission, p. 12.

<sup>165</sup> ibid.

<sup>166</sup> CitiPower and Powercor, first round submission, p. 5.

reducing administrative burden.<sup>169</sup> It considered that, if implemented efficiently, the establishment of an exemption register would ensure that innovative solutions are not excluded from the market on the basis of incorrect assumptions.<sup>170</sup>

TransGrid submitted that the RIT-T should only be extended to high value network asset replacement projects that would likely result in some change in the market or on competition.<sup>171</sup> To give effect to this, it recommended consideration of a gateway test that delineates projects that are likely to impact on the market or on competition from those that will not, raising the cost threshold and/or limiting the extension of the RIT-T to assets on major flow paths, consistent with the identified flow paths outlined in AEMO's NTNDP.<sup>172</sup> TransGrid also submitted that the AEMC could consider a model in which a network service provider identifies the assets which should be exempt from the RIT-T in its regulatory determination process.<sup>173</sup>

Stakeholders commented on the types of replacement expenditure that should or should not fall within the scope of a regulatory investment test process:

- AEMO and Ausgrid considered it was not clear how a large number of small projects within a renewal or replacement program across multiple sites would be treated under the proposed rule.<sup>174</sup> Ausgrid's view was that the regulatory investment tests should not extend to capture programs of work as "this would undermine the effectiveness" of these processes.<sup>175</sup> This issue was also raised by network service providers in subsequent stakeholder discussions on the rule change request.
- Ausgrid considered the scope of exemptions from the regulatory investment tests should be extended to include safety, duty of care, and environmental considerations given the nature of replacement.<sup>176</sup>

In its rule change request, the AER proposed to remove the current explicit exclusion of expenditure related to asset maintenance and refurbishment.<sup>177</sup> This is in addition to the removal of the current exclusion of replacement expenditure from the regulatory investment tests in the NER.

<sup>169</sup> RES, first round submission, p. 5.

<sup>170</sup> Ibid.

<sup>171</sup> TransGrid, first round submission, p. 3.

<sup>172</sup> ibid.

<sup>&</sup>lt;sup>173</sup> ibid, p. 4.

<sup>&</sup>lt;sup>174</sup> First round submissions: AEMO p. 10; Ausgrid, p. 2.

<sup>175</sup> Ausgrid, first round submission, p. 2.

<sup>176</sup> Ausgrid, first round submission, pp. 9-10.

<sup>&</sup>lt;sup>177</sup> Maintenance expenditure is currently explicitly excluded from the RIT-T and refurbishment expenditure is currently explicitly excluded from the RIT-D in the NER.

A number of stakeholders supported extending the regulatory investment tests to refurbishment expenditure.<sup>178</sup>Energex considered the regulatory investment tests may be applicable for refurbishment expenditure above a cost threshold and where viable options are a potential alternative to like-for-like replacement.<sup>179</sup> However, some network service providers did not support extending the regulatory investment test to refurbishment expenditure on the basis that this would lead to additional administrative burden with no benefit.<sup>180</sup>

There were differing views from stakeholders on whether maintenance expenditure should be subject to the regulatory investment test process with some supporting its inclusion and others not.<sup>181</sup>

CUAC considered the regulatory investment tests should be extended to include non-network capital expenditure such as that related to business IT and communication systems.<sup>182</sup> It submitted that investment in improved information technology and communication systems should yield productivity gains. Consequently, extending the regulatory investment tests to this capital expenditure would provide greater transparency of this expenditure.<sup>183</sup>

More generally, PIAC commented that in its view there is a lack of independent oversight of the regulatory investment tests.<sup>184</sup> To address this concern, it recommended that the AER be given authority to do a full assessment of the merit of a regulatory investment test.<sup>185</sup> The TEC had a similar view.<sup>186</sup> The TEC and PIAC also proposed that the AER be required to develop and maintain a central register of processes.<sup>187</sup>

<sup>&</sup>lt;sup>178</sup> First round submissions: Energy and Water Ombudsman of South Australia, p. 1; AGL, p. 6; PIAC, p. 4.

<sup>179</sup> Energex, first round submission, p. 12.

<sup>&</sup>lt;sup>180</sup> First round submissions: Jemena, Attachment 1, p. 5; Citpower Powercor, p. 5

<sup>&</sup>lt;sup>181</sup> First round submissions in support of extending the regulatory investment tests to maintenance: AGL, p. 6; EWOSA, p. 1; PIAC, p. 4; First round submissions not in support of extending the regulatory investment tests to maintenance: ENA, p. 12; Energex, p. 12; Ausgrid, p. 10; Ergon, p.11; Jemena, Attachment 1, p. 5; CitiPower and Powercor, p. 5.

<sup>182</sup> CUAC, first round submission, p. 3.

<sup>&</sup>lt;sup>183</sup> ibid.

<sup>&</sup>lt;sup>184</sup> PIAC, first round submission, pp. 4-5.

<sup>185</sup> ibid.

<sup>186</sup> TEC, first round submission, p. 5.

<sup>187</sup> First round submissions: TEC, p. 4; PIAC, p. 5.

