AUSTRALIAN COMPETITION TRIBUNAL

Application by ActewAGL Distribution [2017] ACompT 2

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| Review from: | Australian Energy Regulator *Final Decision: United Energy Distribution determination 2016 to 2020*  Australian Energy Regulator *Final Decision: ActewAGL Distribution Access Arrangement 2016 to 2021*  Australian Energy Regulator *Final Decision:* *Jemena Distribution Determination 2016 to 2020* |
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| File numbers: | ACT 3 of 2016  ACT 6 of 2016  ACT 7 of 2016 |
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| Tribunal: | **ROBERTSON J (DEPUTY PRESIDENT)**  **MR RF SHOGREN (MEMBER)**  **DR DR ABRAHAM (MEMBER)** |
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| Date of Determination: | 17 October 2017 |
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| Catchwords: | **ENERGY AND RESOURCES** – applications for review of distribution determinations by the Australian Energy Regulator (**AER**) – grounds raised by ActewAGL under *National Gas Law* and *National Gas Rules* – grounds raised by other applicants under *National Electricity Law* and *National Electricity Rules*  **ENERGY AND RESOURCES** – topics for review – return on debt (transition): AER’s decision to reject the relevant applicants’ proposed trailing average approach (with no period of transition) to estimating the return on debt for use in the determination of the allowed rate of return for the 2015/16 year and the 2016-21 access arrangement period (together, 2015-21 period), and to instead determine the relevant applicants’ return on debt using approach that involved a form of transition from the previous “on-the-day” approach to the trailing average approach  **ENERGY AND RESOURCES** – topics for review – value of imputation credits (gamma): AER’s decision to reject the relevant applicants’ proposed value of imputation credits of 0.25 for use in the estimation of the cost of corporate income tax, and instead to determine that the value of imputation credits ought to be 0.4  **ENERGY AND RESOURCES** – topics for review – forecast inflation: AER’s decision to reject ActewAGL’s proposal to adopt a breakeven method estimate of inflation for the 2015-21 period of 1.96 per cent, and to instead determine that forecast inflation ought to be 2.18 per cent  **ENERGY AND RESOURCES** – topics for review – advanced metering infrastructure rollout: the AER’s decision the subject of the Victorian Minister’s intervention |
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| Legislation: | *National Electricity Law*  *National Electricity (Victoria) Act 2005*  *National Gas Law*  *National Gas (ACT) Act 2008*  *National Electricity Rules*  *National Gas Rules* |
|  |  |
| Cases cited: | *Application by ATCO Gas Australia Pty Ltd* [2016] ACompT 10  *Application by Energex Limited (Gamma) (No 5)* [2011] ACompT 9  *Application by EnergyAustralia* [2009] ACompT 8  *Applications by Public Interest Advocacy Centre Ltd and Ausgrid* [2016] ACompT 1  *Application by SA Power Networks* [2016] ACompT 11  *Australian Energy Regulator v Australian Competition Tribunal (No 2)* [2017] FCAFC 79; 345 ALR 1  *Minister for Immigration and Citizenship v SZIAI* [2009] HCA 39; 259 ALR 429 |
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IN THE AUSTRALIAN COMPETITION TRIBUNAL

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|  | | ACT 3 of 2016 |
| RE: | IN THE MATTER OF APPLICATION UNDER SECTION 71B OF THE NATIONAL ELECTRICITY LAW FOR A REVIEW OF DISTRIBUTION DETERMINATIONS MADE BY THE AUSTRALIAN ENERGY REGULATOR IN RELATION TO UNITED ENERGY DISTRIBUTION PTY LTD PURSUANT TO RULE 6.11 OF THE NATIONAL ELECTRICITY RULES | |
| By: | UNITED ENERGY DISTRIBUTION PTY LIMITED (ABN 70 064 651 029)  Applicant | |

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| --- | --- |
| tribunal: | ROBERTSON J (DEPUTY PRESIDENT)  mr rf shogren (member)  dr dr abraham (member) |
| DATE OF determination: | 17 October 2017 |

THE TRIBUNAL DETERMINES THAT:

1. The reviewable regulatory decision, being the *Final Decision: United Energy distribution determination 2016 to 2020*, is affirmed.

**THE TRIBUNAL NOTES:** the AER’s error in calculation identified at [376] of its reasons herein and, in accordance with [377] of those reasons, leaves it to the AER to determine the appropriate response to its error.

IN THE AUSTRALIAN COMPETITION TRIBUNAL

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|  | | ACT 6 of 2016 |
| RE: | IN THE MATTER OF APPLICATION UNDER SECTION 245 OF THE NATIONAL GAS LAW FOR A REVIEW OF A FULL ACCESS ARRANGEMENT DECISION MADE BY THE AUSTRALIAN ENERGY REGULATOR IN RELATION TO ACTEWAGL DISTRIBUTION PURSUANT TO RULE 64 OF THE NATIONAL GAS RULES | |
| By: | ACTEWAGL DISTRIBUTION (ABN 76 670 568 688)  Applicant | |

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| tribunal: | ROBERTSON J (DEPUTY PRESIDENT)  mr rf shogren (member)  dr dr abraham (member) |
| DATE OF determination: | 17 October 2017 |

THE TRIBUNAL DETERMINES THAT:

1. The reviewable regulatory decision, being the *Final Decision: ActewAGL Distribution Access Arrangement 2016 to 2021*, is affirmed.

**THE TRIBUNAL NOTES:** the AER’s error in calculation identified at [376] of its reasons herein and, in accordance with [377] of those reasons, leaves it to the AER to determine the appropriate response to its error.

IN THE AUSTRALIAN COMPETITION TRIBUNAL

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|  | | ACT 7 of 2016 |
| RE: | IN THE MATTER OF APPLICATION UNDER SECTION 71B OF THE NATIONAL ELECTRICITY LAW FOR A REVIEW OF DISTRIBUTION DETERMINATIONS MADE BY THE AUSTRALIAN ENERGY REGULATOR IN RELATION TO JEMENA ELECTRICITY NETWORKS (VIC) LTD PURSUANT TO RULE 6.11 OF THE NATIONAL ELECTRICITY RULES | |
| By: | JEMENA ELECTRICITY NETWORKS (VIC) LTD (ABN 82 064 651 083)  Applicant | |

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| --- | --- |
| tribunal: | ROBERTSON J (DEPUTY PRESIDENT)  mr rf shogren (member)  dr dr abraham (member) |
| DATE OF determination: | 17 October 2017 |

**THE TRIBUNAL DETERMINES THAT:**

1. The reviewable regulatory decision, being the *Final Decision: Jemena distribution determination 2016 to 2020*, is affirmed.

**THE TRIBUNAL NOTES:** the AER’s error in calculation identified at [376] of its reasons herein and, in accordance with [377] of those reasons, leaves it to the AER to determine the appropriate response to its error.

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# INTRODUCTION

1 On 16 June 2016, ActewAGL Distribution (**ActewAGL**) lodged with the Australian Competition Tribunal (the **Tribunal**) an application for leave to apply for review and an application for review of the final decision by the Australian Energy Regulator (**AER**) entitled *Final Decision - ActewAGL Distribution Access Arrangement 2016 to 2021* for the access arrangement period comprising 1 July 2016 to 30 June 2021. The Final Decision was published on 26 May 2016, together with the access arrangement for the ACT, Queanbeyan and Palerang gas distribution network 1 July 2016 - 30 June 2021.

*2* On 16 June 2016, United Energy Distribution Pty Limited (**United Energy**) lodged with the Tribunal an application for leave to apply to the Tribunal for review of a reviewable regulatory decision and an application for review of a reviewable regulatory decision of the AER being the Distribution Determination entitled *Final Decision - United Energy distribution determination 2016 to 2020*.

3 On 16 June 2016 each of Jemena Electricity Networks (Vic) Ltd (**Jemena**), CitiPower Pty Ltd (**CitiPower**), Powercor Australia Ltd (**Powercor**) and AusNet Electricity Services Pty Ltd (**AusNet**) filed their applications.

4 On 26 August 2016, the Tribunal granted these applicants leave to apply for a review of these decisions of the AER published on 26 May 2016 in respect of each of the grounds for review set out in their applications.

5 By notice dated the same day, the Minister for Energy, Environment and Climate Change for the State of Victoria (the **Minister**) intervened in the Victorian matters, ACT 3, 4, 5, 7 and 8 of 2016 (see in particular [6(iv)] and [6(vi)] below).

6 The matters raised were in summary as follows:

(i) return on debt (transition): the AER’s decision to reject the relevant applicants’ (ActewAGL and Jemena) proposed trailing average approach (with no period of transition) to estimating the return on debt for use in the determination of the allowed rate of return for the 2015/16 year and the 2016-21 access arrangement period (together, 2015-21 period), and to instead determine the relevant applicants’ return on debt using an approach that involved a form of transition from the previous 'on-the-day' approach to the trailing average approach;

(ii) value of imputation credits (gamma): the AER’s decision to reject the relevant applicants’ (ultimately only ActewAGL and Jemena) proposed value of imputation credits of 0.25 for use in the estimation of the cost of corporate income tax, and to instead determine that the value of imputation credits ought to be 0.4;

(iii) forecast inflation: the AER’s decision to reject ActewAGL’s proposal to adopt a breakeven method estimate of inflation for the 2015-21 period of 1.96 per cent, and to instead determine that forecast inflation ought to be 2.18 per cent (United Energy withdrew this ground of its application);

(iv) advanced metering infrastructure (**AMI**) rollout: the AER’s decision the subject of the Minister’s intervention in the Tribunal and affecting all applicants except ActewAGL;

(v) labour price growth rates: the AER’s decision the subject of an application to the Tribunal by only CitiPower and Powercor;

(vi) corporate overhead expenses: the AER’s decision the subject of the Minister’s intervention in the Tribunal and affecting only CitiPower and Powercor;

(vii) return on debt (**BVAL curve**): the AER’s decision the subject of an application to the Tribunal only by AusNet; and

(viii) forecasting opex/self-insurance: the AER’s decision the subject of an application to the Tribunal only by AusNet.

7 The grounds raised by ActewAGL were under the *National Gas Law* (***NGL***) and *National Gas Rules* (***NGR***). The grounds raised by the other applicants were under of the *National Electricity Law* (***NEL***) and under the *National Electricity Rules* (***NER****).* Where the laws and rules governing electricity and gas networks are effectively the same we have dealt with them together, with reference where relevant to variations or additions under the corresponding Law or Rules.

8 For convenience, the Tribunal is giving today three sets of reasons structured so that issues common to more than one applicant are dealt with together. For example, the discussion of the return on debt grounds in this decision provides the basis for the conclusions on that issue in relation to Jemena. There were also common submissions in relation to the value of imputation credits (gamma).

9 In summary, these reasons deal with the issues in [6(i)]-[6(iv)] above, that is, all except the following: [6(v)] labour price growth rates and [6(vi)] corporate overheads, where the reasons are to be found in the separate CitiPower and Powercor decisions given today: *Applications by CitiPower Pty Ltd and Powercor Australia Ltd* [2017] ACompT 4; and [6(vii)] return on debt (BVAL curve) and [6(viii)] self-insurance, where the reasons are to be found in the separate AusNet decision also given today: *Application by AusNet Electricity Services Pty Ltd* [2017] ACompT 3.

# THE STATUTORY STRUCTURE

10 The grounds for review are set out in s 246(1) of the *NGL* and the “materially preferable designated NGO decision” requirement is set out in s 259(4a). The grounds for review have recently been considered by a Full Court of the Federal Court in *Australian Energy Regulator v Australian Competition Tribunal (No 2)* [2017] FCAFC 79; 345 ALR 1.

11 Under s 246(1) of the *NGL*, an application under s 245(1) may be made only on one or more of the following grounds:

(a) the AER made an error of fact in its findings of facts, and that error of fact was material to the making of the decision;

(b) the AER made more than one error of fact in its findings of facts, and those errors of fact, in combination, were material to the making of the decision;

(c) the exercise of the AER’s discretion was incorrect, having regard to all the circumstances;

(d) the AER’s decision was unreasonable, having regard to all the circumstances.

12 Section 259(4a) provided as follows:

In a case where the decision is a designated reviewable regulatory decision, the Tribunal may only make a determination –

(a) to vary the designated reviewable regulatory decision under subsection (2)(b); or

(b) to set aside the designated reviewable regulatory decision and remit the matter back to the AER under subsection (2)(c),

if –

(c) the Tribunal is satisfied that to do so will, or is likely to, result in a decision that is materially preferable to the designated reviewable regulatory decision in making a contribution to the achievement of the national gas objective (a ***materially preferable designated NGO decision***) (and if the Tribunal is not so satisfied the Tribunal must affirm the decision); and

(d) in the case of a determination to vary the designated reviewable regulatory decision – the Tribunal is satisfied that to do so will not require the Tribunal to undertake an assessment of such complexity that the preferable course of action would be to set aside the decision and remit the matter to the AER to make the decision again.

(Original emphasis.)

13 Section 244 defined “***materially preferable designated NGO decision***” by reference to s 259(4a)(c).

14 Sections 249(4b), (4c) and (5) should also be reproduced, as follows:

(4b) In connection with the operation of subsection (4a) (and without limiting any other matter that may be relevant under this Law) –

(a) The Tribunal must consider how the constituent components of the designated reviewable regulatory decision interrelate with each other and with the matters raised as a ground for review;

(b) without limiting paragraph (a), the Tribunal must take into account the revenue and pricing principles (in the same manner in which the AER is to take into account these principles under section 28); and

(c) the Tribunal must, in assessing the extent of contribution to the achievement of the national gas objective, consider the designated reviewable regulatory decision as a whole; and

(d) the following matters must not, in themselves, determine the question about whether a materially preferable designated NGO decision exists:

(i) the establishment of a ground for review under section 246(1);

(ii) consequences for, or impacts on, the average annual regulated revenue of a covered pipeline service provider;

(iii) that the amount that is specified in or derived from the designated reviewable regulatory decision exceeds the amount specified in section 249(2).

(4c) If the Tribunal makes a determination under subsection (2)(b) or (c), the Tribunal must specify in its determination –

(a) the manner in which it has taken into account the interrelationship between the constituent components of the designated reviewable regulatory decision and how they relate to the matters raised as a ground for review as contemplated by subsection (4b)(a); and

(b) in the case of a determination to vary the designated reviewable regulatory decision – the reasons why it is proceeding to make the variation in view of the requirements of subsection (4a)(d).

(5) A determination by the Tribunal affirming, varying or setting aside the reviewable regulatory decision is, for the purposes of this Law (other than this Part), to be taken to be a decision of the original decision maker.

15 The “***national gas objective***” is defined in s 2(1) to mean the objective set out in s 23, which provides as follows:

**National gas objective**

The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

16 Section 249(2) states that the amount that is specified in or derived from the decision exceeds the lessor of $5,000,000 or 2 per cent of the average annual regulated revenue of the covered pipeline service provider.

17 Time limits on applicants were imposed as follows: by s 247, an application under s 245 in respect of a reviewable regulatory decision of the present kind must be made no later than 15 business days after the reviewable regulatory decision is published in accordance with the *NGL* or the *NGR*.

18 The provisions of the *NGR* centrally relevant to the AER’s decision were as follows:

**Division 3 Building block approach**

**76 Total revenue**

Total revenue is to be determined for each regulatory year of the *access arrangement period* using the building block approach in which the building blocks are:

(a) a return on the projected capital base for the year (See Divisions 4 and 5); and

(b) depreciation on the projected capital base for the year (See Division 6); and

(c) the estimated cost of corporate income tax for the year (See Division 5A); and

(d) increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency (See Division 9); and

(e) a forecast of operating expenditure for the year (See Division 7).

…

**Division 5 Rate of return**

**87 Rate of return**

(1) Subject to rule 82(3), the return on the projected capital base for each regulatory year of the *access arrangement period* is to be calculated by applying a rate of return that is determined in accordance with this rule 87 (the *allowed rate of return*).

(2) The *allowed rate of return* is to be determined such that it achieves the *allowed rate of return objective*.

(3) The *allowed rate of return objective* is that the rate of return for a service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the service provider in respect of the provision of reference services (the *allowed rate of return objective*).

(4) Subject to subrule (2), the *allowed rate of return* for a regulatory year is to be:

(a) a weighted average of the return on equity for the *access arrangement period* in which that regulatory year occurs (as estimated under subrule (6)) and the return on debt for that regulatory year (as estimated under subrule (8)); and

(b) determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in rule 87A.

(5) In determining the *allowed rate of return*, regard must be had to:

(a) relevant estimation methods, financial models, market data and other evidence;

(b) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and

(c) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.

**Return on equity**

(6) The return on equity for an *access arrangement period* is to be estimated such that it contributes to the achievement of the *allowed rate of return objective*.

(7) In estimating the return on equity under subrule (6), regard must be had to the prevailing conditions in the market for equity funds.

**Return on debt**

(8) The return on debt for a regulatory year is to be estimated such that it contributes to the achievement of the *allowed rate of return objective*.

(9) The return on debt may be estimated using a methodology which results in either:

(a) the return on debt for each regulatory year in the *access arrangement period* being the same; or

(b) the return on debt (and consequently the *allowed rate of return*) being, or potentially being, different for different regulatory years in the *access arrangement period*.

(10) Subject to subrule (8), the methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting:

(a) the return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the time when the AER's *decision* on the access arrangement for that *access arrangement period* is made;

(b) the average return that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a regulatory year in the *access arrangement period*; or

(c) some combination of the returns referred to in subrules (a) and (b).

(11) In estimating the return on debt under subrule (8), regard must be had to the following factors:

(a) the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the *allowed rate of return objective*;

(b) the interrelationship between the return on equity and the return on debt;

(c) the incentives that the return on debt may provide in relation to capital expenditure over the *access arrangement period*, including as to the timing of any capital expenditure; and

(d) any impacts (including in relation to the costs of servicing debt across *access arrangement periods*) on a benchmark efficient entity referred to in the *allowed rate of return objective* that could arise as a result of changing the methodology that is used to estimate the return on debt from one *access arrangement period* to the next.

(12) If the return on debt is to be estimated using a methodology of the type referred to in subrule (9)(b) then a resulting change to the service provider's total revenue must be effected through the automatic application of a formula that is specified in the *decision* on the access arrangement for that *access arrangement period*.

**Rate of return guidelines**

(13) The AER must, in accordance with the *rate of return consultative procedure*, make and publish guidelines (the *rate of return guidelines*).

(14) The *rate of return guidelines* must set out:

(a) the methodologies that the AER proposes to use in estimating the *allowed rate of return*, including how those methodologies are proposed to result in the determination of a return on equity and a return on debt in a way that is consistent with the *allowed rate of return objective*; and

(b) the estimation methods, financial models, market data and other evidence the AER proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits referred to in rule 87A.

(15) There must be *rate of return guidelines* in force at all times after the date on which the AER first publishes the *rate of return guidelines* under these rules.

(16) The AER must, in accordance with the *rate of return consultative procedure*, review the *rate of return guidelines*:

(a) at intervals not exceeding three years, with the first interval starting from the date that the first *rate of return guidelines* are published under these rules; and

(b) at the same time as it reviews the Rate of Return Guidelines under clauses 6.5.2 and 6A.6.2 of the National Electricity Rules.

(17) The AER may, from time to time and in accordance with the *rate of return consultative procedure*, amend or replace the *rate of return guidelines*.

(18) The *rate of return guidelines* are not mandatory (and so do not bind the AER or anyone else) but, if the AER makes a *decision* in relation to the rate of return (including in an access arrangement draft *decision* or an access arrangement final *decision*) that is not in accordance with them, the AER must state, in its reasons for the *decision*, the reasons for departing from the guidelines.

(19) If the *rate of return guidelines* indicate that there may be a change of regulatory approach by the *decision* maker in future *decisions*, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.

**Division 5A**

**87A Estimated cost of corporate income tax**

(1) The estimated cost of corporate income tax of a service provider for each regulatory year of an *access arrangement period* (ETCt) is to be estimated in accordance with the following formula:

ETCt = (ETIt × rt) (1 – γ)

Where

ETIt is an estimate of the taxable income for that regulatory year that would be earned by a benchmark efficient entity as a result of the provision of reference services if such an entity, rather than the service provider, operated the business of the service provider;

rt is the expected statutory income tax rate for that regulatory year as determined by the AER; and

γ is the value of imputation credits.

…

**Division 6 Depreciation**

**88 Depreciation schedule**

(1) The depreciation schedule sets out the basis on which the pipeline assets constituting the capital base are to be depreciated for the purpose of determining a reference tariff.

(2) The depreciation schedule may consist of a number of separate schedules, each relating to a particular asset or class of assets.

**89 Depreciation criteria**

(1) The depreciation schedule should be designed:

(a) so that reference tariffs will vary, over time, in a way that promotes efficient growth in the market for reference services; and

(b) so that each asset or group of assets is depreciated over the economic life of that asset or group of assets; and

(c) so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets; and

(d) so that (subject to the rules about capital redundancy), an asset is depreciated only once (ie that the amount by which the asset is depreciated over its economic life does not exceed the value of the asset at the time of its inclusion in the capital base (adjusted, if the accounting method approved by the AER permits, for inflation)); and

(e) so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.

(2) Compliance with subrule (1)(a) may involve deferral of a substantial proportion of the depreciation, particularly where:

(a) the present market for pipeline services is relatively immature; and

(b) the reference tariffs have been calculated on the assumption of significant market growth; and

(c) the pipeline has been designed and constructed so as to accommodate future growth in demand.

(3) The AER’s discretion under this rule is limited.

**Note:**

See rule 40(2).

**90 Calculation of depreciation for rolling forward capital base from one access arrangement period to the next**

(1) A full access arrangement must contain provisions governing the calculation of depreciation for establishing the opening capital base for the next *access arrangement period* after the one to which the access arrangement currently relates.

(2) The provisions must resolve whether depreciation of the capital base is to be based on forecast or actual capital expenditure.

# CONSULTATION BY THE TRIBUNAL

19 The consultation process referred to in s 261(1)(b) of the *NGL* and s 71R(1)(b) of the *NEL* is an additional step which the Tribunal must take and, ideally, accommodate within the target time prescribed by s 260 of the *NGL* and s 71Q of the *NEL*. The Tribunal, having given leave to the applicants to apply for review, sought information from the AER as to groups or persons who might have an interest in the Tribunal’s review under s 261(1)(b) of the *NGL* and s 71R(1)(b) of the *NEL*.

20 The Tribunal then invited each of those groups or persons to indicate:

 whether they wished to consult with the Tribunal in relation to the Final Decisions;

 the nature of their proposed participation; and

 how the consultation might best be carried out.

21 Having determined a protocol for the consultation, the Tribunal issued a Consultation Agenda under which it provided for those who wished to speak to the Tribunal, either personally or on behalf of an organisation, to do so.

22 The Tribunal conducted the first consultation session on 6 October 2016 at the Federal Court of Australia in Melbourne. At that time, the Tribunal heard submissions by Ms R Sinclair, the Chief Executive Officer of Energy Consumers Australia Ltd (**ECA**), Ms T Jelenic for the Public Interest Advocacy Centre (**PIAC**) and Ms R Held for the Consumer Utilities Advocacy Centre (**CUAC**).

23 The ECA is an organisation formed by the COAG Energy Ministers Council as part of the energy market reform package of 2012. Its oral submissions were addressed first to the new limited merits review process itself; secondly, to the increased focus in that process on the long-term interests of consumers; and thirdly, to the need for the Tribunal’s decision to be a holistic, materially preferable decision focused on the long-term interests of consumers. The ECA also noted the revenue impacts which totalled $365.3 million, of which 60 per cent was said to be collected from residential and small business consumers. It was submitted that consumers did not think that the price increases that those revenue increases would lead to were in their long-term interests. The ECA had conducted an energy consumer sentiment survey in July 2016 and the survey showed that customers valued reliability and competition in the energy sector but were not at all happy with the value for money they were getting from energy services and they did not think that the sector had their interests at heart. The core question, it was submitted, was whether the businesses had truly considered the long-term interests of their customers in putting forward the revised proposals and now in seeking the Tribunal’s review of the AER decisions with respect to the matters raised. It was submitted that the long-term interests of consumers must be the Tribunal’s paramount consideration in determining that a materially preferable decision exists. Emphasis was placed on the terms of s 71P of the *NEL*. It was submitted that the long-term interests of consumers were not delivered by any one factor in isolation but rather required balancing of those factors. The preference for one outcome over another was to be determined with reference to the whole outcome and not the individual components of it and materiality was to be determined with reference to the national electricity and gas objectives and nothing else.

24 PIAC addressed in particular s 71R(1)(b) of the *NEL*, concerning statutory consultation requirements. PIAC sought to support and strengthen the Tribunal’s role in promoting consumer participation by, first, emphasising that s 71R(1)(b) represented an important precondition to the Tribunal’s powers of review and should be construed broadly. Secondly, PIAC drew the Tribunal’s attention to the difficulties faced by consumers in providing useful comment at a time before the parties’ submissions had been lodged and within restrictive time and page limits. Thirdly, PIAC addressed the need for the Tribunal to give adequate consideration to consumer submissions in its final decision. PIAC referred to the national electricity objective in s 7 of the *NEL* as guiding all decision-making by the AER and the Tribunal, being framed in terms of the long-term interests of consumers. PIAC also referred to s 71P(2)(a). PIAC also relied on its written submissions.

25 The CUAC’s submissions and supplementary submissions were directed to whether CitiPower and Powercor’s proposed growth rates for 2016 represented *efficient* costs of achieving the opex and capex objectives for the purpose of rr 6.5.6(c) and 6.5.7(c) of the *NER*. The Tribunal addresses this matter fully in *Applications by CitiPower Pty Ltd and Powercor Australia Ltd* [2017] ACompT 4.

26 The Tribunal conducted a second consultation session on 11 October 2016 at the Federal Court of Australia in Canberra. The only registered speakers at the Canberra consultation withdrew before the start of proceedings. Consequently, opportunity was provided for those who had not registered to participate to make submissions to the Tribunal. One person took that opportunity. It has not been necessary for the Tribunal to revisit those issues in the course of forming its decisions.

27 In order to address concerns about the brevity of time allocated to user and consumer groups and their inability to respond to the written submissions and replies of the applicants, on 18 October 2016 the Tribunal made a direction giving leave to the user and consumer groups to lodge written submissions by 10 November 2016 in relation to the written submissions lodged by the parties. This leave was taken up.

28 In addition to the organisations already referred to, the Tribunal received and considered written submissions from the St Vincent de Paul Society; the Consumer Action Law Centre; the Ethnic Communities’ Council of NSW Inc; UnitingCare Australia; the Queensland Electricity Users Network; and the New South Wales Irrigators’ Council and Cotton Australia.

# SUMMARY OF APPLICANTS’ GROUNDS

29 ActewAGL summarised its grounds as follows.

30 ActewAGL submitted that Pt 8 of the *NGR* governed the AER’s decisions about whether to approve access arrangements by service providers.

31 It submitted that r 76 of the *NGR* adopted a building block approach to the determination of total revenue to be derived from access arrangements. The building blocks relevant to the present grounds of review were: r 76(a) (return on debt); r 76(b) (forecast inflation); and r 76(c) (gamma). We have set these out at [18] above.

#### Return on debt

32 Specifically in relation to return on debt, ActewAGL submitted, in summary as follows.

33 The issue was whether the historical trailing average (**HTA**) approach should be applied immediately to estimate the return on debt (which both ActewAGL and Jemena proposed) or whether, as the AER decided, the trailing average approach should be phased in over a decade (the transition to trailing average (**TTA**)).

34 ActewAGL argued that the AER’s decision was predicated on a misconstruction of r 87 of the *NGR*, equivalent to s 6.5.2 of the *NER*. The AER’s construction embodied a so-called zero net present value (**NPV**) criterion over the ‘life of the Regulatory Asset Base (**RAB**)’; interpreted ‘efficient financing costs’ as relating solely to ‘prevailing’ interest rates (but did not require that those rates be prevailing at any particular time); and did not require any consideration of the financing practices of the benchmark efficient entity (**BEE**).

35 ActewAGL contended that those concepts could not be reconciled to the text of r 87 of the *NGR*. Rather, it appeared that the AER had reached what it considered to be the ‘right’ outcome, and then had sought to fit that conclusion into that rule, something ActewAGL argued was not a proper basis for statutory construction.

36 Similarly, Jemena argued the NPV = 0 criterion in the AER’s Final Decision was incorrect. It had no explicit basis in r 6.5.2 and could not override the requirements of that rule. Jemena also argued that the AER’s application of the condition did not reflect a proper NPV = 0 analysis in any event, because the AER’s approach confused the RAB with debt instruments, and because the on-the-day approach only ever produced a random mismatch with the actual cost of debt, and this random mismatch did not produce some consistent value over time.

37 Further, ActewAGL argued that the AER’s financial theory (ie, that the trailing average approach should only be adopted if there was a transition that preserved “revenue neutrality” over the “life of the RAB” with the on-the-day approach) depended on its conclusion that the on-the-day approach necessarily satisfied the allowed rate of return objective (**ARORO**). That conclusion was untenable. Accordingly, the theoretical premise of the AER’s decision (even leaving aside its construction issues) was flawed.

38 ActewAGL contended that the phrase “efficient financing costs” in r 87(3) of the *NGR*, equivalent of r 6.5.2(c) of the *NER*, related to all matters that bore upon the financing costs that the BEE, acting efficiently, would incur during the regulatory period, including its efficient financing practices. It argued this construction was consistent with extrinsic material, the text of the clause of the *NGL*, and the decisions in *Applications by Public Interest Advocacy Centre Ltd and Ausgrid* [2016] ACompT 1 (*Ausgrid*) and *Application by EnergyAustralia* [2009] ACompT 8 (*EnergyAustralia*).

39 Jemena also argued that efficient financing costs are actual costs incurred by the benchmark business under its debt instruments (facilities and bonds) and, because the business had contractual commitments to pay interest under those instruments, there was a component of future debt costs which was historically predetermined. Consequently, Jemena argued the AER’s construction of the term “efficient financing costs” as the prevailing cost of debt (at the time of making the distribution determination, or alternatively, at any one particular point in time) was incorrect. Rather, the term “efficient financing costs” in the allowed rate of return objective was a reference to costs that a benchmark service provider would incur adopting efficient financing and risk management practices, including practices that might be expected in the absence of regulation, that is, the costs facing an efficient business. Jemena contended the AER’s construction was therefore inconsistent with the adoption of a trailing average approach, which was not a prevailing cost approach.

40 Jemena further argued that, because interest rates payable on existing debt instruments held by the benchmark business were not at the prevailing rate for new debt, the prevailing rate could not sensibly be applied as a measure for the entire cost of debt and did not represent the efficient financing costs of that business. Alternatively, and unlike both the on-the-day approach and the AER’s transition approach, the trailing average approach calculated the efficient financing costs of a benchmark business for Jemena.

41 ActewAGL had no debt. Therefore, it argued, the change in debt methodology to the trailing average approach had no ‘impact’ on it for the purposes of r 87(11)(d), the *NGR* equivalent of r 6.5.2(k)(4) of the *NER*. Given that it was common ground that a BEE would hold a staggered portfolio of debt, and finance (or refinance) 10 per cent of that portfolio each year, the trailing average approach should therefore be applied without a transition.

42Similarly, although Jemena did have debt, it did not have hedge contracts. In addition to arguing that neither the on-the-day approach nor the AER’s transition produced a measure of the efficient financing costs of a BEE in its position, Jemena contended that r 6.5.2(k)(4) provided a transition for businesses that had changed their position in an irrecoverable way on the basis of the previous regulatory regime (such as by entering into hedge contracts). Jemena was not such a business, consequently, it argued, the AER’s transition was not in accordance with r 6.5.2 of the *NER*.

43ActewAGL argued the issues raised by the AER about the proper construction of s 71 of the *NEL*/s 246 of the *NGL* regarding the nature of the grounds claimed by the applicants did not arise because the AER had misconstrued the *NGR* equivalent of r 6.5.2 and had therefore exercised its discretion incorrectly.

44Jemena further argued that the other reasons provided by the AER for a transition (the avoidance of perceived bias and measurement difficulties of the trailing average approach) were not valid reasons for a failure to apply the ARORO.

45Jemena also argued that the AER’s change in reasoning was not foreshadowed to the service providers, in contravention of r 11.60.4(k) of the *NER* and s 16(1)(b) of the *NEL*.

#### Gamma

46 In respect of this ground, ActewAGL relied upon submissions at that time advanced jointly on behalf of all network applicants. However, by letter dated 21 July 2017, all applicants other than ActewAGL and Jemena abandoned their grounds of review in respect of gamma. ActewAGL and Jemena contended for a value of 0.25 for gamma rather than the value of 0.4 applied by the AER. We set out their submissions on this topic at [240]-[260] below.

#### Forecast inflation

47 Specifically in relation to forecast inflation, ActewAGL submitted, in summary as follows.

48 A forecast of inflation was a component of the depreciation building block in r 76(b) of the *NGR*.

49 Forecast inflation on the capital base must be deducted from the depreciation allowance in each regulatory year to avoid “double counting” of inflation (given that the return on capital building block was calculated by reference to the inflation adjusted capital base).

50 ActewAGL proposed a forecast of inflation of 2.19 per cent (later updated to 1.96 per cent) based on the Breakeven Forecasting Methodology, which provided a market-based estimate of inflation.

51 The AER was required to accept ActewAGL’s forecast of inflation (and the methodology used to create it) unless the AER was positively satisfied that ActewAGL’s forecast: (a) was not arrived at on a reasonable basis; and (b) did not represent the best forecast available.

52 In the Final Decision, the AER imposed a forecast of inflation of 2.18 per cent based on the AER’s Forecasting Methodology, which relied on RBA forecasts for the first three years of the 2015-21 period, and then the mid-point of the RBA’s long-term inflation target range for a further seven years.

53 There was expert evidence before the AER that Australia had been experiencing very low inflation, and in prevailing low interest rate conditions, the RBA had little capacity to use monetary policy to lift inflation.

54 ActewAGL submitted that the AER did not attempt a meaningful analysis of these issues. Rather, the AER assumed that its Forecasting Methodology should be adopted unless persuaded otherwise. Further, the AER concluded that any change to its forecasting methodology should only occur after industry wide consultation outside of the decision-making procedures in the *NGR*.

