AUSTRALIAN ENERGY REGULATOR

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Consumer Challenge Panel

CCP Sub-Panel CCP11

12 September 2017

To: Australian Energy Regulator (AER) Board
Ct: Lynley Jorgensen and Adam Young, Co-ordination Directors, Victorian Gas Access Arrangement Review (GAAR)

Dear Paula,

Victorian Gas Access Arrangement Review (GAAR) for Australian Gas Networks (AGN), AusNet Services and Multinet

Please find attached our final advice in relation to the AER's Draft Decision and the Final Proposals by the NSPs in above Access Arrangement Review.

Kind regards,

Chris Fitz-Nead

Consumer
Challenge
Panel

Final Advice to the Australian Energy Regulator (AER)

Consumer Challenge Panel Sub-Panel CCP11

Response to the AER's Draft Decisions and the Revised Proposals from AGN, AusNet and Multinet for a revenue reset / access arrangement for the period 2018 to 2022

Sub-Panel CCP11

David Prins

Bev Hughson

Robyn Robinson

Chris Fitz-Nead

12 September 2017

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EXECUTIVE SUMMARY

CCP11 has considered the AER's Draft Decisions and the Revised Proposals of AGN, AusNet and Multinet (the Network Service Providers or NSPs) in light of the objective of the CCP, which is to:

- Advise the AER on whether the network businesses' proposals are in the long term interests of consumers;
- Advise the AER on the effectiveness of network businesses' engagement activities with their customers and how this is reflected in the development of their proposals.

In this Executive Summary, we summarise CCP11's key observations, and our remaining material concerns regarding the proposed Access Arrangements for AGN, AusNet and Multinet for 2018-2022.

A. CONSUMER ENGAGEMENT

In the seven month period between lodgement of the businesses' initial and revised access arrangement proposals, there was considerable divergence between the approaches that the businesses adopted towards consumer engagement.

AGN continued to demonstrate a commitment to meaningful stakeholder engagement. Together with the other businesses, AGN presented details of its initial proposal at an AER Public Forum. AGN published customer-friendly information about their plans on its 'Have Your Say' website. AGN's Victoria and Albury Reference Group and Retailer Reference Group each met twice during this time. The Groups were both provided with briefings on AGN's initial proposal and on AGN's response to the AER Draft Decision. Members were given an opportunity to provide feedback on any matters of concern.

Overall, AGN's stakeholder engagement during this timeframe has been effective and constructive.

AusNet chose to inform its customers about details of its initial proposal and its Revised Proposal, but not to conduct a formal consultation program to seek stakeholder views and feedback. AusNet also participated in the AER Public Forum to present its initial proposal to stakeholders. AusNet has provided regular website and email updates to large customers and to its Customer Consultative Committee. These groups were informed of the details of the Draft Decision and of AusNet's decision to accept it. In addition, AusNet published a new customer-friendly summary document outlining AusNet's response to the AER Draft Decision. Meetings were held with some of AusNet's largest customers to explain the implications of accepting the Draft Decision.

AusNet's stakeholder engagement activities have been effective at informing customers about the regulatory process and the business's planned responses. CCP11 is of the view that AusNet has not effectively engaged with stakeholders to discuss and seek feedback on those plans.

Apart from participation in the AER Public Forum, ***Multinet*** elected not to undertake any stakeholder engagement on the AER Draft Decision or its revised access arrangement. This was explained to be because of Multinet's intention to accept the AER's decision in large part, anticipating only minor changes in the Revised Proposal.

CCP11 considers Multinet's stakeholder engagement during this phase of the access arrangement review process to be ineffective.

B. LONG TERM INTEREST OF CONSUMERS

There were several issues in the NSPs' initial proposals which in CCP11's view showed or raised the prospect that the proposals were not in the long term interest of consumers. In its Draft Decisions, the AER has considered matters raised by CCP11 in its Advice to the AER dated 3 March 2017. The NSPs have further considered their positions and formulated their Revised Proposals in light of the AER's Draft Decision, submissions on their initial proposals, and other matters that have arisen since their initial proposals.

Many of CCP11's substantive concerns have been addressed by the AER's Draft Decisions and the NSPs' Revised Proposals. These are reviewed, and remaining concerns considered in the Advice section of this paper.

CCP11's key observations and remaining material concerns are summarised in this Executive Summary.

1. Demand Forecasts

CCP11 emphasises the need for network businesses to set out full details of methodologies in their regulatory proposals, to enable stakeholders to provide informed submissions in the AER's formal consultations which are a key component of the regulatory decision making processes.

The demand forecasts by the businesses and the AER's decisions rely significantly on forecasts from AEMO, as an independent expert body. We recommend that the AER should liaise with AEMO to ensure that the latest forecasts available at the time of finalisation of the Final Decisions are used in those Final Decisions.

2. Capital Expenditure

CCP11 considers the reduced mains replacement program provided for in the AER Draft Decision for Multinet to be reasonable, based on the AER and its expert's assessment of safety and risk issues, and based on Multinet's past delivery of mains replacement works.

The plan in Multinet's Revised Proposal for a larger (although not as extensive as initially proposed) mains replacement program is of concern as to whether it is necessary and deliverable. CCP11 encourages the AER (and its expert advisors) to examine closely the additional material provided by Multinet, purporting to justify the expanded program.

3. Operating Expenditure

Each of the three gas distribution businesses proposed a step change in operating expenditure to undertake a joint gas marketing campaign in Victoria. In other jurisdictions, the AER has previously approved operating expenditure step changes for gas marketing.

CCP11 questioned the demonstrated level of support from customers for the marketing expenditure proposal, and whether it is prudent to incentivise new customers to connect to the gas network at a

time when domestic gas prices are predicted to rise substantially. CCP11 also queried whether the current regulatory treatment of marketing expenditure is appropriate.

In its Draft Decision, the AER acknowledged that it has reconsidered its position on marketing from previous decisions, and did not accept any of the proposed marketing step changes on the basis that they are considered to be 'business as usual' expenses which are allowed for in base year opex. Each of the businesses has accepted this decision.

CCP11 supports the AER position on marketing step changes, but considers that further examination of the regulatory treatment for marketing expenditure would be appropriate.

4. Incentive Schemes

Capital Efficiency Sharing Scheme

AGN and AusNet included the introduction of a new Capital Efficiency Sharing Scheme (CESS), referred to as a Contingent CESS in their initial access arrangement proposals. Multinet did not. When the businesses lodged their initial proposals, the design of the Contingent CESS had not been finalised. CCP11 supported the introduction of a CESS for the gas distribution businesses in principle, and encouraged the businesses and the AER to continue working towards a final design in time for release of the AER Draft Decisions.

Following further detailed discussions with the AER and its consultants, AGN and AusNet lodged a late submission to propose a revised design for the Contingent CESS. The AER approved introduction of the revised Contingent CESS in its Draft Decisions, while acknowledging that there may be some risks associated with this 'fast-tracked' design. CCP11 supports the final design of the scheme including its asymmetrical nature and the network performance measures and targets. However, we have reservations about whether the proposed strategy to mitigate the risk of inefficient deferral of capex is adequate. In particular, we consider that a business should not achieve CESS benefits if it fails to deliver its approved mains replacement volumes.

In its Revised Proposal, Multinet formally requested application of the same Contingent CESS set out in the AER Draft Decisions for both AusNet and AGN for the forthcoming access arrangement period. CCP11 supports introduction of the Contingent CESS for Multinet.

In our view, more attention could have been given to engagement with other stakeholders during the later Contingent CESS refinement process, to confirm that stakeholders' views are accurately represented in the final outcome.

Network Innovation Schemes

All three distribution businesses proposed a form of Network Innovation Scheme (NIS). Although each business based its proposal on Ofgem's NIS for gas distribution businesses in the UK, the proposals were different. While supportive of fostering innovation in gas network businesses, CCP11 advised against the acceptance of these schemes, considering that they were not sufficiently developed and aligned across the three businesses to enable implementation of a common scheme for the next access arrangement period.

The AER Draft Decisions did not accept any of the proposed Network Innovation Schemes, and the businesses have all accepted that decision.

5. Rate of Return & Inflation

In their initial proposals only AGN adopted an approach to the rate of return, inflation and gamma that was consistent with the AER's 2013 Rate of Return Guideline and AER's recent decisions. AusNet and Multinet both submitted proposals that varied from the AER's Guideline. AusNet proposed a higher market risk premium (MRP), lower inflation and lower gamma. Multinet proposed a higher MRP and "uplift" factor to the overall return on equity to address the claimed low beta bias as well as lower inflation and gamma. However, all three distribution businesses adopted the AER's approach to transition to the 10-year trailing average for the return on debt.

CCP11's advice was to not accept these variations from the AER's 2013 Guideline. The AER also concluded that AusNet and Multinet had provided insufficient information to cause the AER to vary from its Guideline. The AER also adopted the recent decision of the Full Federal Court (May 2017) to define the benchmark efficient entity (BEE) in terms of comparative risk rather than by reference to regulated or unregulated business.

CCP11 supports the AER's ongoing assessment of this important concept, and our submission provides some further analysis of the BEE and a number of other developments in the AER's assessment of the rate of return, inflation and gamma.

In their Revised Proposals, all three distribution businesses adopted the AER's Draft Decision, including the AER's Draft Decision on inflation and gamma. CCP11 is encouraged by the positive approach that the gas distribution businesses have taken on these hitherto controversial matters.

CCP11, therefore, recommends that the AER accept the Revised Proposals by AGN, AusNet and Multinet on the rate of return, inflation and gamma.

6. Tariffs

We suggest that there are opportunities for future access arrangements for the AER to work with the interested stakeholders:

- To probe a bit further with the distribution networks whether their more complex price structures are justifiable and effective; and
- To encourage further dialogue primarily between retailers and distributors, but also including consumer engagement, to try to achieve a more agreed approach between the parties.