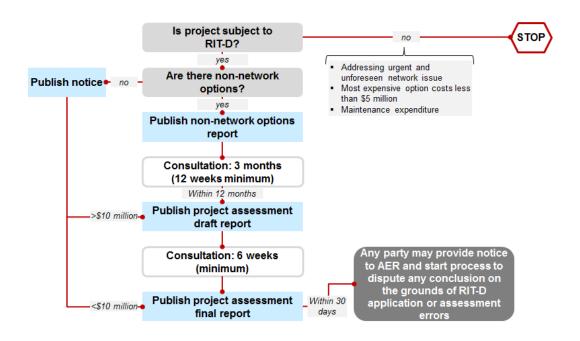
## 5.3 Analysis and conclusions

#### Summary

The draft rule:

- Extends the regulatory investment tests to replacement and refurbishment expenditure while acknowledging that maintenance expenditure is excluded.
- Provides that the existing regulatory investment test capital cost thresholds in the NER will apply to replacement and refurbishment expenditure. These thresholds will remain at the current levels of \$5 million for distribution investments and \$6 million for transmission investments. As a result, there will be one cost threshold for all expenditure to determine whether a project should be subject to a regulatory investment test process.
- Provides that the current processes are to apply to all replacement and refurbishment capital expenditure above the capital cost threshold without exception.
- Allows the existing dispute resolution arrangements in the NER that apply to the regulatory investment tests to continue to apply without amendment.

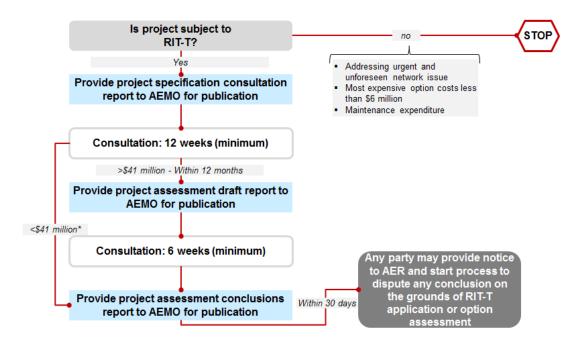
Figure 5.5 sets out the RIT-D process under the draft rule. The amendments resulting from the draft rule can be seen in the box on the right hand side of the figure that sets out the projects that may be exempt from undertaking the RIT-D. In comparison to the current process (Figure 5.1) and that under the proposed rule (Figure 5.3), the available exceptions are limited.



#### Figure 5.5 Draft rule RIT-D process

Source: AEMC.

Figure 5.6 illustrates the corresponding RIT-T process arising from the draft rule. Similar to the RIT-D, the key changes can be seen by the amendments made to limit the exemptions on the right hand side of the figure.



#### Figure 5.6 Draft rule RIT-T process

\*Other requirements are: no material market benefit, the TNSP has identified its preferred option in the consultation report, and submissions on the consultation report did not identify any additional credible options which could deliver a market benefit.

#### Source: AEMC.

#### Should the regulatory investment tests be extended to replacement expenditure

As set out in Chapter 2, the regulatory investment tests provide a transparent process for the identification of efficient network planning options for projects above a certain size. In this way, the process facilitates engagement by energy market stakeholders in the network planning process and in the decision making processes followed to make efficient network investment. In light of these benefits and the changing energy environment discussed in Chapter 3, the scope of the existing regulatory investment tests has been extended to apply to replacement projects as proposed by the AER.

Making this change to the NER also provides a single process for considering potential capital investment. That is, there is not different treatment based on the driver of the investment. This is reinforced by the draft rule that does not distinguish between augmentation and replacement expenditure: all are considered within one process.

The draft rule does not extend the regulatory investment tests to assets which do not form part of the network such as IT and communications systems as was suggested by some consumer groups. The purpose of the process is to identify the efficient network option by facilitating engagement with energy market stakeholders such as non-network providers. It is not designed for general business capital expenditure such as IT and communication systems which is appropriately assessed by the AER as part of the revenue determination processes. In addition, it should be noted that DNSPs are required to report on information technology and communication systems in their DAPRs.<sup>188</sup>

#### What should be the cost thresholds for replacement expenditure

As supported by stakeholders, the same cost threshold should apply to replacement projects and augmentation projects. Given the purpose of the regulatory investment tests, the driver of the need to invest is not a relevant consideration for what cost threshold should apply. In addition, different cost thresholds for replacement and augmentation projects would likely create complexity and uncertainty, as identified by the AER.<sup>189</sup> It would also create a difference between augmentation and replacement expenditure that does not provide a benefit that outweighs the compliance cost.

In a submission to the rule change request, Ergon sought clarification on how the cost threshold would be applied to the regulatory investment test when a project entailed a combination of replacement and augmentation expenditure.<sup>190</sup> This was also raised in stakeholder discussions with the AEMC.

The draft rule provides for one cost threshold for investments in each of the RIT-T and RIT-D as the underlying need for a network investment will be either augmentation or replacement. The AEMC understands this is consistent with the AER's approach on drivers of investment. To the extent that an network service provider takes a view that an investment is driven by a combination of replacement and augmentation then the total cost of the potential capital investment is used to determine whether the regulatory investment test cost threshold is met.

As currently provided for, the AER must regularly update the RIT-T and RIT-D cost thresholds to reflect changes in input costs of network investment.<sup>191</sup>

The AEMC notes that the cost threshold for augmentation is out of scope of this rule change request process given the framing of the request and its intent to focus on the inclusion of replacement expenditure in the planning and investment frameworks.

# Should there be any specific exemptions from the regulatory investment tests for replacement expenditure

The Commission's view is that all replacement expenditure above the existing capital cost thresholds should be subject to the current regulatory investment test processes with no exception. Importantly, this approach means that all network capital investments are treated the same, providing greater clarity and certainty for all stakeholders including the AER who must check for compliance of the draft rule (if it is made).

<sup>188</sup> NER Schedule 5.8(m).

AER rule change request, 30 June 2016, p19.

<sup>&</sup>lt;sup>190</sup> Ergon, first round submission, pp.11-12.

The draft rule does not include the AER's proposal to allow an network service provider to exempt itself from a regulatory investment test if it considers that a like-for-like asset replacement is the only viable replacement option. This exclusion is not necessary as the regulatory burden of undertaking a regulatory investment test where a like-for-like replacement is the only viable solution is unlikely to be significant.