55 ActewAGL submitted that the AER misconceived its statutory task by making a decision otherwise than in accordance with the *NGR*. The issues raised by the AER about the proper construction of the grounds in s 71 of the *NEL*/s 246 of the *NGL* did not arise. On any view, the AER had exercised its discretion incorrectly.

56 ActewAGL submitted it was not precluded from pursuing its grounds of review in relation to forecast inflation under r 60 of the *NGR*.

#### Materially preferable designated NGO decision requirement

57 As to the “materially preferable designated NGO decision requirement” in s 259 of the *NGL*, ActewAGL submitted:

1. a decision that was made according to law was properly construed as being a “materially preferable designated NGO decision” when compared to a purported decision that was not in accordance with law; that was to be contrasted with a decision that was “preferable”, in the sense that, if there were a range of decisions that were correct in law, the decision that was ultimately achieved was the best that could have been made;
2. the term “likely” in s 259(4a)(c) meant that there was a real chance or possibility, rather than that it was “more likely than not”, that varying or remitting the decision will result in a materially preferable designated NGO decision;
3. there was no requirement for the Tribunal to engage in “crystal ball gazing”, whereby it must consider the decision as made by the AER, and compare that with a counterfactual in which a different decision was made by the AER on remittal with a different result, in order to determine whether the requirement was met. Rather, a simple comparative exercise was called for, whereby the grant of relief was compared with the existing regulatory decision;
4. if its return on debt and forecast inflation grounds were made out, then the AER had made a decision about ActewAGL’s allowable revenue on a basis that was not authorised by the NGR. A decision that did not apply the NGR, and which the AER was not authorised to make, was incapable of furthering the NGO. A decision which did apply the NGR, on the other hand, was more likely to further the NGO, and was therefore likely to be materially preferable to a decision which did not. Accordingly, either a remitted or varied decision, which resulted in a decision being made in accordance with law, will necessarily be materially preferable;
5. the AER’s errors otherwise resulted in the Final Decision not furthering the NGO, in that the Final Decision did not apply the building block methodology in the NGR in accordance with its terms, and therefore did not allow ActewAGL a reasonable opportunity to recover its efficient costs of providing services pursuant to the access arrangement. The AER had not asserted (nor was ActewAGL aware of) any offsetting interrelationships or generosities in the Final Decision. Thus, there would likely be material adverse consequences for the long-term interests of consumers absent error correction.

58 The Tribunal turns now to consider in more detail the submissions of the parties in respect of each of these subject matters.

# RETURN ON DEBT

#### Debt Transition

59 The principal issue here is whether the historical trailing average (**HTA**) approach to estimating the return on debt for use in the determination of the allowed rate of return for the 2015-16 year and the 2016-21 access arrangement period (together, 2015-21 period) should be applied immediately (which ActewAGL and Jemena proposed in their Revised Access Arrangement Proposal and Revised Regulatory Proposal, respectively) or whether there should be a transition to the trailing average (**TTA**) approach, with the HTA phased in from the previous on-the-day approach over a decade (which the AER decided in both cases). Both of those applicants had originally proposed a hybrid transition.

60 It was common ground between the parties that the HTA approach would assume that the BEE holds a staggered portfolio of fixed rate debt and refinances 10 per cent of that debt each year at prevailing 10-year interest rates. The interest rate used to calculate the allowance for debt in each regulatory year under that approach is a simple average of the current and previous nine years’ prevailing interest rates.

61 The TTA approach is a transition from the previous on-the-day approach that fixed the interest rate used to calculate the allowance for debt at the rate prevailing at, or close to, the start of each regulatory period for the whole of that period (currently five years). The transition lasts ten years, so that the prevailing/on-the-day rate applies in the first year of the new regulatory period; a weighted average of 90 per cent of the initial on-the-day rate and 10 per cent of the second-year prevailing rate applies in the second year; a weighted average of 80 per cent of the on-the-day rate and 10 per cent of each of the second-year and third-year prevailing rate applies in the third year; and so on until the tenth year when the rate applying in that year is a simple average of the current and previous nine years’ prevailing interest rates, as would apply with the HTA approach. This may be called a “fully-implemented” HTA.

62 Both TTA and HTA approaches “roll in” 10 per cent of the new prevailing rate at the beginning of each regulatory year. Consequently, the practical difference between the TTA and HTA approaches is that the TTA approach substitutes the interest rate prevailing at the beginning of the first regulatory period for all the historical rates prior to that time that would have been averaged into the HTA approach.

63 The AER’s imposition of a transition to the HTA approach is essentially the same issue as was raised in relation to debt by the parties in *Ausgrid* and, more narrowly focussed on only the debt risk premium (**DRP**) component of debt costs, in *Application by SA Power Networks* [2016] ACompT 11 (*SAPN*). In *Ausgrid* the Tribunal’s focus was on the rationale for transition, particularly the proper definition of the BEE and interpretation of r 6.5.2(k)(4) of the *NER* (equivalent to r 87(11)(d) of the *NGR*). The Tribunal in that matter concluded that the AER had misinterpreted the definition of a BEE as a regulated entity with hedged debt that required transition to the HTA approach. The AER subsequently adopted a different rationale for applying the TTA approach in the recent determinations for SA Power Networks, ActewAGL and Jemena, relying on an implied requirement of the NEO and revenue and pricing principles (**RPP**) to ensure a “zero NPV” condition was satisfied “over the life of the RAB”. That is, over time, the net present value of the allowance for the return on capital would just cover the cost of the regulated asset base. This rationale was contested in *SAPN*, but was accepted by the Tribunal in that matter. Since then, the Full Court has decided an application for judicial review of the Tribunal’s *Ausgrid* decision, as discussed in what follows.

#### Regulatory framework

64 This issue was raised by ActewAGL under the *NGL* and Jemena under the *NEL*. As we have noted, there are substantial parallels in the relevant provisions of both the *NGL* and the *NGR* and the *NEL* and the *NER*. The discussion to follow refers to both sets of provisions where necessary.

65 The framework governing the cost of capital is set out in r 87 of the *NGR*; the return on debt specifically is dealt with in rr 87(8) to (12). These rules are the result of substantial recent revision, as explained in the AEMC’s Rule Determination: *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*; *National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012*, 29 November 2012 (**2012 Rule Amendments**).

66 Rule 87(1) of the *NGR* requires a calculation of the allowed rate of return in accordance with the terms of r 87 itself. Rules 87(2) and (3) are the main provisions. We have set them out at [18] above.

67 Prior to the 2012 Rule Amendments, the revenue allowance for the cost of debt was explicitly set as the sum of measures of the risk-free rate and the DRP, the sources for both of which were specified in some detail. The effect was to apply, at the beginning of a regulatory period, an estimate of the long-run cost of debt based on interest rates prevailing during a period close to the start of the regulatory period.

68 Market interest rates constantly change with economic conditions, so the prevailing rate (for instance, for suitably rated (BBB+), long-term (10-year) debt) at the start of a regulatory period is unlikely to be the rate that will apply to new debt over the course of that period. In the lead-up to the 2012 Rule Amendments governing the costs of capital, the AEMC noted concerns that the then mandated on-the-day approach encouraged risk management practices by service providers that would not occur in the absence of such regulation. It considered that the then current approach may lead to various mismatches between the regulatory estimate allowed by the regulator and the actual interest rate exposures of those service providers that employ debt management practices that are not closely aligned with the benchmark assumptions.

69 The 2012 Rule Amendments addressed this by giving the AER the discretion to choose between the on-the-day approach, an HTA approach, or some combination of these two approaches. It described the rule as setting out at a very broad level the characteristics of these three approaches to estimating the return on debt that could reasonably be contemplated by a regulator. The AEMC intended that the regulator could adopt more than one approach to estimating the return on debt, having regard to different risk characteristics of benchmark efficient service providers. The regulatory revenue allowance for debt is now required to be estimated so as to contribute to the ARORO (*NGR* r 87(8), *NER* s 6.5.2(h)), that is, to provide a service provider with a rate of return commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as the service provider in respect of the provision of standard control services.

70 Under the new rules, if the AER estimates the return on debt using a methodology that results in different or potentially different rates in each regulatory year (r 87(9)(b)), the AER’s choice of method must be “effected through the automatic application of a formula” specified in the AER’s final decision at the start of the regulatory period.

71 As summarised in the AEMC 2012 Rule Amendments, at page 8:

**2.4.3 Rate of return**

The final rule introduces a new framework for determining the rate of return. It provides that the allowed rate of return for a NSP must meet an objective related to the efficient financing costs of a benchmark efficient NSP with a similar degree of risk as that which applies to the NSP subject to the decision. The final rule provides the regulator with sufficient discretion on the methodology for estimating the required return on equity and debt components but also requires the consideration of a range of estimation methods, financial models, market data and other information so that the best estimate of the rate of return can be obtained overall that achieves the allowed rate of return objective.

The final rule also provides for the allowed rate of return to reflect changing circumstances so that the application of the framework should result in the best overall estimate of the rate of return in any case that is commensurate with efficient financing costs. This should ensure sufficient funds are attracted for network investment, while minimising costs for electricity consumers.

72 The 2012 Rule Amendments did not alter the task for the AER: to set an allowance for the cost of capital that was the product of the projected capital base (the RAB in the case of the *NER*) and a weighted average of the returns on equity and debt (r 87(4)(a)). Nor did they change the previously understood cost concepts - that the returns on equity and debt were estimates of the long-run returns on those components of capital costs. As noted by the AEMC in the quote at [71] above, the new rules “introduce a new framework”, granting the AER “discretion on the methodology for estimating the required rate of return”, but not changing the underlying cost concept, summarised by the AER as: “the economic understanding that the cost of capital (equity and debt) is a forward-looking opportunity cost”.

73 Besides the requirement (r 87(2)) for the overall rate of return on capital to achieve the ARORO (defined in r 87(3) that the rate of return is commensurate with the efficient financing costs of a BEE with a similar degree of risk), under r 87(5) the AER is required to have regard to:

(a) relevant estimation methods, financial models, market data and other evidence;

(b) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and

(c) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.

74 The AER is also required (r 87(11)) to have regard to:

(a) the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the allowed rate of return objective;

(b) the interrelationship between the return on equity and the return on debt;

(c) the incentives that the return on debt may provide in relation to capital expenditure over the access arrangement period, including as to the timing of any capital expenditure; and

(d) any impacts (including in relation to the costs of servicing debt across access arrangement periods) on a benchmark efficient entity referred to in the allowed rate of return objective that could arise as a result of changing the methodology that is used to estimate the return on debt from one access arrangement period to the next.

#### What the AER decided

75 The AER decided in the Final Decisions that it would not depart from the return on debt methodology that it had proposed in Chapter 6 of its December 2013 Better Regulation Rate of Return Guideline (**RoR Guideline**) and its Draft Decision for ActewAGL and Preliminary Decision for Jemena. At page 10 of Attachment 3 of the Jemena Final Decision the AER said, with an equivalent statement in the ActewAGL Final Decision (omitting footnotes):

We are satisfied that the allowed rate of return … we determined achieves the allowed rate of return objective (ARORO). That is, we are satisfied that this allowed rate of return is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to Jemena Electricity Networks (JEN) in providing standard control services.

and later at pp 11-12 of attachment 3:

Consistent with our preliminary decision, we agree there should be a transition from the on-the-day approach to the trailing averaging approach to estimating the return on debt. However, we disagree with the hybrid form of transition proposed in JEN's (initial) regulatory proposal.

In its revised proposal, JEN departed from its initial position to apply a transition to the trailing averaging approach at all. It now proposes to not apply a transition (that is, to immediately move to a trailing average approach). We disagree with JEN on this and a number of other components of the rate of return.

and further at p 13:

This gradual transition will occur through updating 10 per cent of the entire return on debt each year to reflect prevailing market conditions in that year (a full transition). This approach is consistent with the approached we proposed in the Guideline and adopted in the preliminary decision.

76 Discussing the ARORO, the AER said, at pages 17 and 18 (omitting footnotes):

We are to determine the allowed rate of return such that it achieves the ARORO. The objective is:

…that the rate of return for a distribution network service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the distribution network service provider in respect of the provision of standard control services.

The regulatory regime is an ex-ante (forward looking) regime. As such, we consider a rate of return that meets the ARORO must provide ex-ante compensation for efficient financing costs. This return would give a benchmark efficient entity a reasonable opportunity to recover at least its efficient financing costs. This is a zero net present value (NPV) investment condition, which can be described as follows:

The zero NPV investment criterion has two important properties. First, a zero NPV investment means that the ex-ante expectation is that over the life of the investment the expected cash flow from the investment meets all the operating expenditure and corporate taxes, repays the capital invested and there is just enough cash flow left over to cover investors’ required return on the capital invested. Second, by definition a zero NPV investment is expected to generate no economic rents. Thus, ex-ante no economic rents are expected to be extracted as a consequence of market power. The incentive for investment is just right, encouraging neither too much investment, nor too little.

Under our regulatory framework, a benchmark efficient entity’s assets are captured in its RAB. The return on capital building block allows a benchmark efficient entity to finance (through debt and equity) investment in its network. Because investments usually carry a degree of risk, to satisfy the zero NPV condition the allowed rate of return must be sufficient to compensate a benchmark efficient entity's debt and equity investors for the risk of their investment.

77 The AER went on to discuss, at pages 18-19, efficient financing costs:

A key concept in the ARORO is ‘efficient financing costs’. Because the market for capital finance is competitive, a benchmark efficient entity is expected to face competitive prices in the market for funds. Therefore, we consider efficient financing costs are reflected in the prevailing market cost of capital (or WACC) for an investment with a similar degree of risk as that which applies to a service provider in respect of the provision of regulated services.

…

We consider employing a rate of return that is commensurate with the prevailing market cost of capital (or WACC) is consistent with the zero NPV investment condition (see above). We also consider economic efficiency more generally is advanced by employing a rate of return that reflects rates in the market for capital finance. Similarly, Partington and Satchell interpret efficient financing costs as the opportunity cost of capital, which is a market rate of return for assets with a given level of risk.

78 At page 24, the AER said the following regarding the benchmark efficient entity (omitting a footnote):

We consider a benchmark efficient entity *with a similar degree of risk as that which applies to the service provider in the provision of its regulated services* would be ‘a pure play, regulated energy network business operating within Australia’ acting efficiently. To understand this position, it is essential to understand the relationship and distinction between risk and expected returns. All else being equal, we consider an unregulated monopoly will have higher risk and higher expected returns than a regulated monopoly. This is because regulation:

* mitigates monopolies from being able to extract monopoly rents, thereby constraining potential profits
* increases the certainty of the revenue stream, thereby reducing risk.

For clarity, regulation reduces both risks that are compensated through the rate of return (for example, demand risk) and risks that would not be compensated through the rate of return (for example, by allowing cost pass throughs for unsystematic risks such as industry-specific tax changes or geographic-specific natural disasters). We only focus on risks that are compensated through the rate of return (compensable risks).

79 In what it makes clear is a later addition to its thinking, the AER said at page 3-279, within Appendix H, which deals in detail with the return on debt approach (omitting footnotes):

It is important to note that a debate has now arisen, since the submission of proposals in the matters under consideration, as to whether a benchmark efficient entity would be unregulated. In their recent revised proposals, service providers submitted that a benchmark efficient entity with a similar degree of risk in respect of the provision of regulated services must be an unregulated business. This followed the Tribunal hearing in an application for review of revenue determinations by Networks NSW, and ActewAGL which resulted in the Tribunal recently forming the view that a benchmark efficient entity referred to in the ARORO is likely not a regulated entity.

and further at page 3-280:

Nevertheless, even if a benchmark efficient entity was necessarily unregulated, we do not consider this would affect our conclusions. Our approach to the cost of debt would be applicable to an unregulated firm if it had a similar degree of risk to the service provider in providing regulated services. Further, irrespective of whether a firm is regulated or not, efficient financing costs reflect the current (or prevailing) forward looking costs observed in capital markets.

80 The AER referred to the 2012 Rule Amendments in support of its imposition of a transition as follows in Appendix H, at pages 3-290 to 3-291 (footnotes omitted):

We note that when undertaking the rule change in 2012 the AEMC added in clause 6.5.3(k)(4) that states (emphasis added):

(k) In estimating the return on debt under paragraph (h), regard must be had to the following factors…

(4) any impacts (including in relation to the costs of servicing debt across regulatory control periods) on a benchmark efficient entity referred to in the allowed rate of return objective that could arise **as a result of changing the methodology** that is used to estimate the return on debt from one regulatory control period to the next.

This clause is explicit in requiring us to have regard to any impacts on a benchmark efficient entity that could arise as a result of a change of methodology. This would include having regard to any material changes in the present value of a benchmark efficient entity's regulated revenue purely due to changing the debt estimation methodology. If such changes increased a benchmark efficient entity's value, then this would benefit its equity holders at the expense of consumers. Conversely, if such changes decreased a benchmark efficient entity's value, then this would cost its equity holders but provide a short term financial benefit to consumers (which may not be a long-term benefit to the extent this results in underinvestment). As such, this methodological change may also have a material negative impact on the confidence in the predictability of the regulatory regime. We consider the AEMC’s guidance on the intent of this clause is consistent with our approach (emphasis added):

The purpose of the fourth factor is for the regulator to have regard to **impacts of changes in the methodology** for estimating the return on debt from one regulatory control period to another. Consideration should be given to the potential for consumers and service providers to face a significant and unexpected change in costs or prices that may have negative effects on confidence in the predictability of the regulatory arrangements.

81 The AER added:

We have taken this factor into account and consider our transitional approach is consistent with the intent of this factor. Nevertheless, we consider that irrespective of this factor, our transition approach meets the requirements of the ARORO, NEO/NGO and RPPs.

82 With this background, the AER argued in broad terms as follows.

83 It considered that the on-the-day approach could contribute to the ARORO and was therefore open to it. In particular, the present value of a benchmark efficient entity’s allowed revenues would be sufficient to compensate it for its efficient financing costs.

84 The trailing average approach, once fully implemented in the manner it proposed, would similarly compensate a benchmark efficient entity for its efficient financing costs. Compared to the on-the day approach, a trailing average approach would lead to less volatile cash flows (a smoother price path over the long run, across regulatory periods); would in the view of some stakeholders reduce service providers’ risk; and receive broad stakeholder support. Thus the AER favoured moving from the on-the-day approach to the trailing average approach. The question was how to implement the change.

85 The AER’s method of phasing in the trailing average approach would contribute to the ARORO because it would be approximately revenue neutral in the sense that it would not change the benchmark efficient entity’s present value. These conclusions about the three methodologies – on-the-day, fully implemented trailing average, and phased-in trailing average - were supported by a mathematical analysis of present value calculations.

86 By contrast, the AER argued, the applicants’ proposed methodology would over-compensate them. The allowed return on debt would be greater than the benchmark efficient entity’s efficient financing costs. This was because the current market cost of debt was considerably below the average market cost of debt over the past nine years. Implementing the trailing average approach immediately would effectively treat the applicants as if they now faced a cost of debt considerably higher than in fact they do face. It would thus not produce a rate of return that would be commensurate with achievement of the ARORO.

87 If, instead, the trend of interest rates had been up rather than down, immediate implementation of the trailing average approach would cause under-compensation of the benchmark efficient entity, contrary to the ARORO.

88 Allowing service providers to choose a methodology according to whether known historical data favours them potentially biases regulatory outcomes.

#### The submissions to the Tribunal

89 ActewAGL’s grounds for review were set out at [103]-[118] of its application for review, and Jemena’s grounds were set out at [68]-[82] of its application. The grounds covered essentially the same issues. As was the case throughout the hearing, counsel were asked to provide short written outlines of their oral submissions prior to making them. The two applicants’ outlines covered the same territory, but differed in the way they were expressed. The two applicants did not rely on a common set of submissions. Given the length of the elaboration of grounds for review in the applications, and the overlap in arguments made, the Tribunal has considered it best consider the grounds for review by reference to a melding of the outlines of oral submissions.

90Jemena’s attack on the AER’s decision had a number of elements, as follows:

 The “efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to [Jemena]” (r 6.5.2(c)) are actual costs incurred by the benchmark business under its debt instruments (facilities and bonds). The business has contractual commitments to pay interest under those instruments. This business would hold a staggered portfolio of fixed rate debt. The trailing average approach calculates the efficient financing costs of a benchmark business for Jemena.

 The AER’s construction of “efficient financing costs” is that they are prevailing costs.

 The interest rates payable on existing debt instruments held by the benchmark business are not at the prevailing rate for new debt in 2016. Only new debt taken out by the business in 2016 is at the prevailing rate. Therefore, the prevailing rate cannot sensibly be applied as a measure for the entire cost of debt.

 Whilst the on-the-day approach was required under the previous rules, the rules were amended and now give primacy to the allowed rate of return objective.

 The “on-the-day” approach (which is continued by the AER’s transition, in decreasing weights over 10 years) is neither the prevailing cost of debt nor a measure of the “efficient financing costs” of Jemena. The on-the-day approach is only an appropriate measure for a business that finances (e.g. a new entrant) or refinances all of its debt requirements at the commencement of the regulatory control period. That is not Jemena, or an appropriate benchmark for Jemena. The on-the-day approach and the AER’s transition do not calculate the “efficient financing costs of a benchmark efficient entity” in the case of Jemena. Thus the AER’s transition is not in accordance with clause 6.5.2 of the *NER*.

 The AER’s new “NPV = 0” approach from its Final Decision is not found in r 6.5.2 and cannot override the requirements of r 6.5.2. In any case, the analysis is incorrect. For both the on-the-day approach and the transition to a trailing average, it applies an interest rate that does not represent the efficient financing costs of an existing business. Moreover, the notion of revenue neutrality is meaningless in relation to debt costs. It makes no sense to speak of debt costs over the life of assets.

 Rule 6.5.3(k)(4) provides a transition for businesses that have changed their position in an irrecoverable way on the basis of the previous regulatory regime such as by entering into hedge contracts. Jemena is not such a firm.

 Other reasons given by the AER for a transition – avoidance of bias and measurement difficulties – are not valid reasons to fail to apply the ARORO.

 The AER’s change of reasoning was not foreshadowed to the service providers in contravention of r 11.60(k) of the *NER* and s 16(1)(b) of the *NEL*.

91 In a similar vein but with some variations, ActewAGL submitted, in summary, as follows.

 The AER’s decision is predicated on a misconstruction of r 6.5.2 of the *NER*. The AER’s construction: embodies a so-called ‘NPV = 0’ criterion over the “life of the RAB”; interprets “efficient financing costs” as relating *solely* to “prevailing” interest rates (but does not require that those rates be prevailing at any particular time); and does not require any consideration of the financing practices of the BEE.

 Those concepts cannot be reconciled to the text of r 6.5.2. Rather, it appears that the AER has reached what it considered to be the ‘right’ outcome, and then had sought to fit that conclusion into r 6.5.2. That is not a proper basis for statutory construction.

 Further, the AER’s financial theory (ie, that the trailing average approach should only be adopted if there is a transition that preserves “revenue neutrality” over the “life of the RAB” with the on-the-day approach) depends on its conclusion that the on-the-day approach necessarily satisfies the ARORO. That conclusion is untenable. Accordingly, the theoretical premise of the AER’s decision (even leaving aside its construction issues) is flawed.

 ActewAGL contended that the phrase “efficient financing costs” in r 6.5.2(c) related to all matters that bear upon the financing costs that the BEE, acting efficiently, would incur during the regulatory period, including its efficient financing practices. This construction is consistent with the extrinsic material, the text of r 6.5.2 of the *NER*, and the Ausgrid and EnergyAustralia Decisions.

 ActewAGL has no debt. Therefore, the change in debt methodology to the trailing average approach has no “impact” on it for the purposes of r 6.5.2(k)(4) of the *NER*. Given that it is common ground that a BEE would hold a staggered portfolio of debt, and finance (or refinance) 10 per cent of that portfolio each year, the trailing average approach should therefore be applied without a transition.

 Given that it was common ground that the trailing average methodology was most likely to represent the debt portfolio of a business in a competitive market, then, consistently with the conclusions expressed by the Tribunal in *Ausgrid*, the efficient financing costs of ActewAGL for the purposes of r 87(3) of the *NGR* ought to have been determined on that basis. That is to say, ActewAGL should have been allowed a return on debt based on the trailing average approach without a transition.

92 The AER submitted:

 The meaning of the rules governing the allowed rate of return in the *NER* and the *NGR* is informed by the finance and economic principles that underpin the rules, and the extrinsic materials that explain the ‘problems’ sought to be overcome by the previous rules and the purposes of the amended rules.

 In its Final Decisions, the AER decided that:

* 1. either the on-the-day approach or the trailing average approach, consistently applied, would contribute to the achievement of the allowed rate of return objective;
  2. switching immediately from an on-the-day approach to a trailing average approach would be unlikely to be revenue-neutral;
  3. in the current market circumstances, an immediate adoption of a trailing average would lead to an excess positive return in favour of the service provider relative to the efficient return in the market.

 The on-the-day approach to estimate the return on debt is consistent with the allowed rate of return objective, as it reflects the prevailing cost of capital.

 The term “efficient financing costs” in the allowed rate of return objective encompasses both return on equity and return on debt. The words “financing costs” therefore refer to the cost of capital. ‘Efficient’ should be given its full meaning consistent with the NEO.

 The AER did not err in concluding that an immediate change from an on-the-day approach to a trailing average approach would lead to an excess positive return in favour of the service provider relative to the efficient return in the market.

 The AER did not err in concluding that *NER* r 6.5.2(k)(4) permitted it have regard to the potential for consumers and service providers to face a significant and unexpected change in costs or prices resulting from a change in the methodology of estimating the cost of debt.

 The AER did not err in having regard to the potential for regulatory bias and historical data issues that arise from immediately adopting a trailing average approach.

 No error arises by reason that the Final Decisions explained the AER’s reasons in greater depth than the Preliminary Decisions, including by reference to the underlying economic principles.

 Even if the AER’s decision involved error, the Tribunal should affirm the decision because the alternative would not result in a materially preferable NEO decision.

#### The Full Court’s decision

93 As mentioned above, after the hearing by the Tribunal in the present proceedings, the Full Court’s decision on its judicial review of the Tribunal’s *Ausgrid* decision was handed down, on 24 May 2017. That decision is *Australian Energy Regulator v Australian Competition Tribunal (No 2)*. The participants in this Tribunal’s reviews were given the opportunity to make further submissions.

94 ActewAGL relevantly made the following submissions in respect of the Full Court’s decision.

* First, the Court concluded that the required benchmarking for the purposes of cl 6.5.2(c) extends to the debt management practices of the BEE. In particular:

a) at [531]-[533], in the context of discussing the 2012 Rule Amendments, the Court implicitly accepted that the purpose underlying cl 6.5.2 was to provide an incentive for service providers to adopt efficient financing practices, and that to that end, ‘the required benchmarking is with respect to the efficiency of **financing and risk management practices** that are to be expected according to the disciplines of a workably competitive market’; and

b) at [571] the Court concluded that: cl 6.5.2(c) is an ‘efficiency yardstick’ of the costs that would be incurred in a workably competitive market; that considered against that yardstick, ‘the service provider’s **debt management practices** will either be efficient or inefficient’; and that for the purposes of considering whether an ‘impact’ of the kind referred to in cl 6.5.2(k)(4) exists, it is relevant to consider whether the service provider has ‘already implemented a **debt structure** that satisfies a required aspect of the intended benchmark efficiency’ in cl 6.5.2(c) (that ‘required aspect’ being the service provider’s debt management practices) [emphasis added].

* The effect of these conclusions is that the expression ‘efficient financing costs’ in cl 6.5.2(c) is not (as the AER now contends) confined solely to interest rates.
* Secondly, the Court concluded that the service provider’s actual debt management practices are relevant to considering whether an ‘impact’ of the kind referred to in cl 6.5.2(k)(4) exists that should be taken into account when transitioning from one methodology for estimating return on debt to another. In particular:

a) at [557]-[560], the Court acknowledged that the AEMC’s purpose in promulgating the 2012 Rule Amendments (including cl 6.5.2(k)(4)) was to address the debt management practices that service providers had entered into in reliance on previous methodologies for estimating return on debt deployed by the AER;

b) at [571], as discussed above, the Court reasoned, when considering whether an ‘impact’ of the kind contemplated by cl 6.5.2(k)(4) exists, it is relevant to consider whether the particular service provider's actual circumstances, including its debt management practices, are efficient when assessed against the benchmark.

* Those conclusions cannot be reconciled with the AER’s current construction of cl 6.5.2(k)(4) as being concerned only with maintaining revenue neutrality for the BEE between two methodologies over the ‘life of the RAB’ or 10 year term of the BEE’s debt portfolio. Not only does the AER’s construction not allow for any consideration of debt management practices (as it is focussed solely on interest rates), but it also does not allow for any consideration of the individual circumstances of the service provider (i.e. its debt management practices) in considering the ‘impact’ of a change in debt methodology.
* Thirdly, the Reasons are directed to the assessment of efficient costs during the current regulatory period, and the ‘impact’ of a change in debt estimation methodology from the previous regulatory period to the current regulatory period (see especially at [571]-[573]). The Reasons do not contemplate assessment of efficient financing costs over multiple past and future regulatory periods. The Reasons therefore cannot be reconciled with the AER’s current construction and application of the ARORO, which is that the assessment of ‘efficient financing costs’ is to be assessed over the ‘life of the RAB’, which spans an indeterminate number of regulatory periods (or alternatively, the 10 year term of the BEE’s debt portfolio, which spans the two previous regulatory periods).
* Based on its construction of cll 6.5.2(c) and 6.5.2(k)(4), the Court concluded that no impacts of the kind referred to in cl 6.5.2(k)(4) exist that are 'apposite to the benchmark efficient entity' for any NSW DNSP or ActewAGL (at [572] and [573]). The effect of this conclusion is that the trailing average approach must be applied without a transition for ActewAGL because '…there was no meaningful, relevant impact on the benchmark efficient entity apposite for ActewAGL that could be said to have arisen from the change in methodology for estimating its allowed rate of return. The occasion or need for transition simply did not exist' (at [573]).
* The Court's conclusions about ActewAGL are express and emphatic in their terms. They apply to the matter before the Tribunal at present. There is no basis to distinguish the Court's reasons. It follows that the AER has made a reviewable error in applying a trailing average approach with transition, in that it misconstrued r. 87 of the NGR (which mirrors cl 6.5.2).

95 Jemena made the following submissions:

* *First*, the Full Court has adopted a construction of cl 6.5.2 of the NER whereby, in the case of debt, it is concerned with the *costs* of the entity in question, but measured by reference to an efficiency yardstick, being the benchmark efficient entity, where different entities can have different benchmarks: at [529]-[532], [536]-[537], [539], [543], [571]. At [571], the Full Court observed:

*While, for this purpose, the benchmark efficient entity is a construct, there is nothing in r 6.5.2(c) which requires one to be oblivious to the actual circumstances, including the debt management practices, of the particular service provider whose debt costs are being benchmarked. It is the efficiency of that service provider’s costs that is to be benchmarked according to what would be required by the disciplines of a workably competitive market. Considered against the yardstick of the efficient financing costs of the benchmark, the service provider’s debt management practices will either be efficient or inefficient. Where inefficiency exists, that inefficiency should not be reflected in the allowed rate of return for that service provider. Only efficient financing costs are to be allowed.*

* The Full Court’s position is therefore consistent with the position adopted by JEN in its submissions in reply at [54]. As explained by JEN in the hearing before the Tribunal, the trailing average approach, for an entity in the position of JEN, has the benefit of matching the costs that would be incurred by an efficient business in the position of JEN, both under existing facilities and under new facilities as they are taken out over the regulatory control period. The on-the-day approach does not. As it happens, the trailing average approach also provides an appropriate signal for efficient investment for a business in the position of JEN because it provides the current rate for new debt, whereas the on-the-day approach does not because it provides a single rate for all debt (both existing and new) across the whole 5 year period, and indeed for 10 years (in decreasing weighting) under the AER’s transition.
* More generally, the decision of the Full Court is not consistent with a construction of “efficient financing costs” in cl 6.5.2 as meaning “prevailing rates in the market”, or any such combination of prevailing rates in the market and costs of the (efficient benchmark) business as the AER may choose in its discretion.
* *Secondly*, the Full Court has adopted a construction of cl 6.5.2(k)(4) of the NER which is consistent with JEN’s construction, but inconsistent with the AER’s construction: at [560], [570]-[574]. The Full Court concluded that cl 6.5.2(k)(4) was concerned with impacts arising from a change of methodology on a business that had entered into commitments on the basis of the previous methodology. Thus the Full Court concluded, at [572]-[573], that in the case of the Networks NSW businesses, who did not have hedge contracts, and in the case of ActewAGL, which did not have debt, there was no scope for the application of cl 6.5.2(k)(4) because there were no “impacts”. As the Full Court observed at [573], “the occasion or need for a transition simply did not exist”. The Full Court therefore adopted the approach to the construction of cl 6.5.2(k)(4) advanced in JEN’s submissions in chief at [80]-[85], and rejected the approach advanced in the AER’s submissions at [61]-[66].
* This is significant, because cl 6.5.2(k)(4) was the sole clause that the AER could point to as providing textual support for considering wider NPV=0 issues over the life of the asset (whatever that means). In particular, the Full Court’s construction of cl 6.5.2(k)(4) does not support: (a) the AER’s approach of not permitting a business to recover its efficient debt costs on the basis that the perpetuation of a mismatch is consistent with some broader NPV=0 consideration, or (b) the AER’s approach of considering the effect of changing a methodology on “expectations” at the time of entry into debt facilities.
* The position of JEN is relevantly indistinguishable from the position of ActewAGL, which was the subject of the conclusion of the Full Court at [573].