This may be something that can be taken forward as part of the more collaborative approach between the AER and key stakeholders that the AER has recently announced that it is proposing to implement.[1]

[1] See *Working together to improve engagement on network revenue proposals*, AER communication 11 August 2017, at https://www.aer.gov.au/communication/working-together-to-improve-engagement-on-network-revenue-proposals

BACKGROUND

- This advice was prepared as agreed between sub-panel CCP11 working on the AGN, AusNet and Multinet (the NSPs) access arrangements, and Lynley Jorgensen and Adam Young, Co-ordination Directors for the Victorian Gas Access Arrangements Review (Vic GAAR).
- The NSPs commenced the process of preparation of their access arrangement proposal and the related consumer engagement late in 2015. During 2016, the NSPs undertook a range of consumer engagement activities and processes.
- CCP11 was established in September 2016.
- On 15 and 16 November 2016, CCP11 met in Melbourne with each of the businesses to discuss their consumer engagement processes, the key elements of their proposals (i.e. high-level drivers, priorities, issues and challenges for the business and how these issues were reflected in the proposal), and their key consumer issues.
- CCP11 arranged a forum in Melbourne on 5 December 2016 to meet with consumer representatives. CCP11 invited all parties who had been involved in consumer engagement with each network business in the Vic GAAR process. Three people attended the forum. Separately, members of CCP11 met with other consumer representatives. CCP11 members attended some of the network businesses consumer and retailer engagement sessions. These meetings provided CCP11 with the opportunity to gain some insights on the network businesses consumer engagement processes from the people involved.
- CCP11's involvement in the consumer engagement process was more limited than the Panel would have liked, due to the Panel being constituted near the end of the period over which the network businesses had been engaging with consumers.
- On 1 February 2017, CCP11 participated in the Public Forum convened by the AER in Melbourne. This Public Forum was primarily an opportunity for engagement with the network businesses, with limited attendance by consumer representatives.
- CCP11 has held regular meetings with the Co-ordination Directors since September 2016.
- Meetings have been held with most of the AER specialist teams involved in the Vic GAAR. These meetings have provided an opportunity for CCP11 to increase their understanding of some of the technical issues involved as well as for the Panel and AER officers to exchange view on issues associated with the Vic GAAR proposals.
- CCP11 submitted an Advice to the AER on 3 March 2017 in which it considered the effectiveness of the NSPs' consumer engagement as well as issues which appeared not to be in the long term interests of consumers. CCP11 also met with the Board of the AER on 17 March 2017 to discuss its advice.
- CCP11 has considered the AER's July 2017 Draft Decisions (and supporting material) on the AGN, AusNet and Multinet access arrangement proposals, and has held discussions with AER officers on particular matters.
- CCP11 has considered the NSPs' August 2017 Revised Proposals, and has held discussions with AER officers on particular matters.

ADVICE

A. Consumer Engagement

The effectiveness of network businesses' engagement activities with their customers and how this is reflected in the development of the network businesses' proposals

1. AGN

AGN has continued to demonstrate a commitment to meaningful stakeholder engagement beyond the submission of its initial proposal. Together with the other Victorian gas network businesses, AGN participated in the AER Public Forum and also conducted meetings of its Victoria and Albury Reference Group and Retailer Reference Group in February 2017 to explain the detail of its initial proposal to stakeholders, and to accept any feedback on matters of concern prior to the deadline for lodgement of submissions on the initial proposal.

Following release of the AER's Draft Decision on 6 July 2017, AGN again met with members of its Victoria and Albury Reference Group and its Retailer Reference Group to outline its intended response to the AER's Draft Decision, and to provide an opportunity for members to provide feedback.

AGN has published a customer-friendly Revised Final Plan on the 'Have Your Say' website,[2] together with a media release and response to the Draft Decision. Minutes of Reference Group meetings are also available on the website.

CCP11 again commends AGN for clearly identifying feedback received from stakeholders and how the feedback has been addressed in the Revised Proposal. This level of transparency enhances stakeholder confidence that the business is open to ongoing collaboration on issues of concern.

Overall, AGN's stakeholder engagement during this timeframe has been effective and constructive. AGN has also commenced discussions with its reference groups with a view to embedding the stakeholder engagement processes introduced in support of its Victoria and Albury access arrangement review into business-as-usual operations.

2. AusNet

AusNet also participated in the AER Public Forum in February 2017 to explain the detail of its initial proposal to stakeholders, and to take any feedback on matters of concern prior to the deadline for lodgement of submissions on the initial proposal.

Since lodgement of its initial proposal, AusNet has provided regular website and email updates to large customers and the Customer Consultative Committee (CCC).[3] In particular, these groups were informed of the details of the Draft Decision and of the decision to accept it. In addition, AusNet introduced a new customer-focused initiative – a customer-friendly summary document outlining

[2] https://www.australiangasnetworks.com.au/our-business/have-your-say - Have your say on our proposed plans

[3] https://www.ausnetservices.com.au/en/Misc-Pages/Links/About-Us/Charges-and-revenues/Gas-distribution-network

AusNet's response to the AER Draft Decision. Meetings were held with some of AusNet's largest customers to explain the implications of accepting the Draft Decision.

AusNet's stakeholder engagement activities have primarily been focused at the 'Inform' level of the IAP2 Public Participation Spectrum[4] and have been effective at this level, but CCP11 is of the view that stakeholders could have been more effectively engaged at the 'consult' level of the spectrum.

3. Multinet

Multinet also participated in the AER Public Forum in February 2017 to explain the detail of its initial proposal to stakeholders, and to take any feedback on matters of concern prior to the deadline for lodgement of submissions on the initial proposal.

Apart from participation in the AER Public Forum, Multinet elected not to undertake any stakeholder engagement on the AER Draft Decision or its revised access arrangement. This was explained to be because of Multinet's intention to accept the AER's decision in large part, anticipating only minor changes in the Revised Proposal.

Multinet has placed a copy of the Revised Proposal on its website with no explanation or supporting information.[5] Information about Multinet's revised access arrangement proposal has not been made available in a customer-friendly form.

In its Revised Proposal, Multinet stated that it would:

> *look forward to continuing to engage with the AER and our other stakeholders to finalise our AA, so that we can continue to meet our customers' high expectations for the safe, reliable and efficient supply of natural gas into, and beyond, the forthcoming access arrangement period*.[6]

Multinet has also stated:

> *We recognise that best practice engagement should be an integral and on-going part of our operating model. This requires a shift in culture, the introduction of new specialist skills and time to build understanding and trust with an extensive group of stakeholders who have an interest in our services.*[7]

CP11 has seen no evidence to support these intentions. We consider Multinet's stakeholder engagement during this phase of the access arrangement review process to be ineffective.

4. AER

CCP11 is pleased to note that in its Draft Decisions the AER has drawn heavily on our advice regarding the effectiveness of the consumer engagement program carried out by each business prior to lodgement of the initial access arrangement proposals.[8] The AER quoted CCP11's analysis of the overall effectiveness of the consumer engagement undertaken by each business, and our

[4] See https://www.iap2.org.au
[5] https://www.multinetgas.com.au/gas-connections/gas-access-arrangement-review-2018-2022/
[6] Multinet – 2018-22 Revised Access Arrangement Information, p.2
[7] Multinet – 2018 to 2022 Access Arrangement Information, Section 7, p.21
[8] AER Draft decision – AGN Victoria and Albury access arrangement 2018-22 – Overview, pp.54-56; AER Draft decision – AusNet Services access arrangement 2018-22 – Overview, pp. 52-54; AER Draft decision – Multinet Gas access arrangement 2018-22 – Overview, pp.50-52

identification of some potential opportunities for improvement in each case. However, the AER did not explain how the effectiveness of the consumer engagement had impacted the processes and considerations leading up to the Draft Decisions. We consider that there is an opportunity for enhancement of the way that the AER demonstrates how the businesses' consumer engagement has affected or influenced its Draft Decisions.

5. Outstanding Concern

CCP11 has an outstanding concern regarding stakeholder engagement on the revised Contingent Capital Efficiency Sharing Scheme. During 2016, the three gas distribution businesses carried out extensive engagement with a range of stakeholders leading to development of the initial version of a Contingent CESS for gas distribution businesses. The same level of engagement was not apparent during the process of refining the Contingent CESS design during the first part of 2017. See Section 4.1 for further information.

B. Long Term Interests of Consumers

Whether the network businesses' proposals are in the long term interests of consumers

Overview

On 3 January 2017, the AER published access arrangement proposals from the three Victorian gas distribution businesses (AGN, AusNet and Multinet) for the period 1 January 2018 to 31 December 2022. The AER subsequently published Draft Decisions on the three access arrangement proposals on 6 July 2017.

Apart from minor modifications and information updates, the key differences between the initial access arrangement proposals and the AER Draft Decisions were:

- Revision of demand forecasts (Multinet);
- Reduced volume of the Mains Replacement Program (AusNet, Multinet);
- Reduction of other capex (Multinet);
- Rejection of variations to the AER Guidelines on calculation of Rate of Return and Inflation (AusNet, Multinet);
- Reduction of Opex (AusNet, Multinet);
- Disallowance of a step change for proposed expenditure on a joint marketing campaign (all businesses);
- Revision of the design of the Contingent CESS (AGN, AusNet);
- Rejection of proposed Network Innovation Schemes (all businesses); and
- Rejected wording of Cost Pass-Though Events (AusNet, Multinet).

The businesses submitted revised access arrangement proposals on 14 August 2017. In their Revised Proposals, AGN and AusNet accepted the AER's Draft Decision in its entirety. Multinet largely accepted the Draft Decision, but will continue discussion with the AER with respect to the extent of its proposed mains replacement program, and the wording of Cost Pass-Through Events. Multinet also requested application of the Contingent CESS, although it had not done so in its initial proposal.

CCP11 acknowledges and commends the co-operative and consultative approach taken by the three businesses during this process, and the businesses' general acceptance of the Draft Decisions. We recognise that they are prepared to work within the scope of the proposed regulatory allowances to continue to provide a safe, reliable gas network for Victorian consumers. CCP11 supports the statement made by AusNet in its 'plain language' Customer Update: *By accepting this decision, we will simplify and shorten the regulatory review process, which will give customers confidence in the direction of future gas prices.*[9] In our view, the response of each of these businesses to the AER's Draft Decisions is very much in the long term interest of consumers.

[9] AusNet - AusNet Services' gas network plans 2018-2022: Customer Update

1. Demand Forecasts

1.1 CCP11 advice on regulatory proposals

CCP11 advice to the AER on the distribution businesses' regulatory proposals included various specific recommendations for the AER to address assumptions and estimates in the regulatory businesses' proposal.

We also emphasised the need for network businesses to set out full details of methodologies in their regulatory proposals to enable stakeholders to provide informed submissions, in the AER's formal consultations which are a key component of the regulatory decision making processes.

1.2 The AER's Draft Decisions

The AER largely addressed our specific issues in its Draft Decisions, but two of these concerns were not directly addressed:

- We brought to the attention of the AER that we had noticed an increase in AGN's forecast consumption per commercial customer in both 2017 and 2018, which was not seen in the other distributors' forecasts, which were trending downwards. Though not directly addressed in the Draft Decision, we understand from the AER that AGN's increase in forecast consumption per commercial customer in 2017 and 2018 was satisfactorily explainable as being due to AGN removing zero consumption meters, and therefore not a cause for concern.
- We questioned why AGN's demand forecasts were not adjusted as a result of AGN's marketing step change not being accepted in the Draft Decision. We understand that this was due to low materiality. Instead, AGN has now addressed this matter in its Revised Proposal.