Firstly, the framework already accommodates shorter processes under certain conditions. For example, where there are no non-network solutions to a network need and the project is less than \$10 million then a DNSP does not have to publish and consult on a non-network options report or draft assessment report – it can go straight to the final report as set out in Figure 5.1. Similarly, where a project is less than \$41 million and meets other certain requirements in the NER, a TNSP does not have to publish and consult on a project assessment draft report – it only has to publish a consultation report and the project assessment conclusions report as set out in Figure 5.2.

Secondly, the amount of work to be undertaken for a final report would not be significant where there is only one viable option. It would not require a significant amount of work to calculate the costs and benefits where there is only one option, for example. A network service provider is expected to undertake some of this work in making an investment decision anyway.

Finally, the use of an exemption report that can be challenged creates another new process on top of the existing processes. The Commission is concerned that such a change would create additional regulatory burden.

There were some alternative ideas put forward by stakeholders to the exemption report process. These were: prescribing assets to be exempt in the NER; the AER determining assets to be exempt in a revenue determination process; and network service providers identifying like-for-like exemptions in the annual planning reports or in an exemptions register.

In considering these alternatives, the Commission notes that exclusions to the regulatory investment tests are not necessary as the regulatory burden of undertaking a regulatory investment test where a like-for-like replacement is the only viable solution is unlikely to be significant. Prescribing excluded assets in the NER or through the revenue determination process is therefore unnecessarily burdensome and does not make the overall process more efficient. Given there are no exclusions to report on under the draft rule, the need for network service providers to report on these through the annual planning reports or an exemption register is not required. All regulatory investment test projects will be subject to the existing reporting requirements in the NER including the publication of a final project assessment report.

Separate to the question of an exclusion process is the question of potential exempt assets.

<sup>191</sup> NER clause 5.15.3.

Some network service providers considered assets that are replaced in multiple locations at the same time as part of a replacement "program" such as poles or protection systems should be excluded from the regulatory investment tests.

Such an explicit exclusion of asset replacement "programs" from the regulatory investment tests has not been included in the draft rule. Consistent with the existing arrangements for augmentation, the draft rule provides that replacements that address the same identified need, an objective that is identified by a network service provider, are to be considered together when determining whether the cost threshold is met.

As a result, any program of capital expenditure that includes a number of possible cost items that all go to address one need are considered together for the question of whether the regulatory investment test threshold is met. This applies equally to the augmentation and replacement contexts.

However, the regulatory burden of undertaking a regulatory investment test would not be significant where multiple assets across more than one location are replaced. This is because there is only likely to be one viable option for these replacements. Assets that may be replaced in this way include poles, protection systems and instrument transformers for example.

In addition, if a network service provider plans to replace multiple assets of the same type across more than one location in the same year it may not trigger the capital cost threshold if these assets are addressing more than one identified need.<sup>192</sup>

On a slightly different matter, in a submission to the rule change request Ausgrid considered the scope of exemptions from the regulatory investment tests should be extended to include safety, duty of care, and environmental considerations given the nature of replacement.<sup>193</sup>

Under the existing arrangements, where safety, duty of care and environmental issues would prevent a network service provider from operating its network appropriately and put the reliability of the network at risk then a regulatory investment test would not be required to be undertaken. This is because the NER exempts a network service provider from undertaking a regulatory investment test where a project is required to address an urgent and unforeseen network issue that would otherwise put at risk the reliability of the network.<sup>194</sup>

#### Refurbishment and maintenance expenditure

In its proposed rule, the AER also proposed to remove the explicit exclusion of projects related to the refurbishment or maintenance of assets.<sup>195</sup>

<sup>&</sup>lt;sup>192</sup> An identified need is defined in the NER as the objective a network service provider seeks to achieve by investing in the network. NER clause 5.10.2.

<sup>&</sup>lt;sup>193</sup> Ausgrid, first round submission, pp9-10.

<sup>&</sup>lt;sup>194</sup> NER clauses 5.17.3(a)(1) and 5.16.3(a)(1).

<sup>&</sup>lt;sup>195</sup> AER proposed rule drafting, pp. 8 & 12.

Refurbishment expenditure is a form of capital expenditure as it involves extending the life of an asset beyond its original useful life.<sup>196</sup>The draft rule removes the current specific exclusion of refurbishment expenditure from the RIT-D in the NER. This is an appropriate change as there are benefits in undertaking a regulatory investment test process for refurbishment. It also has the advantage of aligning the RIT-D with the existing RIT-T.

The draft rule retains the current specific exclusion of maintenance expenditure from the RIT-T in the NER as this expenditure should not be subject to a regulatory investment test. For consistency, maintenance expenditure will also be specifically excluded from the RIT-D process by the insertion of a clause in the draft rule (clause 5.17.3(5)). This clause has been included to make clear that RIT-Ds do not need to be undertaken for maintenance. This amendment also provides consistency between the RIT-T and RIT-D exemptions. Maintenance relates to preserving the existing condition of an assets. It is appropriately assessed by the AER within the revenue determination process and is subject to general and explicit incentives. This is consistent with the purpose of the regulatory investment test which is to identify the efficient investment option for an electricity network.

#### Regulatory burden

There will be some increase in regulatory burden from extending the regulatory investment tests to replacement expenditure. An assessment of a small sample of annual planning reports indicates that a network service provider may need to undertake approximately six additional processes each year under the draft rule. This would be expected to vary across network service providers and be dependant on the needs of each network. However, the use of the regulatory investment tests as set out in the draft rule is expected to facilitate stakeholder engagement in the planning and decision making process and result in efficient network investment. The expected regulatory burden is unlikely to outweigh the benefits of having transparent, and consistent regulatory investment test processes for all replacement capital expenditure.