96 The AER made the following submissions (footnotes omitted):

* The conclusions of the Full Court in *AER v Australian Competition Tribunal (No 2)* bear upon, but are not determinative of, the grounds of review raised by the Applications of Jemena (under the NEL) and ActewAGL (under the NGL) with respect to the return on debt topic.
* The AER acknowledges that the ultimate conclusion it reached in its Final Decisions with respect to the return on debt topic for Jemena and ActewAGL was materially the same as the conclusion it reached in its Final Decisions for the NSW/ACT service providers, the subject of the Tribunal decision in *Re Public Interest Advocacy Service and Ausgrid* [2016] ACompT 1 (the **Ausgrid Tribunal decision**) and related decisions and the Full Court’s decision in *AER v Australian Competition Tribunal (No 2).*
* However, the reasoning in the two sets of decisions differs materially. Having received the adverse decision from the Tribunal in the NSW/ACT matters, the AER reconsidered the proper approach to the applicable rules on the return on debt topic for the Jemena and ActewAGL Final Decisions, including the economic considerations relevant to the applicable rules and the AER’s decision, and explained its reasons for decision in greater depth with reference to the economic principles that underlie the NER. In the Jemena and ActewAGL Final Decisions, the AER considered that the previously applied on-the-day methodology had provided ex-ante compensation for efficient financing costs (referred to as the NPV=0 condition), consistent with the ARORO (and the NEO/NGO and the revenue and pricing principles). The AER concluded that compliance with the ARORO requires the change of methodology to be implemented in a forward-looking manner so that the change was revenue neutral and did not affect the net present value of the future cash flows of the service providers through the PTRM (avoiding windfall gains or losses to the service provider and consumers). That conclusion was independent of, but consistent with, the considerations arising under NER cl 6.5.2(k)(4).
* As recorded by the Tribunal in the Ausgrid Tribunal Decision, the primary errors asserted by the service providers on the part of the AER were adopting the concept of the benchmark efficient entity as a regulated entity and adopting a “one size fits all” benchmark efficient entity for the purposes of each of its decisions. The Tribunal found that once the step is taken of starting with a benchmark efficient entity that has the characteristics of a participant in a competitive market, the AER’s approach to transitioning the return on debt estimate, and the application of clause 6.5.2(k)(4), must be reconsidered.
* In *AER v Australian Competition Tribunal (No 2),* the Full Court found no error in those conclusions of the Tribunal. The Full Court concluded that NER cl 6.5.2(c) does not, in terms, posit the benchmark efficient entity as either a regulated entity or an unregulated entity, although the degree of risk to be attributed to the benchmark efficient entity may be affected by the fact that the service provider’s provision of the relevant services is regulated. The Full Court concluded that clause 6.5.2(k)(4) contemplates the possibility that there may not be a single benchmark efficient entity; the Full Court also considered that, in light of the AER’s conceptualisation of efficient financing costs of a benchmark efficient entity in its reasons in the NSW/ACT matters, the AER had not identified any impacts from changing methodologies that would activate clause 6.5.2(k)(4).
* The issues for determination in the present matter differ materially from the issues determined in the Ausgrid Tribunal Decision and *AER v Australian Competition Tribunal (No 2).* That is because the AER’s reasoning for its conclusion in the Jemena and ActewAGL Final Decisions differed materially from the NSW/ACT matters. As a consequence, the Applications for Review of Jemena and ActewAGL, while worded differently, raise the following common issues for determination:

a) the proper construction of the expression “efficient financing costs” within the allowed rate of return objective in NER clause 6.5.2(c) and “efficient costs” within the revenue and pricing principles in s 7A of the NEL;

b) the economic reasons for using prevailing rates (also referred to as the “on the day” methodology) in determining a return on debt (and the cost of capital more generally) and the economic reasons for changing to a trailing average methodology;

c) the economic consequences of changing from an “on the day” methodology to a trailing average methodology and whether the change, without a forward looking transition, would conflict with the NPV = 0 condition which underpins the building block framework prescribed by the NER;

d) the proper construction of NER cl 6.5.2(k)(4);

e) whether the AER was correct to have regard to the difficulties associated with historical debt data and the potential for bias in regulatory decision making;

f) whether the AER failed to consult with Jemena and ActewAGL with respect to its further reasoning for its return on debt decision.

**The benchmark efficient entity issue**

* ActewAGL’s Application (but not Jemena’s Application) raises the issue of the proper characterisation of the benchmark efficient entity. ActewAGL contends that the AER erred because it characterised the benchmark efficient entity as a regulated entity, while it ought to have characterised it as an unregulated entity.
* The AER acknowledges that the effect of the decision in *AER v Australian Competition Tribunal (No 2)* is that it was incorrect for the AER to characterise the benchmark efficient entity as regulated. However, that does not mean that ActewAGL has established a ground of review that would require the AER’s decision to be set aside. That is for the following interrelated reasons.
* First, ActewAGL’s ground of review is itself incorrect. The Full Court did not conclude that the benchmark efficient entity should be characterised as unregulated, as propounded by ActewAGL. Indeed, the Full Court recognised that the risks of regulation may affect the degree of risk that the benchmark efficient entity bears.
* Second, the question whether the benchmark efficient entity is characterised as regulated or unregulated was not material to the AER’s Final Decision with respect to ActewAGL (or, for that matter, the other service providers before the Tribunal in the current matters). As explained above, the AER’s decision to adopt a forward-looking transition arose because this was the only option that it considered met the ARORO and the NEO/NGO. This decision did not depend on the conception of the benchmark efficient entity.
* The AER specifically considered the character of the benchmark efficient entity in section H.1.2 of its reasons. In that section, the AER found that the relevant benchmark efficient entity was ‘a pure play, regulated energy network business operating within Australia’. The AER noted that a debate had now arisen with the service providers as to whether the benchmark efficient entity should be unregulated. The AER found that whether the benchmark efficient entity was regulated or unregulated made no difference to its ultimate conclusion on debt transition:

*…even if a benchmark efficient entity was necessarily unregulated, we do not consider this would affect our conclusions. Our approach to the cost of debt would be applicable to an unregulated firm if it had a similar degree of risk to the service provider in providing regulated services. Further, irrespective of whether a firm is regulated or not, efficient financing costs reflect the current (or prevailing) forward looking costs observed in capital markets.*

* Third, before granting any relief after a ground of review is established, the Tribunal must consider the materially preferable test set out in NGL s 259(4a). The Tribunal ought not be satisfied that a materially preferable NGO decision would be achieved by setting aside the AER’s decision and remitting the matter to the AER to take into account the correct characterisation of the benchmark efficient entity. Having regard to the AER’s expressed reasons as extracted in the preceding paragraph, the Tribunal can be satisfied that a change in the characterisation of the benchmark efficient entity would not alter the AER’s decision.

**NER cl 6.5.2(k)(4) and NGR cl 87(11)(d)**

* Both the Jemena and ActewAGL Applications raise as an issue the proper construction of NER cl 6.5.2(k)(4) and NGR cl 87(11)(d).31
* In *AER v Australian Competition Tribunal (No 2),* the Full Court considered the manner in which the Tribunal in the NSW/ACT matters had interpreted NER cl 6.5.2(k)(4) and concluded that there was no error in the Tribunal’s approach. However, for the following reasons, the Full Court’s decision does not determine the issues raised by Jemena and ActewAGL, nor the outcome of the “materially preferable test”.
* First, the Full Court was not required to provide, and did not provide, an exhaustive analysis of the meaning of clause 6.5.2(k)(4). Its task was narrower: to determine whether the Tribunal had erred in its construction of the clause in the light of the facts and issues raised before it.
* Second, the Full Court was not required to consider, and did not consider, the specific issue raised in this matter: whether clause 6.5.2(k)(4) includes changes to revenue (positive or negative) that arise solely from a change in methodology and which would deviate (positively or negatively) from the recovery of efficient financing costs in accordance with the NPV=0 condition. While this matter was raised in grounds of review before the Tribunal in the Ausgrid matter, those grounds were not ultimately addressed by the Tribunal because it found error at an earlier point (the characterisation of the benchmark efficient entity). Accordingly, the issue was not considered by the Full Court.
* Third, the AER’s decision to adopt Option 2 (the transition) had regard to, but did not depend on, NER cl 6.5.2(k)(4) and NGR cl 87(11)(d). As noted above, the AER based its decision on the ARORO, and considered that that conclusion was consistent with NER cl 6.5.2(k)(4) and NGR cl 87(11)(d).

#### The Tribunal’s analysis

97 The requirement of r 6.5.2(h) is to estimate the return on debt for a particular service provider such that it contributes to the achievement of the allowed rate of return objective. First, the Tribunal notes that in estimating the return on debt, the AER was faced with:

 revised proposals by the applicants for immediate implementation of an HTA of interest rates (the initial proposals having been for a form of transition to that result);

 the fact that in previous regulatory periods, the on-the-day approach had been applied (and indeed mandated);

 a new (as of 2013) Rule which provides a discretion, without limitation, to choose between the on-the-day approach, an HTA, or some combination of the two, subject to r 6.5.2(h) and via it, r 6.5.2(c).

In short, it had a choice, subject to compliance with r 6.5.2(h), and with the *NEL* and *NER* more generally.

98 The AER was thus in the position contemplated by s 16(1)(d) of the *NEL*. This section was considered by the Full Court, which said (at [159]):

…that provision requires, where there are 2 or more possible reviewable regulatory decisions that will or are likely to contribute to the achievement of the national electricity objective, the AER must make the decision that it is satisfied will or is likely to contribute to the achievement of that objective to the greatest degree.

Extrapolating from that requirement, the Tribunal considers that the AER must, in applying r 6.5.2(h), consider which of a choice of estimates, or estimation approaches, would contribute, or be likely to contribute, to the achievement of the ARORO to the greater or greatest degree. This has implications for the manner in which the Tribunal has assessed the applicants’ claims.

99 In the Tribunal’s view, the applicants’ submissions are best dealt with in the following categories of claims:

1. That the immediate implementation of the trailing average would (uniquely for the applicant DNSPs) contribute to the ARORO.

2. That the AER was in error in considering that its transition to a fully implemented HTA could contribute to the ARORO in the case of the applicant DNSPs.

3. That the AER could only decide to impose a transition under r 87(11)(d) and was not in fact empowered to do so by that rule.

4. That the AER’s decision miscarried because of a failure to foreshadow its change of reasoning.

In respect of Claims 1 and 2, both applicants emphasised that the construction of “efficient financing costs of the BEE” was the key issue, and that on which the AER was in error.

100 The essence of Jemena’s case was that a service provider ought to be compensated for its efficient debt costs, with efficiency measured by reference to a BEE; and that efficient debt costs would be those associated with a staggered portfolio of debt, refinanced 10 per cent each year. Senior Counsel for Jemena described debt obligations as costs of the business like other costs of the business, and stated that existing businesses have a staggered portfolio of debt. ActewAGL’s case was presented slightly differently, with the starting point being the AER’s wrong construction of “efficient financing costs” as concerning only interest rates, whereas they related to all matters that bear upon the financing costs that the benchmark efficient entity acting efficiently would incur during the regulatory period, including its efficient financing practices. Since the efficient debt portfolio of a benchmark efficient entity, which was not otherwise regulated by a debt methodology imposed on it by the AER, would be a staggered portfolio of debt as at the commencement of this access arrangement period, then that that is how ActewAGL’s return on debt should be assessed.

101 The Tribunal considers first the construction of “efficient financing costs”.

102 The applicants, in their submissions made subsequent to the Full Court’s 2017 decision, relied on statements there regarding efficient financing costs as set out above. It is worth setting out a number of the Full Court’s statements. The following points are particularly relevant:

* In promulgating the 2012 Rule Amendments, the AEMC considered that the most appropriate benchmark to use in the regulatory framework for all service providers was the efficient private sector service provider.
* The required benchmarking is with respect to the efficiency of financing and risk management practices that are to be expected according to the disciplines of a workably competitive market. The correct approach to estimating the return on debt is by reference to the efficient financing costs of a benchmark efficient entity, rather than the actual financing costs of the particular service provider.
* Plainly enough, a workably competitive market is not a regulated market. But, viewing the efficient financing costs of a benchmark efficient entity as those that would be incurred in a workably competitive market does not mean that, for the purposes of construing and applying the allowed rate of return objective, the benchmark efficient entity must then be fixed with the character of an unregulated entity.
* The degree of risk by which the efficient financing costs of the benchmark efficient entity are to be estimated must be similar to the risks that apply to the relevant service provider in providing the standard control services. The allowed rate of return objective is no more prescriptive than that. The assessment of that risk is a matter for the AER in the first instance.
* “a similar degree of risk” is to be *attributed* to the benchmark efficient entity. That degree of risk may be affected by the fact that the service provider’s provision of the relevant services is regulated. But … this does not mean that the benchmark efficient entity must be characterised as a regulated entity.
* Thus … it is not appropriate to characterise the benchmark efficient entity as either a regulated or an unregulated entity. The allowed rate of return objective does not do so, and there is no need to do so. The allowed rate of return objective confers on the benchmark its particular, necessary and defining characteristics: it must be efficient and it must face “a similar degree of risk” as that which applies to the particular service provider in question in relation to the provision of standard control services. But the attribution of the relevant “efficiency” (i.e., in respect of financing costs) is to be gauged by the disciplines of a workably competitive market (i.e., an unregulated market).
* If one service provider’s risk was different to another service provider’s risk, … the benchmark efficient entity for the first service provider could not be the benchmark efficient entity for the second service provider because different degrees of risk would need to be attributed to the benchmarks appropriate to those service providers…. [T]here will not be an identical benchmark efficient entity for all service providers…. Indeed, the statement of the allowed rate of return objective in r 6.5.2(c) contemplates, at least, the possibility of different benchmark efficient entities, as does r 6.5.2(k)(4).
* In the context of a consideration of r 6.5.2(k)(4): …[T]he undoubted function of r 6.5.2(c) is to provide … an “efficiency yardstick” for the particular costs under consideration. This was plainly the AEMC’s intention in the 2012 Rule Determination. While, for this purpose, the benchmark efficient entity is a construct, there is nothing in r 6.5.2(c) which requires one to be oblivious to the actual circumstances, including the debt management practices, of the particular service provider whose debt costs are being benchmarked. It is the efficiency of that service provider’s costs that is to be benchmarked according to what would be required by the disciplines of a workably competitive market. Considered against the yardstick of the efficient financing costs of the benchmark, the service provider’s debt management practices will either be efficient or inefficient. Where inefficiency exists, that inefficiency should not be reflected in the allowed rate of return for that service provider. Only efficient financing costs are to be allowed. But none of this means that, in applying r 6.5.2(c) to estimate the return on debt under r 6.5.2(h), and in considering whether impacts of the kind referred to in r 6.5.2(k)(4) exist that should be taken into account for that purpose, fictions should be imposed when the service provider has, for example, already implemented a debt structure that satisfies a required aspect of the intended benchmark efficiency.

103 The applicants put particular weight on the last of those passages. The Tribunal notes that it is essential to read the Full Court’s reasons in the context of the questions it was considering. Those questions were: whether the Tribunal erred in law in concluding that the AER was bound to address the RoR Objective on the basis that the benchmark efficient entity must be an unregulated entity; and whether the Tribunal erred in its construction of r 6.5.2(k)(4) of the *NER*. However, the question immediately facing this Tribunal is the construction of “efficient financing costs” for the purpose of giving effect to r 6.5.2(b) and r 6.5.2(h). While the passage above deals with the application of r 6.5.2(h), it does so in the context of construing r 6.5.2(k)(4).

104 In making that point, the Tribunal does not seek to distinguish the words of the Full Court in any of the passages quoted above. Indeed, they have been quoted because of their relevance. But it also considers that the construction of “efficient financing costs” needs to be considered in the context of what is required by r 6.5.2 as a whole, in the context of the NEO and the NGO, and in the light of the specific claims by the applicants about how the return on debt should be estimated.

105 It is true that among the attributes of debt costs is that they constitute obligations to make payments, and in that regard are similar in many ways to other obligations to meet costs of doing business, such as paying wages and salaries, and other components of operating expenditure (opex). But the regulatory scheme treats debt very differently.

106 First, there is no building block for debt. It is not included in opex, and there is no explicit, separate allowance (in dollar terms) for the cost of debt. Rather, there is a building block for return on capital. The return on capital implicitly – through the manner in which it is estimated – contains components for a return on equity and a return on debt. But the return on capital is not calculated separately for equity and debt. The return on capital (in dollar terms) is found by multiplying the rate of return (on capital) by the regulatory asset base (electricity) or the projected capital base (gas).

107 In the economic theory on which the regulatory scheme is based, the rate of return on an investment depends on the risk characteristics of that investment. It is a required rate of return: required *ex ante* by the investor. It is also called the cost of capital. Perhaps counter-intuitively, the cost of capital is not determined by the financial cost of raising debt and equity, but by the risk of the investment. That is because, as usually in economics, it is an opportunity cost. The question is how it can best be estimated.

108 As with so much of the regulatory framework governing the rate of return, there is a large body of economic theory underlying the Rules. That economic theory is broadly accepted by all the stakeholders, but there is disagreement about some of the details, and in particular how the theory should be applied. It is entirely uncontroversial in conventional economics that the required rate of return on an investment is determined by the risk of the investment. Under the usual, generally-accepted, assumptions, in a workably competitive market that rate of return will be just sufficient to give the investment’s stream of cash flows a net present value of zero.

109 This is an *ex ante* concept. That is, the expectation of the investor at the time of making the investment is that the positive cash flows, discounted at the required rate of return, will equal the cost of the investment. Obviously, investors will seek an NPV higher than zero, but competition will prevent that occurring. So the theory goes.

110 It is no leap to consider that a company’s required rate of return is determined by the risk of its investments, i.e of its assets, and can be regarded similarly. All sorts of things might change after the investment is made. It is the possibility of different outcomes that gives rise to the risk in the first place. The investment might turn out better or worse than expected. Of course, in normal circumstances, the debt-holders will expect to get paid, and the equity-holders bear the risk, but debt also has its risks.

111 Moreover, the required rate of return is independent of the financing of the investment or, in the case of a firm’s assets, of its capital structure. That is, the required rate of return depends on the risk characteristics of the firm’s assets, not on the nature of its liabilities (debt and equity).

112 How is that required rate of return to be estimated? More specifically, how is the required rate of return for a regulated electricity or gas service provider to be estimated? Broadly, the idea – again uncontroversial – is that the regulator seeks to estimate the required rate of return (or cost of capital) of a company that has a similar degree of risk to the regulated company but is operating in a workably competitive market. That (opportunity) cost of capital will be efficient in the economic sense, which goes beyond the sense of “with a minimum of waste”. It will lead to the regulated company charging prices for its services that promote efficient investment in, and efficient operation and use of electricity and gas services for the long-term interests of consumers. That is, the required rate of return, properly estimated, will serve the NEO or NGO.

113 The Rules, as now amended, guide the regulator towards the estimate of the required rate of return through the ARORO. It is obvious, then, that the phrase “efficient financing costs” must be construed consistently with the efficiency thrust of the NEO and NGO, ie in terms of the accepted notions of economic efficiency.

114 The allowed rate of return has two components: the return on equity and the return on debt. The allowed rate of return is to be determined such that it **achieves** the ARORO. The components of the allowed rate of return cannot individually achieve the ARORO. They are to be determined so as to **contribute** to the achievement of the ARORO. Achievement of the ARORO consists of the rate of return being commensurate with the efficient financing costs of the BEE.

115 In the Rules, “return on equity” and “return on debt” are rates, ie percentages. The allowed return on equity and return on debt in dollar terms are never calculated. Instead, the estimated rate of return on equity and rate of return on debt are averaged using equity and debt weights to generate the estimate of the overall rate of return on capital, also known as the weighted average cost of capital. Of course, arithmetically, one could instead calculate the dollar allowed return on equity, apply the appropriate weight to it, and add it to the weighted dollar allowed return on debt. The fact that the Rules do not take that approach reflects the underlying theory.

116 The rate of return on capital has primacy. The use of the rates of return on equity and debt is a means to the end of estimating that overall rate of return, and to then determining the return on capital building block. From its total allowed revenue, the service provider must meet its debt obligations along with its opex, capex and other expenditures. The Rules are careful not to imply that there is a guaranteed return to the shareholders. They get what is left. If the service provider can operate more efficiently than expected – including no less in its debt management than its management of opex, for example – the shareholders may receive a higher rate of return than was expected in the forward-looking framework.

117 This is reflected in the fact that the ARORO relates to the overall rate of return – the rate of return is to achieve the ARORO – while the rate of return on debt and the rate of return on equity are to be determined so as to contribute to the achievement of the ARORO. At this point a stark difference might be noted in the degree of prescription in the Rules for estimating the return on equity compared to the return on debt. The return on equity is to be estimated such that it contributes to the ARORO, and in making the estimate regard must be had to the prevailing conditions in the market for equity funds. That is the sum of the guidance given. By contrast, the approach to the estimation of the return on debt is prescribed in far more detail, as has been set out above.

118 And yet in each case it is the ARORO to which reference is made to govern the estimation. It can be seen that the ARORO has a lot of work to do in the case of the return on equity. The AER has very wide discretion in deciding on an approach. In fact, the practice is to apply the Capital Asset Pricing Model (**CAPM**), as explained in the RoR Guideline, which spends considerably more space explaining the return on equity than the return on debt. The CAPM is a highly simplified and elegant framework embedded in a broader finance theory that assumes that an investor holds a fully diversified portfolio and abstracts greatly from the day-to-day realities of equity markets (such as transactions costs). This framework is consistent with the forward-looking rate of return.

119 We add that the use of the word “commensurate” in the ARORO might be regarded as an acknowledgement that the efficient financing costs of a BEE are not something that can be estimated with precision. The injunction to achieve the ARORO, while unequivocal, has an unavoidably aspirational aspect to it. The determinations of the returns on equity and debt are, equally unavoidably, at a remove from the achievement of the ARORO; hence the requirement that their determination “contribute”.

120 Whether or not the Rule acknowledges an imprecision in the task facing the regulator, it is certainly the case that practitioners would never claim that a required rate of return can be estimated with precision.

121 The point of mentioning the return on equity is to note that in construing the ARORO, and in particular “efficient financing costs of a BEE with a similar degree of risk as that which applies to the DNSP”, it is clear that all the constituent terms, and indeed individual words, are redolent with the economic theory – generally accepted by stakeholders – of the whole investment framework given effect to by the Rules. Ultimately that framework is employed in the regulatory scheme to serve the NEO and the NGO for the long-term interests of consumers. Those objectives embody notions of productive, allocative and dynamic efficiency. It would be a mistake to think of efficient costs in the context of return on debt purely in terms of efficient debt management practices. The broader objectives need to be kept in mind.

122 The Tribunal sees no tension between this view and the statements by the Full Court, set out at [102] above. In particular, the term “efficient financing costs” embodies the *ex ante*, forward-looking, expectations-based framework briefly described above. This does not seem to be in contention when expressed in those broad terms.

123 A question arises whether the term “efficient financing costs of a BEE” needs to be interpreted differently in estimating the return on debt from how it is interpreted in determining the return on equity. In the case of the return on debt, the AER has a somewhat narrower discretion. The Rules give more guidance than in the case of the return on equity. Nevertheless, the discretion is still considerable. In particular, although attention is given to the time at which a BEE raises debt – at the time of or shortly before the making of the determination, or over a historical period prior to the commencement of a regulatory year, or a combination – that Rule is expressed in non-mandatory terms (“the methodology may be designed…”) and is without relevant limitation.

124 The Tribunal concludes that “the efficient financing costs of a BEE” has the same meaning whether applied to the estimation of the return on equity or the return on debt, and should not be seen as carrying deeper or more specific implications in one case than the other. However, there is no avoiding the fact that estimating the return on debt is a very different process from estimating the return on equity. We shall return to what the AEMC had to say about that difference.

125 With that background, we turn to the four claims by the applicants.

#### Claim 1: The immediate implementation of the trailing average approach would contribute to the achievement of the ARORO

126 There were several assertions of what was common ground between the parties. The Tribunal can only be confident that all parties seem to agree that it is a reasonable assumption that a BEE for either of the applicants would, in due course, ten years after implementation of the HTA approach (either immediately or with a transition), hold a staggered portfolio of debt, refinanced 10 per cent each year. Clearly the AER does not accept that the BEE would already, at the start of the regulatory period to which its Final Decisions apply, have such a staggered portfolio in place. The applicants assert that the BEE in their cases would. Jemena concedes that the BEE for another firm, such as a new entrant, might not have a staggered portfolio in place.

127 Effectively the claim is that a BEE for Jemena or ActewAGL would have adopted that financing practice ten years ago (or earlier) because it is the efficient debt management practice in a workably competitive market.

128 The Tribunal has a number of concerns. The first is that it cannot be said that the efficient debt management practice of any particular BEE *would be* to have had in place a staggered portfolio of fixed-rate ten-year debt (although reference was made to the apparent acceptance by the Tribunal of that proposition in *Ausgrid* at [865]). Given the vast array of financing options in modern capital markets, it would be heroic indeed to try to specify what the debt financing arrangements of a BEE would look like. In fact, neither Jemena nor ActewAGL has any debt; both are 100 per cent equity-financed. That is itself indicative of the range of efficient actual debt management practices available. Many strategies are used in workably competitive markets to raise debt including, indeed, hybrids of debt and equity.

129 It is unclear what debt management practices a BEE with similar risk to the applicant service providers would adopt. The only characteristic that the Rules specify for the BEE is that it have similar risk to the company for which it is the benchmark (specifically, risk in respect of the provision of reference services). No evidence was presented to suggest that this degree of risk is uniquely associated with – or in any way associated with – the fact that the company was not a new entrant but had been operating under the regulatory regime for some years. Yet this was the only characteristic proposed as making it almost self-evident that the BEE would have a staggered portfolio of debt. To emphasise the point: the BEE is not to be supposed to ape the characteristics of the company for which it is the benchmark in extraneous respects such as debt management arrangements. It is only risk that is germane. This is all the more clear when the BEE is specific to a company that has no debt, as in the case here.

130 In fact, no persuasive evidence was adduced that staggered debt portfolios are the norm for firms with any particular risk characteristics in a workably competitive market.

131 The AEMC did not make the 2012 Rule Amendments because there was evidence that in a workably competitive market firms adopt a staggered portfolio of ten-year fixed-rate debt. Rather its concern was that an efficient debt management practice for DNSPs might be to manage debt in that way, and that the on-the-day approach was preventing or discouraging it; and that the on-the day approach was forcing inefficient debt-management practices on some service providers.

132 The 2012 Rule Amendments should be seen not as changing the method of estimating the cost of debt so as to be in accord with a debt management practice that had been in place for ten years, but as removing an impediment to that practice where it was efficient. Importantly, the Rule change did not mandate the new approach but allowed it, without limitation, as a regulatory option along with the on-the-day approach or a combination of the two. That is very far from making a finding, or adopting a fiction, that a BEE would have had a staggered portfolio of debt in place for ten years.

133 But more than that, the Tribunal does not consider that the ARORO can be interpreted such that the term “efficient financing costs” should generate and govern a search for supposedly superior actual debt management practices in the market. Such a search would have to consider the risk/return trade-off in various debt instruments. As the Full Court made clear, a BEE is a construct which, while specific to a given DNSP, is simply a means to the end of judging whether financing costs are efficient. And that exercise is undertaken to assess whether the overall rate of return on capital is commensurate with efficient financing costs.

134 This is consistent with the AEMC’s statements:

The final rule provides the regulator with sufficient discretion on the methodology for estimating the required return on equity and debt components but also requires the consideration of a range of estimation methods, financial models, market data and other information so that the best estimate of the rate of return can be obtained overall that achieves the allowed rate of return objective.

and:

…the return on debt estimate should reflect the efficient financing costs of a benchmark efficient service provider. It should try to create an incentive for service providers to adopt efficient financing practices and minimise the risks of creating distortions in the service providers’ investment decisions.

and:

… the new rules allow the regulator (and the appeal body) to focus on whether the overall rate of return meets the allowed rate of return objective, which is intended to be consistent with the NEO, the NGO and the RPP.

There is no hint that the AEMC considered that there was a single right answer to estimating the return on debt, or a range of single right answers for different service providers. Rather, its whole emphasis was on giving the AER a discretion and a guiding light.

135 The HTA approach is consistent with an assumption that the BEE has refinanced, and will continue to refinance, one-tenth of its debt each year. This is a simplifying assumption. It is far from a finding that the efficient financing costs of a BEE would in fact involve such a debt structure and debt instruments. That is asking too much of the ARORO and the concept of efficient financing costs. The objective is more modest. It is not to specify efficient debt management practices but, by reference to a workably competitive market, to ascertain whether the return on capital (overall) is commensurate with efficient financing costs. As part of that, it is to have the return on debt contribute to that exercise.

136 In the case of Jemena and ActewAGL there is little difficulty in accepting the artificial construct of a BEE that would have refinanced the whole of its debt at the start of the regulatory period because that would be efficient given the risk attributed to it, being a similar degree of risk as applying to the relevant DNSP in the provision of standard control services, and noting the Full Court’s comment that the degree of risk may be affected by the fact that the service provider’s provision of the relevant services is regulated. To see this, we need to consider what is involved in such an attribution of degree of risk. Little was said about this in submissions to the Tribunal, so the Tribunal will not attempt a definitive analysis.

137 However, it is conventional that a firm’s risk relates to the variability of the cash flows generated by its assets. In the case of a firm regulated under the Rules, its cash flows are partly determined as allowable revenue. Under the on-the-day approach, a firm that is able to borrow at around the time its allowed revenue is set is guaranteed revenue – a cash flow that is less variable than in a workably competitive market – that includes a component very close to what is needed to just cover its actual (not opportunity) borrowing costs. For such a firm, the BEE with a similar degree of risk could thus reasonably be constructed as one that borrows “on the day”.

138 This is not to characterise the BEE as a regulated entity. It is simply to examine how to attribute the similar degree of risk to it.

139 The applicants argue that firms in their circumstances could not adopt that approach. But since they do not borrow at all, it is hard to see why the construct should be considered out of court. In any case, a BEE for either of them would have had the risk characteristics of a service provider whose allowed revenue included a return on its capital base calculated, in part, on a return on debt estimated by the on-the-day approach. It is not clear to the Tribunal why one should assume that such a BEE would have had a staggered portfolio in place over the last ten years.

140 To the extent that ActewAGL’s argument rested on the assumption that the BEE is an unregulated entity, which it considered to have been the Tribunal’s position in *Ausgrid,* that argument must be rejected in the light of the Full Court’s decision that the BEE is neither regulated nor unregulated, *per se*.

141 The Tribunal therefore does not accept that the immediate implementation of the HTA would *necessarily* contribute to the achievement of the ARORO in the case of Jemena or ActewAGL.

142 So far we have passed over the objection that the AER’s analysis is necessarily in error because it took the BEE to be a regulated entity, contrary to the subsequent findings of the Full Court. We note that in its Final Decisions the AER stated that its approach to the cost of debt would be applicable to an unregulated firm if it had a similar degree of risk to the service provider in providing regulated services; and that irrespective of whether a firm is regulated or not, efficient financing costs reflect the current (or prevailing) forward looking costs observed in capital markets. We accept the AER’s approach to be consistent with what we have said above about the efficient financing costs of the BEE, with the proviso that our discussion of the relationship between forward-looking costs and prevailing market conditions is presented later in these reasons.

143 We come now to the AER’s conclusion that immediate implementation of the HTA would not contribute to the achievement of the ARORO. That conclusion was based on the fact that the current market cost of debt is considerably below the average over the last nine years. Implementing the HTA immediately would, in the AER’s view, provide a rate of return higher than needed to compensate the applicants for their efficient financing costs.

144 The Tribunal considers that unless the applicants did have legacy debt as described – and they did not – it is indisputable that providing a return on debt partially based on the much higher interest rates of some years ago would give the applicants a windfall gain. This would be inefficient. The allowed revenue would be higher than needed to cover their costs. They do not have debt borrowed at the higher legacy interest rates, or any debt. There is no need – and it would be inappropriate – to adopt a fiction that a BEE would have had such debt obligations. Nothing in the ARORO could support an outcome so starkly at odds with the long term interests of consumers. It would simply be a transfer from consumers to the service providers. And the Full Court said, at [571]: “… there is nothing in r 6.5.2(c) which requires one to be oblivious to the actual circumstances, including the debt management practices, of the particular service provider whose debt costs are being benchmarked.”

145 The applicants submitted that the Full Court’s reasons do not contemplate an assessment of the efficient financing costs over multiple past and future regulatory periods, and that this invalidates the AER’s reasoning in respect of windfall gains (and the use of the NPV = 0 analysis). The Tribunal considers that the Full Court’s reasons in respect of the construction of r 6.5.2(k)(4) are not relevant to that part of the AER’s reasoning.

146 The AER also considered that, had the trend in interest rates been up rather than down, immediate implementation of the HTA would under-compensate the service providers, and the Tribunal agrees. It cannot be doubted that no service provider would in those circumstances propose an immediate implementation of the HTA. The Tribunal considers it a relevant consideration whether an approach to estimating the return on debt is neutral with respect to past interest rates.

#### Claim 2: The AER was in error in considering that its transition to a full trailing average (TTA) could contribute to the ARORO

147 The AER concluded that its phased implementation of the HTA could contribute to achievement of the ARORO. Both applicants argue that it is a step in the AER’s reasoning to that conclusion that the on-the-day approach could contribute to achievement of the ARORO, and that it could not. Hence, the AER was in error. Embedded in these claims is a dispute about the prevailing cost of capital.

148 The applicants claim that the AER had incorrectly equated the concept of efficient financing costs in the ARORO with prevailing debt interest rates, ignoring other factors that influence the financing decisions of a BEE. For instance, the AER stated (ActewAGL Final Decision at page 3-17):

A key concept in the ARORO is ‘efficient financing costs’. Because the market for capital finance is competitive, a benchmark efficient entity is expected to face competitive prices in the market for funds. Therefore, we consider efficient financing costs are reflected in the prevailing market cost of capital (or WACC) for an investment with a similar degree of risk as that which applies to a service provider in respect of the provision of regulated services.

149 In reaching this conclusion the AER relied upon the advice of Partington and Satchell (*Report to the AER: Discussion of the allowed cost of debt*, 5 May 2016 (**Partington and Satchell**)). In particular, Partington and Satchell stated that the WACC should be calculated on the basis of prevailing interest rates:

The theory of finance (and common practice) is that in computing the weighted average cost of capital for use in NPV calculations it is the current required returns on debt and equity that should be used for the WACC. Thus with respect to the cost of debt it is the current cost of debt (as currently required in the market) that should be used in the WACC, not the historic cost of debt. (Partington and Satchell, page 14)

150 The AER summarised this and other advice in that report and consequently concluded:

(Partington and Satchell) interpret efficient financing costs as the opportunity cost of capital, which is a market rate of return for assets with a given level of risk. They advise the opportunity cost of debt is generally measured using the (appropriately benchmarked) yield to maturity. They also consider our use of a benchmark BBB+ credit rating and ten year term is appropriate.