Lack of detail in Multinet forecasts

The AER also censured Multinet for lack of detail in its forecasts:

> *Multinet's forecasts are based on work undertaken by its consultant, the National Institute of Economic and Industry Research (NIEIR). We have necessarily taken a high level approach to the assessment of, NIEIR's methodology because Multinet did not explain to our satisfaction the particulars of the methodology NIEIR employed or the details of how its forecasts were arrived at. This affected the analysis that we and our consultants, ACIL Allen, could undertake. This lack of transparency falls short of the quality of information that we would generally expect to accompany an access arrangement proposal. We would encourage Multinet and NIEIR to reconsider their approach for the purposes of the revised access arrangement proposal and other future review processes*[10]

This was consistent with CCP advice:

> *CCP11 found little detail in Multinet's regulatory proposal regarding its methodology as to how the number of new connections was forecasted. "Forecasts of residential customer growth are based upon forecasts of Multinet Gas' share of Victorian dwelling completions and the consequent growth in Multinet Gas dwelling stock"*[11] *and "NIEIR forecast residential*

[10] AER Draft Decision Multinet Attachment 13.1 Demand
[11] NIEIR – Natural gas customer number and MHQ forecasts for Multinet Gas to 2026, p.8

customer growth based on our share of Victoria's dwelling completions and the consequent growth in dwelling stock within our service area".[12]

Multinet's Revised Proposal accepted the AER's Draft Decision in regard to demand forecasts, notwithstanding the high level approach that the AER was required to make in its Draft Decision, due to the lack of transparency in the information provided by Multinet.

We again emphasise the need for network businesses to set out full details of methodologies in their regulatory proposals, to enable stakeholders to provide informed submissions in the AER's formal consultations which are a key component of the regulatory decision making processes.

1.3 Use of AEMO forecasts

The demand forecasts by the businesses and the AER's decisions rely significantly on forecasts from AEMO, as an independent expert body. We recommend that the AER should liaise with AEMO to ensure that the latest forecasts available at the time of finalisation of the Final Decisions are used in those Final Decisions.

[12] Multinet – 2018 to 2022 Access Arrangement Information, p.34

2. Capital Expenditure

2.1 Introduction

In its Advice to the AER regarding capital expenditure,[13] CCP11 expressed concern at the scale of the NSPs' mains replacement programs and at the unit rate for this work. CCP11 also queried the impact of the proposed change to the methodology for depreciation of their assets from a weighted average life of an asset class to year by year tracking and it expressed concern with changes to certain asset lives.

CCP11 made the following recommendations to the AER:

- The AER should consider whether the scale of each NSP's mains replacement program reflects a reasonable and balanced assessment of the risk and reliability issues. In the case of Multinet, its past conduct in delaying its mains replacement program suggests that there may be further room for a more measured approach. The step up in scale of its 2018 to 2022 program from the size of the program in current period (where it incurred overruns on the cost allowed by the AER), should give pause to consider whether Multinet's proposed program is too large and at risk of continuing cost overrun.
- The AER should investigate the steep escalation of unit rates for mains replacement work seen in the NSPs' proposals. The sheer scale of the mains replacement planned across all three networks needs to be considered as a possible factor in the rapid escalation in unit rates for these programs. The AER should thoroughly review the proposed unit rates including comparing forecast cost among the three NSPs and benchmarking to similar work in other gas networks.
- The AER should examine the impact of the proposed change in the methodology for depreciation of assets from a weighted average life of an asset class to year by year tracking and if there is a material adverse impact on consumers through higher revenue requirement by the NSPs, consider rejecting the proposal.
- The impacts of proposals by AusNet and Multinet to reduce the life of meters (from 20 and 30 years respectively to 15 years) should be assessed by the AER and if there is a material adverse impact on consumers through higher revenue requirement by the NSPs, consider how to mitigate this including rejecting it.
- Multinet's proposed change to building lives from 50 to 35 years should be benchmarked to other NSPs and be rejected if, as it appears, it is not consistent with industry practice and the useful life of such assets.

2.2 Mains Replacement Programs

In its Draft Decisions on the three NSPs, the AER has considered the efficacy of each of the proposed mains replacement programs as well as the unit rate assumptions proposed by the NSPs. The result of the AER's technical review, supported by independent expert advice (from Zincara), is a reduction in the allowance for mains replacement by Multinet and AusNet and confirmation that the forecast unit rates for the main replacement works by all three NSPs are reasonable.[14]

[13] CCP11 Response to proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022 – 3 March 2017 pp.47-54

[14] AER Draft Decision, Multinet Gas Access arrangement 2018 to 2022 Attachment 6 – Capital expenditure July 2017 Section 6.4; Draft Decision, AGN Victoria and Albury Access arrangement 2018 to 2022; Attachment 6 – Capital expenditure July 2017 Section 6.4; AusNet Services Access arrangement 2018 to 2022; Attachment 6 – Capital expenditure July 2017 Section 6.4

CCP11 was particularly concerned by the scale of Multinet's proposed mains replacement program and considers that the AER's conclusions reasonably address the concern:

> *Multinet's proposal to replace 625 km of low pressure mains equates to an annual average of 125 km. This is 50 per cent more than its 83 km per annum average since the start of the replacement program. … We consider continuing replacements at the historical average during the 2018–22 access arrangement period will continue to improve network integrity and public safety. This is also consistent with Zincara's advice.*[15]

CCP11 is satisfied that the examination undertaken and the conclusions made provide comfort that the NSPs' mains replacement programs are achieving an appropriate balance between delivering safety and reliability to consumers while prudently investing and managing these large scale projects which result in quantum increases in Regulated Asset Base (RAB) with resultant long term increases in costs to consumers.

2.3 Reduced Asset Lives and Accelerated Depreciation

CCP11 queried the proposed change by all three NSPs in asset depreciation methodology from a weighted average life of an asset class to year by year tracking with the focus not on the reasonableness of the proposed new methodology but on the scale of the impact of the proposed change on consumers through higher revenue requirement by the NSPs. The AER's analysis suggested that the impact of the change is modest[16]. On this basis, CCP11 considers the change to be reasonable.

CCP11 expressed concern with the possible impact on consumers of the proposals by AusNet and Multinet to reduce standard lives of meters to 15 years (which is consistent with meter asset lives approved by the AER for other gas NSPs) from 20 and 30 years respectively. The AER assessed the impact to be "immaterial"[17] or "insignificant".[18] On this basis, CCP11 considers the change to be reasonable.

CCP11 was also concerned that the following proposals by Multinet were not reasonable or justified, so could not be in the long term interests of consumers:[19]

- Accelerated depreciation of existing meter assets from 6.3 years to 5 year (to make the regulatory asset base simpler); and
- Reducing the asset life of its buildings from 50 year to 35 years (justified on the basis that it is consistent with the standard life for buildings for tax purposes approved by the Australian Taxation Office).

The AER's Draft Decision did not accept the proposal regarding accelerated depreciation of existing meter assets from 6.3 years to 5 years (to make the regulatory asset base simpler). It applied the new standard meter life of 15 years, with a resultant reduction in Multinet's regulatory depreciation

[15] AER Draft Decision, Multinet Gas Access arrangement 2018 to 2022; Attachment 6 – Capital expenditure July 2017 p.6.18

[16] AER Draft Decision AusNet Services Gas access arrangement 2018 to 2022 Overview July 2017 pp.35-36; Multinet pp.24-35; AGN pp.38-39

[17] AER Draft Decision AusNet Services Gas access arrangement 2018 to 2022 Attachment 5 – Regulatory depreciation p.5.12

[18] AER Draft Decision, Multinet Gas Access arrangement 2018 to 2022 Attachment 5 – Regulatory depreciation p.5.17

[19] AER Multinet Gas – 2018 to 2022 Access Arrangement Information p.125

allowance of $10.7 million.[20] The Draft Decision also did not accept the proposal to reduce the life of buildings.[21]

These conclusions reflect a more reasonable approach consistent with the long term interests of consumers.

2.4 NSPs' Revised Proposals

AGN and AusNet Services have accepted the AER's Draft Decision on capital expenditure and depreciation issues without reservation but with minor updates reflecting updated information.[22]

Multinet has accepted the majority of the AER's Draft Decision with the material exception of the mains replacement program.[23] CCP11 appreciates Multinet's acceptance of the AER's position on the regulatory asset life of buildings and its rejection of accelerated depreciation on existing meters.

Multinet's proposal for a larger mains replacement program than that provided in the AER's Draft Decision is considered in the next section.

2.5 Multinet Mains Replacement Program

Multinet's Revised Proposal includes a mains replacement program which is larger than that proposed in the AER's Draft Decision, but smaller in scale and $36.1 million less in capital. The following table shows Multinet's revised mains replacement capital expenditure, compared with its initial proposal and the AER's Draft Decision.

Table 2.1: Comparison of forecast mains replacement program capex for the 2018 - 22 access arrangement period ($M, real 2017)[24]

	Original Proposal	AER Draft Decision	Revised Proposal	Variance to Draft Decision
Low pressure mains	209.0	142.4	176.6	(34.2)
Medium pressure cast iron	18.1	10.4	18.1	(7.8)
Early first generation HDPE	15.9	-	15.9	(15.9)
Reactive mains replacement	1.0	1.0	1.0	-
Unplanned service renewals	5.7	5.7	5.7	(0.0)
Total direct expenditure	**249.7**	**159.5**	**217.3**	**(57.9)**
Overheads	15.0	8.5	11.7	(3.3)
Escalation	2.2	1.3	1.8	(0.5)
Total expenditure	**266.9**	**169.2**	**230.8**	**(61.6)**

It can be seen from Table 2.1 that Multinet proposes additional replacement of low pressure mains, but less than it originally proposed, and that it seeks to reinstate the original proposal's level of replacement of medium pressure cast iron mains and early first generation HDPE mains.