#### A general review of the regulatory investment tests

Consideration of the regulatory investment test processes in general is out of scope of this rule change request.<sup>197</sup> The AER's rule change request is specifically framed to address the intent of including replacement expenditure in the scope of the RIT-T and RIT-D. The AEMC notes that the COAG Energy Council RIT-T review recommended

#### 56 Replacement expenditure planning arrangements

<sup>196</sup> For example, the AER considers asset refurbishment as "the non-demand driven capital expenditure to restore an asset to its former functionality where the asset has reached the end of its economic life. The works undertaken must result in a material extension in the expected life of the asset." AER 2017, AER Melbourne, viewed 6 April 2017, http://www.aer.gov.au/system/files/AER final category analysis RIN - distribution network service providers.docx.

<sup>&</sup>lt;sup>197</sup> This includes the publication of regulatory investment test reports by the AER as proposed by some consumer groups.

that the AER would explore extending existing RIT-D requirements to the RIT-T to improve the level and accessibility of information relating to transmission networks.<sup>198</sup>

The regulatory investment tests are also in scope of the contestability of energy services – demand response and network support rule change request currently being considered by the AEMC.<sup>199</sup>

<sup>198</sup> COAG Energy Council, *Review of the regulatory investment test for transmission*, RIT-T review, 6 February 2017.

AEMC 2007, AEMC viewed 24 March 2017, http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services-demand-response.

# 6 Other related issues

This chapter sets out the Commission's view on some related secondary amendments proposed by the AER in its rule change request. These relate to:

- requiring network service providers to notify registered participants and AEMO of any technical limits that will be exceeded arising from planned asset retirements or de-ratings
- requiring TNSPs to provide information on their asset management approach in their TAPRs and
- requiring TNSPs to reapply the RIT-T where there has been a material change in circumstances since the RIT-T was undertaken and the preferred option identified in the final project assessment report is no longer the preferred option
- clarifying the existing requirement for DNSPs to provide information on IT and communication systems in their DAPRs.

Each of these is discussed in turn below.<sup>200</sup>

## 6.1 Notification of network limitations

#### 6.1.1 AER's view

Currently, clause 5.11.2(b) of the NER requires a network service provider to notify any affected registered participants and AEMO of technical limits that will be exceeded from annual analysis of forecast information as well as the expected time for addressing the problem.

In its rule change request, the AER proposed to amend this clause to explicitly require network service providers to notify any registered participants and AEMO of the above information where a network problem arises as a result of planned asset retirements or de-ratings.<sup>201</sup>

#### 6.1.2 Stakeholder views

Network service providers generally accepted that information on potential system technical limits that will be exceeded from planned asset retirements and de-ratings may be useful for registered participants.<sup>202</sup> However, they also noted that this

<sup>&</sup>lt;sup>200</sup> In response to submissions, some stakeholders also commented on the balance between capital and operating expenditure incentives under the regulatory framework as well as appropriate network pricing. These issues are out of scope of this rule change request.

AER rule change request, Attachment: AER proposed amendments to Chapter 5, p. 1.

<sup>&</sup>lt;sup>202</sup> First round submissions: ENA, p. 14; Ausgrid, p. 13; Ergon, p.15.

information may already be available by other mechanisms.<sup>203</sup>In contrast, AEMO, RES and EUAA supported the amendments to NER clause 5.11.2 proposed by the AER.<sup>204</sup>

# 6.1.3 Analysis and conclusions

The Commission has decided not to amend NER clause 5.11.2 as it does not consider it is necessary to do so. Firstly, this clause currently captures all exceeded technical limits, regardless of whether they result from asset retirements, de-ratings or some other cause. Accordingly, a specific reference to asset retirements and de-ratings is not needed. Second, as the information required to be reported in this clause is also required to be provided in the annual planning reports then the additional notification required by this clause has limited benefit. In practice, the requirements may be met by the publication of annual planning reports.

# 6.2 Reporting information on asset management approach

# 6.2.1 AER's view

The AER proposed to require TNSPs to provide certain information on their asset management approach in their TAPRs noting the information is already required to be provided by distribution networks.

The information the AER proposed that TNSPs provide:

- a summary of the asset management strategy employed by the TNSP
- a summary of any issues that may impact on the system limitations identified in the TAPR that have been identified through carrying out asset management and
- information about where further information on the asset management strategy is available.

The AER noted that asset management is increasingly important in both transmission and distribution.  $^{\rm 205}$ 

# 6.2.2 Stakeholder views

Only two stakeholders commented on this proposal. Both expressed support for the AER's proposal to require TNSPs to provide information on their asset management approach in their TAPRs.<sup>206</sup>RES considered the information to be useful.<sup>207</sup> While AGL considered this proposed change to be appropriate, it submitted the information

<sup>&</sup>lt;sup>203</sup> First round submissions: ENA, p. 14; Ausgrid, p. 13.

<sup>&</sup>lt;sup>204</sup> First round submissions: RES, p. 6; EUAA, pp. 7-8.; AEMO, p. 10.

AER rule change request, p. 16.

<sup>&</sup>lt;sup>206</sup> First round submissions: AGL, p. 8; EUAA, pp. 7-8; Ergon, p. 15, RES, p. 6.

<sup>207</sup> RES, first round submission, p. 6.

could be reported at longer intervals such as once every three years or following the occurrence of a significant event rather than annually.<sup>208</sup>

# 6.2.3 Analysis and conclusions

The draft rule amends the NER to require TNSPs to provide information on their asset management practices in their TAPRs.<sup>209</sup>

The information the draft rule requires TNSPs to provide is:

- a summary of the asset management strategy employed by the TNSP
- a summary of any issues that may impact on any network constraints identified in the TAPR that have been identified through asset management
- where further information on the asset management strategy and methodology adopted by the TNSP is available.<sup>210</sup>

The information required to be provided by the draft rule is the same as that proposed by the AER with a minor drafting change.<sup>211</sup>

Requiring TNSPs to report this information will provide greater transparency of their asset management practices. This will give energy market stakeholders context for TNSPs' replacement decisions and therefore more confidence in these decisions. In addition, TNSPs should readily have the information available so there will not be a significant increase in regulatory burden from this requirement. This change will also provide consistency between transmission and distribution on this issue.