We consider that productive, allocative and dynamic efficiency are advanced by employing a return on debt that reflects prevailing rates in the market for funds. This will also promote the long term interests of consumers in line with the National Electricity Objective/National Gas Objective (NEO/NGO). (ActewAGL Final Decision p.3-279, footnotes excluded)

151 A similar conclusion was included in the Jemena Final Decision, at page 3-278.

152 There was dispute over when the rates were or are “prevailing”, with it even being asserted that the AER never said when they were prevailing. The Tribunal considers it clear that Partington and Satchell are referring to rates in existence at each point in time. At any given point in time, those are the rates that should be used. This is not only consistent with the plain meaning of “prevailing” and the passages above (“current required returns”) but is also consistent with – and the only interpretation that is consistent with – the forward-looking nature of the cost of capital, remembering that it is an opportunity cost.

153 Consequently, the Tribunal concludes that the AER’s statement in the Final Decisions that “we consider efficient financing costs are reflected in the prevailing market” does not constitute an error as the applicants claim. The question is what guidance that provides for estimating a return on debt for incorporation in the rate of return on capital, given that market interest rates fluctuate, and how the AER applied the principle of a current required rate of return. That is the essence of the dispute about the NPV = 0 condition. The problems with the on-the-day approach that motivated the legislative changes arise largely from its use of the rate prevailing at the start of the regulatory period rather than at each point of time during the regulatory period.

154 As noted previously, the AER took the view that the return on debt must satisfy a zero NPV condition that does not appear explicitly in the *NGL* or *NGR* (or the *NEL* and *NER*). It states that:

... we consider a rate of return that meets the ARORO must provide ex-ante compensation for efficient financing costs. This return would give a benchmark efficient entity a reasonable opportunity to recover at least its efficient financing costs. This is a zero net present value (NPV) investment condition ... (ActewAGL Final Decision page 3-16; Jemena Final Decision page 3-18).

155 The Tribunal agrees that, as expressed above, the zero NPV condition is consistent with the NGO and RPP and considers that, consistent with achievement of the ARORO, it represents a criterion that should be satisfied, to the greatest degree practicable, by the approach used to assess the rate of return (cost of capital) and the returns on equity and debt. The AER then considered the zero NPV investment condition by reference to Partington and Satchell:

The zero NPV investment criterion has two important properties. First, a zero NPV investment means that the ex-ante expectation is that over the life of the investment the expected cash flow from the investment meets all the operating expenditure and corporate taxes, repays the capital invested and there is just enough cash flow left over to cover investors’ required return on the capital invested. Second, by definition a zero NPV investment is expected to generate no economic rents. Thus, ex-ante no economic rents are expected to be extracted as a consequence of market power. The incentive for investment is just right, encouraging neither too much investment, nor too little. (Partington and Satchell, p.14).

156 Translated into a property of the revenue allowance for a regulated service provider, this condition also restates the cost recovery requirements in the RPP, although limited to a specific investment over its life span. It would require that a regulated entity be allowed a stream of revenues over the life of the asset that, at the time the investment is made, have a net present value, measured at the prevailing WACC, equal to the cost of the asset.

157 The Tribunal considers that to be entirely conventional economic thinking in perfect accord with the Rules and is potentially a test that the AER could use, together with the other criteria specified in the *NGR*, to establish its choice between approaches. We disagree with the applicants that the AER elevated the criterion above the Rules.

158 At this stage we need to summarise. The objective is to implement the requirement that the ARORO be achieved by the determination of the allowed rate of return. That requirement comes from a view that the outcomes in workably competitive markets are to be emulated by reference to the efficient financing costs of a benchmark efficient entity for the service provider in question. The conventional view (which the Tribunal accepts) is that that involves a forward-looking cost of capital, which in turn implies the use of prevailing, or current, rates in the market; and that that in turn implies an NPV = 0 test. And all that comes back to use of the prevailing cost of capital leading to prices and revenues that provide the right incentives for the BEE to invest efficiently and for its services to be used efficiently, as they would be in a workably competitive market.

159 But this is about the BEE, not the service provider. The service provider is not free to make investment decisions based on its WACC. Rather, the Rules govern in detail what capital expenditure is allowed to be added to the capital base and thus generate revenue – as part of the return on the capital base building block – at the allowed rate of return. (The Rules relating to capital expenditure differ between the electricity and gas regulatory regimes.)

160 It bears reiterating that this whole process is targeted on making a forward-looking estimate of the overall rate of return. Thinking in terms of an allowance for debt is likely to lead to error, especially if the allowance is thought of as compensation for borrowing costs incurred in the past at interest rates then prevailing.

161 The applicants argued that their proposal was superior to the on-the-day approach because it updated one-tenth of the return on debt to the rate prevailing at the start of each regulatory year. But the transition to the HTA decided upon by the AER has this same property. The idea seems to be that new investment decisions during the regulatory period are given the correct signal because they will, by assumption, be funded by the one-tenth of total debt that is assumed to be borrowed in that year at the rate prevailing at the start of that year.

162 Thus, it is said that the rate of return that the firm has regard to in considering new investment is not its WACC, but the one-tenth of its WACC that is based on the latest debt interest rate. (In fact the argument was generally put ignoring that it is the rate of return that is relevant to investment decisions, not the return on debt, as if the investment were fully debt financed. Perhaps it was even assumed that the new investment is fully financed by debt.)

163 The Tribunal sees no support for that proposition in the economic theory of investment, and it is contrary to the advice from SFG Consulting, with which the Tribunal agrees, to the AEMC, which is discussed below. The proposition is part of a view that the return on debt can and should provide an allowance to compensate for past borrowings and simultaneously provide the signal for efficient new investment decisions. Indeed, it was claimed that there was no tension between those aims. The Tribunal disagrees. It is a misunderstanding of the role of the opportunity cost of capital.

164 The question arises: if the rate of return on capital is a forward-looking concept, how can historical interest rates on debt figure in the estimation of the return on debt, which requires prevailing rates? That question can equally be asked of the HTA and the on-the-day approach, because each incorporates past interest rates rather than current interest rates, at least as the regulatory period progresses. (For example, by the second year, in the on-the day-approach the rate used is “out of date”.) The answer, so it appears to the Tribunal, is that adherence to the prevailing rate principle cannot be achieved in practice, and nor can full consistency be achieved between the estimation of the return on equity and the return on debt.

165 This issue is set out starkly in the report to the AEMC by SFG Consulting at the time of the Rule change proposals:

13. … The rule change … that the cost of debt allowed by the regulator should reflect interest costs on debt issued prior to the regulatory period … would represent a fundamental change to the principles which underpin the regulated rate of return. It would also embed a clear inconsistency between the principles which underpin the cost of debt and equity components of the regulated rates of return. Specifically, the cost of equity component would reflect the return equity holders require to encourage them to commit to a new project today; while the cost of debt component would reflect the return debt holders required to entice them to commit funds in a prior period.

14. In all likelihood, the historical indexing approach … will produce cost of debt estimates which exhibit lower variation over time from one determination to the next. If this time-series stability promotes a regulatory objective then it should be considered. However, it should also be made clear that this computation does not represent an estimate of the prevailing cost of funds at the time of the determination.

15. In short, the regulated rate of return will not be an estimate of the cost of capital. The principle which underpins the regulatory framework in Australia is to estimate a price which equates the present value of expected cash flows to the regulated asset base. If the regulated rate of return is set at a rate other than the cost of capital this will no longer hold.

166 This strong view is not reflected in the AEMC’s Rule Determination, where the dilemmas involved are discussed to a degree, but not entirely satisfactorily. The AEMC said, at page 44, in relation to the rate of return on capital:

It was determined that a robust and effective rate of return framework must be capable of responding to changes in market conditions. If the allowed rate of return is not determined with regard to the prevailing market conditions, it will either be above or below the return that is required by capital market investors at the time of the determination. The commission was of the view that neither of these outcomes is efficient, nor in the long-term interests of energy consumers.

167 Then, dealing with the question of consistency between the estimation of the return on equity and the return on debt, at page 64, it said:

If a historical average is used to estimate the allowance for the return on debt, there is no requirement for the resulting estimate, or any part of it, to constrain the estimate of the allowance for the required return on equity. The return on equity must reflect the prevailing conditions in the market as it is a forward-looking financial concept. The estimation of an historical average is a different exercise altogether, and one estimate does not constrain the other.

…

The final rule also requires that the return on equity estimation to have regard to the prevailing conditions in the market for equity funds. There is no corresponding requirement on the allowance for the return on debt, since the final rule (and the draft rule) allows the return on debt to be estimated with reference to an historical average as well to the prevailing conditions in the market.

The final rule makes clear the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt.

and:

The Commission has decided not to reference “prevailing conditions in the market for funds” in the overall rate of return objective. This is because the objective would then be in conflict with the allowance for the return of debt where it is estimated on a trailing average basis. The Commission considers that it is clear from the return on equity provisions that the “prevailing conditions” concept continues to apply there, and that it also does apply, to the extent possible, for the return on debt estimation.

and, at page 66:

Also, references to “prevailing conditions” are not meant to exclude from any consideration historical or realised returns. However, the Commission does not consider that any drafting changes to the draft rule are required for the final rule to give effect to this. The final rule (as with the draft rule) is drafted in sufficiently broad terms to allow for such financial concepts to be taken into account for the purposes of developing appropriate estimation methodologies.

168 It seems to the Tribunal that there is a tension between the AEMC’s concerns that:

 first, if the overall allowed rate of return is not determined with regard to the prevailing market conditions then inefficient outcomes not in the long term interests of consumers would ensue; and secondly

 the return on equity must reflect prevailing conditions in the market as it is a forward-looking concept; and thirdly

 the estimation of the return on debt might not recognise prevailing conditions, and (therefore) could not be allowed to constrain the estimation of the return on equity; and fourthly

 the “prevailing conditions” concept continues to apply to the overall rate of return but could not be specified because there would then be a conflict with the estimation of the return on debt; and finally

 nevertheless the “prevailing conditions” concept does apply, to the extent possible, to the return on debt estimation.

The final passage quoted above deals with a different issue: the fact that making an estimate that reflects prevailing conditions may require the use historical data. That is certainly the case in estimating the return on equity. The situation in respect of the estimation of the return on debt is different. Current interest rates are set by competitive interactions between borrowers and lenders in the market. There is no need to have reference to past interest rates. In short, interest rates can be directly observed; the return on equity cannot.

169 The passage “the ‘prevailing conditions’ concept … does apply, to the extent possible, for the return on debt estimation” is telling. In the Tribunal’s view it properly reflects the fact that use of the HTA approach represents a departure from forward-looking rates of return, as set out in the SFG Consulting report. That approach was made possible by the Rule changes as an option to overcome difficulties with the application of the on-the-day approach, at least to some service providers. And as noted above by the Tribunal, the on-the-day approach also represents a far less than perfect application of the forward-looking concept, even where it can be implemented by a service provider with minimal difficulty through the use of capital market instruments.

170 These comments are consistent with those of the Tribunal in *SAPN*, at [239]:

***Efficient investment and the regulatory approach to debt costs***

NER cl 6.5.2.(k)(3) requires that in setting the cost of debt consideration be given to “the incentives that the return on debt may provide in relation to capital expenditure over the regulatory control period, including as to the timing of any capital expenditure”. While the historical trailing average approach is more compatible with actual debt management practices, it might be thought to be less consistent with determination of a cost of capital, and allowable revenue and prices, required for efficient investment decisions.

171 At this stage we remind ourselves why the HTA was introduced into the Rules as an option to be considered by the AER: to provide a smoother price path over the long run, across regulatory periods, possibly to reduce service providers’ risk, and because it received broad stakeholder support. It was not introduced because the AEMC considered that, in the normal case, it can be assured of representing the efficient financing costs of a BEE with similar risk, as the applicants claim. The departure from even the imperfect reliance on prevailing conditions embodied in the on-the-day approach needs to be kept in mind.

172 Furthermore, the AEMC placed weight on advice from SFG Consulting that:

For a given benchmark (in particular, the assumed credit rating and term to maturity), whether the regulatory allowance is based on the spot rate or an average of that spot rate over time, the average cost of debt will be the same over the long run. That is, changing to an averaging approach will not, in itself, systematically reduce the allowed return on debt.

and further:

Given a particular benchmark for the cost of debt, the long-run average regulatory allowance for the cost of debt will be the same regardless of which method is adopted in the Rules. This means that, over time, consumers will pay the same amount to provide a return to debt holders regardless of which approach is adopted in the Rules;

The Tribunal interprets those passages to mean that if the on-the-day approach were to be applied permanently, or the HTA were applied permanently, the average rate of return on debt would be the same in the long term. As we observed above (also quoting from an SFG report to the AEMC), the HTA would not, when incorporated in the WACC, provide an estimate of the opportunity cost of capital; and the on-the-day estimate would only be consistent with an opportunity cost of capital at the start of the regulatory period. Nor are the comments relevant to the issue of a transition.

173 We turn now to how the AER applied the NPV = 0 criterion. The key issue is as follows. The NPV = 0 criterion relates to the overall rate of return on capital. What can be deduced from it for the return on debt?

174 The AER relied in its Final Decisions on a mathematical analysis to show, it claimed, that the on-the-day approach and its transition to an HTA for the return on debt satisfy the NPV = 0 criterion, while immediate implementation of the HTA does not. This is in Attachment H. The applicants did not refer in detail to Attachment H. Rather, their attack was mounted at a level that did not require an assessment of the actual mathematical formulation. The AER followed the same approach in defending its conclusions. We largely take the same approach in the following discussion, although we have considered it desirable to examine Attachment H in detail.

175 First, even applying the NPV = 0 criterion using the overall rate of return presents difficulties. The RAB of a BEE will comprise a large number of assets of different values, ages and remaining operating lives, and will change in value and composition over time. Applying the Partington and Satchell zero NPV investment condition to those assets individually would suggest a stream of revenues based on all the initial valuations and prevailing rates at their time of acquisition. The aggregate revenue allowance for a return on capital building block implied by that stream could not be precisely implemented within the Rules because the framework requires a single rate of return to be applied each year to a separately defined RAB. Immediately, some approximation is inevitable.

176 The AER’s mathematical analysis of the zero NPV condition treated the RAB as if it was a single asset, as set out in the following passage:

We consider a rate of return that meets the ARORO must provide ex-ante compensation for efficient financing costs (we refer to this as ex-ante efficient compensation).

We consider ex-ante efficient compensation should result in the ex-ante allowed return on capital cash flows having a present value equal to the present value of the ex-ante efficient cost of capital cash flows required to finance the regulatory asset base (RAB). This means we must set, ex-ante, an allowed rate of return for a benchmark efficient entity such that the return on its investment (in its RAB) equals its efficient cost. This is a zero net present value (NPV) investment condition, which is a forward looking concept that shows a benchmark efficient entity is provided with a reasonable opportunity to recover at least efficient financing costs over the life of its investment (in its RAB). (footnotes omitted) (ActewAGL Final Decision page 3-282; Jemena Final Decision page 3-281)

177 The period “over the life of its investment (in its RAB)” is unknown, since the capital stock of a service provider has no fixed lifespan while the provider continues to operate. The AER’s mathematical analysis assumes a finite life stretching over multiple regulatory periods. For simplicity it assumes a fixed value of the RAB throughout the “life of the assets” (with capex exactly offsetting depreciation in each regulatory period and NPV calculations that collapse each regulatory period into a single period with a constant rate of return within that period, reset at the start of each regulatory period).

178 The AER commented:

We note the mathematical explanation in this section is a simplification of reality. We use it to demonstrate the principle that the allowed rate of return should be set (and periodically reset) such that the ex-ante allowed return on (and of) capital cash flows equals the ex-ante cost of a benchmark efficient entity's investment in its RAB (in present value terms). This gives service providers a reasonable opportunity to recover at least efficient financing costs over the term of the RAB.

179 The trouble is that the AER went close to assuming what it sought to prove algebraically. If the BEE can borrow for the regulatory period at the rate prevailing at the beginning of the regulatory period, then the NPV = 0 condition holds, in a more or less trivial way. If the rate of return facing the BEE varies during the regulatory period, as it surely must, then the analysis is at best an approximation. The Rules require that the return on equity be fixed for the regulatory period, and allow for that return on debt to be fixed, but do not require it.

180 The same shortcoming applies, in the Tribunal’s view, to the AER’s mathematical analysis purporting to show that its transition to the HTA satisfies the NPV = 0 condition.

181 The present value analysis necessarily deals with the (overall) rate of return. Translating insights from that analysis to precise results for the return on debt is not to be expected. The Tribunal considers, indeed, that it is intuitively obvious that without strong simplifying assumptions, the NPV = 0 criterion for the rate of return cannot be converted into a precise condition to be applied to the return on debt. The algebra would be intractable. In the Tribunal’s view, the AER’s analysis does not produce proofs of the sort claimed, viz. that the on-the-day approach and fully implemented trailing average approach ensure that the present value of the benchmark efficient entity is unchanged over the regulatory period or the life of the assets.

182 The Tribunal concludes that there are inconsistencies in the AER’s analysis, and that they tend to vitiate some of the reasoning it used to reach its conclusions. The next question is whether they render the AER’s conclusions amenable to the limited merits review available to parties under the *NEL* and the *NGL*.

183 First, the fact that the AER’s NPV = 0 analysis of the on-the-day method is unconvincing does not show that the approach could not contribute to the achievement of the ARORO. The Tribunal regards the NPV = 0 condition as a conceptual tool rather than a formula from which a precise value of the return on debt can be extracted. It is no more than another way of saying that the search required by the ARORO provisions in the Rules is for an estimate of the rate of return that provides *ex ante* compensation for efficient financing costs.

184 There is ample support for the AER’s conclusion that the on-the-day approach to estimating a return on debt can contribute to the ARORO. That is explicit in passages quoted above from the SFG Consulting report and from Partington and Satchell.

185 It is also consistent with the following reasoning of the Tribunal in *SAPN*, at [240]:

By using an on-the-day approach to determine cost of capital and thus allowable revenues, the outcome – in theory at least – is that the DNSP can expect a revenue stream consistent with what a competitive market would generate. Capital investment decisions made at that date which meet a positive NPV condition using the allowed rate of return would be efficient, based on current conditions in the market for funds. In contrast, if the DNSP assessed capital investment options by reference to the rate of return incorporating debt costs allowed from the trailing average approach, inefficient investment decisions could result.

186 Thus, despite the inconsistencies in its analysis and in some of its assertions, the AER was correct, the Tribunal finds, to take the view that the on-the-day approach could contribute to the achievement of the ARORO. It follows that the Tribunal does not accept that the AER’s view that its transition could contribute to the achievement of the ARORO must be in error because, as the applicants submit, it relies on the view that the on-the-day approach could do so.

187 Secondly, the fact that the AER’s NPV = 0 analysis of the on-the-day method is flawed does not imply that the immediately implemented HTA is better. It implies nothing for that approach. We have explained above why we consider that the AER was correct to consider that the immediately implemented HTA would be less likely than the on-the-day approach to contribute to the ARORO.

188 Thirdly, the AER considered, and this is not in contention, that a fully implemented HTA would, in due course, contribute to the ARORO. It sought to get the point of having the HTA approach fully implemented. That seems to be a widely-accepted goal of stakeholders following the AEMC’s Rule change process, although the AEMC did not consider it to be the only correct approach. The Tribunal has expressed a degree of scepticism about the HTA approach because it is a clear departure from an opportunity cost of capital, but accepts that no approach that does apply a true opportunity cost of capital is available, and the HTA approach may have certain advantages compared to the on-the-day approach.

189 In those circumstances, in the Tribunal’s view, the AER was bound to consider alternatives. Setting aside continuation of the on-the-day approach – because the widely-held view is that in due course a fully implemented HTA will be superior – the clear option is a combination of the on-the-day approach and a fully implemented HTA. The transition that the AER decided upon is such a combination. Both the on-the-day approach and the transition are specifically provided for in the Rules and it is clear that the AEMC considered that both could contribute to the ARORO in certain circumstances. It is not clear what the AEMC considered those circumstances would be, or how they would differ from each other, or even if they would differ. Rather, it considered that it was a matter for the AER in each particular case. No compelling argument was ever put why, if the fully implemented HTA approach can contribute to achievement of the ARORO, the transition to that outcome could not also contribute to the ARORO.

190 The Tribunal does not consider that the AER improperly had regard to extraneous matters, but in any case considers that those concerns played no substantial part in its reasoning.

#### Claim 3: The AER could only decide to impose a transition under Rule 87(11)(d) and was not in fact empowered to do so by that Rule.

191 As can be seen in the consideration above, the AER’s reasons for a transition to the HTA do not involve resort to r 6.5.2(k)(4).

#### Claim 4: The AER’s decision miscarries because of a failure to foreshadow its change of reasoning

192 The AER made preliminary decisions when the initial proposals put to it involved a transition to the HTA. Following those decisions, the applicants put revised proposals that involved immediate implementation of the HTA. The AER necessarily addressed the newly proposed approach in explaining why it was not changing its position from that of the RoR Guideline and the preliminary decisions. It had not used the NPV = 0 analysis until the Final Decisions.

193 If this was a departure from the procedural requirements of the Law and Rules, the Tribunal considers that that does not of itself constitute an error providing a ground for review. The grounds of review comprise only the three types of error set out at [11] above.

194 The AER’s failure to provide service providers with an opportunity to advance arguments against its reasoning could deprive it of useful inputs to its reasoning, thus making it more liable to error. Indeed, the Tribunal considers that this is the likely purpose of the provisions in question. But any error, if there is one, must exist apart from matters of procedure.

#### Conclusion

195 This ground of review fails. It is not necessary for the Tribunal to consider the issue of “materially preferable”.

# GAMMA

#### Introduction

196 The building block approach and the post-tax revenue model (**PTRM**) have been described by the Tribunal in *SAPN* in terms which we adopt for introductory purposes. The Tribunal in that case said, at [113ff]:

The NER (r 6.3) specify that the DNSP’s revenue requirement is to be calculated using the “building block” approach. Rule 6.4 provides detail on the building block components. Two components are relevant in this matter. One is the allowed rate of return on capital which is to be calculated in accordance with cl 6.5.2. The NER (cl 6.5.2(d)(2)) specifies that the allowed rate of return “must be … determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in clause 6.5.3.” The second component (cl 6.4.3(b)(4)) is that “the estimated cost of corporate income tax is determined in accordance with clause 6.5.3”.

197 As the Full Court said in *Australian Energy Regulator v Australian Competition Tribunal (No 2)* at [752ff], the context is the determination of a regulated return using a PTRM based on a nominal vanilla WACC. The Rules require consistency in the way the relevant building blocks interact, that is, a post-company tax and pre-personal tax and personal costs basis. The nature of gamma is an estimate to be used in a model. We also note that, at [756], the Full Court said:

… it was not therefore a reviewable error for the AER to prefer one theoretical approach to considering the determination of gamma over another. This means that it is not an error of construction for the AER to focus on utilisation rather than on implied market value. This is not to say that the AER’s approach to gamma is immune from (limited) merits review. For example, if it erred in principle and thereby omitted to take into account a mandatory relevant consideration or arrived at a conclusion which meant that its decision was unreasonable within the meaning of s 71C(1)(d) of the *NEL*, the Tribunal may intervene. It may also be that the AER would err within s 71C(1)(c) or (d) in acting on economic learning outside the mainstream of that discipline, at least if it did so without explaining the basis for so doing.

198 Under the heading “Matters relevant to the making of building block determinations”, r 6.5.2 of the *NER* provided:

**6.5.2 Return on capital**

**Calculation of return on capital**

(a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory year* that is determined in accordance with this clause 6.5.2 (the *allowed rate of return*) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

**Allowed rate of return**

(b) The *allowed rate of return* is to be determined such that it achieves the *allowed rate of return objective*.

(c) The *allowed rate of return objective* is that the rate of return for a *Distribution Network Service Provider* is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the *Distribution Network Service Provider* in respect of the provision of *standard control services* (the *allowed rate of return objective*).

(d) Subject to paragraph (b), the *allowed rate of return* for a *regulatory year* must be:

(1) a weighted average of the return on equity for the *regulatory control period* in which that *regulatory year* occurs (as estimated under paragraph (f)) and the return on debt for that *regulatory year* (as estimated under paragraph (h)); and

(2) determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in clause 6.5.3.

(e) In determining the *allowed rate of return*, regard must be had to:

(1) relevant estimation methods, financial models, market data and other evidence;

(2) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and

(3) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.

**Return on equity**

(f) The return on equity for a *regulatory control period* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.

(g) In estimating the return on equity under paragraph (f), regard must be had to the prevailing conditions in the market for equity funds.

**Return on debt**

(h) The return on debt for a *regulatory year* must be estimated such that it contributes to the achievement of the *allowed rate of return objective*.

(i) The return on debt may be estimated using a methodology which results in either:

(1) the return on debt for each *regulatory year* in the *regulatory control period* being the same; or

(2) the return on debt (and consequently the *allowed rate of return*) being, or potentially being, different for different *regulatory years* in the *regulatory control period*.

(j) Subject to paragraph (h), the methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting:

(1) the return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the making of the distribution determination for the *regulatory control period*;

(2) the average return that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a *regulatory year* in the *regulatory control period*; or

(3) some combination of the returns referred to in subparagraphs (1) and (2).

(k) In estimating the return on debt under paragraph (h), regard must be had to the following factors:

(1) the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the *allowed rate of return objective*;

(2) the interrelationship between the return on equity and the return on debt;

(3) the incentives that the return on debt may provide in relation to capital expenditure over the *regulatory control period*, including as to the timing of any capital expenditure; and

(4) any impacts (including in relation to the costs of servicing debt across *regulatory control periods*) on a benchmark efficient entity referred to in the *allowed rate of return objective* that could arise as a result of changing the methodology that is used to estimate the return on debt from one *regulatory control period* to the next.

(l) If the return on debt is to be estimated using a methodology of the type referred to in paragraph (i)(2) then a resulting change to the *Distribution Network Service Provider's annual revenue requirement* must be effected through the automatic application of a formula that is specified in the distribution determination.

**Rate of Return Guidelines**

(m) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (the *Rate of Return Guidelines*).

(n) The Rate of Return Guidelines must set out:

(1) the methodologies that the *AER* proposes to use in estimating the *allowed rate of return*, including how those methodologies are proposed to result in the determination of a return on equity and a return on debt in a way that is consistent the *allowed rate of return objective*; and

(2) the estimation methods, financial models, market data and other evidence the *AER* proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits referred to in clause 6.5.3.

(o) There must be *Rate of Return Guidelines* in force at all times after the date on which the *AER* first publishes the *Rate of Return Guidelines* under these *Rules*.

(p) The *AER* must, in accordance with the *distribution consultation procedures*, review the *Rate of Return Guidelines*:

(1) at intervals not exceeding three years, with the first interval starting from the date that the first *Rate of Return Guidelines* are *published* under these *Rules*; and

(2) at the same time as it reviews the *Rate of Return Guidelines* made under clause 6A.6.2.

(q) For the avoidance of doubt, nothing prevents the *AER* from *publishing* the *Rate of Return Guidelines* made under this clause 6.5.2 in the same document as the *Rate of Return Guidelines* made under clause 6A.6.2.

199 We set out below, at [209], the provisions of r 6.5.3 of the *NER*.

200 Until 1987 Australia had what is called a classical taxation system under which company profits were subject to company tax, and dividends paid to shareholders were taxable as part of their income (eg as personal income tax). This double taxation of company profits created an incentive to retain profits rather than pay dividends, although the incentive depended on the nature of taxation on capital gains. Equivalently, there was a preference – now removed – for debt financing.

201 Under the current imputation tax system, shareholders can be given franking credits that attach to dividends and which recognise that company tax has been paid. If a dividend of $1 is fully franked (requiring the company in question to have paid sufficient tax), the franking credit is worth 43 cents. This reflects the fact that, to pay a dividend of $1, the company needed to have taxable income of $1.43, on which it paid 30 per cent company tax, i.e. 43 cents. (These figures are slightly rounded.) The 43 cents paid by the company to the Australian Taxation Office (**ATO**) is effectively given back to the shareholder by the ATO when the shareholder lodges a tax return and then taxed in the hands of the shareholder in the same manner as cash dividends. This can result in a tax refund to the shareholder.

202 The system of dividend imputation can be seen as a simple recognition that the company tax paid by the company was paid on behalf of its owners; indeed, pre-paid, where company tax may be thought of as a withholding tax. It removes the double taxation of company profits.

203 In discussions of this sort, it is often assumed that the shareholder pays personal income tax, but, in truth, the shareholder could be a company, or a trust, or a superannuation fund, or a charity. Ultimately, returns accrue to natural persons. The route by which they do so is one of the many, often unstated, complications in considering returns on investment.

204 Clearly the system of tax imputation affects the returns on an investment. The return on investment is central to the Australian (and many another) system of economic regulation (i.e. regulation concerned with the prices charged, revenues received and profits made by certain enterprises subject to such regulation, typically those exhibiting natural monopoly characteristics).

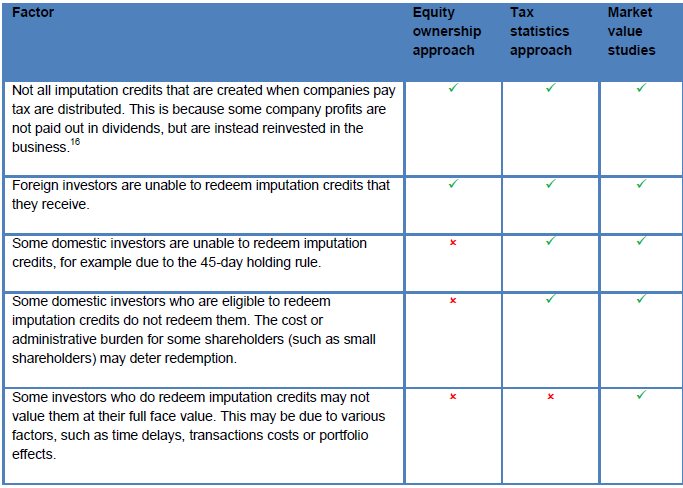
205 As explained by the AER in its Final Decisions (footnotes omitted):

The National Electricity Rules/National Gas Rules (NER/NGR) recognises that a service provider’s allowed revenue does not need to include the value of imputation credits. Under the NER/NGR, service providers are to recover revenue that compensates them for their efficient costs in providing regulated services. This includes, among other things, a return to be provided to investors (return on equity) that is required to promote efficient levels of investment. The more that imputation credits are valuable, the less return that investors require from dividends and capital gains. However, the estimation of the return on equity does not take imputation credits into account. Therefore, an adjustment for the value of imputation credits is required. This adjustment could take the form of a decrease in the estimated return on equity itself.

An alternative but equivalent form of adjustment, which is employed by the NER/NGR, is via the revenue granted to a service provider to cover its expected tax liability. Specifically, the NER/NGR require that the estimated cost of corporate income tax be determined in accordance with a formula that reduces the estimated cost of corporate tax by the 'value of imputation credits' (represented by the Greek letter, , 'gamma'). This form of adjustment recognises that it is the payment of corporate tax which is the source of the imputation credit return to investors.

206 Gamma is a ratio between nought and one: it is the value per dollar of imputation credits created. A dollar of imputation credits created cannot be worth more than a dollar or less than nothing. This part of the Applications for review largely revolves around the meaning of the phrase “value of imputation credits”.

207 It is useful to reproduce here a table provided by the applicants which sets out five categories of investor who may value imputation credits at less than face value, leading to gamma being less than one. The other columns in the table refer to types of evidence for estimating gamma, and are explained later.



(Footnote omitted).

208 We have set out at [18] above r 87A of the *NGR* which corresponds with r 6.5.3 of the *NER*.

209 Rule 6.5.3 was as follows:

**6.5.3 Estimated cost of corporate income tax**

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETCt) must be estimated in accordance with the following formula:

ETCt = (ETIt ×rt) (1 – γ)

where:

ETIt is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider*, operated the business of the *Distribution Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

rt is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the value of imputation credits.

210 In addition, rr 87(4)(b)/6.5.2(d)(2) provide that the allowed rate of return must be determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits referred to in rr 87A/6.5.3.

211 The Tribunal set out the historical context of this part of the *NER* in *Ausgrid* as follows, at [1021]-[1029]:

Gamma was first introduced into the Australian regulatory context in 1998 by the ACCC in the first version of the National Electricity Code (the Code) under Part VII of the *Trade Practices Act 1974* (Cth), in the context of calculating the weighted average cost of capital under the imputation tax system. It was defined as the “value of franking credits or imputation factor”. This definition of gamma was then introduced as part of the weighted average cost of capital formula in Ch 6 of the NER, which commenced operation on 1 July 2005.

In 2006, Ch 6A of the NER relating to transmission services was introduced, which broadly aligned the provision in Ch 6 relating to distribution services as part of the determination of the corporate income tax building block. It defined gamma as “the assumed utilisation of imputation credits, which is deemed to be 0.5”. From 1 January 2008, the definition of gamma as “the assumed utilisation of imputation credits” was adopted in Ch 6.

The current versions of the Rules are the result of a series of amendments culminating in the 2012 Rule Amendments. Unlike the Code which was initially implemented, and as the AER has observed (in Attachment 4 to each of the JGN Final Decision at p 4-6, the ActewAGL Final Decision at p 4-7, and the Networks NSW Final Decisions p 4-7), without footnotes) under the Rules:

the estimation of the return on equity does not take imputation credits into account. Therefore, an adjustment for the value of imputation credits is required. This adjustment could take the form of a decrease in the estimated return on equity itself. An alternative but equivalent form of adjustment, which is employed by the NER/NGR, is via the revenue granted to a service provider to cover its expected tax liability. …This form of adjustment recognises that it is the payment of corporate tax which is the source of the imputation credit return to investors.

As the AER observes, the 2012 Rule Amendments effectively restore the wording of the definition of gamma that appeared in the first version of the NER (incorporating Schedule 6.1 of the Code), as the “value of franking credits”.

As observed, it is agreed between the parties that the change in the definition of gamma in the Rules from the “assumed utilisation of imputation credits” to the “value of imputation credits” does not change the meaning of gamma. Instead, the dispute concerns what that meaning is.

The Rules continue to reflect the relationship between imputation credits and the cost of capital in the method of calculating the rate of return. Relevantly, r 6.5.2(d) of the NER provides that:

…the *allowed rate of return* for a regulatory year must be:

(1) a weighted average of the return on equity for the *regulatory control period* in which that *regulatory year* occurs (as estimated under paragraph (f) and the return on debt for that *regulatory year* (as estimated under paragraph (h)); and

(2) determined on a nominal vanilla basis that is **consistent with the estimate of the value of imputation credits** referred to in clause 6.5.3.