[20] AER Draft Decision, Multinet Gas Access arrangement 2018 to 2022 Attachment 5 – Regulatory depreciation p.5.14
[21] Ibid. p.5.23
[22] AER AGN Revised Final Plan Attachment 8.11 – Response to Draft Decision: capital expenditure Aug 2017 p.2; AGN Revised Final Plan Attachment 9.6 – Response to Draft Decision: capital base August 2017 p.3; Gas Access Arrangement review 2018 - 2022: AusNet Services Revised access arrangement information, 11 August 2017, pp.6-7
[23] Multinet 2018 to 2022 Revised Access Arrangement Information – 14 August 2017, p.1
[24] Multinet 2018 to 2022 Revised Access Arrangement Information: Attachment 2 – Revised Mains Replacement Program 14 August 2017 p.2

Multinet provides additional information to support these higher volumes of mains replacement including further information on the risk assessment, and among other things it contends:

> *that the medium pressure cast iron mains and early first generation HDPE mains present higher risk than the low pressure cast iron and unprotected steel mains.* [25]

The additional material regarding risk and the prudency of Multinet's revised mains replacement program needs to be carefully considered by the AER and its expert advisors.

The following table shows Multinet's proposed volumes of replacement of mains and the AER's proposed volumes.

Table 2.2: Multinet comparison of forecast mains replacement capital volumes (kilometres) for the 2018 - 22 access arrangement period[26]

	Original Proposal	AER Draft Decision	Revised Proposal	Variance to Draft Decision
Low pressure mains	624.0	425.0	531.0	(106.0)
Medium pressure cast iron	24.0	12.0	24.0	(12.0)
Early first generation HDPE	40.0	-	40.0	(40.0)
Total volume (km)	**688.0**	**437.0**	**595.0**	**(158.0)**

The proposed 531km of low pressure mains replacement represents an average of 106km per year. AER's Draft Decision adopted an average rate of 85km per year based on the historic average 2003 to 2016 of 83km per year[27] compared to Multinet's initial proposal to replace 625 km of low pressure mains (equating to an annual average of 125km or, 50 per cent more than its 83 km per annum average since the start of the replacement program).[28]

Multinet believes that it is now well placed to deliver the average of 106km of low pressure mains replacement as well as the 24km of medium pressure cast iron and 40km of early first generation HDPE replacement over the 2018 to 2022 period. It points to its performance over recent years as shown in the following table.

Table 2.3: Annual volumes (kilometres) of mains addressed by Multinet during the 2013 to 2017 regulatory period[29]

	2013	2014	2015	2016	2017 (forecast)	Total
Mains replaced	**57**	**110**	**85**	**113**	**162**	**527**

Multinet also notes that as the mains replacement programs for the AusNet and AGN's Victorian gas distribution networks are completed and ramp down in the 2018–2022 period, it is likely that some of this capacity will become available to Multinet, particularly in future periods.[30]

[25] Ibid. p.5
[26] Ibid. p.3
[27] AER Draft Decision, Multinet Gas Access arrangement 2018 to 2022; Attachment 6 – Capital expenditure July 2017 p.6.16
[28] Ibid. p. 6.18
[29] Multinet 2018 to 2022 Revised Access Arrangement Information: Attachment 2 – Revised Mains Replacement Program 14 August 2017 p.14

The AER needs to consider whether Multinet's past performance (and the likelihood of delivery of the forecast 162km of mains replacement in 2017) in assessing the mains replacement program proposed by Multinet is deliverable.

CCP11 remains uncertain as to whether the scale of mains replacement program is justified in order to address safety and risk, and whether Multinet will be able to deliver the program. Should the AER approve application of the Contingent CESS for Multinet in its Final Decision, CCP11 advises the AER to ensure that the design of the scheme is sufficiently robust so that Multinet would not be entitled to a CESS benefit that resulted from a capex underspend due to failure to deliver the approved program. This is discussed in Section 4.2 below.

[30] Ibid. p.18

3. Operating Expenditure

3.1 Marketing Step Change

Introduction

Each of the three gas distribution businesses proposed a step change in operating expenditure to undertake a joint gas marketing campaign in Victoria, as shown below.

Table 3.1: Proposed Marketing Step Changes

Business	Proposed Step Change
AGN	$5 million[31]
AusNet	$21.8 million[32]
Multinet	$23.3 million[33]

The AGN 2013-2017 Victorian access arrangement review resulted in approval of an allowance of $18.28 million for marketing.[34] Therefore, AGN's base year operating expenditure already contains a significant component of proposed expenditure on marketing. AGN reported that its total expenditure on the joint marketing program over the next period was forecast to be $21.2 million.[35]

CCP11 made the following recommendations to the AER:

- In making a decision on the proposed marketing step changes, the AER:
  - give consideration to the level of demonstrated stakeholder support, and
  - assess whether it is prudent to encourage new customers to connect to the gas network, and existing customers to renew gas appliances, at a time when wholesale gas prices, and hence retail gas prices are predicted to rise substantially.
- Should marketing step changes be approved, the AER reviews whether it is appropriate to include marketing expenditure within base opex for subsequent regulatory periods, and whether marketing expenditure should be excluded from the Efficiency Benefit Sharing Scheme (EBSS).
- For consistency, we recommend that that the marketing allowance that is already included in AGN's base opex should be treated in the same way as the new step change requests.[36]

AER Draft Decision

The AER did not include marketing step changes in opex allowances for any of the businesses.[373839]

In arriving at this decision, the AER acknowledged that it has reconsidered its position on marketing from previous decisions.[40] It identified that:

[31] AGN Final Plan, Access Arrangement Information for our Victorian and Albury natural gas distribution networks: 2018 – 2022, p.70
[32] AusNet Services – Gas Access Arrangement Review 2018-2022 Access Arrangement Information, p.165
[33] Multinet Gas – 2018 to 2022 Access Arrangement Information, p.100
[34] AGN Final Plan, Access Arrangement Information for our Victorian and Albury natural gas distribution networks: 2018 – 2022, Attachment 7.1, Figure 2.5
[35] AGN Final Plan, Access Arrangement Information for our Victorian and Albury natural gas distribution networks: 2018 – 2022, Attachment 7.1, Figure 3.5
[36] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.55
[37] AER Draft Decision - AGN Victoria and Albury gas access arrangement 2018-22, Attachment 7, p.16
[38] AER Draft Decision – AusNet Services gas access arrangement 2018-22, Attachment 7, p.26
[39] AER Draft Decision – Multinet gas access arrangement 2018-22, Attachment 7, p.26

The test we apply is whether the step change is needed for the opex forecast to comply with the opex criteria. Our starting position is that only exceptional circumstances would warrant the inclusion of a step change in the opex forecast because they may change a business' fundamental opex requirements. Two typical examples are:

- *A material change in the business' regulatory obligations*
- *An efficient and prudent capex/opex substitution opportunity*[41]

The proposed step changes were not accepted on the basis that marketing is a 'business as usual' expense for each business to consider within its existing base opex forecast, and the proposed step change does not relate to a change in regulatory obligation or a capex/opex trade-off. CCP11 supports the rationale underpinning the AER's revised approach to opex step changes for marketing.

CCP11 also raised concerns regarding the Business Case which was provided by Axiom Economics in support of the proposed marketing program.[42] The AER considers that Axiom Economics has overstated the benefits of the marketing program, and did not provide any evidence to demonstrate the effectiveness of similar marketing programs undertaken in other jurisdictions.[43] We are satisfied that the Draft Decision has addressed the concerns raised.

NSPs' Revised Proposals

All three businesses have accepted the AER Draft Decision.[444546]

However, in its Revised Proposal, AusNet expressed a view that for businesses which currently do not have established gas marketing programs, initiating one in the absence of a step change is likely to result in a substantial unfunded expense until the next access arrangement commences, and potentially a penalty under the EBSS, and suggested that the appropriate treatment of this expense under the regulatory framework warrants further investigation.[47]

CCP11 is also concerned about the regulatory treatment of expenditure on marketing for those businesses which do have established gas marketing programs, and questions whether the current treatment adequately encourages efficient and prudent expenditure, and whether expenditure on marketing should be excluded from the EBSS. We suggest that further investigation of this issue would be appropriate.

3.2 Opex Step Change: Ring Main Pigging (AusNet)

Introduction

AusNet sought to include an opex step change for the in-line inspection of part of its gas transmission pipeline in 2021 at a forecast cost of $0.41 million.[48] CCP11 advised against acceptance of the proposed ring-main pigging project as an opex step change. CCP11 suggested that the work is a

[40] AER Draft Decision – AusNet Services gas access arrangement 2018-22, Attachment 7, p.27
[41] AER Draft Decision - AusNet Services gas access arrangement 2018-22, Attachment 7, p.14
[42] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.56
[43] AER Draft Decision - AusNet Services gas access arrangement 2018-22, Attachment 7, p.32
[44] AGN – Victoria and Albury Revised Final Plan, page 2
[45] AusNet Services – Revised Access Arrangement Information, p.15
[46] Multinet Gas – 2018-2022 Revised Access Arrangement Information, p.25
[47] AusNet Services – Revised Access Arrangement Information, p.15
[48] AusNet Services – Gas Access Arrangement Review 2018-2022 Access Arrangement Information, pp.174-177

routine maintenance activity which should be provided for in base opex, and that it could see no need for special treatment of this project. [49]

AER Draft Decision

The Draft Decision did not include **a** step change of $0.4 million ($2017) in the alternative opex estimate to account for AusNet's proposed costs for ring-main pigging activity.[50] This was consistent with CCP11 advice.

NSPs Revised Proposal

AusNet has accepted the Draft Decision.

[49] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p. 59

[50] AER Draft Decision – AusNet Services gas access arrangement 2018-22, Attachment 7, p.32

4. Incentive Schemes

4.1 Capital Efficiency Sharing Scheme (CESS)

Introduction

AGN and AusNet included the introduction of a new Capital Efficiency Sharing Scheme (CESS),[51] referred to as a Contingent CESS in their initial access arrangement proposals. Multinet did not include a CESS in its initial proposal. The design of the Contingent CESS submitted in the businesses' initial proposals was developed during 2016 following a comprehensive stakeholder engagement program involving all three businesses. Features of the proposed Contingent CESS include:

- Making payment of rewards contingent on meeting specified network performance standards;
- An asymmetric approach in that it does not inflate a reward if performance targets are exceeded, but discounts a reward if performance targets are not met;
- Sharing of benefits in the same proportion as the EBSS (i.e. 30% to business and 70% to customers); and
- Any penalty earned under the CESS is not discounted if network performance is exceeded.

The AER's *Capital expenditure sharing scheme for gas distribution network service providers* Information Paper was released in December 2016. As this paper was released after the businesses had finalised their proposals, it was not taken into account by either AGN or AusNet. However, the businesses signalled their intention to engage further with the AER and stakeholders on the proposed contingent CESS leading into the AER's Draft Decision.