It is appropriate that the proposed information on asset management practices be reported annually following a TNSP's annual planning review consistent with other planing reporting requirements.

# 6.3 Re-application of the RIT-T

# 6.3.1 AER's view

To address potential uncertainty as to whether a TNSP should proceed with a preferred option in a RIT-T where there has been a material change in circumstances, the AER proposed to require TNSPs to reapply the RIT-T where there has been a material change in circumstances since the RIT was undertaken and the preferred

AGL, first round submission, p. 8.

<sup>&</sup>lt;sup>209</sup> Draft rule clause 5.12.2(c)(8).

<sup>&</sup>lt;sup>210</sup> Draft rule clause 5.12.2(c)(8)(iii).

<sup>&</sup>lt;sup>211</sup> The AER proposed network service providers provide a summary of any issues that may impact on "limitations" which is a term that is not used in the TAPR requirements. The draft rule substitutes this term with the equivalent term ("constraints") which is already used in the TAPR requirements in the NER.

option identified in the final project assessment report is no longer the preferred option.

The proposed rule also provided that if a TNSP considered it would be inappropriate for it to re-apply the test, it can seek a determination from the AER to waive this requirement. The AER noted these requirements already exist in the RIT-D and its proposed changes would promote consistency between the RIT-T and RIT-D.<sup>212</sup>

# 6.3.2 Stakeholder views

While generally in support of this change, AEMO considered that a TNSP should not be required to repeat the whole RIT-T process. Instead it suggested that a TNSP only be required to repeat those elements of the RIT-T process which are materially affected by the change in circumstances. AEMO submitted that it may otherwise become difficult for a TNSP to finalise its decision.<sup>213</sup>

Egon stated that it did not oppose the proposed change.<sup>214</sup> No other network service providers commented on this issue.

Where other stakeholders commented, they supported the AER's proposed change.<sup>215</sup> RES considered the existing requirement in the RIT-D has been useful.<sup>216</sup>

## 6.3.3 Analysis and conclusions

The draft rule requires a TNSP to undertake the RIT-T for a project again where:

- a final project assessment conclusions report for the project is published
- a TNSP still wishes to address the identified need
- there has been a material change in circumstances which means that, in the opinion of the TNSP, the preferred option in the final project assessment conclusions report is no longer the preferred option.<sup>217</sup>

However, where these circumstances are met a TNSP may seek a determination from the AER that it does not have to undertake the process again.<sup>218</sup> In making such a determination the draft rule requires the AER to have regard to:

• the credible options (other than the preferred option) identified in the final project assessment conclusions report

AER proposed rule drafting, p. 10.

AEMO, first round submission, p. 10.

<sup>&</sup>lt;sup>214</sup> Ergon, first round submission, p. 15.

<sup>&</sup>lt;sup>215</sup> First round submissions to rule change request: EUAA, pp. 7-8; RES, p. 6.

<sup>216</sup> RES, first round submission, p. 6.

<sup>217</sup> Draft rule clause 5.16.4(z3).

<sup>&</sup>lt;sup>218</sup> Draft rule clauses 5.16.4(z3) and (z5).

- the change in circumstances identified by the RIT proponent
- whether a failure to promptly undertake the project is likely to materially affect the reliability and secure operating state of the transmission network or a significant part of that network.<sup>219</sup>

In considering these matters, the AER may conclude that:

- all of the RIT-T process should be carried out
- certain elements of the RIT-T be re-run or
- the RIT process is not required.

Under the existing distribution rules and the draft rule for transmission, all of these options are feasible conclusions for the AER.

The draft rule also sets out that a material change in circumstances includes a change to the key assumptions used in identifying the identified need or credible options in the final project assessment conclusions report.<sup>220</sup>

The Commission considers it is appropriate that a TNSP be required to undertake the RIT-T again where there has been a material change in circumstances and the preferred option identified in the final project assessment report is no longer the preferred option. It will facilitate stakeholder engagement in the identification of the efficient option and provide clarity for TNSPs as to what to do in this scenario.

It is also appropriate to provide flexibility so that a TNSP does not have to reapply the RIT-T in circumstances where it may not be efficient to do so. For example, where a previously considered option becomes the preferred option and the change in circumstances has not impacted on the key inputs into the RIT-T final project assessment conclusions report. The draft rule provides for this flexibility. Where key assumptions in the RIT-T have changed it is appropriate that the RIT be undertaken again in full.

The draft rule mirrors the same provision in the RIT-D, making the two tests consistent with one another. It is also consistent with the AER's proposed rule.

# 6.4 DNSP information on IT and communications

#### 6.4.1 AER's view

Currently, Schedule 5.8(m) of the NER requires a DNSP to provide information in its DAPR on its investments in metering or information technology systems related to management of network assets which occurred in the preceding year. A DNSP is also

<sup>219</sup> Draft rule clause 5.16.4(z5)

Draft rule clause 5.16.4(z4).

required to report planned investments in metering or information technology in the forward planning period.

The AER has proposed to:

- remove the requirement in this clause to provide information on metering
- clarify that information technology systems includes communication systems.<sup>221</sup>

The AER did not provide reasons for this proposed amendment in its rule change request.

# 6.4.2 Stakeholder views

Stakeholders did not comment on this amendment proposed by the AER.