[emphasis in bold added]

Rule 87(2)(4) of the NGR is in similar terms.

As noted elsewhere in these reasons, the 2012 Rule Amendments also introduced a requirement for the AER to periodically publish the RoR Guideline: r 6.5.2(m) of the NER and r 87(13) of the NGR. As required, the RoR Guideline sets out (among other things) the estimation methods, financial models, market data and other evidence the AER proposes to take into account in estimating the value of imputation credits under r 6.5.3 of the NER and r 87A of the NGR: r 6.5.2(n) of the NER and r 87(14) of the NGR. Also as noted elsewhere in these reasons, while the RoR Guideline is not binding on the AER in relation to making individual determinations, if the AER makes a decision that is not in accordance with the RoR Guideline, it must state its reasons for departing from the them: r 6.2.8(c) of the NER and r 87(18) of the NGR.

In accordance with the Rules, as indicated above, the AER published the RoR Guideline in December 2013, setting out (amongst other things) guidelines for estimating imputation credits. In keeping with accepted interpretation and practice, the AER’s gamma decision calculated the value of imputation credits as the product of the distribution rate for imputation credits and the utilisation rate of distributed imputation credits. The estimates outlined at p 23 of the RoR Guideline were an estimate of 0.5 for the value of imputation credits, based on a distribution rate of 0.7 and a utilisation rate of 0.7.

212 Contrary to the position in *Ausgrid*, in the present proceedings there was a difference between the parties as to the significance of the change in the definition of gamma in the Rules.

213 At [1083] the Tribunal stated: “It is … clear that the intent of the changes to the NER and the NEL was to allow the AER greater flexibility to adopt a more sophisticated approach to the cost of capital than previously envisaged by the NER and the NEL.”

214 The comments of the Tribunal in *SAPN* at [118]-[120] are also relevant:

The dispute over gamma needs to be placed in the context of changes made to the NER in November 2012 which changed the terminology used to describe gamma. Prior to that change, gamma was defined as “the assumed utilisation of franking credits”. Subsequently it has been defined (NER cl 6.5.3) as “the value of imputation credits”. No specific definition of what that term means, or how it is to be estimated, is given, other than that it needs to be consistent with the “vanilla WACC” approach.

Those rule changes also gave increased flexibility to the regulator in determination of the value to be chosen for gamma. “The current prescription of the gamma value of 0.5 in clause 6A.6.4 has also been removed to allow the regulator the ability to estimate an appropriate value that reflects the best available evidence at the time of a decision and would therefore result in a rate of return that meets the overall objective.” (AEMC, Rule Determination: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, p 68).

Other than this statement, there appears to be no other explanation given for the change in terminology from “assumed utilisation” to “value”, although the latter term (even though not specifically defined) is more consistent with the flexibility given to the regulator and requirement (NER cl 6.5.2(e)) that:

*In determining the allowed rate of return, regard must be had to:*

*(1) relevant estimation methods, financial models, market data and other evidence;*

*(2) the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and*

*(3) any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.*

215 It might be noted that in 2010, the Tribunal had proposed that an expert study be undertaken to estimate theta, following which in May 2011 it decided (*Energex No 5*) that the appropriate value for theta was 0.35 and for the distribution rate was 0.7, giving a value for gamma of 0.25. That value of gamma was applied in regulatory determinations by the AER until it published the RoR Guideline.

#### What the AER decided

216 The AER’s Final Decisions set a value for gamma of 0.4, having rejected the applicants’ proposed value of 0.25. The effect was to reduce the revenue allowed for the cost of corporate income tax below the amounts sought by the applicants (or equivalently, as explained above, reduce the allowed rate of return on equity).

217 It is common ground that the value of imputation credits, gamma, can be considered to be the product of two ratios: the distribution rate (F), which is the proportion of imputation credits generated that is distributed to investors, and the utilisation rate (theta), which is the per dollar value to investors of imputation credits distributed.

218 The AER considered that it was not required to determine specific values for the distribution rate and utilisation rate separately. Rather, in each case it considered ranges, and consequently a range of values for gamma, from which it made a choice of what it considered the most appropriate estimate.

*The distribution rate*

219 The AER considered that a reasonable estimate of the distribution rate for listed equity was 0.75, and for all equity was 0.70.

*The utilisation rate*

220 As will be seen, the crux of the disagreement between the AER and the relevant applicants is about the utilisation rate. The AER stated that (footnotes omitted) “[t]here is no consensus among experts or regulators on the value of imputation credits or the techniques to use to estimate it” and that:

* The role of the value of the imputation credits in the revenue building block framework suggests that the value of imputation credits is intended to reflect the value of imputation credits to investors in the benchmark efficient entity.
* The framework developed in a 1994 paper by Officer is widely recognised as providing the basis for the value of imputation credits in the building block framework. A key implication of Officer's framework is that the value of imputation credits should be estimated on a before-personal-tax and before-personal-costs basis. This is consistent with a rate of return determined on a nominal vanilla (that is, a post-company tax pre-personal tax and costs) basis. Therefore, we view the value of imputation credits as the proportion of company tax returned to investors through the utilisation of imputation credits.

221 It considered that (footnote omitted):

* or an ‘eligible’ investor, each dollar of imputation credit received can be fully returned to the investor in the form of a reduction in tax payable or a refund. Therefore, we consider that eligible investors have a utilisation rate of 1. Conversely, ‘ineligible’ investors cannot utilise imputation credits and have a utilisation rate of 0. It follows that the utilisation rate reflects the extent to which investors can utilise the imputation credits they receive to reduce their tax or obtain a refund.
* This means imputation credits expected to be utilised should be valued at full face value on a pre-personal tax basis.

222 Elsewhere the AER said that “one dollar of claimed imputation credits has a post (company) tax value of one dollar to investors, before personal taxes and personal transaction costs.”

223 The Tribunal notes that there is a degree of looseness in these statements between “imputation credits expected to be utilised” and “claimed imputation credits”; and as to whether face value applies on a “pre-personal tax basis” or “before personal taxes and personal transaction costs”.

224In reaching its views, the AER relied upon expert reports from Handley and Lally. Among other things these dealt with the development of the Officer framework by Monkhouse and Lally and van Zijl to interpret Officer’s seminal paper. One aspect of that development was that the utilisation rate is the weighted average, by wealth and risk aversion, of the utilisation rates of individual investors.

225 The AER stated (footnote omitted):

We do not contend that the Officer Paper is a “statute or a code”. However, as the Officer Paper underpins the inclusion of gamma in the corporate income tax formula in NER 6.5.3 and NGR 87A, it is fundamental to a coherent understanding of the role of gamma in the regulatory scheme.

The Officer Paper specifically identified gamma in its WACC formulae to be the “proportion of tax collected from the company which gives rise to the tax credit associated with a franked dividend”: It directly supports an interpretation of gamma which is focused on the utilisation or redemption of imputation credits, and an approach to theta which seeks to identify the proportion of investors that are eligible to utilise distributed imputation credits. So much is confirmed by Handley, who states:

It is clear from Monkhouse (1996) that the second parameter refers to the utilisation value of a distributed imputation credit. This parameter is commonly denoted and called theta. It is also clear from the post-tax basis of the regulatory framework (and the Officer and Monkhouse WACC frameworks) that the item of interest is more precisely described as the after-company-before-personal-tax utilisation value of a distributed imputation credit.

226 In the Final Decisions the AER identified three types of evidence for estimating the utilisation rate:

 the proportion of Australian equity held by domestic investors (the ‘equity ownership approach’)

 the reported value of credits utilised by investors in Australian Taxation Office (ATO) statistics (‘tax statistics’)

 studies that seek to infer from market prices the value to investors of distributed imputation credits (‘implied market value studies’).

227 For reasons it explained at length, the AER said that it placed most reliance on the first, less reliance on the second, and even less on the third. This judgement was supported by Handley and Lally.

228The **equity ownership** approach – using the proportion of equity held by Australian investors – reflects the fact that foreign investors are unable to utilise imputation credits (because they do not pay tax in Australia at the personal or equivalent level). The AER placed significant reliance on the equity ownership approach because:

 it is well aligned with the definition of the utilisation rate in the Monkhouse framework

 it employs a relatively simple and intuitive methodology

 it uses a reliable and transparent source of data

 it provides estimates of the utilisation rate for investors in both all equity and only listed equity.

229 It went on to say (footnotes omitted):

We recognise the equity ownership approach does not take into account the existence of some domestic investors that do not hold their shares for 45 days at risk over the ex-dividend date (the 45 day rule). However, we consider it is unlikely to have a material impact on the utilisation of imputation credits by domestic investors. Importantly, no data has been presented that demonstrates a material impact.

We also recognise the equity ownership approach produces a range of estimates of the utilisation rate, and the upper end of this range is higher than the estimate produced from tax statistics (see discussion under ‘Tax statistics’ below). However, we do not consider this means the equity ownership approach is incorrect. This is because tax statistics, like the equity ownership approach, produce an estimate of the utilisation rate. These estimates are uncertain and dependent on the quality of the underlying data (this is a particular issue for tax statistics). As such, the true (unknown) value could be higher or lower. Following this, we do not consider the 45 day rule explains the difference in utilisation rate estimates between tax statistics and the equity ownership approach. We consider the difference is likely driven by estimation error in the taxation data. This view is supported by Lally. We also note Lally's statement that:

Thus, if foreign investors are recognized and absent any information on the terms other than the value weights on the RHS of equation (8), the equity ownership approach is not an upper bound on theta but an unbiased estimate.

230 The AER considered equity ownership proportions for both all equity and listed equity only, with the matching distribution rates. This gave corresponding ranges for gamma of 0.40 to 0.47, and 0.28 to 0.41, respectively, from which it selected 0.4, which is within the overlap of 0.40 to 0.41.

231 **Tax statistics**, which apply to all equity but not the subset of listed equity, gave a lower estimate of gamma of 0.34. The AER considered that the tax statistics were neither complete (ie did not include some credits that were in fact claimed) nor accurate, and placed less reliance on them. In this it relied on advice from Hathaway that “conclude[s] that the ATO statistics cannot be relied upon for making conclusions about the utilisation credits” and he would “urge all caution in using ATO statistics for any estimates of parameters concerned with franking credits”.

232 Hathaway’s advice was referred to and was reinforced by Handley and Lally.

233 In particular, Hathaway showed why the tax statistics based in franking account balances were reliable, but those based in dividends were not, with a very large discrepancy.

234 The only **market study** considered, provided by the applicants, gave a value of gamma of 0.26, but the AER considered that if that study and approach were to be accepted, the estimate would need to be adjusted upward, to 0.30. The market study necessarily applied only to listed equity. The AER’s rejection of that study was supported by Handley and Lally.

235The AER justified its rejection of (or giving least weight to) drop-off studies, with references to expert advice, on the basis that:

 The results of these studies might not be reflective of the value of imputation credits to investors in the market as a whole. For instance, in dividend drop-off studies the value of imputation credits is determined by the marginal investor that trades around the ex-dividend date. There is no reason to assume this reflects the value that long term investors who provide capital to a benchmark efficient entity place on imputation credits in aggregate.

 It is only the value of the combined package of dividends and imputation credits that can be observed in the market. However, there is no consensus among experts on how to separate the value of dividends from the value of imputation credits.

 Dividend drop-off estimates of the utilisation rate do not produce a post-tax (pre-personal tax) estimate and therefore do not produce estimates consistent with the Officer post-tax framework. The dividend drop-off estimate is influenced by differential personal taxes, given that investors value capital gains more than dividend income due to preferential tax treatment of capital gains.

#### The errors claimed by the applicant parties to have been made by the AER

236The applications for review in respect of gamma are substantially identical for the relevant applicants. They made joint submissions.

237The alleged errors extended to about seven pages of text. In some instances, the errors were expressed to “cover all the bases”, involving one or more errors of fact, an incorrect exercise of discretion and unreasonableness, with the Tribunal apparently invited to make a choice.

238 The outline of oral submissions provided by Senior Counsel in making the joint submissions, while not addressing the specific *NEL* categories of error giving rise to grounds of review, crystallised the applicants’ claims.

239 The relevant applicants say that the AER erred in that, in respect of the distribution rate:

 It should have considered only the figure for all equity, not that for listed equity, because listed equity firms are not a good proxy for the benchmark efficient entity, because the benchmark efficient entity has 100 per cent Australian income. The receipt of foreign income had the potential to significantly alter the distribution rate.

In respect of the utilisation rate:

 The AER’s approach of assessing gamma as the utilisation rate or face value of the credits was not consistent with the ordinary meaning of the term “value of imputation credits”, with the assessment of the rate of return parameters, or with the national electricity objective.

 The AER was incorrect in concluding that the assessment on a pre-personal-tax and pre-personal-costs basis supports face value. Rather, the value of imputation credits needed to reflect their value to investors taking into account the effects of personal taxes and costs.

 The equity ownership approach did not measure the value to the investor of imputation credits. It merely identified and quantified one class of investor who could not utilise credits. It was even above a proper measure of the utilisation rate, because it did not account for Australian resident investors who could not or did not utilise credits. Equity ownership figures were therefore above an upper bound.

 Tax statistics also did not measure the value of imputation credits to investors, as they did not capture matters that reduce that value. They were therefore an upper bound. However, this upper bound was below the AER’s figure for gamma. Contrary to the AER’s position, the tax statistics provided a reliable upper bound for gamma. By contrast, the AER’s demonstration of the limited effect of the 45 day rule was based on an inaccurate part of the tax office database.

#### The applicants’ submissions

240The two remaining applicants contended for a distribution rate of 0.7 and an utilisation rate of 0.35, which multiplied together and rounded gave their contended-for value of 0.25 for gamma. The distribution rate was taken from statistics for all equity. The utilisation rate came from a dividend drop-off study conducted by the consulting firm SFG for the energy networks. The study sought to estimate the value placed by the market on imputation credits by investigating the amount by which share prices fell when they go ex-dividend, ie when ownership of the share no longer conferred a right to a dividend and associated imputation credits.

241The theory and practice of using dividend drop-off studies to estimate theta was considered in detail by the Tribunal in *Energex (No 2)* at [70]-[76] and again at [100]-[144]. The study replied upon by the applicants updates a previous SFG study, reported and relied upon in *Application by Energex Limited (Gamma) (No 5)* [2011] ACompT 9, which was produced in response to the Tribunal’s concerns with previous studies as expressed in *Energex (No 2)*.

*The distribution rate*

242 The applicants submitted that the benchmark efficient entity was assumed to operate solely in Australia. But the distribution rate for listed equity was likely to be skewed by the practices of multinational firms with significant foreign earnings. Therefore, estimation of the distribution rate should use data for all equity.

*The utilisation rate*

243 The applicants accepted that the value of imputation credits should reflect the value of imputation credits to investors in the BEE, and that the Officer framework implied that, consistent with the rate of return being estimated on a nominal vanilla basis, the value of imputation credits should be estimated on a before-personal-tax and before-personal-costs basis. However, they disagreed with how the AER interpreted “before-personal-tax and before-personal-costs”. Senior Counsel for the applicants acknowledged the AER’s reliance on the advice of its experts, and submitted that the advice was wrong.

244 In general, the applicants’ submissions were not directed towards identifying whether the AER's decision exhibited one or more errors of fact, an incorrect exercise of discretion, or unreasonableness. Rather, they sought to show that the AER had reached wrong conclusions, or wrongly analysed an issue, and that the applicants’ proposed approach was correct and superior.

245 The applicants submitted that imputation credits should not be valued at face value but at market value, reflecting the value that an investor actually placed on the imputation credits. Using the table at [207] above, they pointed to five reasons why some investors did not place full face value on imputation credits and how the three estimation approaches dealt with them: only the market value studies columns had ticks in each box.

246 In support of their contention that imputation credits should be given a market value, the applicants submitted that:

 the “value of imputation credits” in r 6.5.3 of the *NER* should be given its ordinary meaning. This reflected its conceptual role – to ensure that investors were provided with an appropriate rate of return.

 the consistency required by r 6.5.2 required market value: other rate of return parameters were assessed using market value.

The submission regarding market value was supported by Professor Gray of SFG, who had provided the dividend drop-off study on which the applicants relied.

247 The applicants further submitted that the above matters were correctly identified in *Ausgrid* and that approach should be followed. Contrary to the observations in *SAPN*, the resolution of the issues for determination did not depend upon a distinction between a marginal investor approach and an average investor approach. Both were merely analytical tools for explaining the setting of an equilibrium price. The “utilisation rate” approach of the AER was not an average investor approach. This issue was a distraction from the correct issue, which was to identify what was required to be measured, and which of the AER’s sources of evidence measured that thing.

248 Moreover, the “issues” identified by *SAPN* with dividend drop-off studies were not weaknesses. The existence of the 45-day rule was correctly taken into account by the analysis, as was the value to imputation credits (and returns expected) by short, medium and long term traders.

249 At this stage it is necessary for the Tribunal to give some information about the two previous decisions by the Tribunal, referred to above, on essentially the identical issue before this Tribunal, the value of imputation credits.

250 In *Ausgrid* the Tribunal concluded, at [1100]:

We consider that, by … effectively defining the utilisation rate as the proportion of distributed imputation credits available for redemption, the AER has adopted a conceptual approach to gamma that redefines it as the value of imputation credits that are available for redemption. This is inconsistent with the concept of gamma in the Officer Framework for the WACC which underlies the Rules, and with the objective of ensuring a market rate of return on equity by making an adjustment to the revenue allowance for taxation to account for imputation credits.

251 That Tribunal also accepted the view of Professor Gray of SFG for the applicants and concluded, at [1073], that the AER’s reasoning (in that decision, but the reasoning is the same in this decision) ignored the fact that the other parameters in the WACC calculations were market values that already incorporated the effects of the differences in investors’ tax positions and transactions costs.

252 In *SAPN*, a differently constituted Tribunal found that the AER was not in error. The applicants contend at the hearing before the present Tribunal that that decision, which is subject to a judicial review application in the Federal Court, was in error. Essentially, the applicants submitted that the Tribunal there wrongly treated the issue as one of weighing evidence, and did not properly address the meaning of “value of imputation credits”.

253 In their written submissions, the applicants argued that a detailed debate between experts about how particular statements by Officer should be interpreted had distracted the AER’s attention from the proper inquiry as a matter of economic regulation; and that “Officer’s papers are not a statute or a code. Seeking to parse and analyse Professor Officer’s papers is not a substitute for a proper consideration of the role of imputation credits pursuant to the regime established by the NER.”

254 Nevertheless, the applicants then quoted a footnote in Officer’s paper to support their interpretation:

Where there is a market for tax credits one could use the market price to estimate the value of γ for the marginal shareholder, i.e. the shareholder who implicitly sets the price of the shares and the price of γ and the company’s cost of capital at the margin, but where there is only a covert market, estimates can only be made through dividend drop-off rates.

255 The applicants placed significance on the 2012 Rule Amendments. They said that the amendments brought the language of the rule – “value of imputation credits” in place of “assumed utilisation of imputation credits” – into line with regulatory practice. They saw some irony in the fact that, while the *NER* now referred to the “value of imputation credits”, rather than the “assumed utilisation of imputation credits”, the AER’s approach in applying the *NER* had gone in the opposite direction.

256 The applicants argued, by reference to the table reproduced at [207] above, that the equity ownership approach failed to take account of three of the reasons why some investors may not value imputation credits at face value; and the use of tax statistics failed to take into account one of the reasons. Therefore, both those approaches could only give estimates that were upper bounds on the best estimate.

257 The applicants also submitted that the AER erred in using equity ownership figures over the period since July 2000 (when the tax laws changed) rather than current figures; and that, in contrast with their position with the distribution rate, the AER should have used only figures for listed equity rather than also considering all equity. The argument was that the proportion of foreign equity in listed companies was more likely to reflect the proportion in the BEE; all equity includes small, privately held companies, which are not as accessible to foreign investors as the BEE (or as electricity and gas service providers in Australia, a number of which are privately and foreign owned).

258 The applicants also questioned the AER’s concerns about the completeness and reliability of tax statistics.

259 In their oral submissions, the applicants submitted that tax statistics could be used to avoid separate consideration of the distribution rate and the utilisation rate.

260 Using figures from Hathaway’s paper, relied on by the AER and referred to above, the applicants derived an estimate of gamma by dividing credits redeemed by credits created, giving a figure of 0.3, or 0.34 using more recent data, noting that in their contention this was an upper bound. According to the applicants, the figures for credits created and credits redeemed were reliable, and were considered to be so by Hathaway. They pointed to a reference to that effect.

#### The AER’s submissions

261 In its written submissions, the AER largely repeated the reasoning in its Final Decisions. In that reasoning the AER relied on expert economic advice, in particular from Handley and Lally. For example, Handley’s advice was that “the per dollar value of an imputation credit γ gamma should be measured prior to any personal tax on the credit and prior to any personal costs associated with the receipt of the credit”. (The AER noted that “[a]lthough the term ‘personal’ is used, we note that classes of investors other than individual persons can value imputation credits (for example, superannuation funds and charities). Therefore, an alternative characterisation might be ‘before-investor-tax’ and ‘before-investor-costs’.”)

262 The AER pointed to a series of statements by the Tribunal over some years to the effect that there was no one way of measuring gamma, and that the estimation methodology was subject to continual change. Internal consistency was a key requirement, and its approach achieved that, being supported by a number of economic experts, and was not found to be in error by the Tribunal in *SAPN*.

263 The weighting of evidence – from the three approaches mentioned above – was, in the AER’s contention, a matter of regulatory judgement. It could not be concluded, the AER submitted, that the AER’s position was wrong and that the applicants’ – which relied entirely on a dividend drop-off study – was right.

264 However, in oral submissions, Counsel for the AER used an argument that seemed to be different from the reasoning in the Final Decisions, and to break new ground. Certainly it was characterised that way by Senior Counsel for the applicants. It amounted to an argument about double counting.

265 Counsel for the AER accepted that dividends and imputation credits can be valued by those entitled to them at less than face value, and indeed adopted the applicants’ table, reproduced at [207] above.

266 Using a post-tax valuation framework, or revenue framework, both the cash flows and the cost of capital were estimated before investor taxes and before investor costs. The observed returns based on stock prices reflected the full range of investor taxes and investor costs that affected the investment. To the extent that they diminished the value of an equity investment, that would be reflected in the asset price and the required return be higher as a result.

267 The AER contended that because those costs were capitalised into share prices and reflected in the return on equity, investors were compensated for those costs through the allowed return on equity, which were already in the allowed cash flows under the building block framework.

268 The applicants’ approach, as characterised by Counsel for the AER, was to provide compensation for the same costs a second time through the allowance for company tax.

269 The submissions referred to so far deal with the in-principle and practical case against a reliance, much less a complete reliance, on the dividend drop-off study put forward by the applicants. The AER also responded to specific points raised by the applicants regarding the equity ownership and tax statistics approaches.

270 The AER argued that neither the equity ownership approach nor the use of tax statistics provided point estimates. They generated ranges. Therefore, a particular estimate within the range could not be considered an upper bound. This was consistent with expert economic advice.

271 It pointed out that the applicants argued for the use only of all equity (and not listed equity) data in estimating the distribution rate, and the use of only listed equity (and not all equity) in estimating the utilisation rate. In both cases, the applicants’ argument was by reference to the BEE. The AER pointed out that in each case it considered both listed equity and all equity, and matched the corresponding estimates.

272 Regarding the period over which it estimated the proportion of foreign equity ownership (since July 2000), the AER argued that there was no reason why the most recent period would provide the best estimate for the forthcoming regulatory period. The period it chose was consistent with the period used in the applicants’ own dividend drop-off study.

273 The AER argued that it had specifically considered the category of investors who were unable to redeem imputation credits because of the 45-day rule, but were not captured in equity ownership approach estimates, and concluded that it was not material.

274 Regarding the use of tax statistics, the AER argued that it was clear from the Hathaway report that the figure for credits redeemed in fact came from the unreliable dividend data rather than the reliable franking account balance data: a table in Hathaway’s report appeared to show that. This would be consistent with Hathaway’s clear warnings against using the ATO data for drawing any conclusions about the utilisation of franking credits.

275 The AER received advice from Lally on the Tribunal’s *Ausgrid* decision. In that advice Lally stated, in relation to the value of imputation credits, “…the NER is not the arbiter on this matter. Nor is the ACT … Instead, one must look to the relevant economic literature.” He then went on to analyse Officer’s paper and later derivations of gamma under that framework.

276 The AER received Lally’s most recent advice too late in the piece for the network distributors to have had an opportunity to respond to it before the AER made its Final Decisions. However, the applicants made submissions on it.

277 The AER drew attention to the decision of the Tribunal in *SAPN* that the AER did not err in regard to gamma. Counsel relied more on that Tribunal’s conclusions than on its detailed reasoning.

#### The Full Court’s decision

278 As mentioned above, after the hearing in these proceedings, the Full Court’s decision on its judicial review of the Tribunal’s *Ausgrid* decision was handed down. That decision is *Australian Energy Regulator v Australian Competition Tribunal (No 2)*. The parties were invited to make submissions on the effect of the decision, and did so.

279 The applicants made the following points.

280 At [751]-[755], the Full Court concluded that the Tribunal had erred in law in its construction of r 6.5.3 of the *NER*, in failing to construe the phrase as a whole in its context and having regard to the subject matter of the exercise. The Full Court said that it accepted the AER’s submission that the context was the determination of a regulated return using a PTRM based on a nominal vanilla WACC, and accepted the AER’s submission that the Rules required consistency in the way the relevant building blocks interacted, that is, a post-company tax and pre-personal tax and personal costs basis. The Full Court observed that, as the nature of gamma was an estimate to be used in a model, the context related to a statutory model rather than the value of something which existed, and that the Tribunal was distracted by the apparent simplicity of the concept of market studies and data into mistaking what was to be estimated as real in a market rather than as estimates within a model. The Full Court went on to state, at [755], that:

… we accept the AER’s submission the Tribunal’s approach to gamma was underpinned by a misunderstanding on its part about how return to investors was conceptualised in a WACC framework. In our opinion the Tribunal assumed that other parameters in the WACC calculations were market values that already incorporated investors’ tax positions and transaction costs but that misconstrued the “post-tax” framework. The rules required gamma to be determined consistently with return on equity.

281 Applying that approach in the present case, one would need to consider the content of the model. In this regard, it was apparent that the Full Court had before it different information from the information which was before this Tribunal as to the nature of the model.

282 In the present case, the position adopted by the AER was that its rate of return model did not ignore, or fail to incorporate, personal transaction costs. The AER had conceded that the model needed to account for them in some way. Rather, the position adopted by the AER was that they were already taken into account in the assessment of the return on equity because they affected asset prices, which in turn affected the measurement of the required return on equity. This was explained by Counsel for the AER at pages 627-639 of the transcript. It was a lengthy explanation, but required reading in full to see how the operation of the model was explained.

283 The applicants submitted that the AER’s explanation was directly contrary to the observations of the Full Court at [755] as to the content of the model, extracted at [280] above.

284 That difference arose from the different material that was before the Full Court and this Tribunal. So even if the approach of the Full Court was applied (to treat imputation credits as a function of a model, rather than as something that was “real”), that directed attention to the content of the model and to the evidence on that model in the individual case.

285 Likewise, in the present case, Counsel for the AER, at pages 648-651 of the transcript, discussed the decision of the Tribunal in *Ausgrid* in terms that made it clear that the Tribunal was correct to assume that other parameters “already incorporated investors’ tax positions and transaction costs”, but stated that to account for them in relation to imputation credits would involve some measure of double counting.

286 After briefly restating the argument they had made in the hearing, the applicants submitted that the position before the present Tribunal was:

(a) the AER accepted that matters affecting the value of imputation credits, such as transaction costs, are *relevant* and *need to be taken into account* – the model did not exclude them;

(b) the AER said they were taken into account in the assessment of asset prices, and therefore did not need to be included in the gamma calculation;

(c) however, the AER was incorrect in stating that transactions costs and other matters affecting the value of imputation credits were already reflected in the return on equity calculation, for the reasons developed by the applicants in oral reply.

287 In these circumstances, the applicants submitted, the decision of the Full Court did not determine the Tribunal’s assessment of the gamma topic. Rather, it emphasised that the correct approach to gamma depended upon the content of the model used to calculate the overall rate of return of the regulated business. That model, properly understood on the material before the Tribunal in the present case, required two adjustments for the value of imputation credits: to gross up post-1987 return on equity calculations to exclude the value of imputation credits (so as to produce an overall average market risk premium, and thus an overall return on equity, unaffected by imputation credits), and then to deduct the value of imputation credits. At each stage, matters affecting the value of imputation credits must be taken into account under the model.

288 Nor did the Full Court decision determine a number of the other grounds for review concerning the gamma topic. On any view as to the construction of r 6.5.3 of the *NER*, these grounds would still need to be determined by the Tribunal.

289 The applicants accepted that the Full Court decision had implications for those aspects of the Applications relying on the plain meaning of the term “the value of imputation credits”. However, as explained above, they submitted that the decision of the Full Court did not otherwise determine the Tribunal’s assessment of the gamma topic.

290 The AER made the following submissions (omitting footnotes but adding references to the decision).

291 In relation to the topic of gamma, the decision of the Full Court in *AER v Australian Competition Tribunal (No 2)* was dispositive of the primary ground of review, the correct interpretation of the phrase “the value of imputation credits” in *NER* r 6.5.3/*NGR* r 87A. The findings of the Full Court also had implications for other gamma grounds of review.

292 The Full Court made the following findings that were relevant to the gamma grounds of review in this proceeding:

(a) The appropriate method to determine “the value of imputation credits” within *NER* r 6.5.3, and the sources of information and/or weight to be attributed to each data source, was a derivative of the interpretation of that term (at [742]).

(b) The expression “the value of imputation credits” was be construed as a whole, in its statutory context and having regard to the subject matter of the exercise. It would be an error to limit attention to the word “value” and give it a meaning in isolation. The relevant context was the function of imputation credits under the *NER* in relation to the return on capital and the tax building block and, in particular, the determination of a regulated return using a PTRM based on a nominal vanilla WACC. The *NER* required consistency in the way the relevant building blocks interacted (at [744], [751] and [752]).

(c) It was a misconstruction of the expression “the value of imputation credits” to interpret “value” as a “market value” derived from market studies rather than a value within a PTRM in which the integers were determined on a consistent basis (at [753] and [755]).

(d) It was not an error of construction for the AER to prefer one theoretical approach to considering the determination of gamma over another. Specifically, the AER did not err by focusing on the utilisation of imputation credits rather than on an implied market value (at [756]).

293 The submissions of the AER to the Tribunal were consistent with and supported by the findings of the Full Court summarised above.

294 Each of the service providers raised as its primary ground of review with respect to gamma a contention that the AER adopted an incorrect construction of the words “value of imputation credits”. These grounds must be dismissed because the binding decision of the Full Court was that the interpretation of that phrase adopted by the AER in its Final Decisions was correct. The arguments advanced by the service providers before the Tribunal were materially the same as the arguments advanced by the service providers to the Full Court, which were rejected by the Full Court.

295 The conclusions reached by the Full Court also had implications for other grounds of review raised in relation to gamma. As paragraph 117 of the joint submissions on gamma records, other grounds raised in relation to gamma with respect to the weight given to the equity ownership approach (paragraphs 117(a) and 119 to 135), the weight given to market value derived from dividend drop-off studies (paragraphs 117(b) and 167 to 205) and the adjustments made by the AER to the results of dividend drop-off studies (paragraphs 117(c) and 173 to 177) also depended on the primary ground with respect to construction.

296 The applicants’ supplementary submission that the Full Court had before it different information to that which is before this Tribunal as to the nature of the model (the PTRM) used by the AER should be rejected. There was no relevant difference in the model, nor any relevant difference in the information before the Tribunal about the model. As previously acknowledged by the applicants, the AER’s decision in Networks NSW, SAPN and in these matters is “essentially the same decision by the AER”. The applicants’ further supplementary submissions concerning the PTRM used by the AER revisited matters addressed before the Tribunal. The submissions failed to address the economic evidence relied upon by the AER (particularly Associate Professor Handley) as to why it was correct to focus upon utilisation rather than implied market value. The AER otherwise relied upon its submissions previously made to the Tribunal.

297 The ECA submitted that the Tribunal was bound by the decision of the Full Court. In the absence of any development in economic theory, or the intrusion of some other distinguishing factor, the Full Court had resolved that: (a) the AER had discretion in respect of its theoretical approach to gamma; and (b) the adoption of a gamma value of 0.4 on the basis of the AER’s preferred theoretical approach was a defensible one. The ECA made two further observations. First, it submitted that if the Tribunal were to require the adoption of a gamma value of 0.25, as the applicants were contending, that result would mean substantial additional revenue to the applicants, and a corresponding increase in the price paid by energy consumers. The Tribunal ought only to be satisfied with an outcome resulting in additional revenue for a network business (and a corresponding increase in energy prices) if the business had clearly identified real and substantial improvements to quality, reliability, security or safety in the long-term interests of consumers that would serve to justify such an increase. Second, the ECA observed that arguably the appropriate gamma value may be even higher than the figure which the AER had adopted over the applicants’ objections. The Tribunal should not be quick to find that correcting every alleged error in favour of the network businesses’ increased revenue was necessary to achieve optimally efficient balance between price, quality, reliability, security and safety. Rather, the relatively stronger incentives for network businesses to engage in self-help, as compared to other stakeholders, would tend to increase revenues at the expense of optimally efficient pricing in any event.

298 As mentioned at [46] above, CitiPower, Powercor, United Energy and AusNet Services, by letter dated 21 July 2017, informed the Tribunal that they now wished not to press their grounds of review in respect of gamma. This left ActewAGL and Jemena as continuing to press the gamma grounds.

#### The Tribunal’s analysis

*The distribution rate*

299 The Tribunal finds that it was open to the AER to consider both listed and all equity consistent with matching the distribution and utilisation rate estimates for each of those categories. Only one of its sources of expert advice, Lally, took a view against the need for matching, but his advice would have given an outcome less favourable to the applicants than that decided upon by the AER.

*The meaning of “value of imputation credits”*

300 The applicants’ submission that the oft-repeated statement that “value of imputation credits” should be given its ordinary meaning does not sit easily with the equally oft-repeated statement that “value of imputation credits” should be interpreted in the light of its conceptual role in the *NEL*/*NER*. In fact, all parties accept the second proposition; but the interpretation requires a careful study of the complex regulatory framework within which the phrase is embedded, and the elaborate and more complex economic framework which underlies the regulatory framework.