CCP11 Initial Advice

In its advice to the AER on 3 March 2017, CCP11 supported the application of a Contingent CESS for the gas distribution businesses, and recommended that:

- The AER, AGN and AusNet continue working with stakeholders with a view to finalising a Contingent CESS design leading into the Draft Decision.
- Businesses should be requested to identify the financial impacts for consumers as part of the design of the proposed Contingent CESS.
- The final form of any new CESS should be subject to a full stakeholder engagement process so that consumers have input on the actual scheme adopted.[52]

Supplementary Submission on Contingent CESS

Following consideration of the AER's CESS Information Paper, and the issues raised by other stakeholders in submissions on the Contingent CESS in the original business proposals, AGN and AusNet continued working with the AER and their consultants Zincara to formulate a revised Contingent CESS design which addressed the issues raised by stakeholders. This work resulted in AGN and AusNet providing a "*Joint Submission on a revised Contingent Capital Expenditure Sharing Scheme for Australian Gas Networks and AusNet Services gas distribution networks for the 2018-22 Access Arrangement period*" on 31 March 2017. The revised Contingent CESS design includes a

[51] AGN Final Plan, Access Arrangement Information for our Victorian and Albury natural gas distribution networks: 2018 – 2022, p.133 and AusNet Services – Gas Access Arrangement Review 2018-2022 Access Arrangement Information, p.268

[52] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.11

refinement of the asset performance measures together with associated weightings (i.e. network health index) and performance target levels. In addition, the Revised Proposal nominates a zero-tolerance banding approach to overall asset performance whereby the upper bound exactly equals historical performance using an index value of 100, and the rewards scale down to an index value of 80, where zero rewards are payable. (This replaces the 80%-60% band proposed originally.) The revised Contingent CESS design proposed in this document was the design considered in the AER's Draft Decision.

AER Draft Decisions

The AER's Draft Decisions accept the application of the revised Contingent CESS for both businesses.[53] CCP11 supports these Draft Decisions.

Risk Mitigation

The overarching objective of a CESS is to provide network businesses with an incentive to undertake efficient capex during a regulatory control period.[54] In the Draft Decisions, the AER outlined strategies necessary to mitigate the risks of implementing a new CESS for gas distribution businesses.[55] The primary risk is that service providers could achieve savings in capex through reductions in service standards, or by inappropriate deferral of capex rather than through efficiency gains. The AER proposes that this risk be managed in two ways:

- A contingency for any material reduction in the health of the network, and
- A deferral mechanism in the calculation of the CESS payment.[56]

The Revised Proposal for a Contingent CESS addresses concerns around the effects of capex underspend or deferral on network health. The proposed scheme ensures that a business will not receive a full CESS payment if network health declines. CCP11 commends the level of collaboration between the businesses and the AER to develop a robust measure of network health. We endorse adoption of the measures, weightings and targets as proposed.

To manage the risk of 'inefficient deferral' of capital expenditure, the AER has replicated provisions from the CESS for electricity businesses whereby capital expenditure inappropriately deferred from one regulatory period to the next can be identified and removed from the CESS calculations. CCP11 continues to have concerns regarding the effectiveness of these provisions. We believe that this capability is largely untested. We are not aware of any situations where an 'inefficient deferral' process has been applied without the full cooperation of the business concerned. We are particularly concerned that network businesses that fail to deliver approved mains replacement program volumes may qualify for CESS benefits. CCP11 advises the AER to consider whether additional safeguards, such as the addition of a 'volumetric hurdle' should be incorporated whereby CESS benefits would not be achieved if a business failed to reasonably deliver the approved mains replacement program volume.

As a further risk mitigation strategy, the Draft Decisions retain the ability for the AER to make changes to the CESS mechanism in the 2023-27 access arrangement period to address any unintended impacts arising from implementation of the new scheme. CCP11 previously advised that:

[53] AER Draft Decision AGN Victoria and Albury gas access arrangement 2018-22 – Attachment 14, p.5; and AER – Draft Decision AusNet Services gas access arrangement – Attachment 14, p. 5

[54] AER Capital Expenditure Incentive Guideline for Electricity Network Service Providers, November 2013, p.5

[55] AER Draft Decision AusNet Services gas access arrangement – Attachment 14, p.12

[56] AER Draft Decision AusNet Services gas access arrangement – Attachment 14, p.13

As the proposed scheme is new to the gas sector, and given the concerns raised by stakeholders regarding unintended consequences, we agree with the AER that a cautious approach should be taken in the introduction of a new CESS.[57]

We support the decision not to apply the revised Contingent CESS as a fixed arrangement for 10 years.

NSPs' Revised Proposals

Both AGN and AusNet have accepted the AER's Draft Decision in respect of the revised Contingent CESS.[58]

Multinet CESS

In its Revised Proposal, Multinet formally requested application of the same Contingent CESS set out in the AER Draft Decisions for AusNet and AGN (adjusted to reflect Multinet data and network service performance) for the forthcoming access arrangement period.[59]

CCP11's advice to the AER on the initial AGN and AusNet proposals stated that:

The efficiency of capital expenditure is of critical importance to consumers. …. A well designed CESS provides one mechanism for driving improvements in capex efficiency which can benefit consumers in the long term through downward pressure on RAB levels.[60]

CCP8 previously expressed support for a CESS for AGN's South Australian gas network:

Where an EBSS is in place, we support the application of a complementary CESS. We consider that the EBSS and the CESS work together to ensure that there is no bias towards one form of expenditure over another.[61]

CCP11 supports the application of the same Contingent CESS to Multinet for the 2018-22 access arrangement period. However, the inclusion of a Contingent CESS is a significant new addition to Multinet's revised access arrangement proposal, and Multinet has not sought to engage with its stakeholders to obtain feedback or gauge support for this change.

The concerns expressed earlier regarding 'inefficient deferral' of capital expenditure, particularly for mains replacement capex, also apply to introduction of a Contingent CESS for Multinet.

Outstanding Concern

CCP11 has an outstanding concern regarding stakeholder engagement on the revised Contingent CESS. As discussed earlier, CCP11 advised that "*The final form of any new CESS should be subject to a full stakeholder engagement process so that consumers have input on the actual scheme adopted.*"[62]

[57] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.65

[58] AGN Revised Final Plan Attachment 11.7, p.3; and AusNet Services – Revised Access Arrangement Information, p.3

[59] Multinet Gas 2018 to 2022 Revised Access Arrangement Information, p.48

[60] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.65

[61] Consumer Challenge Panel subpanel 8 – Advice to AER from CCP8 regarding AGN's (SA) Access Arrangement 2016 - 21, August 2015, p.15

[62] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, p.11

Following extensive stakeholder engagement during development of the initial Contingent CESS, it is disappointing that there was minimal engagement carried out, either before or after release of the AER Draft Decision, to inform stakeholders of the final form of the revised Contingent CESS or to seek their feedback. Stakeholders had been extremely influential in the initial design of the Contingent CESS, yet they were generally not aware of the refinements to the Contingent CESS which were introduced in the late joint submission to the AER by AGN and AusNet which formed the basis of the scheme approved in the Draft Decision. Best practice engagement would include a feedback loop to confirm that stakeholders' views are accurately represented in the final outcome.

4.2 Network Innovation Scheme (NIS)

Introduction

All three distribution businesses proposed a form of Network Innovation Scheme (NIS).[63] Although each business based its proposal on Ofgem's network innovation scheme for gas distribution businesses in the UK, the proposals were different. AGN and AusNet proposed schemes which are similar in intent to the Demand Management Incentive Scheme (DMIS) for electricity networks, although the specific features varied. Multinet proposed the introduction of a Gas Network Innovation Competition (NIC) structured similarly to the arrangement that Ofgem has implemented in the UK.

CCP11 Initial Advice

CCP11 recognises that the long term interests of consumers are well served by innovation which drives productivity improvements and maintains downward pressure on prices. We consider that it is important for a business to invest in innovation so that efficiency benefits can be shared by consumers.[64]

As with the other incentive schemes for both Australian electricity and gas networks, we consider that it is appropriate to develop a single scheme that applies to all businesses rather than creating tailored schemes for individual businesses. CCP11 did not consider that the proposed Network Innovation schemes were sufficiently developed and aligned across the three businesses to enable implementation of a common scheme for the next access arrangement period.

AER Draft Decision

The AER's Draft Decision for each business was not to accept the introduction of a Network Innovation Scheme.[65]

CCP11 supports these Draft Decisions.

NSPs' Revised Proposals

AGN, AusNet and Multinet have all accepted the AER's Draft Decision in respect of their proposed Network Innovation Schemes.[66]

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[63] AGN Final Plan, Access Arrangement Information for our Victorian and Albury natural gas distribution networks: 2018 – 2022, p.138; AusNet Services – Gas Access Arrangement Review 2018-2022 Access Arrangement Information, p.272; Multinet Gas – 2018 to 2022 Access Arrangement Information, p.135

[64] Consumer Challenge Panel subpanel 8 – Advice to AER from CCP8 regarding AGN's (SA) Access Arrangement 2016 – 21, August 2015, p.69

[65] AER Draft Decision AGN Victoria and Albury gas access arrangement 2018-22 – Attachment 14, p.5; AER Draft Decision AusNet Services gas access arrangement – Attachment 14, p. 5; and AER Draft Decision Multinet Gas access arrangement 2018-22 – Attachment 14, p.5

5. Rate of Return, Inflation and Gamma

5.1 Introduction and summary

The AER's 2013 Rate of Return Guideline (Guideline)[67] set out the AER's preferred approach to calculating a rate of return, the forecast of expected inflation and the value of imputation credits (gamma) in order to best satisfy the National Gas Objective (NGO) and the Revenue and Pricing Principles (RPP)[68] and to achieve the allowed rate of return objectives (ARORO) in the National Gas Rules (NGR).[69] In particular, the Guideline established that:

- The return on equity is be determined by adopting the Sharpe-Lintner CAPM (SL CAPM) as the 'foundation model' supported by other relevant information and models. Specific values were set in the Guideline for the equity beta (**β**= 0.7) and the market risk premium (MRP = 6.5%).
- The return on debt is to be determined using a 10-year trailing average approach along with a period of transition to move from the 'on-the-day' to the trailing average methodology.
- Inflation is modelled on the basis of achieving the best estimate of 10-year average expected inflation. This is measured using the geometric average of the RBA's 2-year forecast of expected inflation and the mid-point of the RBA's target inflation range for the remaining eight years.
- A calculation of the value of imputation credits of 0.4 based on the product of the estimate of the payout ratio (0.7) and the utilisation rate (theta = 0.6) of imputation credits and where theta is derived from domestic equity ownership and tax statistics.