# 6.4.3 Analysis and conclusion

The draft rule clarifies Schedule 5.8(m) of the NER as proposed by the AER. Under the draft rule a DNSP must provide information in its DAPR on:

- the DNSP's investments in information technology and communication systems related to management of network assets which occurred in the preceding year
- planning investments in information technology and communication systems in the forward planning period.<sup>222</sup>

It is appropriate to remove the requirement for DNSPs to report on metering as metering services will become contestable from 1 December 2017 under the expanding competition in metering and related services final rule.<sup>223</sup>

It is also appropriate to clarify that DAPR requirements for a DNSP to report on information technology includes communication systems as these are related investments.

There is no existing corresponding requirement for transmission networks. The Commission has not added this reporting requirement for transmission networks as it does not consider it appropriate. This is because the information would be of limited use to energy market stakeholders such as non-network providers to make efficient investment decisions relating to the network.

Information on information technology and communications would be of value to the AER and stakeholders for the purpose of determining network service provider revenues. However, the AER can seek this information through its information

AER proposed rule drafting, p. 5.

Draft rule Schedule 5.8(m).

AEMC, Rule determination, Expanding competition in metering and related services, 26 November 2015.

gathering powers under the NEL for this purpose, namely regulatory information orders and regulatory information notices.

# 7 Implementation

This chapter sets out the AER's view, stakeholder views and the Commission's analysis in relation to:

- implementation specific to Victoria
- the timing of implementing a rule.

# 7.1 Issues specific to Victoria

Under the current NER, there is recognition that AEMO and AusNet Services (a declared network system operator in Victoria) both have a role in planning and investing in transmission network assets in Victoria. AEMO's role is to plan augmentations to the transmission network. AusNet Services owns and operates most of the electricity transmission network in Victoria. In practice, the two parties work together to meet the relevant rule requirements.

# 7.1.1 AER's view

The AER has stated that the implementation of the proposed rule would not impact on the transmission planning arrangements between AEMO and AusNet Services in Victoria. It has proposed that the arrangements that currently exist in relation to augmentations also be applied to the proposed amendments. It stated:<sup>224</sup>

"... the proposed amendments would result in AusNet Services being responsible for conducting replacement expenditure assessments, but this would require in some cases a RIT-T to be undertaken for replacement projects."

While this suggests that the AER considers AusNet Services should carry out replacement expenditure related RIT-T processes, it does not clarify which party should have the responsibility for the proposed new annual planning report requirements.

# 7.1.2 Stakeholder views

AEMO noted that in its role of Victorian transmission planner, it "is responsible for planning and procuring new transmission capacity and for connecting generators and customers to the declared shared transmission network – this includes augmentation RIT-Ts".<sup>225</sup> Having regard to the existing arrangements, AEMO suggested that AusNet Services be responsible for "both the additional reporting requirements and for

AER rule change request, p. 19.

AEMO, first round submission, p. 9.

conducting the repex RIT-Ts".<sup>226</sup> AEMO noted that it and AusNet Services currently co-ordinate and share information to meet their respective obligations. It commented: "AEMO and AusNet are working together to consider how the proposed Rule could apply in practice".<sup>227</sup>

AusNet Services responded to the consultation paper, stating:<sup>228</sup>

"... AusNet Services is the appropriate party to conduct the RIT-T, on account of the allocation of responsibilities in Victoria, and consider that AEMO's Victorian Transmission Annual Planning Report (TAPR) is the appropriate avenue for the additional reporting requirements. This would be consistent with current practice ..."

AusNet Services also commented that it has the responsibility to provide a safe, efficient and reliable transmission network in Victoria. This makes AusNet Services accountable to make asset replacement decisions within an asset management strategy although it does consult with AEMO and DNSPs. Having regard to these obligations, AusNet Services considered that it would be appropriate for it to be responsible for carrying out a RIT-T process for their asset replacements. Consultation with, and modelling from, AEMO would be required for these tasks consistent with existing liaison practices.<sup>229</sup>

A number of other stakeholders also commented on this issue. Noting that AEMO is currently responsible for preparing the TAPR in relation to the Victorian transmission network, stakeholders suggested that it would be appropriate for AEMO to carry out this role in regard to the proposed rule.<sup>230</sup>

In regard to the responsibility for undertaking a RIT-T related to replacement expenditure, Jemena suggested that this be AEMO as it is the network planner. It did acknowledge that AEMO would require advice from AusNet Services to carry out the process.<sup>231</sup> A preference for AEMO was shared by RES and the EUAA.<sup>232</sup>

In contrast, the ENA suggested that AusNet Services conduct any RIT-T process related to the replacement of assets as this would be consistent with the existing separation of responsibilities in Victoria.<sup>233</sup> AGL also supported this arrangement although it also suggested that an alternative arrangement could be joint responsibility.<sup>234</sup>

AEMO, first round submission, p. 9.

AEMO, first round submission, p. 9.

AusNet Services, first round submission, p. 1.

AusNet Services, first round submission, pp. 3-5.

<sup>&</sup>lt;sup>230</sup> First round submissions: Jemena, p. 9; RES, p. 6; EUAA, p. 7; ENA, p. 14; AGL, p. 8.

<sup>&</sup>lt;sup>231</sup> Jemena, first round submission, p. 9.

<sup>&</sup>lt;sup>232</sup> First round submissions: RES, p. 6; EUAA, p. 7.

ENA, first round submission, p. 14.

AGL, first round submission, p. 8.

# 7.1.3 Analysis and conclusions

The Commission has considered the allocation of responsibilities arising from the draft rule in the context of the current approach. It notes the nature of the tasks required by the NER necessitate some co-ordination and co-operation between AEMO and AusNet Services (or any other owner of transmission network assets in Victoria). The Commission is not aware of any issues arising from these arrangements that impact on compliance with the current NER requirements.