301 The Tribunal was invited to take offence at the provocatively worded statement by Lally, quoted above at [275], in his advice to the AER on the Tribunal’s *Ausgrid* decision. It is of course the case that the task of statutory construction cannot be handed over to economic experts, but the views of those experts are valuable, and necessary, in considering how the concepts underlying the *NEL* and the *NER*, and the processes required under the *NER*, relate to each other and should be implemented. The applicants, no less than the AER, have been guided by such evidence.

302 That being the case, it is inevitable that consideration of the meaning of “the value of imputation credits”, and how to estimate it, involves economic argument.

303 We deal first with the implications of the Full Court’s decision. In the Tribunal’s view, the arguments of the AER and the ECA are compelling. The issues raised by the applicants in these proceedings were said by themselves to be substantially the same as those raised in *Ausgrid*. The context – the determination of a regulated rate of return using a PTRM based on a nominal vanilla WACC – is the same. The model itself is the same.

304 The applicants nevertheless now appear to argue that the content of the model is different from that in the earlier matters because the AER argued its case differently. They say that the Tribunal in these proceedings has different information before it as to the nature of the model from what was before the Full Court.

305 That submission must be rejected if only because the Full Court was not grappling with the intricacies of the model, but only with whether the Tribunal’s decision in *Ausgrid* accorded with the law, specifically on a question of statutory construction.

306 The applicants made it very clear that their contention was that “value of imputation credits” must, under the *NEL* and *NER*, be interpreted as meaning “market value of imputation credits”. The Full Court decision makes it equally clear that that construction is wrong.

307 However, it does not follow that, not being in legal error in its *Ausgrid* decision on gamma on that ground, the AER had carte blanche in the estimation of the value of estimation credits. These proceedings did raise new issues which were not part of the *Ausgrid* proceedings, for example the arguments used in *SAPN* and a new line of argument by Counsel for the AER. The Tribunal considers that it is worthwhile to discuss those arguments before moving on to whether there are any remaining statutory errors in the AER’s decision on gamma.

*Market estimates*

308 The applicants’ principal submission was that a market estimate of the value of imputation credits was required by the Rules, in particular for consistency with the market-based method for estimating the required rate of return on equity in the PTRM.

309 The applicants submitted that what this required was not an ignoring of investor tax and investor costs, but an estimation of the value of imputation credits that took account of those factors. However, the applicants also explicitly accepted that the value should be after company tax and pre-investor tax and pre-investor costs.

310 Most of the consideration of how gamma should be estimated depends on resolving these differences.

311 The applicants’ exposition was couched in terms of the value of imputation credits to “the investor”. Much of the argument was put in terms of the liability for investor income tax and the investor costs incurred by “investors”, “the investor”, or “the typical investor”, which may mean the same as an average investor.

312 For example:

…if the risk-free rate is 3%, and a typical investor needs a margin of 4% above the risk-free rate to make an investment in the particular entity, and if the investor has accountancy, brokerage and other costs of 1%, and if the investor incurs foreign currency fees of 0.5%, then the entity will need to be providing a return of 8.5% for this investor to invest in the business (rather than leaving his or her money in the bank or in Commonwealth Government Securities).

The same approach is necessary for the discount attributable to the value of imputation credits. If the investor receives imputation credits with a face amount of 2% of the investment, but it costs the investor 1% to realise the credits, then the investor is only receiving a 1% net benefit from the imputation credits, which would reduce the overall required return to 7.5%.

313 Although this exposition may be helpful up to a point, it risks hiding or begging important questions. Who or what is the typical investor? What rate of return is required by him or her or it? Most importantly, is it the typical investor’s required rate of return that determines the rate of return to be estimated under the Rules?

*The marginal investor vs the average investor*

314 The applicants’ submissions jumped from “the typical investor” to the use of market value derived from a dividend drop-off study on the basis that the market value was set by the average valuation across all investors weighted by wealth and risk aversion. In their written submissions, they noted:

This example uses a single investor, but in reality the required return is a product of the individual wealth, appetite for risk, and idiosyncratic position, of investors as a whole. The equilibrium position produced by the sum of individual investors (as reflected in the share price, and thus the return received by those investors) is the required return. That required return incorporates all matters (such as investor costs) that are taken into account by the multitude of individual investors.

315 As it was presented to the Tribunal, this was no more than an assertion. No information was provided about the weighting. The implication was that the market value studies automatically reflected the effect of the weighting. However, it appeared to be consistent with the AER’s citation of the Monkhouse framework – an extension of Officer’s work – in which, it said, “… the utilisation rate is equal to the weighted average, by wealth and risk aversion, of the utilisation rates of individual investors.” Handley referred to the Monkhouse framework in his advice mentioned above.

316 But while the Monkhouse framework was referred to many times in the AER’s Final Decisions, it was not specifically brought to the Tribunal’s attention. This question of how prices are set in the market – whether by the average investor or the marginal investor – was referred to above in a reference to the applicants’ submissions in relation to the *SAPN* decision, where the issue loomed large.

317 In its reasons in *SAPN*, the Tribunal considered whether the market return was set by the average of investors, in some such way as described above, or by the marginal investor. The latter proposition might better be described as the marginal trade in the market between two investors, a buyer and a seller. This is a natural inquiry to be interested in when trying to understand the nature of the required rate of return, which is a necessary focus in interpreting and applying the *NER*.

318 The Tribunal in *SAPN* did not express a final view. It stated, at [158], that “… the available empirical evidence is inadequate to enable confident discrimination between these alternative approaches.” It noted a number of references to the marginal investor in the Officer paper, but considered that Officer’s work could not be appealed to so as to settle the interpretation of “value of imputation credits”, and considered, at [186], that the applicant’s submission in those proceedings was incorrect if “stock prices (and thus imputation credit value) are determined by some marginal investor”, noting, at [193], that how stock prices were determined was an unsettled issue between experts (by which it meant experts at large, not just those engaged in those proceedings).

319 In these proceedings, the marginal vs average investor issue similarly did not arise clearly in the AER’s reasoning in its Final Decisions, as it had not in the decisions reviewed in *Ausgrid* and *SAPN*. But as alluded to above, it appears that a particular view underlay some of the advice given to the AER and the view that it came to. The applicants argued that the issue was a distraction. The AER submitted that none of its reasoning depended on the marginal vs average distinction and, in answer to questions, agreed with Senior Counsel for the applicants that the distinction was not helpful in these proceedings.

320 The Tribunal does not find it so easy to set aside. There are a number of references in the Final Decisions to the AER’s view that the utilisation rate is equal to the weighted average, by wealth and risk aversion, of the utilisation rates of individual investors. The AER also held the view that in dividend drop-off studies the value of imputation credits is determined by the marginal investors that trade around the ex-dividend date. This inconsistency with its view that a weighted average value ought to be estimated contributed to its rejection of dividend drop-off studies.

321 The AER’s view of how the weighted average valuation by investors relates to the marginal valuation was not clear.

322 It is worth noting that in the applicants’ written submissions on the interpretation of “value of imputation credits”, they said that “[c]ritically, an appropriate return is one that would induce the *marginal* investor to invest in the benchmark business over other alternatives, and the text and structure of the NER confirm that this is necessarily a market-based measure” (emphasis added). This was in the same context as that of the example quoted at length above, viz. the return required by investors taking their personal circumstances into account.

323 Perhaps this is indicative of neither the AER nor the applicants having a thoroughly consistent view of how market values are in fact set.

324 What was missing in the submissions to the Tribunal was a clear analytical exposition of the economic principles that would lead inexorably from the theory underlying the whole PTRM to the contended-for means of estimating the value of imputation credits. In particular, the applicants’ argument essentially rests on a claim that the required rate of return must be reduced by the average value across all investors of imputation credits, together with the claim that drop-off studies provide a good estimate of that value. Nor was the argument put by Counsel for the AER in oral submissions in a manner which showed it to be consistent with the PTRM framework.

325 That said, there are multiple instances of where the estimation of parameters necessarily departs from what would be strictly in accord with the Officer framework, for example, because data is unavailable. This means that judgments need to be made to achieve a reasonable level of consistency, knowing that complete consistency is impossible.

326 It seems likely that understanding how the required rate of return should be determined requires a view of how market prices are set, and certain that a consistent framework needs to be applied to both the rate of return and the value of imputation credits, since they are not merely related issues but part of the same issue.

327 It is unfortunate that the materials before us do not allow us to reach a final view about those relationships, and more so that the Rules do not appear to be based on any comprehensive analysis of how these things precisely fit together. It may be that the unsettled nature of some issues would prevent that anyway. We accept that the marginal vs average question is not one to be taken further in these proceedings. Fortunately, that is not an impediment to reaching a view on the grounds for review. The key is the AER’s reasoning as set out in its Final Decisions, and the processes though which it went that are revealed there.

*Are dividend drop-off studies required under the Rules?*

328 First we return to the applicants’ contentions.

329 The applicants’ submissions were largely, as explained above, in terms of economic principle: that a correct interpretation of the *NER* required a market value approach.

330 As referred to above, the applicants naturally placed great weight on the *Ausgrid* decision, which clearly and directly accepted their interpretation of “value of imputation credits”, that the value of theta should be estimated by the drop-off methodology, and that in those decisions the AER erred in not finding that the value of theta is that for which they contend in these proceedings. The AER submitted that in those proceedings, at that time subject to pending judicial review, the Tribunal was in error.

331 Nevertheless, a statement made at [1088] in *Ausgrid* is of interest:

The New Zealand decision in *WAIL* [*Wellington International Airport Ltd and others v Commerce Commission* [2013] NZHC 3289] suggests that financial modelling may not yet have produced a workable version of a CAPM that incorporates a generalised treatment of imputation credits, in which case the AER would necessarily have to make judgements about whether and how to the modify the methodology in the RoR Guideline for factors subsequently raised in advice it received from experts.

332 In a similar vein, in *SAPN* the Tribunal said, at [156]:

In conclusion, the Tribunal is of the view, reflected in the diversity of expert opinion, that there is no generally accepted theoretical model for explaining the valuation of imputation credits. There is broad agreement across experts that the existence of the imputation system lowers, to some degree, the cost of equity capital to Australian, domestically operating, companies, relative to a classical tax system. That is, required returns ignoring imputation credits (ie expected cash dividends plus capital gains) will be lower if imputation credits are expected to be attached to cash dividends.

333 In these proceedings, the Tribunal does not seek to pronounce authoritatively on the economic chain of logic involved in determining how best to estimate the value of imputation credits in terms of r 6.5.3 in the light of r 6.5.2(d)(2). Rather, it is of the view that the approach of the AER was open to it, in the sense that no (limited) merits review grounds have been made out. That is consistent with the Full Court’s decision.

334 The AER had three possible estimation approaches – no-one suggested any others – and considered them all carefully. It used expert economic advice appropriately. It did not accept advice unquestioningly, but used it as an aid to its own analysis and decision-making. This was evident from the extensive discussion in the Final Decisions.

335 The economic advice of Gray, the consultant responsible for carrying out the dividend drop-off study was that it was the appropriate approach. There is nothing to suggest that that advice was anything but careful and professional. But the AER had strong advice to the contrary.

336 That advice was directly to the point, came from two sources, and was unequivocal. In particular, it dealt carefully with the ambiguities in Officer’s original paper, and resolved them in the way that the AER followed. Moreover, the Final Decisions devote almost 12 pages to a detailed analysis of Gray’s comments on a number of issues. It could not be said that the AER did not consider both sides of the argument.

337 In these proceedings, the Tribunal accepts that the AER was entitled to come to the view that, through their underpinning by the Officer framework, the Rules require that the value of imputation credits be measured before investor taxes and costs. As noted above, that is accepted by the applicants. The expert advice relied upon by the AER is clear. Thus, for the purposes of this limited merits review, the Tribunal finds that the AER did not err in its interpretation of “value of imputation credits”.

338 The Tribunal accepts that the expert advice is that “before investor taxes and costs” means that the value of imputation credits is to be estimated before allowing for the impact of those taxes and costs. Market studies and, in particular, the dividend drop-off study relied upon by the applicants, do not meet that requirement. The very thing they seek to do is measure the value of imputation credits to the investor after taking account of the investor’s costs and liability for taxes. This position is also explicitly supported by Handley and Lally.

339 The Tribunal concludes, therefore, that the AER made no error in its overall approach.

340 Regarding related matters, the Tribunal considers that the AER was likewise entitled to take into account its concern that dividend drop-off studies may not measure the value of imputation credits to investors in a way that is referable to the rate of return required by investors under the Rules, and in a way that ensures the consistency required by r 6.5.2(d)(2). The contrary position, in the Tribunal’s view, involves too cavalier a view that market estimates of rates of return and market estimates of the value of imputation credits are automatically consistent, without regard to the characteristics of the market participants in each case.

341 In the light of its expert advice, the AER was also entitled to take into account its reservations about the dividend-drop-off study itself. It might be noted that this is an area – the characteristics and limitations of a particular, highly technical estimation methodology – where expert advice is necessary.

342 As a consequence, the Tribunal considers that the AER made no error in applying the weighting it did to the market studies approach.

*The Tribunal’s further conclusions*

343 That leaves only the question whether the AER’s use of the equity ownership and tax statistics approaches was flawed by error of the kind available on this limited merits review. The Tribunal considers it was not.

344 The Tribunal finds no error in the manner in which the AER used data for listed equity and all equity. Its approach was not precluded, but rather was reasonable, thorough and clearly explained.

345 The Tribunal accepts that an estimate chosen from within a range of equity ownership proportions cannot be an upper bound on the best estimate of gamma. The same is true of an estimate derived from tax statistics.

346 The AER made no relevant error in its choice of the period over which it considered equity ownership data. That approach was open to it, and as explained by it, reasonable.

347 The AER made no relevant error in choosing the estimate that it did from within the equity ownership range. Its manner of choice, as described in its Final Decisions, was clearly open to it.

348 The reliability of the tax statistics is unclear. The applicants were able to point to evidence in the relevant source, the Hathaway paper, that supported their view that gamma could be reliably estimated from data for credits created and credits redeemed.

349 Credits created data comes from companies franking account balances. Credits redeemed data comes from tax returns. Certainly, the AER showed that the tax return data cannot be comprehensive.

350 The AER pointed out that the table in which the credits redeemed figure appears shows it as deriving from the unreliable dividend data. That is a conundrum. In considering whether a limited merits review ground has been made out, the Tribunal considers that the AER did not err by accepting Hathaway’s clear injunctions not to use the data for the purpose that the applicants seek to use it. The AER’s position was also supported by Handley and Lally.

351 It follows that the AER did not err in giving some reduced weight to tax statistics; nor did it err in the manner in which it took them into account, as set out in detail in its Final Decisions.

352 The Tribunal considers the AER’s analysis of submissions regarding the effect of the 45-day holding rule to have been fair and careful. While it is not possible to be certain that the impact of the rule is immaterial, no evidence was put before the Tribunal to quantify the effect or show that it is material. There is no basis for making an adjustment to the estimate of gamma.

353 The Tribunal finds no reviewable error in the AER’s Final Decisions on gamma.

# FORECAST INFLATION

#### Introduction

354 We have set out r 87 of the *NGR* at [18] above.

355 In the determination of allowed revenue, forecast inflation is used:

 to index the regulatory asset base during the access arrangement period to maintain its real value, with the adjusted regulatory asset base used to calculate the return on capital building block;

 in calculating the depreciation (return of capital) building block by deducting the indexation adjustment from nominal straight line depreciation of the regulatory asset base; this is necessary to prevent double-counting of inflation in allowed revenue, and

 to maintain the value of capital expenditure during the access arrangement period in real terms.

356 An estimate of forecast inflation is an input to the AER’s PTRM. Although the *NGR* do not mandate use of the PTRM as the *NER* do, in practice the AER does use the PTRM in relation to gas service providers under the gas regime in the same way as it uses it under the electricity regime, because, the AER says, the *NGR* require a similar building block approach as the *NER* to determine allowed revenue, and the PTRM implements such an approach. This practice is accepted by ActewAGL.

357 The impact is that, the higher the estimate of forecast inflation, the lower the service provider’s allowed revenue.

358 The forecast inflation estimation methodology used in versions of the PTRM since 2008 has been a geometric average of annual estimates over 10 years using the latest available forecasts from the Statement of Monetary Policy published by the Reserve Bank of Australia (RBA) for the first two or three years (the number can vary depending on when the RBA forecasts become available in relation to the start of the access arrangement period), and the mid-point of the RBA’s target inflation band for each of the remaining seven or eight years. That mid-point is 2.5 per cent.

359 Actual inflation in recent years has been low: significantly lower than 2.5 per cent.

360In its access arrangement proposal, ActewAGL calculated forecast inflation using the AER’s approach described above. However, it also said that, “expectations concerning inflation appear to be volatile and it may be that the best method for estimating inflation may evolve during the period that our revenue proposal is being considered”.

#### The statutory framework in respect of forecast inflation

361 Part 8 of the *NGR* governed the procedure for the submission of an access arrangement by a service provider and the AER’s decision regarding the access arrangement.

362 The procedure included the following (relevant) steps:

An access arrangement proposal must be submitted under r 46, complying with the access arrangement information requirements in r 42.

Under r 59, the AER must make an access arrangement draft decision on the proposal.

The relevant parts of r 60 were:

**60 Revision of access arrangement proposal in response to draft decision**

(1) The service provider may, within the revision period, submit additions or other amendments to the *access arrangement proposal* to address matters raised in the access arrangement draft *decision*.

(2) The amendments must be limited to those necessary to address matters raised in the access arrangement draft *decision* unless the AER approves further amendments.

**Example:**

The AER might approve amendments to the *access arrangement proposal* to deal with a change in circumstances of the service provider’s business since submission of the *access arrangement proposal*.

Under r 62 the AER must make an access arrangement final decision.

Rule 64(1) provided that if, in an access arrangement final decision, the AER refused to approve an access arrangement proposal, it must itself propose an access arrangement or revisions to the access arrangement for the relevant pipeline. By r 64(2), the arrangement was to be formulated with regard to the matters that the *NGL* required an access arrangement to include; the service provider’s access arrangement proposal; and the AER’s reasons for refusing to approve that proposal. Although the AER may consult on its proposal, it was not obliged to do so: r 64(3).

363 Part 9 of the *NGR* governed the calculation of the allowed total revenue for a regulated pipeline and the tariffs derived from that revenue.

364 Rule 72 set out particular information which had to be included in a full access arrangement proposal. In particular, r 72(1)(m) required the information to include the total revenue to be derived from pipeline services for each regulatory year of the access arrangement period.

365 Rule 73(1) specified that financial information must be provided on a nominal basis; or a real basis; or some other recognised basis for dealing with the effects of inflation. Rule 73(3) specified that all financial information had to be provided, and all calculations made, consistently on the same basis.

366 Rule 74(1) provided that information in the nature of a forecast or estimate had to be supported by a statement of the basis of the forecast or estimate. Rule 74(2) provided that a forecast or estimate had to be arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances.

367 Rule 76 provided that total revenue was to be determined for each regulatory year using the building block approach. The building blocks included, relevantly, (a) a return on the projected capital base for the year and (b) depreciation on the projected capital base for the year.

368 The calculation of the depreciation building block was addressed in rr 88 and 89. Rule 88 provided that the depreciation schedule set out the basis on which the pipeline assets constituting the capital base were to be depreciated for the purpose of determining a reference tariff. Rule 89(1)(d) provided that the depreciation schedule should be designed:

… so that (subject to the rules about capital redundancy), an asset is depreciated only once (ie that the amount by which the asset is depreciated over its economic life does not exceed the value of the asset at the time of its inclusion in the capital base (adjusted, if the accounting method approved by the AER permits, for inflation))…

369 Rule 89(3) provided: “The AER’s discretion under this rule is limited.” Rule 40(2) provided that where the AER’s discretion under a particular rule was limited, then the AER may not withhold its approval to an element of an access arrangement proposal that was governed by the relevant provision if the AER was satisfied that it:

complied with applicable requirements of the *NGL* and *NGR*; and

was consistent with applicable criteria (if any) prescribed by the *NGL* and *NGR*.

370 A contrast with the *NER* was raised in submissions.

371 In the *NER*, r 6.4.3 provided that the annual revenue requirement for a service provider must be determined using a building block approach, under which building blocks include: indexation of the regulatory asset base; a return on capital for that year; and depreciation for that year (plus some other building blocks not presently relevant). The rule went on to specify, by reference to other rules, how the indexation of the capital base was to be calculated, and stated that the indexation of the regulatory asset building block was a negative adjustment of that amount: see r 6.4.3(b)(1)(ii). Thus, the capital base was indexed each year, and the return on capital was calculated on that indexed amount, but the amount of the indexation was deducted from the annual revenue requirement by creating a negative building block of the amount of indexation.

372 The *NGR* did not make explicit mention of indexation of the capital base or provision for a negative building block. Rather, the deduction was, as a matter of practice, made by deduction of the amount of forecast inflation (indexation) from the depreciation building block provided for in r 76 and addressed in rr 88 and 89, referred to at [368]-[369] above. There was no dispute about this practice.

#### What the AER decided

373 In its draft decision the AER noted ActewAGL’s remark that “the best method for estimating inflation may evolve”. It further commented that it had raised the inflation method as an issue for potential review in its rate of return guideline development consultation process, asking for submissions on whether it should change the approach. It said that, in response, stakeholders endorsed the continuation of the current approach and it was therefore satisfied that the current approach was the appropriate approach for this (draft) determination. The AER updated ActewAGL’s original estimate using the latest data, giving an estimate of 2.5 per cent (this being the geometric average of ten annual estimates).

374 The AER said it would consider a change to inflation forecasting if it was endorsed by stakeholders as part of a comprehensive consultation process, and that the next rate of return guideline review may be such a suitable process for reviewing the inflation forecasting method.

375 In its revised access arrangement in response to the AER’s draft decision, ActewAGL departed from the prior method and proposed an estimate of 2.19 per cent. This estimate was based on its consultant’s, CEG’s, application of the “breakeven approach”. In a submission on 12 May 2016 ActewAGL put forward an updated estimate of 1.96 per cent.

376 The AER rejected that approach and forecast in its Final Decision of 26 May 2016, maintained its existing approach, as it had done in accepting ActewAGL’s initial proposal in its draft decision, and updated the estimate again, arriving at a figure of 2.18 per cent. This was intended to be the geometric average of the RBA’s forecasts of 1.0 per cent for 2015-16, 2.0 per cent for 2016-17 and 2.0 per cent for 2017-18, and of 2.5 per cent, being the midpoint of the RBA’s target range, for each of the seven years 2018-25. In the process of its deliberations, the Tribunal noted that the AER had incorrectly calculated this geometric average based on the RBA’s forecasts. The correct average is 2.25 per cent. The AER acknowledged this error in its supplementary submissions of 3 July 2017, and noted:

The Tribunal itself does not have the power to correct the error, as no ground of review is raised in relation to it. In those circumstances, the appropriate course is for the AER to consider, once the Tribunal has delivered its determination, whether to exercise its power under NER 6.13 and NGR 68. Under those rules, the AER must consult with the service providers affected and such other persons as the AER considers appropriate (NER 6.13(d) / NGR 68(d)).

377 The Tribunal accepts this and, given the conclusion to follow that the AER made no (methodological) error in its determination, leaves it to the AER to determine the appropriate response to its error. The balance of this discussion refers to the AER's originally determined 2.18 per cent figure.

378 The AER considered its current method to be reasonable because:

 RBA research indicated that its one year inflation forecasts had substantial explanatory power.

 To the extent that the historical success of RBA monetary policy informed market consensus inflation expectations, the mid-point of the RBA’s inflation targeting band would reflect longer term inflation expectations (noting that since inflation rate targeting began in 1993, the average annualised inflation rate had been approximately 2.6 per cent, close to the 2.5 per cent midpoint of the target band).

 Evidence indicated that the RBA’s control of official interest rates and commentary had an impact on outturn inflation and inflation expectations.

 The method was simple, transparent, easily replicated and unlikely to be subject to estimation error.

379 The AER stated that it did not accept the approach ActewAGL put forward in its revised access arrangement proposal and in its late submission. This was because the AER did not consider CEG’s application of the breakeven approach appropriately adjusted for bias. Further, the AER did not consider that a breakeven approach using indexed Commonwealth Government Securities (**CGS**) would necessarily produce better estimates of expected inflation than the current method (or another estimation method, such as one based on inflation swaps). The AER said:

* Moreover, even if we considered an alternative approach could be preferable (which we do not), the method for estimating expected inflation should apply to all service providers as inflation expectations are not business-specific. As such, any change in approach should only be considered following broad consultation with all stakeholders, rather than within a single reset.
* We note that ActewAGL did not propose CEG’s recommendation to apply a five year inflation expectation to the return on debt. Rather it proposes an inflation expectation that matches the term of our allowed rate of return (that is, 10 years). We accept this aspect of ActewAGL’s proposed access arrangement.

(Footnote omitted.)

#### The errors claimed by ActewAGL to have been made by the AER

380 The nub of ActewAGL’s claim regarding error was that:

 under r 89 the AER’s discretion was limited;

 taken together, rr 40(2) and 74(2) required the AER to accept the breakeven forecasting methodology unless it was positively satisfied that the methodology was not arrived at on a reasonable basis and did not represent the best forecast possible in the circumstances;

 the AER could not properly have been so satisfied because there was cogent evidence regarding the breakeven methodology to the contrary, and that the AER’s methodology was unlikely to provide an accurate forecast in the prevailing market conditions.

381 ActewAGL also claimed that the AER adopted a presumption that its methodology should continue unless the breakeven methodology was established to necessarily produce better estimates; and that it had had regard to irrelevant considerations regarding the need for any change to be made in the light of broad industry consultation, the desirability for the methodology to be consistent across gas and electricity service providers, and whether the methodology was simple, transparent and easily replicated.

382 Various errors were also alleged to the effect that the AER’s decision was unreasonable or involved incorrect exercise of discretion in the face of evidence regarding interest rates and inflation.

383 These claimed errors were alternatively formulated in terms of errors of fact – e.g. that the AER wrongly concluded that its methodology was arrived at on a reasonable basis and represented the best forecast possible – or as being incorrect or as being unreasonable. The applicant not having clearly distinguished errors of fact from incorrect exercises of discretion or unreasonableness, there is no utility in the Tribunal trying to do so before it considers the substance of the claims.

#### The applicant’s submissions

384 ActewAGL submitted that there was no inconsistency in proposing the use of the PTRM to calculate its allowed revenue but departing from the current inflation forecasting methodology. The AER’s current inflation forecasting methodology was not part of the PTRM. An inflation forecasting methodology was merely an input to the PTRM.

385 ActewAGL said that the AER’s decision in respect of inflation forecasting was clearly “governed” by r 89, and specifically r 89(1)(d), since there was no other power under which to make a deduction from the annual revenue requirement. It said that the AER did not appear to appreciate in its Final Decision that this invoked the limited discretion provision in r 40. The Final Decision made no mention of the issue.

386 Senior Counsel for ActewAGL accepted that ActewAGL had not raised the question of limited discretion during the processes leading up to the Final Decision.

387 In oral submissions, Senior Counsel for ActewAGL said that the review grounds did not relate to inflation *per se*. It was the deduction of indexation of the capital base from the annual revenue allowance for depreciation that was the subject of the grounds of review.

388 The AER’s discretion being limited, r 40 provided that it had to be objectively – not subjectively – satisfied that ActewAGL’s inflation forecast was not compliant with, or consistent with, applicable criteria in the *NGL* and the *NGR*. It had to actively turn its mind to those matters and form a positive conclusion as to whether it was satisfied as to them.

389 In oral submissions, Senior Counsel for ActewAGL clarified that position by saying:

[I]t’s not open to the AER to simply say, “Look, we are satisfied that the requirements of the rules are not made out”. That is to say, it cannot sidestep – as the submission of *ATCO* put it, it could not merely sidestep the requirements of rule 40 by simply saying, “Look, we’re not satisfied of something”. It had to be satisfied on a reasonable basis and without there being error involved. And that’s what I mean about “objective”.

390 The reference to *ATCO* is to the Tribunal’s decision in *Application by ATCO Gas Australia Pty Ltd* [2016] ACompT 10 (*ATCO*), which ActewAGL relied on as supporting both its view that r 89 governed the AER’s decision and its interpretation of being “satisfied” under r 40.

391 By reference to the comments made in the Final Decision, ActewAGL argued that the AER had made a presumption in favour of the existing inflation forecasting methodology, which was not open to it. It had not actively turned its mind to whether ActewAGL’s proposed forecasting methodology was arrived at on a reasonable basis and represented the best forecast possible in the circumstances.

392 Rather, it had had regard to prohibitedconsiderations, viz. its view of the desirability of applying the same methodology to all service providers (as inflation expectations are not business-specific) and for considering a change only following broad consultation with all stakeholders.

393 ActewAGL argued that the AER should not have concluded that its forecast was accurate. It claimed that the Final Decision was premised on two conclusions that constituted findings of fact:

 that an inflation forecast for the 2015-21 period of 2.18 per cent, based on the AER’s forecasting methodology, represented the likely rate of inflation over that period; and

 that the inflation forecast proposed by ActewAGL in its Revised Proposal (based on the Breakeven Forecasting Methodology) for the 2015-21 period of 2.19 per cent, and updated on 12 May 2016 to 1.96 per cent, did not represent the likely rate of inflation over that period.

394 In the AER’s methodology, by far the greatest contributor to the forecast of inflation was the mid-point of the RBA’s target range for the last seven years of its forecast (following the RBA’s forecast for the first three years). ActewAGL submitted that the AER’s reasoning provided scant evidence in support of the predictive power of the methodology, because times had changed. The fact that since 1993 the average annualised inflation rate had been close to the 2.5 per cent mid-point was irrelevant. Reliance on the target range mid-point assumed that investors perceived an equal likelihood that the RBA would be unable, over the medium term, to prevent above-target inflation as below-target inflation.

395 ActewAGL drew upon a report by CEG of June 2015, which it said:

explained that current market conditions were not such that inflation could be assumed to have equal probability of being above as below the mid-point of the RBA’s inflation target range. CEG observed that monetary policy loses its power to lift inflation back to target levels when the interest rate approaches zero. CEG presented evidence that inflation has been consistently below target levels in all developed countries, including Australia, and explained why, in this context, inflation was likely continue to be below RBA targets in the short to medium term (certainly more likely than inflation rising above the mid-point of the RBA's target range), and that there was a risk of Australia falling into a ‘low inflation trap’. Having regard to that evidence, the AER’s claim that its Forecasting Methodology was ‘unlikely to be subject to estimation error’ was insupportable.

396 CEG referred to a series of statements by the RBA to the effect that, at current levels, lower interest rates were not stimulating economic activity to the same extent as historically. Similarly, CEG referred to statements in the financial press in May 2016 that echoed the IMF’s 2015 concerns regarding Australia falling into a low inflation trap as a result of interest rates approaching the ‘zero lower bound’.

397 In its May 2016 submission providing the updated forecast of 1.96 per cent, CEG observed that actual inflation remained persistently low. It noted that the AER’s forecasting methodology assumed that even though inflation had averaged 1.3 per cent over the most recent two years to March 2016 and even though the centre of the RBA forecast range was 2.0 per cent for the next two financial years, investors expected inflation to then immediately jump from 2.0 per cent to 2.5 per cent (i.e. the mid-point of the AER’s target inflation band) in the year ended June 2019. There was no reasonable basis for that assumption (and certainly none advanced by the AER in the Final Decision).

398The AER did not, so ActewAGL argued, attempt a meaningful analysis of the prevailing low interest rates and the efficacy of monetary policy, issues which it acknowledged in its Final Decision:

If monetary policy loses or is perceived to have lost its effectiveness in influencing economic activity, inflation expectations may deviate systematically from the mid-point of the inflation target range. In which case, estimates under this approach may be too high or too low relative to the market inflation expectations.

The current approach is more likely than market-based estimates to be inconsistent with the term structure of inflation observed in the market because it is not based on the market-implied forward inflation curve. This raises the risk that estimates of the real risk free rate may depart from the ‘true’ real risk free rate in the market.

399ActewAGL’s proposed methodology involved comparisons between fixed interest rate CGS and inflation-indexed CGS to estimate expectations of inflation in the market. It used economic theory in the form of the Fisher equation. At a particular inflation rate, which can be calculated, all other things being equal, the two types of CGS will provide the same return, i.e. “break even”.

400In ActewAGL’s submission, this methodology can be viewed as the probability-weighted forecast of inflation in all possible circumstances that market participants perceive. Being determined by market prices for bonds, it reflected the views of bond market investors who had a financial investment in forecasting inflation accurately, and whose expectations were embedded in the risk-free rate and cost of debt estimates used by the AER to determine the cost of equity and debt.

401In oral submissions, Senior Counsel for ActewAGL particularly drew attention to comparisons made by CEG of estimates of inflation for the year to December 2015 and the year to March 2016, made using the breakeven method, and those produced by the AER’s methodology, i.e. forecasts by the RBA made in November 2014 and February 2015.

402ActewAGL submitted that the AER’s stated concerns about the breakeven methodology, viz, that they contained potential biases:

 relied only on “preliminary research”;

 did not attempt to quantify (or otherwise assess the significance of) the supposed liquidity premium bias, did not have regard to its previously held view that a lack of supply of indexed CGS meant that their yield was biased downwards (thereby overstating breakeven inflation), and did not have proper regard to the fact that the very significant increase in indexed CGS on issue since 2008 suggested that any bias (in either direction) was likely to be small;

 acknowledged that any inflation risk premium was more likely to result in the breakeven methodology over-estimating inflation;

 failed to consider an overall direction of bias or to consider why those biases could be expected to be more material than the evidence before it which demonstrated that inflation was likely to be materially lower than forecast by the AER’s forecasting methodology and the mid-point of the RBA’s target band for inflation after two years; and

 failed to consider evidence of the dramatic fall in breakeven inflation between December 2015 and the time of the AER’s Final Decision (from 2.22 per cent in December 2015 to 1.64 per cent on 6 May 2016, a fall of 0.58 per cent) and that this was unlikely to be wholly attributable to an increase in the level of bias.

403ActewAGL’s overriding submission, returned to at all times, was that the AER presumed that its forecasting methodology would apply unless and until dislodged by another methodology, which was an error, as described above.