Each one of the components of the rate of return assessment, the AER's approach to inflation and the value of imputation credits have been the subject of multiple appeals by various networks to the Australian Competition Tribunal (Tribunal) and the Full Federal Court (Court). At a broad level, the NSW Tribunal has confirmed the AER's approach to return on equity but has rejected the AER's approach to the return on debt using a transition and corporate tax (gamma component). A differently constituted Tribunal (SA Tribunal) confirmed the AER's approach to both debt transition and gamma. The AER has appealed the NSW Tribunal's decision to the Full Federal Court (Court). In May 207, the Court confirmed the NSW Tribunal's decisions on transition but rejected the NSW Tribunal's decision on gamma. The SA Power Networks has appealed the SA Tribunal decision, and the Court has reserved its judgement. Further appeals on different matters are pending including the Victorian network's appeal to the Victorian Tribunal.

It is against this complex legal situation that the Victorian gas distribution and transmission businesses submitted their initial proposals in January 2017 and CCP11 responded to these proposals in March 2017. The AER's Draft Decision and the current Revised Proposals by the gas businesses have been made after the Federal Court's decision on the NSW/ACT appeals was published.

In their initial proposals on the rate of return, AGN applied the AER's Guideline approach to the rate of return (including the rate of return parameters), inflation and gamma. In contrast, AusNet and Multinet both proposed a higher value for MRP (7.5%) in the rate of return on equity. Multinet also

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[66] AGN Revised Final Plan Attachment 11.7, page 4; and AusNet Services – Revised Access Arrangement Information, p.3; Multinet Gas 2018 to 2022 Revised Access Arrangement Information, p.47

[67] AER, Rate of Return Guideline, December 2013; AER, Explanatory Statement, Rate of Return Guideline, December 2013. While the Guideline applies to both electricity and gas distribution, the focus in this submission is on the gas distribution requirements.

[68] The NGO and RPP are set out in the National Gas Law (NGL). Equivalent provisions apply to electricity distribution businesses.

[69] See NGR r. 87(2). Equivalent obligations are set out in the National Electricity Rules (NER).

proposed an 'uplift' factor to correct for the claimed bias in the SL CAPM model while AusNet sought an extension of the averaging period for the risk free rate (from 20 days to 8 months). Both AusNet and Multinet also proposed minor changes to the way the cost of debt was estimated while accepting the debt transition process. Both networks also proposed changes to the assessment of inflation and gamma. For example, AusNet proposed a "placeholder" inflation estimate of 1.65% and Multinet proposed 1.68%, both estimates being based on the 'breakeven approach' rather than the RBA's methodology.[70]

In its March 2017 advice to the AER, CCP11 made several recommendations to the AER. These are summarised below:[71]

- The proposals by AusNet and Multinet to adopt a higher value for MRP (7.5%) should not be accepted by the AER;
- The proposal by Multinet to include an 'uplift' factor in the return on equity should not be accepted by the AER;
- The proposed extension of the averaging period for the risk free rate should not be accepted by the AER, but warranted further investigation in the future;
- The AER should continue its current approach to estimating the cost of debt;
- The AER should continue its current approach to determining expected inflation, noting that the AER was conducting a review of its approach to inflation;
- CCP11 did not provide advice on the assessment of gamma on the basis that the Full Federal Court would determine this.

While CCP11's advice was based on a careful analysis of the networks' proposals, it was also our strongly stated view that the AER should make its decisions in accordance with its Guideline unless there was very strong evidence that a change was necessary to achieve the ARORO, and associated and equivalent level of stakeholder consultation.[72] This is particularly important given the current uncertainty created by the multiple appeals and, more importantly, in the context of the expected reviews of the treatment of inflation and the Rate of Return Guideline.[73]

Moreover, this evidence must take account of the AER's general regulatory approach to the rate of return and specifically, that the relevant rate of return is to be assessed on the basis of investors' expectations for long-term investments in long-term assets.

The assessment of current short-term market indicators must be tempered by the regulatory focus on the long-term underlying trends in financial markets. In essence, the regulatory framework is seeking to establish the prevailing view of the financial market, but it is the prevailing view of long-term financial market outcomes not next year's outcomes. This is consistent with the use of 10-year Commonwealth Government Securities (10-yr CGS) and 10-year commercial bonds (10-yr BBB bonds) in the calculation of the return on equity and return on debt respectively.

[70] These placeholder values were calculated using an averaging period during September 2016 as advised by their consultant CEG. The AER updated the averaging period in its Draft Decision.

[71] See CCP11, Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, 3 March 2017, pp. 72 & 85. Note, CCP11 did not provide any advice on the value of gamma adopted by the networks although both AusNet and Multinet proposed a value of 0.25 compared to the AER's Guideline figure of 0.4.

[72] For instance, the AER's 2013 Rate of Return Guideline was finalised after a period of 12 months intensive consultation with different stakeholders.

[73] The inflation review is expected to be finalised by December 2017 while the Rate of Return Guideline project will not be completed until late 2018 to take effect from 2019.

For this reason, CCP11 was sceptical of much of the evidence provided by the networks and their consultants as this was based on analysis of shorter-term market trends and inflation outcomes. For example, CCP11 did not consider the evidence supported a change in the equity beta/MRP since 2013, particularly given the evidence was based on a limited historical period or emphasis on short-term assumptions in the Dividend Growth Model (DGM) of equity. Similarly, we did not accept that inflation of 1.65% represented the best estimate of average inflation expectations over the next 10 years.

The AER has not accepted the proposals by AusNet and Multinet with respect to the changes to the rate of return assessments. Nor has the AER accepted the proposals by the two networks with respect to the estimation of inflation expectations and to the lower 'market based' estimation of the value of gamma. The reasons for the AER's three Draft Decisions are summarised in section 5.2 – 5.4 below.

The CCP11 largely supports the AER's Draft Decisions, albeit noting that some aspects of the AER's decision (and the Guideline on which they are based) have been considered as "conservative" by previous CCP subgroups and consumer groups. CCP11 considers that stability and certainty must be priority considerations at this stage, given the ongoing appeals and the current reviews of inflation and of the Rate of Return Guideline. The AER's reasoning has evolved since the completion of the 2013 Guideline (without changing the fundamental Guideline parameters and approach), and we have given some consideration to these explanations.

In their Revised Proposals, both AusNet and Multinet have adopted the AER's Draft Decision. CCP11 acknowledges this change as a constructive contribution that will benefit consumers and the businesses. Extensive legal challenges can be a major distraction and cost to the businesses and detract from a focus on the real challenges that face the Victorian gas industry.

Tables 5.1 and 5.2 below summarise:

- Table 5.1: AER's 2013 Guideline, the initial network proposals and CCP11's response to these proposals (Table 7.1); and
- Table 5.2: AER's Draft Decision, revised network proposals and CCP11's response to the Draft Decision and Revised Proposals.

Table 5.1: Summary, AER 2013 Guideline, Initial Proposals and CCP11 Response

	AER 2013 Guideline	AGN	AusNet	Multinet	CCP11 Response
Return on Equity					
Modelling framework	SL CAPM foundation model	Adopt	Adopt	Adopt	Accept
Equity beta	0.7	0.7	0.7	0.7 (but see adjustment factor)	Accept
Market Risk Premium	6.5%	6.5%	7.5%	7.5%	6.5%
Risk Free Rate	10-yr CGS averaged over 20 BD	Adopt	Adopt 10-yr CGS averaged over 8 months	Adopt	Reject 8 month averaging period

	AER 2013 Guideline	AGN	AusNet	Multinet	CCP11 Response
Other				1.14% uplift factor due to beta bias in SL CAPM	Reject uplift factor
Return on debt					
Modelling framework	10-yr trailing average with annual update	Adopt	Adopt	Adopt	Accept
Transition	10-yr transition to trailing average	Adopt	Adopt	Adopt	Accept
Debt	Average RBA & Bloomberg 10-yr BBB bond series	Adopt	RBA series only	RBA, Bloomberg & Reuters series	Reject proposed changes to series
Expected Inflation					
Modelling Approach	Average of RBA forecast for 2 yrs + mid-point RBA target range for 8 yrs	Adopt	Propose expected inflation using 'breakeven' methodology	Propose expected inflation using 'breakeven methodology	Reject proposed changes to inflation estimation
Gamma					
Payout ratio	0.7	Adopt	Adopt	Adopt	Accept
Utilisation Rate	0.6	Adopt	0.35	0.35	No comment

As a result of the different approaches adopted by the three distribution networks, there were differences in their proposed rate of return, an outcome that would have impacts on the costs of distribution to Victorian gas customers over the 2018-23 regulatory period. Multinet proposed a nominal vanilla rate of return (WACC) of 6.12% and AusNet proposed 5.63%. AGN's proposed WACC of 5.28% aligned with the AER's Guideline approach and parameters. Similarly, differences in inflation forecasts will flow through to the underlying value of the real rate of return; the lower the value of inflation in the AER's revenue model, the higher the real rate of return (all other things being equal).[74] A lower gamma figure also translates into higher revenues for the networks.

As noted, the AER's Draft Decision closely follows the AER's 2013 Guideline and all three networks have adopted the AER's Draft Decision in their Revised Proposal. CCP11 accepts these Revised Proposals for the rate of return, inflation and gamma at this point in time,[75] as summarised in Table 5.2 below.

[74] That is, the nominal rate of return under the WACC is effectively adjusted by deducting the inflation forecast using the Officer formula for converting nominal to real values (and vice versa).

[75] However, as noted, we consider the equity beta and MRP are conservative estimates and our acceptance is in the context of the current round of appeals and the review of inflation and the Rate of Return Guideline

Table 5.2: Summary, AER's Draft Decision, Revised Proposals & CCP11 Response

	AER Draft Decision	AGN	AusNet	Multinet	CCP11 Response
Return on Equity					
Modelling framework	SL CAPM foundation model	Adopt	Adopt	Adopt	Accept
Equity beta	0.7	0.7	0.7	0.7	Accept
Market Risk Premium	6.5%	6.5%	6.5%	6.5%	Accept
Risk Free Rate	10-yr CGS averaged over 20 BD	Adopt	Adopt	Adopt	Accept
Other				Remove uplift factor	Accept
Return on debt					
Modelling framework	10-yr trailing average with annual update	Adopt	Adopt	Adopt	Accept
Transition	10-yr transition to trailing average	Adopt	Adopt	Adopt	Accept
Debt	Average RBA & Bloomberg 10-yr BBB bond series	Adopt	Adopt	Adopt	Accept
Expected Inflation					
Modelling Approach	Average of RBA forecast for 2 yrs + mid-point RBA target range for 8 yrs	Adopt	Adopt	Adopt	Accept
Gamma					
Payout ratio	0.7	Adopt	Adopt	Adopt	Accept
Utilisation Rate	0.6	Adopt	Adopt	Adopt	Accept

Notwithstanding the agreement by all three of the Victorian gas distribution networks to adopt the AER's rate of return Draft Decision, the remainder of this submission will respond to various aspects of the AER's Draft Decision. This is because the AER's Draft Decision raises important points of principle and demonstrates the AER's own evolving view on how to determine a rate of return that best meets the ARORO. This evolution also reflects, inter alia, the analyses set out in the decisions of the various Tribunals and the Full Federal Court.