Accordingly, the Commission has concluded that arrangements consistent with the existing division of responsibilities should apply to replacement-related planning and investment.

AEMO will be responsible for producing annual planning reports for the Victorian transmission network that will provide information on all planned network asset retirements and certain planned de-ratings as set out in the draft rule. It is anticipated that AusNet Services will be able to provide relevant information and advice to enable AEMO to fulfil its planning report obligations as it does currently.

AusNet Services (or any other owner and operator of transmission network assets in Victoria) is to be responsible for carrying out any regulatory investment test processes for Victorian transmission replacement expenditure. This process includes consideration of market benefits. The Commission notes that AEMO currently works with AusNet Services when undertaking a RIT-T in the context of augmentation expenditure. It is expected that such co-operative arrangements would similarly apply in the context of replacement expenditure.

The arrangement of responsibilities, while not limiting any co-ordination and co-operation between the parties, is reflected in clause 5.1.2(f1) of the draft rule. This clause refers to 'relevant declared transmission system operator' rather than AusNet Services by name in recognition that AusNet Services is not the sole owner and operator of transmission network assets in Victoria.

# 7.2 Transitional arrangements to implement a rule

If the draft rule were to be made, then network service providers and the AER will need time to implement processes to be able to comply with the new provisions of the NER. This is likely to require a final rule, if made, to include specific clauses on the timing of when certain obligations should be met.

# 7.2.1 AER's view

The AER did not include any transitional arrangements in its proposed rule. Nor did it provide any comment or policy view on what it considered to be appropriate transitional arrangements.

## 7.2.2 Stakeholder views

The ENA noted that the AER's rule change request did not include any guidance on the implementation of the proposed rule. It commented that it was therefore concerned that network service providers would be required to comply with the new regulatory investment test in relation to projects that had already commenced. The ENA suggested that for projects where consultation had already been undertaken, the new regulatory investment test requirements should not apply.<sup>235</sup>

The ENA also commented that network service providers would need a transition of at least six months following the publication of the proposed AER network retirement guideline.<sup>236</sup>

Similar comments were made by Energex and Ausgrid.<sup>237</sup> Although Ausgrid suggested that the transitional time for the proposed AER guideline and then network service provider compliance should total to at least 18 months.

Ergon did not suggest a time period but did suggest that a similar transitional process should apply as when the RIT-D process replaced the regulatory test process following the distribution planning and expansion rule in 2012. This approach would allow any current committed projects to be exempt from the new process.<sup>238</sup>

Other stakeholder commented that it would take some time to prepare for the application of the proposed rule. Jemena stated:<sup>239</sup>

"Transition arrangements need to ensure committed investments on asset replacements that are scheduled to occur over the next 2 years are excluded from any rule change that arises from the AER's rule change request.

The DNSPs would need time to implement the proposed new annual information reporting requirements. Accordingly, the new annual information reporting requirements should only commence one year after the AER has published the guideline."

Although not agreeing with the proposed rule, Citipower/Powercor commented that if a rule were to be made then "it should apply to the next determination period as the increased financial, administrative and operational burden of the APRs and the RIT-Ds cause delays in the implementation of already planned projects".<sup>240</sup>

AEMO commented that on the assumption that a final rule is made in mid-2017, then the new annual planning report requirements could take effect for the following round

ENA, first round submission, pp. 14-15.

ENA, first round submission, p. 15.

<sup>&</sup>lt;sup>237</sup> First round submissions: Energex, p. 17; Ausgrid, p. 13.

<sup>&</sup>lt;sup>238</sup> Ergon, first round submission, p. 15.

<sup>&</sup>lt;sup>239</sup> Jemena, first round submission, p. 10.

<sup>&</sup>lt;sup>240</sup> CitiPower and Powercor, first round submission, p. 6.

of reports in 2018. Similarly, it suggested that the new regulatory investment test requirements could be applied to replacement investment decisions made after 30 June 2018. AEMO noted that network service providers could be permitted to initiate their regulatory investment test process before 30 June 2018.<sup>241</sup>

While the network service providers expressed some concern on the implementation of the proposed rule and the time needed to meet the proposed new obligations, other stakeholders suggested that it would be important to have a new regime commence as soon as possible. EUAA commented:<sup>242</sup>

"Given the large potential benefits in terms of the NEO, the EUAA believes that the transitional arrangements should ensure the changes are implemented as quickly as possible. ... The networks should have no concerns with their ability to meet the guidelines assuming, as noted above, they have best practice planning procedures already in place in their organisations."

Similarly, AGL noted the importance of replacement expenditure for network service providers and that it is important that the new regime apply as soon as possible.<sup>243</sup>

An alternative transitional approach was put forward by RES. It suggested that projects which are valued at more than \$20 million should not have any transitional arrangements and that projects valued at between \$5 million and \$20 million could be transitioned over three years.<sup>244</sup>

#### 7.2.3 Analysis and conclusions

The draft rule does not include draft transitional provisions. However, a summary of the transitional arrangements that the Commission considers necessary to support the introduction of the final rules (if it is made in the same form as the draft rule) are set out below. Such transitional arrangements would commence on the date of commencement of the final rule.

The Commission acknowledges that stakeholders will require some time to prepare for the introduction of new requirements and the application of the draft rule requirements to new activities and information. The AER will also be required to review and update its regulatory investment test documents and its guidelines as a result of amendments made to the NER.

In considering the requirements set out in the draft rule, the Commission's view is that the following steps are likely to be appropriate for the implementation of a final rule, if made in July 2017. These steps are:

AEMO, first round submission, p. 10.

EUAA, first round submission, p. 8.

AGL, first round submission, p. 8.

RES, first round submission, p. 6.