404ActewAGL also submitted that the AER’s Final Decision involved an incorrect exercise of discretion or was unreasonable in that the AER failed to properly consult with and inform ActewAGL of the deficiencies it perceived with the breakeven methodology. In this regard, it was submitted, the AER contravened s 28(1)(b)(i) of the *NGL*, which provided that:

(1) The AER must, in performing or exercising an AER economic regulatory function or power—

(a) perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the national gas objective; and

(b) if the AER is making a designated reviewable regulatory decision—

(i) ensure that—

(A) the covered pipeline service provider that provides the pipeline services to which the applicable access arrangement decision will apply; and

(B) users or prospective users of the pipeline services that the AER considers have an interest in the matter; and

(C) any user or consumer associations or user or consumer interest groups that the AER considers have an interest in the matter,

are, in accordance with the Rules—

(D) informed of the material issues under consideration by the AER; and

(E) given a reasonable opportunity to make submissions in respect of the decision before it is made…

405Further, it was submitted, a failure to accord procedural fairness had the consequence that the AER’s decision was unreasonable in all the circumstances.

406As described later in these reasons, the AER submitted that r 60, set out at [362] above, precluded ActewAGL from changing the inflation forecasting methodology in its initial access arrangement proposal. ActewAGL submitted that the AER appeared to have assumed that if the break-even forecasting methodology was not proposed in ActewAGL’s initial access arrangement proposal, then by operation of r 60 the AER cannot have made an error of the kind specified in s 246 of the *NGL* by not adopting or even considering, on its interpretation, the break-even forecasting methodology.

407ActewAGL pointed out that the AER did not rely upon (or indeed mention) r 60 in its Final Decision to argue that ActewAGL had had no ability to revise the inflation forecasting methodology between its initial proposal and its revised proposal. In fact, the AER had “purported” to consider ActewAGL’s breakeven methodology proposal.

408ActewAGL submitted that r 60 was procedural, and did not provide for any consequence if a service provider submitted additions or other amendments to an access arrangement proposal. It was not concerned with grounds of review that may legitimately be pursued. The AER did not oppose leave, and the Tribunal had given leave. A provision of the *NGR* could not be elevated to limit the Tribunal’s otherwise properly invoked jurisdiction.

409ActewAGL submitted that r 74 contained an unqualified requirement that whatever forecast was used must represent the best possible forecast or estimate in the circumstances. That requirement was not limited by forecasting methodologies proposed in an access arrangement proposal.

410In any event, ActewAGL submitted, even if r 60 limited the jurisdiction of the Tribunal, which ActewAGL submitted it did not, then ActewAGL did not contravene the rule because the breakeven methodology was in fact proposed to address a matter “raised in the access arrangement draft decision”. The word “raised” in r 60(1) was not a word that should be construed narrowly in circumstances where many economic and business variables might move between the making of an initial access arrangement draft decision and the final decision. Also, matters under consideration by the AER in a draft decision involved many complex and interconnected decisions and it might not be apparent or clear at the time of the draft decision that a restrictive construction of r 60 would not promote the NGO.

411The phrase “matters raised in the access arrangement draft decision” ought to be interpreted to mean no more than a requirement that issues had arisen from the draft decision that required consideration (including as to whether the draft decision would, if it were a Final Decision, be in accordance with the *NGR* or further the NGO). The draft decision “raised” the methodology to be used to forecast inflation. ActewAGL had made clear that its adoption of the AER’s forecasting methodology was contingent. The draft decision raised and discussed the question whether the forecasting methodology should be replaced.

412ActewAGL submitted that a narrow interpretation would not promote the NGO but would promote arbitrariness in decision-making rather than a proper consideration of the issues that bore upon whether the final decision (if in the form of the draft decision) would be affected by error. Rule 60 should not be construed to mean that once an initial access arrangement proposal was made, it could not be departed from by the service provider. That limitation was not expressed in r 60, and it could not otherwise be implied from that rule.

413Alternatively, ActewAGL contended that by advancing the breakeven methodology in its revised proposal, it was seeking (if it were necessary to do so) the AER’s approval. The AER could have been in no doubt as to whether ActewAGL was seeking to modify the position taken in its initial proposal.

414ActewAGL also claimed that the AER introduced new contentions in its oral submissions. Without expressing a conclusion on whether any of those contentions were new, that proposition being resisted by the AER, the Tribunal granted leave to ActewAGL to make short written reply submissions on those topics on the basis that Senior Counsel for ActewAGL wished to make such submissions orally, but time did not permit that to be done.

415ActewAGL’s reply was dated 2 December 2016. One submission addressed the proposition put by the AER in oral address that the AER and ActewAGL were essentially in agreement about proposed expected inflation until immediately before the Final Decision, but ActewAGL altered its position by proposing a lower estimate in May 2016. ActewAGL said that this submission was incorrect. A second matter addressed by ActewAGL was as to whether or not ActewAGL’s proposed inflation estimate fell outside r 89. The AER had submitted that ActewAGL’s estimate was not governed by r 89. A third matter addressed by ActewAGL was as to the meaning of the word “best” in the context of a forecast. The fourth matter went to the AER’s criticisms of ActewAGL’s expert, Dr Hird of CEG, and as to the substance of the matters with which he dealt. The fifth matter addressed the position if the AER’s decision about ActewAGL’s estimate of inflation was not subject to r 40(2). ActewAGL emphasised that this was a peripheral issue: if the AER’s discretion to reject ActewAGL’s estimate was limited by r 40(2) (as ActewAGL contended that it was), then the question of the criteria by which the AER was to make its own proposed estimate of inflation did not arise for consideration.

416There was subsequent correspondence from the solicitors for the AER dated 9 December 2016. That letter stated the AER did not seek to put on further submissions in response to ActewAGL’s reply submissions dated 2 December 2016. However, the AER requested that the Tribunal note that, in its view, the circumstances did not give rise to any need for ActewAGL to approach its reply in the manner in which it did. There was then a further letter from the solicitors for ActewAGL to the Tribunal, dated 13 December 2016. It is not necessary for the Tribunal to address that correspondence. To the extent necessary, we do consider below ActewAGL’s written reply submissions dated 2 December 2016.

#### The AER’s submissions

417The AER’s first submission was that ActewAGL had been precluded from advancing a new method of estimating expected inflation by r 60. ActewAGL had submitted its initial access arrangement proposal using the PTRM, including the inflation estimation method contained within it. The use of this method was accepted by the AER in its draft decision, which thus did not raise a matter that provided a basis for an amendment to the inflation estimation method in the revised proposal.

418ActewAGL’s statement in its initial access arrangement proposal that the best method of estimating inflation may evolve during the regulatory process did not permit it to avoid the operation of the *NGR*. It was required to request the AER to exercise its discretion to allow it to amend its approach.

419The AER did not refer to r 60 in deciding that it would not accept ActewAGL’s revised inflation methodology. Nevertheless, ActewAGL never requested the AER to exercise its discretion under r 60.

420In the AER’s submission, r 60 reflected the important policy consideration that the service provider should place all its cards on the table in its initial proposal, which was subject to a consultation process with users before the draft decision was made. Raising new matters after the draft decision bypassed that consultation process, and there was no practical need to do so, since the five years between new access arrangements provided ample time for a considered proposal to be put forward.

421The figure of 2.18 per cent in the Final Decision was insignificantly different from the 2.19% in ActewAGL’s revised access arrangement proposal (in response to the draft decision). It was only on 12 May, two weeks before the Final Decision, that ActewAGL sought to further revise its estimate to 1.96 per cent. The time for submissions to be made had expired on 6 January.

422The AER denied that the limited discretion rule was applicable. However, if it was applicable, it was complied with, because the AER was not satisfied that the estimate derived using the Fisher equation had been arrived at on a reasonable basis and was the best forecast or estimate in the circumstances, whereas it had that satisfaction about the PTRM method.

423In particular, ActewAGL had failed to address the known biases and issues including:

 convexity arising because Treasury Bonds were more volatile than Treasury Indexed Bonds;

 the inflation risk premium applied to Treasury Bonds;

 the liquidity premium applied to Treasury Indexed Bonds, as the less liquid asset; and

 inflation indexation lag, which was estimated by the RBA to be around 4.5 to 5.5 months.

424These issues and the CEG report were discussed in the Final Decision, where the AER explained why it considered that the CEG report had not adequately dealt with earlier concerns expressed by its author.

425These issues concerning potential biases were known from the academic literature referred to in the Final Decision and in the findings and advice provided in 2008, when the AER, following a process of consultation, adopted its current methodology in preference to the breakeven approach. The draft decision had noted that in its recent rate of return guideline development process the AER had raised the inflation forecasting method as an issue for potential review. In response, stakeholders had endorsed the continuation of the current approach. It was therefore significant that ActewAGL and CEG had not sought to address the issues in the revised access arrangement proposal and associated submissions.

426The AER’s conclusion – that it did not accept ActewAGL’s approach because it did not consider CEG’s application of the breakeven approach appropriately adjusted for bias – constituted a finding for the purposes of *NGR* r 40(2) that the estimate of expected inflation produced using the inflation estimation method proposed by ActewAGL did not comply with *NGR* r 74 because the estimate was not arrived at on a reasonable basis and did not represent the best forecast or estimate possible in the circumstances.

427The AER argued that the material in the CEG report and ActewAGL’s submissions regarding actual inflation outcomes – by necessity, in the past – were not to the point. The question was what methodology was best for forecasting inflation.

428Counsel argued that there was no basis for apparent claims in the CEG report that the RBA had lost control of monetary policy. To the contrary, the very RBA statement quoted by CEG contained the following:

Nonetheless we do not think that monetary policy has reached the point where it has no ability at all to give additional support to demand. Our judgement is that it still has some ability to assist the transition the economy is making, and we regarded it as appropriate to provide that support.

RBA Governor Stevens, Opening Statement to House of Representatives Standing Committee on Economics, Sydney - 13 February 2015.

429The AER pointed to its statements in the Final Decision, referred to at [215] and following above, on why it considered the PTRM methodology to be reasonable. It also noted throughout the Final Decision that there was no better method for estimating future inflation, and that it therefore represented the best method, as required by r 74.

430Further it submitted:

In order to consider whether an estimate has been arrived at on a reasonable basis and is the best possible in the circumstances, it is appropriate to take account of all circumstances that might inform whether a particular estimate is the best. The fact that a proposed method is not widely accepted and departs from established regulatory practice, has not been the subject of broad consultation in circumstances where it is an industry-wide method for an economy-wide indicator and has not been able to be subject to a comprehensive analysis of its strengths and weaknesses, are all circumstances that can legitimately inform that assessment.

431As to the applicability of the limited discretion rule, the AER submitted that the inflation forecast methodology was governed (the term used in r 40(2)) not by r 89, which dealt with depreciation criteria and was a limited discretion rule, but by rr 73 and 74, which were not limited discretion rules. Rule 73 expressly dealt with inflation. Rule 74 required that the forecast must be supported by a statement of the basis of the forecast.

432The methodology was relevant to a number of the integers making up the PTRM, which was used by ActewAGL to calculate total revenue, not just depreciation. In fact, the Final Decision dealt with forecast inflation in the chapter on rate of return, not that on depreciation. Rule 89 dealt with how depreciation schedules were designed, and that was what the limited discretion applied to. A depreciation schedule must ensure that assets were depreciated only once, but the rule did not mandate a particular method by which inflation should be estimated, or even that it be estimated.

433If the AER’s discretion was not limited, then under r 40 it may withhold its approval to an element of an access arrangement proposal if, in its opinion, a preferable alternative existed that complied with the requirements of the law.

434The AER submitted that there was no failure to consult with ActewAGL in accordance with s 28 of the *NGL*. ActewAGL could not have been surprised that the AER approved its proposal to use the PTRM forecast inflation methodology in its draft decision. In subsequently proposing a different methodology, ActewAGL must have known it was raising a new issue and that it would consequently have to advance all relevant information in support of its change. The AER considered the material provided and came to its Final Decision.

435Under r 64(1), if the AER, in a final decision, refused to approve an access arrangement proposal, it must itself propose an access arrangement or revisions to the access arrangement. Rule 64(3) provided that it may, but was not obliged to, consult on its proposal.

436The AER drew attention to statements by the Tribunal in previous cases about the detailed sequence involved in the regulatory process to avoid gaming, and that “a line must be drawn by the AER in its engagement with a DNSP” so as to meet deadlines imposed on it. The AER also referred to the Tribunal having previously recognised that failure to accord procedural fairness was not an available ground of review.

#### The Tribunal’s analysis

*Was ActewAGL precluded from making amendments to its initial access arrangement proposal?*

437The Tribunal considers that the effect of r 60 is clearly to constrain the behaviour of the service provider during the regulatory decision-making process. It accepts the submissions of the AER as to the policy intention regarding that constraint, and respectfully agrees with the comments of the Tribunal in the previous cases cited by the AER.

438Contrary to the submissions of ActewAGL, the rule, while procedural, does have consequences for the service provider. It does not include sanctions for non-compliance, but it is intended to be complied with, and to foster an orderly process in which the scope to amend an initial access arrangement proposal is limited and, unless required in order to address a matter raised in the AER’s draft decision, subject to approval by the AER. It disciplines the service provider into making the most well-considered initial proposal possible, conscious that the time for proposing departures from existing methodologies is the period prior to the draft decision, during which consultation with stakeholders takes place.

439Further, the Tribunal does not accept ActewAGL’s submissions that the phrase “raised in the access arrangement draft decision” should be interpreted so broadly as to comprehend the mere mention in the draft decision of issues that require consideration. It could not be the case that by accepting ActewAGL’s proposed inflation forecasting methodology, the AER was “raising” it.

440Rather, the intent is that the service provider be given an opportunity to respond to matters raised by the draft decision as needing an amendment to the initial proposal, and not to allow amendment of that proposal otherwise. For example, the AER might signal in its draft decision that it would not accept some element of the initial proposal unless it was amended. The implication would be that if the service provider declined to amend its proposal, it was accepting the possibility that the AER would reject the initial proposal and substitute its own proposal under r 64.

441It is true that in its draft decision the AER referred to the future possibility of changing its methodology. In doing so, it was not raising the methodology as an issue needing to be addressed by ActewAGL by making amendments to its initial proposal. It had accepted that proposal.

442It may be, as ActewAGL’s submission implies, that there could in some instances be a degree of trade-off between allowing a better proposal for making a forecast or estimate to come forward, on the one hand, and constraining and confining the decision-making process, on the other. Rule 60 explicitly intervenes in that trade-off, on the side of restricting the ability of the service provider to make an amendment to its initial proposal – even an improvement – once the AER has agreed to its initial proposal.

443If it be thought, as ActewAGL submitted, that such an outcome would be at odds with finding the “best estimate or forecast possible in the circumstances” for the purpose of r 74, it need only be noted that the circumstances include those brought into effect by r 60. Of course, if the AER considered that an otherwise impermissible proposed amendment should be permitted to be advanced, it could approve the amendment.

444It follows that in the Tribunal’s view the AER was entitled to reject ActewAGL’s amended forecast inflation methodology as caught by r 60 without giving it further consideration.

445But the AER did not, in its Final Decision, reject the revised proposal pursuant to r 60, or even mention r 60. Nor did it oppose leave for review of the forecast inflation decision on the basis that ActewAGL had been precluded by r 60 from making the amendment (or on any other basis). Instead, it considered the proposal and subjected it to the analysis that will be described later. It then rejected it.

446In these circumstances, the Tribunal does not construe r 60(2) as having the result that ActewAGL’s amendment to its forecast inflation methodology is or was a nullity, or as otherwise having the result that ActewAGL’s amendment could not or should not be considered by either the AER or by the Tribunal. Rather, the Tribunal takes the view, as we have said, that the effect of r 60(2) of the *NGR* was to entitle the AER not to consider such an amendment but, where, as here, the AER does consider such an amendment, then it has, by implication, approved that further amendment being made in terms of r 60(2). We reach that conclusion without resort to concepts of estoppel. It follows that the Tribunal should consider the consequences, if any, of ActewAGL’s amendment.

*Was the AER’s discretion limited?*

447The next question is whether the AER’s discretion in making its decision regarding forecast inflation was limited, and thus subject to r 40. The only basis on which that would be the case is if the forecast inflation element of the access arrangement proposal is governed by r 89, a limited discretion rule dealing with depreciation criteria. There is no disagreement that forecast inflation is an element of ActewAGL’s access arrangement proposal. The Tribunal was not referred to materials regarding the policy background to r 40 or why r 89 is a limited discretion rule. The Tribunal notes that the other limited discretion rules in Pt 9 of the *NGR*, Price and Revenue Regulation, are those applying to new capital expenditure criteria (r 79), operating expenditure criteria (r 91) and tariffs (rr 94 and 95), but not to the capital base.

448The relevant part of r 89 is quoted at [368] above*.*

449ActewAGL’s main submission was that there was no other Rule that conferred a power to make a deduction for inflation from the annual revenue requirement. The fact that the inflation forecast entered the PTRM in more than one place was not to the point. The *NGR* differed from the *NER* (r 6.4.3(b)(1)), which explicitly required a negative adjustment to the regulatory asset base of the amount of indexation for inflation.

450This is to put all the emphasis on the deduction of indexation to prevent double-counting. But that is not the only or the primary purpose of making an inflation forecast. First, in terms of the logic of the building block approach, the capital base must be indexed each year to maintain its real value. Secondly, new capital expenditure must also be indexed to maintain its value in real terms. Thirdly, to prevent the service provider receiving revenue from the effect of inflation twice – once through the rate of return and once through depreciation – the amount of indexation must be deducted from the annual revenue requirement.

451Moreover, the Tribunal does not accept that, as Senior Counsel for ActewAGL submitted, the ground of review is not the inflation forecast *per se* but the deduction of the inflation indexed component from depreciation, and thus from the annual revenue requirement. That claim is contradicted by ActewAGL’s acceptance of the deduction as a matter of principle, and of its execution through the depreciation (return of capital) building block. What ActewAGL objected to is the AER’s inflation forecast, and the effect of that on the amount of the deduction, not the fact of the deduction. If that inflation forecast were to be changed by the Tribunals’ decision, it would have effects throughout the calculation of the annual revenue requirement.

452It would therefore seem that if the inflation forecast, as an element of an access arrangement proposal, is governed by r 89 dealing with how the depreciation schedule is designed (depreciation criteria), then it must also be governed by the other Rules under which it is used in the PTRM or, for that matter, in any means of deriving the revenue requirement. Rule 78 deals with the projected capital base. It makes no mention of inflation, but it makes no mention of whether the capital base is measured in real or nominal terms. Under r 87, the rate of return used is in nominal terms. It follows that the capital base needs to be indexed to maintain its value in real terms from year to year. This adjustment can only be authorised under the *NGR* by r 78. It would follow that the inflation forecast, as an element of the access arrangement proposal, must also be governed by r 78.

453The inflation forecast would similarly be governed by r 79, which deals with new capital expenditure criteria during the access arrangement period.

454It would be a curious interpretation of the *NGR* if the AER’s discretion to withhold approval of the same inflation forecast was limited in the case of its use in a depreciation schedule or new capital expenditure but not in its use in indexing the capital base.

455The Tribunal considers that the inflation forecast is not governed by the several Rules dealing with building blocks in which it plays a part. Rather, the inflation forecast is governed by r 74, which deals with forecasts and estimates.

456The issue that the Tribunal’s decision in *ATCO* dealt with was rather different, and went to the heart of what r 89 is about. The AER did not address the *ATCO* decision in either its written or its oral submissions.

457ATCO had sought to make a transition from (1) the method for avoiding over-compensation for inflation by deducting an amount for indexation – as in these proceedings – described in *ATCO* as the current cost accounting approach to (2) a historical cost accounting approach. The Tribunal said that is was well known that under the historical cost accounting or current cost accounting approaches the present value of the capital cash flows equals the original asset cost, but with a difference in the time pattern of the revenue streams over the life of the asset. Assuming the same style of depreciation schedule (e.g. straight line depreciation), the historical cost accounting revenue stream is more “front end loaded” than the current cost accounting revenue stream (assuming that inflation is positive).

458The Tribunal said, at [328]-[329], that:

The central question is whether ATCO’s schedule has been designed so that reference tariffs will vary over time in a way that promotes efficient growth in the market for reference services (it not having been suggested that the market for such services is immature) and so as to allow for ATCO’s reasonable needs for cash flow to meet financing, non-capital and other costs: r 89(1)(a) and (e) of the NGR.

It is uncontroversial that those objectives are best met by the depreciation methodology that most closely matches [annual revenue] with long run marginal cost (‘**LRMC**’) associated with an incremental increase in services. However, there is dispute as to the basis for that comparative analysis.…

459In fact, the whole dispute revolved around whether ATCO’s proposed depreciation schedule met the requirements of r 89(1)(a). Rule 89(1)(d), which is invoked in these proceedings, was not at issue or discussed.

460In *ATCO*, the Tribunal nowhere specified what “element of an access arrangement proposal” was governed by r 79. There was consequently no reference to the deduction for indexation or the historical cost accounting approaches as an “element”. Rather, the Tribunal appears to have considered the element to have been the depreciation schedule or the depreciation building block. The regulator in that matter accepted, at [374], that its discretion was limited, and there appears to have been no dispute or indeed discussion in that case about the applicability of r 89 to the facts, which is unsurprising since the form of the depreciation schedule was central to the issues involved in considering the grounds of review.

461The Tribunal acknowledges that the issues in *ATCO* and in these proceedings are not unrelated, in that in both cases the treatment of depreciation is involved, including how to avoid over-compensation of a service provider by reason of the relationship between a nominal rate of return being applied to an inflation-adjusted capital base. However, its sees nothing in *ATCO* to support the proposition that forecast inflation is an element of an access arrangement that is governed by r 89.

462In essence, the proposition must be that if an inflation forecast is used in the calculation of depreciation – even though r 89 does not require such a use, and *ATCO* is about the historical cost accounting alternative of not using an inflation forecast – then r 89 governs the inflation forecast for the purposes of r 40. The Tribunal does not accept that proposition.

463Rule 89(1)(d) is not “about” deducting indexation of the capital base from depreciation so as to arrive at an annual revenue requirement that avoids overcompensation for indexation. It is concerned with not allowing an asset to be depreciated more than once: that is, with ensuring that the amount of depreciation does not exceed the value of the asset at the time of its inclusion in the capital base. It is expressed in terms of individual assets rather than the total capital base. It makes no mention of indexation, but refers to the value of an asset being adjusted, if the accounting method approved by the AER permits, for inflation.

464That reference is clearly to indexation to maintain an asset’s real value, if that is the accounting method being used. It is not about deducting indexation.

465This emphasises that it is, as ActewAGL submitted, a matter of practice for the indexation deduction to be made to depreciation in the PTRM for gas network service providers. In the Tribunal’s view, r 89 no more makes provision for the deduction than does r 87, which deals with rate of return. Rate of return is the other PTRM building block where the deduction could appropriately be made, there being no separate (negative) building block specified for it.

466The Tribunal notes that its reasoning does not depend on a view, ascribed by ActewAGL in its 2 December 2016 written reply submission to the AER, that the structure of the PTRM mandates the AER’s construction of r 79.

467In case the Tribunal is wrong in its view that the AER’s discretion was not limited, it now considers the Final Decision under the assumption that r 40(2) applies to it.

*Does ActewAGL’s inflation methodology comply with applicable requirements?*

468Paraphrasing the Tribunal in *ATCO* at [386], if ActewAGL’s amended inflation forecasting methodology:

complies with applicable requirements of the *NGL* and *NGR*; and

is consistent with applicable criteria (if any) prescribed by the *NGL* and *NGR*,

then it should be accepted by the AER, even if the AER regards its approach as (merely) preferable.

469The Tribunal must examine the analysis of the AER in reaching its conclusion of non-compliance by ActewAGL – i.e. its not being satisfied that ActewAGL’s proposal met the requirements – and if that analysis involves errors of fact, wrongful exercise of discretion or is unreasonable in result, reviewable error will result.

470The applicable requirements of the *NGL* and *NGR* are those found in r 74: that a forecast or estimate must be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances.

471It may be seen that the word “best” implies some form of comparison: between the best forecast possible and those that are less good. Thus, while the AER may not be entitled to reject ActewAGL’s forecast merely because it thinks its own preferable, see *ATCO* at [386], it is not precluded from rejecting ActewAGL’s forecast if, on analysis, it forms a well-based view that its own is clearly better, for in that case ActewAGL’s forecast could not be the best possible. On the contrary, in that event the AER is bound not to accept ActewAGL’s forecast.

472As a threshold point, the Tribunal accepts the AER’s submission that its Final Decision conclusion – that it did not accept ActewAGL’s approach because it did not consider CEG’s application of the breakeven approach appropriately adjusted for bias – constitutes a finding for the purposes of r 40(2) of the *NGR* that the estimate of expected inflation produced using the inflation estimation method proposed by ActewAGL did not comply with r 74 because the estimate was not arrived at on a reasonable basis and did not represent the best forecast or estimate possible in the circumstances.

473Further, the AER’s conclusions in the Final Decision that its methodology was a better approach constitute a finding that ActewAGL’s forecast did not represent the best forecast possible in the circumstances.

474The question is whether the AER was right so to conclude. Was its reasoning sound, or does it reveal error? Did it have a reasonable basis for not being satisfied that ActewAGL’s forecast was the best possible in the circumstances? This is the test that ActewAGL’s counsel ultimately proposed, and that the Tribunal now applies. The Tribunal’s view is not that which ActewAGL, in its 2 December 2016 written reply submission, ascribes to the AER, viz. that “best” has such a wide interpretation that the AER’s discretion is effectively unlimited.

475ActewAGL submitted that the AER appeared not to have realised that its discretion was limited. ActewAGL had not raised that proposition with the AER during the regulatory decision-making process so it is not surprising that the AER’s Final Decision did not refer to it in terms. The AER denied that its discretion was limited, but submitted that if it was, that requirement was complied with. The Final Decision does not mention the issue of limited discretion, and does not reveal conscious effort, by the nature and terms of its drafting, to comply with r 40. That does not answer the question whether it did comply.

476The AER spent over six pages discussing the CEG approach and making comparisons with its existing approach. The Tribunal considers that the comparison of the two approaches is fair and balanced and not in error. The AER’s view that ActewAGL’s forecasting methodology was deficient was based on an enumeration of potential biases in the breakeven approach, with in each instance a view expressed about whether it would require adjustment to the forecasts produced, giving references to consultants’ reports (including by the author of the CEG report), its own previous decisions, and numerous academic articles. The CEG report had made no adjustments for bias to its forecasts.

477The analysis was not in depth, but the Tribunal finds it is not accurate to characterise it as lacking substance. It constituted the listing of known issues that needed to be addressed before the AER could reasonably change its mind that the breakeven methodology had fundamental flaws.

478The Tribunal finds that it was known among stakeholders that the breakeven approach was flawed at the time it was dropped in 2008. It finds that the author of the CEG report, in particular, was aware of those issues and had expressed concerns about them. It reasons that it was for ActewAGL to address those concerns in some detail to explain why they could now be put aside if the approach were to be considered the best possible. It finds that the CEG report did not attempt such a task except in a broad brush way. It finds the AER specifically considered CEG’s comments about what had changed in the market since 2008, and decided that it could not be satisfied that there were no longer concerns.

479In assessing the question of statutory error, the Tribunal finds ActewAGL’s submissions – and the relevant passages in the CEG report – unpersuasive as to the relative merits of the two methodologies. The question is which methodology is likely to produce the better forecasts. As to the first three years, the Tribunal heard no evidence to suggest that the official forecasts of the RBA were to be discounted. It might be noted that in making those forecasts – which are a vital input to market expectations and investment decisions – the RBA would employ a range of methodologies and market intelligence, no doubt including market estimation methodologies, of which the breakeven methodology is one.

480The claimed loss of efficacy of monetary policy is irrelevant to those medium-term forecasts, as they are made by the RBA in its full knowledge of how monetary policy is operating – a knowledge as good as anyone else’s – and of likely market developments. In any case, the Tribunal accepts that no evidence was produced that the RBA has made a statement to the effect that its monetary policy interventions are ineffective, and indeed had stated, at the relevant time, that it still had scope to influence the market.

481Attention must turn to the use of the breakeven methodology for the out-years of the ten-year inflation forecasts versus the use of the mid-point of the RBA’s target range. Even three years out, forecast inflation is highly unpredictable. That much can be seen by the surprises in the market at inflation being lower than expected in the recent past. The Tribunal sees no inherent unlikelihood in inflation being 2.5 per cent in 2018-19, as assumed in the AER’s methodology. The only evidence that such an outcome was unlikely was that it would involve inflation increasing from 2.0 per cent the year before. This was merely asserted to be implausible, with no evidence regarding, for example, the frequency or otherwise of such events in the past.

482Given the widely reported intention of monetary authorities in many countries to encourage inflation to increase, and the historical coincidence between actual inflation outcomes and the mid-point of the range, the Tribunal accepts that use of the RBA’s target range provides the best possible inflation forecasts for the time being. Of course, that assessment should be reconsidered by the AER from time to time.

483As may be seen, the Tribunal’s view is tied to the reasoning in the Final Decision. ActewAGL’s 2 December 2016 written reply submission regarding how counsel for the AER dealt with the CEG report does not raise any matters to disturb the Tribunal’s view.

484The following statements in the Final Decision were relied on by ActewAGL as not being concordant with the AER’s failing to be satisfied that ActewAGL’s methodology was the best possible:

… we do not consider that a breakeven approach using indexed CGSs would necessarily produce better estimates of expected inflation than the current method (or another estimation method, such a [sic] one based on inflation swaps).

…

… we maintain that if we change our view in the future, this should follow a consultation process and a comprehensive analysis of the strengths and weaknesses of different approaches. This will allow us to consistently apply a methodology for estimating expected inflation that is broadly accepted as sound. We consider this to be beneficial over changing approaches across resets (noting that we do not consider service providers have shown broad support to permanently return to the breakeven approach).

…

If an alternative to the current method provides unambiguously better estimates of expected inflation, we consider it preferable to adopt this as our general approach rather than applying it on a decision-by-decision basis. We do not consider CEG or ActewAGL have made a strong case for how the breakeven approach might produce superior estimates of expected inflation to the current method. Further, neither addressed nor proposed to adjust for the potentially material biases underpinning this approach.

485ActewAGL appears to have been making two related points. First, it claimed the passages as evidence that the AER had misconceived its task, which was to reach satisfaction about whether the breakeven methodology was the best possible. Secondly, ActewAGL said that the passages were evidence that the AER had taken impermissible considerations into account.

486There is looseness in the AER’s language that may have been avoided had it explicitly addressed the requirements of r 40. Similar thoughts are expressed differently in different places. For example, by comparison with the first passage above it also said:

Given the information currently before us, we are not satisfied that changing our approach would improve our estimates of expected inflation.

487If it were the case that the AER had decided merely that ActewAGL’s proposed methodology was no better than its existing methodology, then, with a limited discretion, it could not reject the proposal. But the Tribunal considers it evident from the substantial comparison between the two methodologies that the AER had considerable unaddressed concerns about the breakeven methodology, and is confident that the existing methodology is robust, in the sense that it produces good inflation forecasts. It clearly considered that the existing methodology was better, and therefore the best possible in the circumstances. The Tribunal also considers that the AER had a reasonable basis for reaching those views.

488If the AER had decided to reject ActewAGL’s amendment purely on the basis that industry consultation and broad stakeholder agreement were needed before it would implement a change, it is possible that the AER would have been in error. But that was not the case. It is clear from the Final Decision that the issue of bias was paramount.

489It is also clear that those other considerations were taken into account in making the decision. The Tribunal considers that the absence of scrutiny of the breakeven methodology through broad stakeholder consultation was a justifiable consideration in whether that methodology was the best possible.

490ActewAGL submitted that the AER made two findings of fact that could not be rationally supported:

 that an inflation forecast for the 2015-21 period of 2.18 per cent, based on the AER’s forecasting methodology, represented the likely rate of inflation over that period; and

 that the inflation forecast proposed by ActewAGL in its Revised AA Proposal (based on the Breakeven Forecasting Methodology) for the 2015-21 period of 2.19 per cent, and updated on 12 May 2016 to 1.96 per cent, did not represent the likely rate of inflation over that period.

491Whether they are findings of fact, which the AER denies, is neither here nor there. The Tribunal considers that, if “more likely” is substituted for “likely”, they are deducible propositions from the AER’s decision that its existing methodology is superior and the best possible. That does not further ActewAGL’s argument. The propositions simply crystallise the effect of choosing one methodology over the other. The reasons for the choice do not rest on the outcomes produced, as if those outcomes – forecasts regarding an uncertain future – are somehow able to be assessed independently of the methodologies that produced them.

492As the AER submits, it does not know what future inflation will be. It has chosen what it considers the best method for forecasting it. The point is, in the Tribunal’s view, that the subject matter is a forecast.

493The Tribunal finds that the claim that the AER did not actively turn its mind to the task before it is amply contradicted by the discussion and detail in the Final Decision, including references to the submission that it received two weeks before that decision was published. It was only in that submission that ActewAGL’s proposed methodology generated a forecast different from its previously proposed 2.19 per cent, negligibly different from the AER’s forecast of 2.18 per cent. The proximity of those estimates is not relevant to our view of the merits of the competing methodologies. Consequently, ActewAGL’s 2 December 2016 written reply submission about what the AER’s counsel said about the importance of the proximity is also not relevant to our view of the merits of the competing methodologies.

494Finally, there is the question whether the AER erred by not properly consulting with ActewAGL and informing it of the potential deficiencies it perceived with the breakeven methodology.

495The Tribunal finds that the AER properly considered the material placed before it by ActewAGL. It had already approved ActewAGL’s initial proposal to use the existing methodology, and ActewAGL consequently needed to provide materials to support an amended proposal. It should not have needed to be asked. It cannot be the case that, in addition to preparing a draft decision under the Rules, the AER is required to further foreshadow its Final Decision before publishing it, in an instance where the Final Decision confirms the draft decision. ActewAGL was not denied procedural fairness.

496In summary, the Tribunal finds no ground of review made out in relation to this issue.

# ADVANCED METERING INFRASTRUCTURE (AMI)

497 As identified by Senior Counsel for the Minister, this ground concerned advance metering infrastructure (**AMI**), productivity improvements and reliability benefits. It related specifically to the Victorian jurisdiction and the installation in Victoria of smart meters.