Summary of Recommendations

- The AER should accept the revised rate of return proposals by AGN, AusNet Services, Multinet regarding all elements: the return on equity, the return on debt, inflation and gamma.
- The AER should investigate the implications of the new definition of the BEE when assessing the risk of providing regulated services and the range of appropriate comparator firms.
- The AER should undertake further investigation of the claimed increasing gap between the historical MRP and the MRP calculated using the DGM, to determine the role that the DGM should play in future decisions on return on equity.

5.2 AER's Draft Decision – Rate of Return

5.2.1 Overview of the AER's Draft Decision

In its Draft Decision, the AER accepted AGN's initial proposal with respect to the rate of return as this proposal aligned with the AER's Guideline. The difference between AGN's rate of return proposal and the AER's Draft Decision, therefore, only reflects the impact of updating the CGS yields for the 20 day averaging period (return on equity) and the update of the period for the corporate bond series (return on debt). These will be further updated in the AER's Final Decision.

However, the AER did not accept the proposals by AusNet and Multinet where these proposals varied from the AER's 2013 Guideline. The AER's Draft Decision determined an allowed rate of return of 5.75% (nominal vanilla) for both businesses. While the AER's Draft Determination of 5.75% is not significantly different than the networks' initial proposals, this apparently anomalous result merely reflects a timing difference in the assessment of the CGS and the corporate bond yields. [76]

Beyond noting our general concern that the AER's rate of return represents a cautious regulatory approach that has been regarded as overly "conservative" by various consumer groups, CCP11 largely supports the AER's Draft Decision on the rate of return and considers it is reasonably consistent with the NGO, RPP and the ARORO. As all three networks have adopted the AER's Draft Decision in their Revised Proposals, CCP11 supports the networks' Revised Proposals with the caveat noted above regarding the AER's cautious approach to the assessment of the rate of return.

Key components of the AER's Draft Decision on the rate of return

The AER's determination of a nominal vanilla WACC included:

- Nominal return on equity of 7.2% for AGN, AusNet and Multinet;
- Nominal return on debt of 4.79% for AGN, 5.10% for AusNet and 4.79% for for Multinet;[77] and
- Nominal weighted average cost of capital (WACC) of 5.75% for AGN, 5.94 for AusNet and 5.75% for Multinet.

The AER's decisions on the rate of return components are consistent with its previous decisions based on the approaches and parameters set out in the 2013 Guideline. The discussion below summarises the AER's reasoning in the areas where it rejected the initial proposals by AusNet and Multinet.

[76] In the period following the network proposals, the yield on 10-year CGS and the yield on 10-year corporate bonds (BBB) have increased, partially offsetting the overall impact of the AER's reduction in the WACC parameter values for AusNet and Multinet.

[77] These small differences reflect differences in the proposed averaging period for return on debt. The networks can select corporate bond rates averaged over any period within the last year.

5.2.2 Efficient financing costs and the benchmark efficient entity (BEE)

Underpinning the AER's analysis of the proposals is its ongoing development of the concept of 'efficient financing costs' as expressed in the ARORO. This includes developing its understanding of the 'benchmark efficient entity' (BEE) based on the core elements in the ARORO of 'risk', 'similar' and 'reference services'. [78]

CCP11 regards the AER's ongoing clarification of the BEE as essential, particularly following the decisions of the NSW Tribunal and the Full Federal Court. The Court confirmed the Tribunal's view that a BEE cannot be defined by reference to a 'regulated entity';[79] rather the relevant benchmark is an entity with a *'similar risk'* for the '*provision of reference services'* (whether regulated or not). [80] As summarised by the Court (@ 592):

> *…we repeat our conclusion that the allowed rate of return objective in r 6.5.2(c) does not import the characterisation of the benchmark efficient entity as a regulated entity. It does, however, require the benchmark efficient entity to be taken* ***as having a similar degree of risk*** *as that which applies to the particular service provider in the provisions of its standard control services.* ***As we have remarked, this degree of risk may be affected by the fact that the provision of the services is regulated by price control****.* [emphasis added]

The Federal Court's decision provides a welcome clarification of the NSW Tribunal's decision as the latter decision could be construed as determining that the relevant reference for a BEE is an unregulated business. As the Federal Court stated [@ 537]:

> *Thus, in our view,* ***it is not appropriate to characterise the benchmark efficient entity as either regulated or a non-regulated****. The allowed rate of return objective does not do so, and there is no need to do so.* [emphasis added]

The AER's most recent approach is summarised in the Draft Decision for the Victorian gas businesses as follows: [81]

> *We adopt the Full Federal Court's decision that a benchmark efficient entity is not necessarily to be characterised as a regulated entity. Therefore in assessing the efficient rate of return we look to comparators that have similar risk characteristics. Otherwise our allowed rate of return would not achieve the ARORO or the NGO.*

CCP11 supports the AER's approach following the Court's decision, and its application to the rate of return. We expect that the concepts such as 'similar risks' to the entity providing network services will be an important point for discussion in the review of the AER's Rate of Return Guideline. For instance, as the Court noted, one consideration is whether the BEE should include only those entities subject to some form of price control that in turn can be considered as limiting excess profits but also limiting losses and protecting cash flow and asset values.

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[78] The ARORO provides for a rate of return 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* (see NGR, r. 87(3)).

[79] In its Draft Decision, the AER states that: "*we previously considered a benchmark efficient entity would be a 'pure play,* ***regulated*** *energy network business operating within Australia*" (see Attachment 3, p. 322). This definition was included in the AER's 2013 Guideline and in all its decisions that followed the publication of the Guideline.

[80] See for instance Federal Court of Australia, *Australian Energy Regulator v Australian Competition Tribunal (no 2)[2017] FCAFC 79*, May 2017, @ [529]-[545]. The Court provides a detailed analysis of both the AER's and the networks' interpretations of the ARORO and the benchmark efficient entity.

[81] AER Draft Decision AusNet Services, Attachment 3, p. 3-324.

The BEE is particularly relevant to the assessment of the equity beta in the return on equity calculation and a part of the assessment of the efficient financing of debt.

5.2.3 AER's Draft Decision on the Return on Equity

In its reasoning on the efficient return on equity, the AER highlighted that the NSW Tribunal has upheld the AER's approach to assessing the return on equity.[82] However, while the Victorian gas NSPs accepted the Tribunal's decision on the AER's overall approach (the foundation model approach), AusNet and Multinet disputed the values of some of the parameters used by the AER in this approach.

The key parameter values in dispute are the Market Risk Premium (MRP) for AusNet and Multinet and, in the case of Multinet, the inclusion of an 'uplift factor' to account for the theory underpinning the Black CAPM and the alleged bias in the SL CAPM for low beta stocks. These issues are considered below. All the three gas distribution networks accepted the equity beta of 0.7, although Multinet's 'uplift' factor can be regarded as a 'back door' to achieving a higher beta allowance.

AER rejects higher MRP

The AER did not accept AusNet's and Multinet's proposal for a higher MRP allowance (7.5%) and adopted the MRP of 6.5% that was set out in its 2013 Guideline and confirmed in the additional analyses presented by the AER in many of its subsequent electricity and gas revenue determinations. The AER accepted AGN's MRP as this was consistent with the AER's Guideline and subsequent analyses. The AER's Draft Decision was consistent with the CCP11's reasoning and recommendations in our response to the initial proposals.

The AER's conclusion that an MRP of 6.5% remains reasonable as an estimate of the MRP, is summarised as follows:[83]

- As set out in the 2013 Guideline, the MRP is a "forward looking estimate of the risk premium …on the market portfolio required by investors with a ten-year investment horizon" (p. 3-85); it is not a measure of the return required by investors with a short investment horizon.
- The 2013 Guideline was developed following extensive consultation with stakeholders including on the assessment of the MRP and the AER's Draft decision is consistent with this. (p. 3-84).
- The Tribunal in its decision on the NSW electricity and gas distribution businesses upheld the AER's approach on all aspects of the return on equity.[84] (p. 3-84).
- The AER has considered the material provided to it since the 2013 Guideline, including material provided by the networks as part of this proposal; the material does not provide satisfactory evidence to warrant a departure from the Guideline. (p. 3-85).
- The AER places more weight on the analysis of a series of historical returns as this is considered the best approach to estimating the market return required by investors with a 10-year investment horizon. The AER's analysis of historical excess returns provides a baseline of 5.5-6.0 per cent from an observed MRP range of 5.1-6.4 per cent. (p. 3-86).

[82] For example, see Australian Competition Tribunal, *Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT*, 26 February 2016, @ [813].

[83] For details, see Attachment 3 of the AER's Draft Decision. The page references refer to Attachment 3 in the AusNet Draft Decision. However, the same general arguments are included in Attachment 3 to each of the AER's Draft Decisions for the gas distribution businesses.

[84] Australian Competition Tribunal, *Application by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompt 1*, 26 February 2016, @ [p. 632-814] and specifically paragraph [735]. The "*Ausgrid Decision*".

- The AER's analysis of the Dividend Growth Model (DGM) indicates a MRP estimate above this baseline with a range of 5.97 – 8.88 per cent after conducting 'sensitivity tests'; The AER also considers that the DGM models are likely to produce upwardly biased estimates in the current market with a wide range of possible outcomes as identified in the stress tests. The AER therefore uses the DGM results only as a 'directional guide', i.e. as a guide to whether the MRP is likely to be above or below historical estimates. (p. 3-87).
- It follows that the AER rejects the claim by Frontier (and supported in AusNet's and Multinet's proposals) that the AER's methodology represents a simple averaging of the historical and DGM output. The AER also, therefore, rejects the proposals that faced with evidence that the MRP has increased, it should now adopt a MRP of 7.5% being a simple average of its historical excess returns and DGM outputs. (p. 3-90).
- The recent decisions by other regulators support a conclusion that 6.5% is reasonable once the AER takes into account differences in objectives and approach (p. 3-87).
- Examination of the conditioning variables[85] indicates that there has not been a material change in market conditions since the AER's 2016 decisions (p. 3-87) and the AER does not accept the networks' claims that the conditioning variables support a MRP of 7.5% (p. 3-93) or that the evidence is irrelevant. (p. 3-94).
- Survey evidence supports a MRP around 6.0-6.5 per cent. (3-87), rather than supporting an MRP of 7.5% as proposed by AusNet and Multinet. In response to the networks' claim that the survey results are inclusive of dividend imputation, the AER considers that the evidence for this assumption is ambiguous. (p. 3-94).