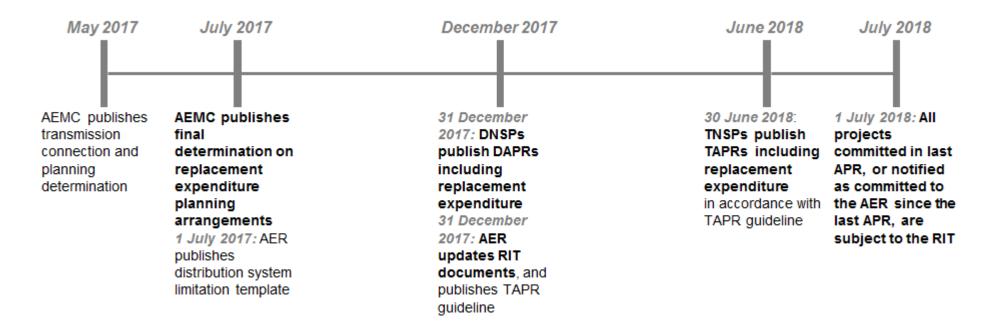
- The new annual planning report requirements are to apply for the next scheduled annual planning reports. That is, for distribution network service providers, by 31 December 2017 and for transmission network service providers, 30 June 2018.
- The new regulatory investment test requirements (for both distribution and transmission network capital expenditure) are to apply from 1 July 2018. That is, replacement projects that have been committed to by the network service provider by that date will not be required to be assessed under the regulatory investment test process. Replacement expenditures that become committed projects after 1 July 2018 will be required to be assessed according to the regulatory investment test.

The annual planning reports will be used to identify whether a project is committed prior to 1 July 2018. Where a project is committed before 1 July 2018 but since the last annual planning report was published then a network service provider must notify the AER of this if it does not wish to undertake a regulatory investment test for the project.

The AER should complete amendments to the regulatory investments tests and associated regulatory investment test application guidelines by 31 December 2017.

This process is illustrated by the figure below. The Commission welcomes stakeholder feedback on this matter.

#### Figure 7.1 Draft transitional arrangements and related milestones



# Abbreviations

AEC	Australian Energy Council
AEMC or Commission	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CUAC	Consumer Utilities Advocacy Centre
DAPR	distribution annual planning report
DNSP	distribution network service provider
ECA	Energy Consumers Australia
ENA	Energy Networks Australia
EUAA	Energy Users Association of Australia
EWOSA	Energy and Water Ombudsman South Australia
MEU	Major Energy Users
NEL	National Electricity Law
NEM	national electricity market
NEO	national electricity objective
NER	National Electricity Rules
NTNDP	national transmission network development plan
PIAC	Public Interest Advocacy Centre
RES	RES Australia
RIT-D	regulatory investment test for distribution
RIT-T	regulatory investment test for transmission
TAPR	transmission annual planning report
TEC	Total Environment Centre

transmission network service provider

TNSP

# A Legal requirements under the NEL

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this draft rule determination.

# A.1 Draft rule determination

In accordance with s. 99 of the NEL the Commission has made this draft rule determination in relation to the rule proposed by the AER.

The Commission's reasons for making this draft rule determination are set out in Chapters 2 to 7.

A copy of the more preferable draft rule is attached to and published with this draft rule determination. Its key features are described in Chapter 2 and Chapters 4 to 7.

# A.2 Power to make the rule

The Commission is satisfied that the more preferable draft rule falls within the subject matter about which the Commission may make rules. The more preferable draft rule falls within s. 34 of the NEL as it relates to:

- regulating the operation of the national electricity system for the purposes of the safety, security and reliability of that system (s. 34(1)(a)(ii))
- the activities of persons (including registered participants) participating in the national electricity market or involved in the operation of the national electricity market (s. 34(1)(a)(iii)).

Further, the more preferable draft rule falls within the matters set out in Schedule 1 to the NEL as it relates to:

- item 11 the operation of generating systems, transmission systems, distribution systems or other facilities
- item 30E the declared network functions.

#### A.3 Commission's considerations

In assessing the rule change request the Commission considered:

- the Commission's powers under the NEL to make the rule
- the rule change request
- submissions and other information received during the first round of consultation

- interactions with other relevant rule changes and review recommendations
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NEO.

There is no relevant Ministerial Council on Energy (MCE) Statement of Policy Principles.<sup>245</sup>

# A.4 Declared system functions

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of AEMO's declared network functions.<sup>246</sup> The Commission is satisfied that the draft more preferable rule is compatible with, and does not impact, AEMO's declared network functions. In particular, the draft rule provides that the declared transmission system operator rather than AEMO is required to perform RIT-Ts for replacement network assets.

#### A.5 Allocation of powers, functions and duties

The Commission may only make a rule that affects the allocation of powers, functions and duties between AEMO and the declared transmission system operator if AEMO has provided its consent to the making of the rule.<sup>247</sup> The draft more preferable rule affects the allocation of functions between AEMO and the declared transmission system operator, by introducing the new function of RIT-Ts for replacement of network assets, which will be performed by the declared transmission system operator in relation to declared transmission systems of an adoptive jurisdiction. As such, the AEMC will seek consent from AEMO prior to the making of any final rule that affects the allocation of powers, functions and duties as between AEMO and the declared transmission system operator.<sup>248</sup>

# A.6 Civil penalties

The more preferable draft rule does not amend any clauses that are currently classified as civil penalty provisions under the NER or the National Electricity Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the draft rule be classified as civil penalty provisions.

<sup>&</sup>lt;sup>245</sup> Under s. 33 of the NEL the AEMC must have regard to any relevant MCE Statement of Policy Principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for energy. On 1 July 2011 the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated Council is now called the COAG Energy Council.

<sup>246</sup> Section 91(8) of the NEL.

<sup>247</sup> Section 91(9) of the NEL.

<sup>248</sup> Section 91(9) of the NEL.