498 The historical background was given by the AER in its written submissions in terms which the Tribunal accepts. In 2006, the Victorian Government mandated the rollout of AMI, colloquially referred to as “smart meters”, to all households and small businesses across Victoria. Under an Order in Council made by the former Victorian Minister, Victorian consumers substantially paid for the rollout of AMI through additional charges on their electricity bills. Whereas analyses produced in 2009 and 2010 projected very substantial net benefits of the AMI rollout, in 2011 Deloitte provided a report to the Victorian government that forecast a net cost to customers of $319 million (NPV at 2008).

499 Deloitte referred to smart meters as new digital meters that were able to measure usage in half hourly intervals, to have this data remotely read, and to enable other innovative products and services (“smart services”).

500 As described by the AER, during the 2011-15 regulatory control period, incremental costs associated with implementing and operating smart meters were regulated under the AMI Order in Council (AMI OIC). This included costs associated with new or upgraded IT systems. With the expiry of the AMI OIC, opex associated with AMI was to be regulated under the *NER*.

501 The Tribunal uses Powercor as the prime exemplar for this purpose, as did counsel.

#### What the AER decided

502 The AER decided as follows:

**B.4.5 Forecast productivity growth**

We have applied a zero per cent productivity growth forecast in our estimate of the overall rate of change. This reflects our expectations of the forecast productivity for an efficient service provider in the short to medium term. This is consistent with Economic Insights' recommendation to apply zero forecast productivity growth for other distribution network service providers such as Ergon Energy. This is also consistent with our preliminary decision.

Powercor also included forecast productivity growth of zero in its rate of change.

The Guideline states that we will incorporate forecast productivity in the rate of change we apply to base opex when assessing opex. Forecast productivity growth will be the best estimate of frontier shift.

We consider past performance to be a good indicator of future performance under a business as usual situation. We have applied forecast productivity based on historical data for the electricity transmission and gas distribution industries where we consider historical data to be representative of the forecast period.

To reach our best estimate of forecast productivity we considered Economic Insights' economic benchmarking, Powercor’s proposal, our expectations of the distribution industry in the short to medium term, and observed productivity outcomes from electricity transmission and gas distribution industries. We discuss these further in our preliminary decision.

[The Victorian Energy Consumer and User Alliance] VECUA, however, stated that our decision to apply zero productivity growth 'is illogical and is not supported by the evidence'. It stated that we need to forecast positive productivity growth for the Victorian distributors to bring their productivity back into line with their previous productivity levels and into line with the levels the electricity transmission, gas distribution and other asset intensive industry sectors achieve.

VECUA claimed that a key reason for the distributors’ productivity declines during the previous regulatory period was our provision of excessive opex allowances. It considered this was a strong driver of the networks’ inefficient labour practices. It stated that such factors must not be used to justify poor productivity outcomes in future years. VECUA, however, provided no evidence to support these claims. We note that productivity declines have not been unique to Australian electricity distribution networks. We have seen similar declines in productivity in Ontario and New Zealand, which operate under different regulatory frameworks. Further, we are unaware of any incentive for the Victorian DNSPs to increase their actual opex when it is not efficient to do so. We consider the drivers of recent productivity declines in our assessment of Powercor’s base opex in appendix A.

Although it stated that forecast productivity growth should be positive, VECUA did not suggest a basis on which to forecast positive productivity growth. VECUA did state that some of its participants operate in asset intensive industries that have delivered positive productivity growth during the 2006–13 period. However it did not identify which industries it was referring to or why those industries would be an appropriate benchmark for electricity distribution. The [Consumer Challenge Panel] CCP also considered forecast productivity should be positive. However, it did suggest we should consider the approach IPART uses to forecast productivity growth for the industries it regulates. The approach the CCP referred to was the approach used by IPART to regulate rural and regional buses and local council rates. IPART forecast productivity based on the 15-year average of the ABS market sector value-added multifactor productivity (MFP) based on quality adjusted hours worked. It sets forecast productivity growth to zero when the 15 year average is negative. The 15 year average productivity growth for the utilities industry is –3.3 per cent. Consequently IPART’s approach to forecasting productivity also results in forecast productivity growth of zero.

Consistent with previous submissions, the Victorian Department of Economic Development, Jobs, Transport and Resources (DEDJTR) stated that:

… with the rollout of smart meters in Victoria substantially complete, the AER should expect the Victorian DNSPs to realise efficiency gains from the rollout. These efficiency gains should be passed through to customers as the benefits are realised, as it is their customers, rather than the DNSPs, that have funded the investment in smart meters through a cost recovery regulatory regime.

We stated in our preliminary decision that DEDJTR had not identified or quantified the ‘value added benefits’ or the further benefits it expected to be realised over the 2016–20 regulatory control period. We stated that without this information we could not incorporate them into our opex forecast. We also note that DEDJTR had not provided us the independent assessment of the benefits of the AMI program that it had referred to.

DEDJTR stated in its submission on our preliminary decisions that Deloitte forecast the benefits associated with the rollout of smart meters in a public report it prepared in 2011 for the Department of Treasury and Finance. The most significant benefits identified in this report relate to capex and metering expenditure. Deloitte also identified some ‘other smaller benefits’ that may be relevant to standard control services opex. Of these smaller benefits, the most material reductions in standard control services opex are from:

* the avoided cost of investigation of customer complaints about voltage and quality of supply
* the avoided cost of investigation of customer complaints about loss of supply which turn out to be not a loss of supply
* reduction in calls to faults and emergencies lines
* reduced cost of network loading studies for network planning.

DEDJTR stated that a recent review it undertook indicates that the DNSPs are in the early stages of realising these benefits and therefore their revealed 2014 operating expenditure would not reflect them. DEDJTR did not provide this review. It also did not identify how the savings are allocated across the DNSPs and the extent to which these savings are reflected in base opex.

Powercor stated in its revised regulatory proposal that the benefits of the Advanced Metering Infrastructure (AMI) rollout that it has realised to date have largely been realised through savings in alternative control services opex and are already reflected in its base metering operating expenditure. It stated the same was true of standard control services opex and thus its standard control services opex forecast already reflected the productivity benefits of AMI.

Powercor further stated that it expects the future benefits of the AMI rollout will relate to capex, rather than opex. It stated access to AMI data mostly provides future capital expenditure savings, for example by enabling improved network and community safety and improved network investment decisions, including the potential to defer network augmentation.

In response to DEDJTR's submission, Powercor set out its progress to date on each of the categories of smart meter benefits identified and how it is sharing the benefits with its customers. It noted that it undertook its smart meter rollout within the timeframes set out by the Victorian Government. Further, the rollout was 96 per cent complete by 31 December 2013.

Powercor stated that once it reached a critical mass of smart meter coverage it commenced implementation of business initiatives aimed at leveraging smart meter benefits. These included business initiatives implemented to achieve the smaller benefits identified by Deloitte. Powercor described each of these initiatives and when it implemented the initiatives. In each case Powercor implemented the initiative prior to the commencement of the 2014 base year.

(Footnotes omitted.)

503 The Minister’s amended notice of intervention was relevantly in the following terms, omitting footnotes. In that notice, the acronym STPIS refers to the Service Target Performance Incentive Scheme. Rule 6.6.2 of the *NER* requires the AER to develop and publish, in accordance with the distribution consultation procedures, the service target performance incentive scheme. The references to “SAIDI” are to system average interruption duration index (**SAIDI**).

**The Minister’s grounds of review**

*Productivity improvements*

62. **Ground 1:** In applying a zero per cent productivity growth forecast, the AER made errors of fact in the following findings of fact in the final decisions:

(a) equating the Victorian DNSPs with DNSPs in NSW and the ACT. In doing so, the AER failed or neglected to consider and account for the differences between the Victorian DNSPs and DNSPs in NSW and the ACT, including that none of the DNSPs in NSW and the ACT have completed a rollout of AMI;

(b) relying upon the Economic Insights report Economic benchmarking of operating expenditure for NSW and ACT electricity DNSPs of October 2014 when that report was in respect of the OPEX of DNSPs in NSW and the ACT;

(c) equating the Victorian DNSPs with Ergon Energy Corporation Ltd, the regional DNSP in Queensland. In doing so, the AER failed or neglected to consider and account for the differences between the Victorian DNSPs and Ergon Energy, including that Ergon Energy has not completed a rollout of AMI;

and those errors of fact, either singly or in combination, were material to the making of the final decision.

63. **Ground 2:** Further or alternatively the AER’s decision applying a zero productivity growth forecast was unreasonable having regard to all the circumstances and/or the AER’s exercise of discretion to apply a zero productivity growth forecast was incorrect having regard to all the circumstances by reason of:

(a) equating the Victorian DNSPs with DNSPs in NSW and the ACT. In doing so, the AER failed or neglected to consider and account for the differences between the Victorian DNSPs and DNSPs in NSW and the ACT, including that none of the DNSPs in NSW and the ACT have completed a rollout of AMI;

(b) relying upon the Economic Insights report Economic benchmarking of operating expenditure for NSW and ACT electricity DNSPs of October 2014 when that report was in respect of the OPEX of DNSPs in NSW and the ACT;

(c) equating the Victorian DNSPs with Ergon Energy. In doing so, the AER failed or neglected to consider and account for the differences between the Victorian DNSPs and Ergon Energy, including that Ergon Energy has not completed a rollout of AMI;

(d) failing or neglecting to pay any or sufficient regard to the differences in productivity of DNSPs in Victoria arising from AMI being installed and operational in Victoria in the 2016 – 2020 regulatory control period;

(e) failing or neglecting to account for there being an ‘additional level of productivity growth’ in the 2016 – 2020 regulatory control period arising from AMI being installed and operational in Victoria in the 2016 – 2020 regulatory control period;

(f) noting that Economic Insights saw past declines in productivity as ‘abnormal’ and quoting Economic Insights opinion to the effect that those declines were (as the AER put it) ‘unlikely to reflect long term trends’, but then not applying a productivity growth percentage forecast that reflected those long term trends;

(g) rejecting the Minister’s submissions on the basis that:

(i) the Deloitte report was outdated;

(ii) the Deloitte report did not provide sufficient detail to accurately apply adjustments to the individual Victorian DNSPs;

(iii) the Minister had not provided the ‘recent review’ (being the Confidential AMI Benefits Report); and/or

(iv) the Minister had not identified how savings were allocated across DNSPs and the extent to which those savings were reflected in base OPEX,

when confidentiality claims by the DNSPs in respect of the ‘recent review’ and the information asymmetry between the Minister and the DNSPs meant that the Minister could not:

(i) provide the ‘recent review’; or

(ii) carry out the allocation of savings or identify the extent to which those savings were reflected in base OPEX,

and where the AER could (if it had not already done so), by using its powers under the NEL, itself obtain information to effect that allocation and identify the extent to which those savings were reflected in base OPEX for each DNSP.

64. **Ground 3:** The AER made errors of fact in the following findings of fact in the final decisions:

(a) finding that the benefits of AMI rollout were reflected in base OPEX for the year 2014 for the DNSPs;

(b) conflating benefits already accrued arising from AMI rollout with the ‘additional level of productivity growth’ (future productivity improvements) expected to arise from the use of AMI,

and those errors of fact, either singly or in combination, were material to the making of the final decision.

65. **Ground 4:** Further, or alternatively, the AER’s decision that the benefits of AMI rollout were reflected in base OPEX for the year 2014 was unreasonable having regard to all the circumstances and/or the AER’s exercise of discretion to decide that to benefits of AMI rollout were reflected in base OPEX for the year 2014 was incorrect having regard to all the circumstances by reason of:

(a) the AER not distinguishing (as it should have) between efficiencies that are captured in the base year 2014 and the future productivity improvements;

(b) the AER equating the two when it found that there has already been capture of efficiencies in the base year.

*Reliability*

66. **Ground 5:** The AER made errors of fact in the following findings of fact in the final decision:

(a) not modifying the performance targets, in particular (unplanned) SAIDI, to account for reliability benefits arising from the rollout of AMI;

(b) finding that the Deloitte report’s estimate of supply reliability improvements was not supported by the reported evidence on the basis that:

(i) only Jemena and AusNet had achieved performance improvement in the last regulatory control period; and

(ii) CitiPower, Powercor and United Energy had not reported improvement in supply reliability in the last regulatory control period (despite having achieved a high rate of AMI implementation) in the relatively short time frame between achieving a high rate of AMI implementation and the end of the last regulatory control period.

(c) failing or neglecting to consider future reliability improvements arising from the rollout of AMI;

(d) finding that the use of AMI does not result in a change in the duration of outages recorded for STPIS purposes on the basis that AMI only allows for faster outage detection but the response process is the same (ie that AMI only shifts the starting point of a response), when the Deloitte report had identified, and the Minister referred to, benefits arising from the AMI rollout involving faster supply restoration upon an outage being detected (ie the Deloitte report identified that the response process following the AMI rollout would not be the same) definition of (unplanned) SAIDI is one of duration from the start of the outage, not from the time of detection,

and those errors of fact, either singly or in combination, were material to the making of the final decision.

67. **Ground 6:** Further or alternatively, the following decisions of the AER were unreasonable having regard to all the circumstances and/or the AER’s exercise of discretion in making the following decisions was incorrect having regard to all the circumstances:

(a) not modifying the STPIS performance targets, in particular (unplanned) SAIDI to account for reliability benefits arising from the rollout of AMI;

(b) finding that the Deloitte report’s estimate of supply reliability improvements was not supported by the reported evidence on the basis that:

(i) only Jemena and AusNet had achieved performance improvement in the last regulatory control period; and

(ii) CitiPower, Powercor and United Energy had not reported improvement in supply reliability in the last regulatory control period (despite having achieved a high rate of AMI implementation) in the relatively short time frame between achieving a high rate of AMI implementation and the end of the last regulatory control period;

(c) failing or neglecting to consider future reliability improvements arising from the rollout of AMI;

(d) finding that the use of AMI does not result in a change in the duration of outages recorded for STPIS purposes on the basis that AMI only allows for faster outage detection but the response process is the same (ie that AMI only shifts the starting point of a response), when the Deloitte report had identified, and the Minister referred to, benefits arising from the AMI rollout involving faster supply restoration upon an outage being detected (ie the Deloitte report identified that the response process following the AMI rollout would not be the same)definition of (unplanned) SAIDI is one of duration from the start of the outage, not from the time of detection,

(e) failing or neglecting to consider that clause 6.6.2 of the NER requires that November 2009 STPIS is to provide incentives to ‘improve’ (as well as ‘maintain’) performance (clause 6.6.2(a)) although it must also take into account the past performance of the distribution network (clause 6.6.2(b)(3)(iii)); and

(f) failing or neglecting to consider clause 3.2.1(a) of the November 2009 STPIS, and in particular the future reliability improvements arising from AMI.

#### The submissions to the Tribunal

504 The Minister submitted, in summary, that the AER’s decision to adopt zero percent productivity growth for the Victorian DNSPs did not take into account the productivity improvements arising from the AMI rollout (Grounds 1, 2, 3 and 4).

505 Economic Insights’ advice was that zero should be adopted for NSW/ACT and Queensland DNSPs: the AER had adopted that advice to apply it in Victoria. This was done by the AER despite:

* 1. that advice recognising that step changes could be netted out in Victoria;
  2. there being future productivity benefits arising from the rollout of AMI in Victoria;

(Grounds 2 and 3 for both).

506 The Economic Insights’ reports were not accepted by the Tribunal in *Ausgrid*.

507 The expenditure forecast assessment guideline recognised that in estimating frontier shift a “like for like” comparison was required, and that there should be an adjustment for technical change (which AMI rollout was) (Grounds 1 and 2).

508 The DNSPs having included AMI productivity benefits in their 2014 base year opex was not to point. The question was future productivity benefits. CitiPower/Powercor in their Reply asserted that they had included the benefits in base year opex. The benefits they identified were the avoided costs of no more accumulation meters, not the future productivity benefits of AMI (Grounds 3 and 4).

509 The AER was advised of the future productivity benefits but took no action to issue a regulatory information statement (**RIN**). Jemena had also told the AER that it was at the early stages of realising the benefits of AMI. That reinforced the need for a RIN. CitiPower/Powercor in their Reply asserted there was no duty on the AER to inquire, but the authorities they cited were under the *Administrative Decisions (Judicial Review) Act 1977* (Cth). And those authorities recognised that a decision may miscarry if the decision maker does not make an obvious inquiry as to a critical fact. The AER was conferred with an express power to issue RINs. That sufficed to indicate the legislative intent: the AER must inquire (Ground 2).

510 Deloitte identified the reliability benefits.

511 The DNSPs having disputed the Deloitte report as outdated, the AER took no steps to make its own inquiries and made no adjustment to the STPIS targets on the basis that there was insufficient evidence. Again this was a matter that called for a RIN (Ground 6).

1. Further:
2. Reliability benefits of AMI only arise in the last years of the rollout. The AER pointing to the DNSPs as having completed the rollout in 2013/14 but there being no reliability improvement shown was not to point, the time frame to assess this was too short;
3. The AER did not address the faster restoration times identified by Deloitte.

(Grounds 5 and 7)

513 The CUAC supported the grounds of review raised by the Minister in relation to the productivity improvements arising from the roll out of AMI. The CUAC drew to the Tribunal’s attention the submissions made by VECUA, of which CUAC was a member, to the effect that the AER’s decision in its draft determinations to apply a productivity factor of zero was not supported by the evidence and would result in further declines in the distributors’ productivity levels. The CUAC supported the Minister’s submission that the AER erred in applying a zero per cent productivity growth forecast in its final determinations for the Victorian DNSPs. In particular, the CUAC supported the Minister’s submission that the mandatory rollout of AMI in Victoria had resulted in significant productivity improvements and/or efficiencies that will be realised by the Victorian DNSPs in the 2016-2020 regulatory period. The CUAC noted the evidence of present and future efficiencies in the DNSP regulatory proposals to the AER. Jemena explicitly forecast a productivity improvement of 0.89% per year in its opex over the 2016-2020 regulatory period. Although other Victorian DNSPs did not forecast productivity improvements, future efficiency benefits arising from the AMI rollout were nevertheless acknowledged. For instance, the regulatory proposals of both CitiPower and Powercor stated that they were already realising network benefits from their smart meter program and would continue to do so. CitiPower and Powercor stated that these network benefits provided long term benefits to their customers. The CUAC supported the Minister’s submissions to the effect that whatever option was selected for the transition to metering contestability, Victorian DNSPs will still be able to realise efficiency benefits from the installation of AMI and these should be passed on to consumers through the application of a positive productivity factor. The CUAC submitted the benefits outlined in the DNSPs’ own regulatory proposals were broadly indicative of an error in the AER’s decision not to apply a positive productivity factor.

514 The affected applicants, the Victorian DNSPs, submitted, in summary, that contrary to the contention of the Minister, the AER did not err in determining their forecast productivity growth on the basis that the rollout of AMI was unlikely to increase their productivity over the 2016-2020 period.

515 The principal reason was that, as the AER concluded, these DNSPs had substantially completed their rollout of AMI prior to the 2014 base-year upon which their opex forecast was based. Accordingly, the productivity benefits of the AMI rollout were already incorporated into their forecasts.

516 The Minister had also misunderstood the way that the AER determined forecast productivity growth for Victorian DNSPs. This was forecast on the basis of change in the efficiency frontier, not on a firm by firm basis. That approach was open to the AER and no error had been shown. That, it was submitted, answered both the Minister’s contention on AMI productivity, and her contention that the AER in determining the Victorian DNSPs’ forecast productivity growth, erred in failing to net out step changes which had affected their past opex performance. The Minister relied upon a report of Deloitte dated 2 August 2011. However that report was directed at identifying the overall societal benefits of AMI over the 2008 to 2028 period, and could not have been relied upon by the AER to identify a likely increase in productivity over the 2016-2020 period as a result of the AMI rollout.

517 The Minister also relied on a “Confidential AMI Benefits Report”. However, she did not supply that report to the AER. The AER was not obliged to collect further information on this topic in circumstances where no cogent submission had been made to it indicating that further information was required.

518 Contrary to the Minister’s contention, the AER did not err in deciding not to adjust STPIS targets for reliability improvements associated with AMI. Principally, that was because there was insufficient evidence before the AER to support the proposition that AMI would result in reliability improvements over the 2016-2020 period sufficient to justify an adjustment to the STPIS targets. In particular, that was because under the STPIS, outage times are measured from the time a DNSP detects an outage, rather than from when the outage commences. While AMI led to faster detection of outages, it did not necessarily improve outage response time.

519 The AER submitted, in summary, that the “confidential report” was never provided to it, even though it was requested. The AER had no record of having been informed that it was subject to a confidentiality claim. The AER submitted it did not err by not using its information-gathering powers. The AER was under no duty, in the circumstances, to exercise its compulsory information-gathering powers to obtain the information contained in the “confidential report”.

520 When forecasting productivity growth for the purposes of determining the rate of change for the calculation of opex, the AER submitted it used the forecast “shift in the productivity frontier” across the industry, rather than on a DNSP-specific or jurisdiction-specific basis.

521 The AER submitted it did not “equate” the Victorian DNSPs with DNSPs in New South Wales and the ACT; err in relying on a report by Economic Insights in respect of the opex of NSW/ACT DNSPs; or “equate” the Victorian DNSPs with Ergon Energy (a Queensland DNSP).

522 The AER noted that the Minister asserted that the AER should have netted out step changes for Victorian DNSPs when determining the “productive growth rate for Victoria”. The AER submitted that those submissions on the part of the Minister did not relate to any of the Minister’s grounds of review, nor was this issue raised in her submissions to the AER. Thus this issue could not now be raised before the Tribunal.

523 In any event, the AER submitted, it did not err in the manner that the Minister asserted.

524 Given the evidence before it, including features of the 2011 Deloitte report, the fact that the AMI roll-out was largely complete by 2014, and the DNSPs’ responses to the Minister’s submissions, the AER submitted it was open to it to estimate the productivity forecast as it did.

525 The AER submitted it did not equate efficiencies in base-year opex and future productivity improvements.

526 The AER submitted that its reference to AMI productivity benefits being captured by the EBSS did not disclose error.

527 As to the STPIS performance targets, the AER submitted that its decisions in relation to SAIDI targets were made under r 3.2.1(a) of the STPIS. The Minister’s submissions were based on figures postulated by Deloitte. Those figures were intermediate assumptions, unsupported by evidence or analysis. The AER was justified in not adjusting the SAIDI targets.

528 The AER submitted that if the Tribunal concluded that the AER committed any of the reviewable errors alleged by the Minister then the AER accepted that remitting the determinations in order to remedy those errors would result in a decision that was preferable to the original determinations in making a contribution to the achievement of the NEO.

529 In oral submissions, Senior Counsel for the Minister emphasised the Economic Insights report was done to benchmark opex expenditure for NSW and ACT DNSPs (on the contention that everything in the Economic Insights report was taken up and adopted by the AER); that an earlier Tribunal in *Ausgrid* rejected the efficacy of the Economic Insights report; step changes; the benefits from the rollout of smart meters in the 2011 Deloitte report; and the STPIS, particularly its reliability of supply component.

530 We note the observation made by Senior Counsel for the AER that much of the Minister’s submissions were irrelevant to the matters properly before the Tribunal as they did not relate to her submissions to the AER, raising a s 71O issue, and did not relate to the grounds of review set out in the notice of intervention.

531 In oral submissions, Senior Counsel for CitiPower and Powercor submitted that the Minister’s grounds of review contained two discrete topics: the first, contained in grounds 1 to 4 of the Minister’s notice of intervention, concerned the subject of productivity improvements, and that was directed towards the AER’s productivity growth forecast which was an integer in the calculation of opex for standard control services. The second topic, contained in grounds 4 and 5 of the Minister’s notice of intervention, in many ways discrete from the first, concerned the reliability benefits, the STPIS grounds. As to the first topic, Senior Counsel submitted that the short answer was that the AER accepted, for good reason, that the rollout of smart meters did not produce any expected additional opex efficiency gains in the regulatory control period: the efficiency gains were built into the base opex for the applicants and passed through to consumers via that mechanism and future benefits were anticipated to involve capex but no addition to opex. As to the second topic, Senior Counsel submitted the short answer was that there was no evidence before the AER that the smart meter rollout would be expected to result in a material improvement in supply reliability in respect of unplanned SAIDI.

532 Senior Counsel for Jemena adopted those submissions. He submitted that the relevant meters had been rolled out substantially, almost entirely, prior to the relevant base year and, therefore, any efficiency benefits that would be obtained from the meters had been picked up by that base year. He further submitted that the Minister had conflated opex efficiencies that arose from matters as they stood at the commencement of the regulatory control period, and any potential further benefits that could only arise if the business in question undertook some additional program, not part of its capex forecast, which the AER had reviewed and approved. Any opex benefits associated with that entirely new initiative, and that resulted from the program, would appropriately be covered by the EBSS.

533 Counsel for United Energy adopted the preceding submissions.

534 Senior Counsel for AusNet also adopted those submissions. He added that, with one exception, the findings of fact complained of in the Minister’s grounds were generally methodological choices, value judgements or opinions made or formed by the AER which were open to it.

535 In oral submissions, Senior Counsel for the AER submitted there were two key questions arising in relation to the Minister’s AMI grounds. The first was whether there was any or any sufficient evidence before the AER to justify altering its views on productivity growth on account of the AMI rollout, both in relation to productivity relevant to opex and the effect on reliability relevant to the setting of targets under the STPIS. The second, partially related, question was whether the AER had any duty to inquire or investigate in response to the Minister’s submissions which adverted to a recent review that the Department had undertaken but had not provided.

536 We now turn to consider these submissions.

#### The Tribunal’s analysis

537 The subject matter here is *forecasting* productivity growth. We find that the AER did not make the errors for which the Minister contended. In our opinion, the AER did not equate the Victorian DNSPs with either the NSW and ACT DNSPs or with Ergon Energy. The Tribunal finds that what the AER was describing and doing in its distribution determinations was to set its forecast rate of productivity growth consistently as a matter of approach, relevantly by reference to the recently observed productivity trend of firms at or near the efficient frontier nationally. As submitted on behalf of the AER, the “efficient frontier” referred to the grouping of the most-efficient DNSPs across the national electricity market, against which the AER benchmarked the efficiency of all DNSPs’ base-year opex. As further submitted, in turn the “catch up to the frontier” corresponded to the reduction that the AER made to a DNSP’s revealed base-year opex, if it was found to be materially inefficient: that was the “efficiency adjustment” term of the opex formula. Fundamentally, as submitted by the parties opposing the Minister’s contentions, the AER’s productivity growth forecast used in determining the rate of change was directed to the efficient frontier, rather than to individual DNSPs or jurisdictions. We reject the submission put by the Minister that the AER should have made a jurisdiction-specific productivity growth forecast.

538 Despite the emphasis which Senior Counsel for the Minister placed on the Economic Insights report, we do not regard the parts of that report which were concerned with the adjustments to base year opex of the New South Wales and ACT distributors as relevant to the exercise that the AER was undertaking.

539 Also, in relation to the Economic Insights report, the Tribunal does not accept the Minister’s submission that the AER adopted the reasoning in that report so as to incorporate that reasoning as the AER’s reasoning. Put differently, in the Tribunal’s view, the references in the AER’s decisions in relation to the Victorian DNSPs to the Economic Insights report does not mean that the AER incorporated the entirety of the reasoning in that report, especially that part of the report dealing with catch-up for the NSW and ACT DNSPs.

540 Next, the Tribunal sees no basis for concluding that the AER’s not exercising its information gathering powers under the *NEL*, to obtain the information upon which the Department’s Review was based, was itself a reviewable error or caused the Final Decisions to be unreasonable or caused the incorrect exercise of discretion.

541 The relevant provision is s 28F of the *NEL* which provided, relevantly, that “the AER, if it considers it reasonably necessary for the performance or exercise of its functions or powers under this Law or the Rules, may …” serve a regulatory information notice. It follows from the terms of the provision that there is no duty to exercise the power and the AER has a discretion whether or not to serve a RIN and to do so where it considers it reasonably necessary to do so for its statutory functions or powers. We refer also to the terms of s 28J and 28K of the *NEL* which impose procedural and other requirements. The former section requires the AER to give the regulated network service provider an opportunity to make written representations as to whether the AER should serve a RIN on it.

542 The Tribunal finds that it was a case where no version of the Department’s Review was provided to the AER and that the now asserted reason for that non-provision, confidentiality, was not then made out. Indeed it is not now made out. The Tribunal also finds and notes that no redacted version of the Department’s Review was offered or provided to the AER, as one would expect if a confidentiality claim were made. The Tribunal finds it was not suggested to the AER that it might use its powers under the *NEL* to obtain that Review report.

543 Since, as the Tribunal finds, the Department’s Review was not provided to the AER and the AER did not know what the Review contained, the AER made no error either in not obtaining it or in not taking it into account. The Tribunal finds that there was no failure on the part of the AER to make an obvious enquiry as to a critical fact: compare the legal regime and the facts considered in *Minister for Immigration and Citizenship v SZIAI* [2009] HCA 39; 259 ALR 429. We find that the Minister’s grounds of intervention fail in this respect.

544 The Tribunal sees no error in the way in which the AER treated the 2011 Deloitte report. How that report might be used is a matter on which differences of opinion may reasonably be held. The AER in its final decision gave reasons for concluding that the information set out in the 2011 Deloitte report was inadequate. The AER said as follows:

We have considered the evidence provided to us and are satisfied that any future benefits arising from the AMI rollout will not materially impact standard control services opex. We are satisfied that base opex sufficiently captures the benefits of the AMI rollout, as they relate to standard control services opex, because the AMI meters were largely rolled out by the start of the base year.

and:

We are satisfied that the majority of the benefits of the AMI rollout that relate to AusNet Services’ standard control services opex are already reflected in its base opex. We are satisfied that the future benefits of the AMI rollout will primarily relate to capex, rather than opex. …

While there could be some minor opex benefits, based on the available information, it is unclear whether base opex already reflects these minor benefits. We do not think the available information provides a basis to make any adjustment for these minor benefits.

545 It is also to be noted that the Deloitte report was made in 2011 and dealt with the period from 2008 to 2028. The Tribunal does not regard it as a solid basis on which to forecast productivity growth for the period 2016 to 2020. We also note the cogent submissions made by the DNSPs as to why the Deloitte report should not be relied on by the AER to adjust its productivity forecast.

546 The Tribunal sees no error in the conclusion of the AER that the Deloitte report constituted insufficient material for the AER to adjust its productivity forecast for the Victorian DNSPs.

547 We have considered the 2011 Deloitte report, especially figure 4.10 on page 83. We accept the AER’s submission that by 2014, the yellow band, relating to the “other smaller benefits” had expanded to substantially its full height and, therefore, that Deloitte’s modelling in its report appeared to indicate that the “other smaller benefits” from the AMI rollout were expected to have been realised by 2014, the base year. We note that the Minister relied on part only of the “other smaller benefits”.

548 The Tribunal does not accept the Minister’s submission that the AER erred in conflating accrued productivity benefits with future productivity benefits or that this reflected a “conceptual confusion” fundamental to the AER’s decision, as the Minister contended.

549 We do not accept the Minister’s submission that the AER erroneously decided that the DNSPs should not be rewarded through the EBSS for productivity improvements arising from the rollout of AMI, but that AMI efficiencies should be passed on to customers by adjusting the productivity growth forecast. In our opinion the statement by the AER that “any benefits that have not yet been realised will be shared with consumers through our revealed cost forecasting framework and the EBSS” was an immaterial observation, the AER having already concluded that it was not satisfied that there were any future productivity benefits that were not already reflected in the 2014 base year opex.

550 Insofar as the Minister’s criticised the AER for not having regard to step changes, in our opinion it is clear that the Minister did not make any submissions to the AER about this and neither did the Minister include that matter in the notice of intervention. Section 71O(2)(c) of the *NEL* has the effect that the Minister “may not raise in relation to the issue of whether a ground for review exists or has been made out” that matter as it was not raised by the Minister in a submission to the AER before the reviewable regulatory decision was made. In our view although it may be a matter of judgement in some cases as to the specificity with which a matter is required to be raised, in the present case raising productivity as a general topic does not have the effect that netting out step changes may now be raised. Section 71P(2b)(a) is not relevant because that provision deals with the consequences of error rather than the identification of error.

551 In any event, we do not find that the AER made such an error. The Tribunal finds that the AER addressed the effects of and did have regard to past step changes, for example at pages 7-70 of each of the CitiPower/Powercor Preliminary Decisions.

552 The Minister’s grounds of review, grounds 5 and 6, then turned to the issue of reliability.

553 The Minister submitted that the AER decision not to adjust the SAIDI target in light of asserted AMI benefits was not justified. In our opinion, this ground turns on competing understandings of the 2011 Deloitte report. We conclude that the AER’s understanding of that report did not involve any relevant error. We see no error in the AER’s understanding that the Deloitte report had a limited purpose, being to compare the relative cost-benefit analysis of removing the government mandate for the AMI rollout from 31 December 2011, as opposed to continuing the AMI program beyond 1 January 2012. That cost-benefit comparison was performed by reference to the forecast costs and benefits of the program across the 20 year period from 2008-2028. The assessments made as to percentage SAIDI improvement rates were merely intermediate assumptions that Deloitte applied, to provide a monetary quantification of the value of faster outage detection and restoration times on the DNSPs’ low voltage systems. We find no error in the AER’s conclusion that the empirical evidence before it did not accord with the assumptions in the 2011 Deloitte report. Whether the reliability benefits were “expected to result in a material improvement in supply reliability” as reported by Deloitte was otherwise a matter for the AER’s judgement.

554 The Minister also submitted, with reference to the 2011 Deloitte report, that the AER erred by failing to refer to the benefits associated with faster response times, rather than faster detection times. We can discern no reviewable error in this respect. There is no separate quantification in the Deloitte report of the claimed faster response times benefits. That report itself said that the anticipated benefits in relation to faster restoration of supply were “unlikely to significantly reduce SAIDI results” and were “difficult to quantify”. The response-time component of the reliability improvements were assumed by Deloitte.

555 The Minister contended that the AER, when making the distribution determinations, failed to discharge its obligation under r 6.6.2(a) of the *NER* to provide incentives to maintain and improve reliability performance. However r 6.6.2(a) relates to the AER making the STPIS, not to the making of a distribution determination. The Tribunal sees no basis for the Minister’s contention.

# CONCLUSION AND DETERMINATION

556 The Tribunal affirms the reviewable regulatory decisions.

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| I certify that the preceding five hundred and fifty-six (556) numbered paragraphs are a true copy of the Reasons for Determination herein of the Honourable Justice Robertson, Mr RF Shogren, Dr DR Abraham . |

Associate:

Dated: 17 October 2017