CCP11 supports the AER's reasoning and conclusions in the Draft Determination while noting that the MRP of 6.5% represents a cautious decision by the AER given the information available to it. As noted in our original submission, CCP11 is particularly sceptical of the value of the DGM within the AER's regulatory framework given the DGM's reliance on a variety of assumptions such as expectations (obtained from surveys/analysts) about medium to long-term growth in dividends, GDP and inflation. CCP11 also noted that there are many different DGM specifications and these can lead to different results, with no clear rationale for adopting one model specification over another.[86] Partington and Satchell for instance have since highlighted some studies using the DGM model and a reasonable set of assumptions, which indicate a declining MRP with a value of 4.4% as at July 2017.[87]

It is our view that the DGM can be construed to deliver any particular results depending on these assumptions, making it unsuitable for use in the regulatory context, particularly when forecasting current perceptions of market risk by long-term investors.

[85] The relevant conditioning variables include dividend yields, credit spreads and implied volatility.

[86] For example, whether the DGM model will be a two stage or three stage model or some more complicated model specification. In particular, assumptions must be made about when dividend growth rates will converge to the expected 'normal' GDP growth rate.

[87] See report by Fenebris.com at http://www.market-risk-premia.com/au.html updated to 31.07.17, accessed 08.09.17. Partington and Satchell recommend that the AER evaluate the Gordon and the Fenebris models rather than rely on the Gordon DGM model. See for instance, Partington & Satchell, *Discussion of estimates of the return on equity*, April 2017, p. 26

Moreover, we consider that the DGM is overly influenced by and reflects near term expectations for dividend growth and GDP growth. For example, in the original submission, CCP11 made reference to comments from the Tribunal that restated the AER's position as follows:[88]

> *In the AER's view, the short term MRP will vary from the long run estimates of MRP at times, but that in order to maintain regulatory consistency, a long-term MRP with a notional ten year investment consistent with the terms of the risk free rate ought to be considered.*

In particular, if the DGM is to provide estimates of the average expected MRP over a 10 year forecast period (as suggested in the quotation above), then the outcome will be dominated by the assumptions of long-term growth (and growth patterns) and may bear little relationship to current observations of dividend payouts and the expectations that are formed on the basis of these current outcomes. It is little wonder the AER's own analysis using the DGM has identified a wide range of possible (arguable) estimates of the MRP as noted above.

In the absence of an objective and independent basis for forecasting the long-term trends and determining the optimal model specification, the CCP11 has considerably more confidence in the simpler and more transparent approach of forecasting long term expectations for the MRP on the basis of observable historical trends.

AER rejects 'alpha' adjustment to the return on equity proposed by Multinet

The AER has not accepted Multinet's proposal to include an additional 'alpha' term (1.14%) to the overall return on equity to compensate for the claim that there is a low beta bias for low beta stocks in the SL CAPM model of return on equity. The AER's Draft Decision on the additional alpha term is consistent with CCP11's analysis and recommendations.

There are two issues to be addressed in response to Multinet's proposal. The first issue concerns whether there is an established low beta bias in the SL CAPM. Secondly, if such a bias is established, then what is the appropriate means to address this bias within the Gas Rules and the overall regulatory framework?

The existence, and treatment (if appropriate) of the low beta bias in the SL CAPM has been an area of contention both during and since the development of the Guideline in 2013. The AER's Guideline, for instance, has acknowledged the possibility of such a bias by reference to the *theory* of the Black CAPM while also stating that the quantum of the bias cannot be reliably calculated. The AER states with respect to Multinet's proposal for an uplift (alpha) and the Black CAPM that:[89]

> *Multinet's proposal appears to stem from consideration of the Black CAPM which we have assessed and determined to be unsuitable for directly estimating the return on equity.*

AER has, therefore, selected an equity beta of 0.7 which is at the top end of the range of empirically derived equity betas[90] (range of 0.4 – 0.7 with a mean of 0.5) based on a series of studies by Professor O Henry (Henry) in 2008-09 and 2014. Most consumer organisations have recommended the adoption of an equity beta closer to the observed mean value of 0.5. The AER's stated reason for

[88] CCP11 Response to Proposals from AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, 3 March 2017, p. 76. The quotation is taken from the Australian Competition Tribunal, *Application by Envestra Limited (No 2)[2012],* ACompT4 @ 136.

[89] AER Draft Decision AusNet Services, Attachment 3, p. 3-57

[90] That is, the equity betas were arrived at by assessing historical returns of Australian energy utilities compared to equity returns of the market as a whole. The range of equity betas reflect the alternative methodologies that can be used to calculate the equity beta, e.g. daily versus weekly sampling, individual firm versus portfolio returns.

adopting a higher value is that the Black CAPM theory provides some 'directional' information in the point estimate within the range.

Multinet's original claims for an 'alpha' adjustment, while notionally applying to the overall return on equity, is in reality an argument for a higher equity beta value. This in turn is justified on the basis of empirical studies by Multinet's consultants CEG, Frontier and Houston Kemp.[91] Multinet concludes that the empirical mean value of beta has increased from 0.5 to 0.7. It follows from the AER process that the allowed value of beta should be higher than 0.7, although this is then captured in the proposed 'alpha' adjustment to the overall return on equity.

The AER rejected this reasoning in the Draft Decision on the basis that Multinet has misconstrued the AER's approach and that there is insufficient evidence that equity beta has increased.

For example, the AER states that, contrary to Multinet's claim, the AER did not 'adjust' the equity beta but rather it selected from the top of the empirical range to account for the theoretical principles underpinning the Black CAPM and other relevant information".[92] CCP11 is not convinced that the AER's selection of the top end of the empirical range is either necessary or theoretically sound, particularly given the cogent criticisms of the Black CAPM.[93]

However, having said that, we also recognise that the AER's approach does not involve any specific 'adjustment' as Multinet and its advisors appear to claim. Rather, as noted above, the AER's approach related to selecting a point estimate within, but at the higher end, of Henry's empirical range of equity beta values. CCP11 also acknowledges that the NSW Tribunal found no error in the AER's reasoning and we therefore consider the issue is best pursued by consumers in the context of the review of the Rate of Return Guideline.

With respect to the evidence that Multinet presents in its initial proposal for a higher empirical equity beta for the energy utilities since 2013, the AER stated that the analyses provided by Multinet's advisors did not provide sufficient "satisfactory evidence" of an increase that would lead the AER to depart from its range and point estimate, a conclusion supported by Partington and Satchell in their review of the relevant reports.[94] Moreover, Multinet's referral to the estimation by the Economic Regulation Authority of Western Australia (ERA) of a mean beta of 0.7 was also not relevant. The ERA's analysis was based on limited sample size of four firms and only included 5 years of data, consistent with ERA's approach of using a five year horizon for estimation of CGS and commercial bonds.[95]

CCP11's submissions on Multinet's proposal also raised these issues. We noted that given the small sample size and limited sampling period, there were insufficient data points to provide statistically reliable results and that, in any case, the AER's focus was on robust longer term trends – five year data is more likely to be overly affected by short term or cyclical factors.[96] Moreover, the alpha

[91] Houston Kemp set out a methodology to adjust the return on equity (rather than the equity beta).
[92] AER Draft Decision AusNet Services, Attachment 3, pp. 3-58-59.
[93] For example, CCP11 notes McKenzie and Partington's caution that the theory underpinning the Black CAPM does not necessarily support an uplift in equity beta and, more generally, it is not clear what role the theory should have in choosing the equity beta. See McKenzie and Partington, *Report to the AER Part A: Return on equity*, October 2014, p. 24; also cited in AER, Attachment 3, p. 3-60, fn 207.
[94] AER Draft Decision AusNet Services, Attachment 3, p. 3.58.
[95] More specifically, the ERA makes its assessment of costs of equity and debt on the basis of the five-year regulatory period rather than the 10-year horizon used by the AER.
[96] As noted by CCP11, Multinet's consultant Frontier concluded that its preference is to use 10-year data on the basis of statistical reliability, particularly given the small sample size. See CCP11 Response to Proposals from

adjustment to the return on equity implies an equity beta of 0.85 as set out in a supplementary submission on the network proposals, an outcome for Australian energy utilities that has virtually no empirical support.[97]

CCP11 therefore strongly supports the AER's Draft Determination when it concluded as follows:[98]

> *We note that short term data is more prone to one-off events, fluctuations and volatilities in the market – which may obscure the 'true' equity beta for a benchmark efficient entity. Therefore, we have most retard to longer term estimates and a large sample of firms when determination the equity beta.*

CCP11 also notes that the AER has conducted its own very recent study using 10 years of data up to 28 April 2017[99] and based on Henry's methodology. The AER reports that its results were consistent with Henry's results and supports the AER's range and point estimate.[100]

CCP11 also considers that in its assessment of Multinet's proposed 'alpha' adjustment, the AER has raised an important distinction between ex ante expected returns and ex post realised returns.[101] We agree that expected returns may not match realised returns as realised returns are determined by many exogenous factors that arise such as economic shocks and outperformance. More particularly, within the regulatory incentive framework, the allowed rate of return on equity is set on an ex ante basis to reflect the current market expectations. Realised returns in the past will have some influence on expectations, but they are not a basis for setting or adjusting expected returns.

CCP11 therefore, supports the AER's conclusion that it is incorrect to use realised returns as a basis for adjusting the ex-ante expected return on equity ('alpha' factor adjustment), as Multinet's consultants, Frontier and Houston Kemp, appear to have recommended. Moreover, in the specific regulatory context there is a significant risk of circularity. That is, it is possible that the realised returns of the listed regulated businesses may be greater than expected returns because of the of the AER's tendency to select the top of the range for each of the variables – including the MRP and the equity beta, risking a compound effect in the overall return on equity.

AER rejects AusNet's initial proposal to extend the averaging period in the estimation of the risk free rate

While AusNet agreed that the appropriate basis for estimating the prevailing risk free rate is the yield on 10-year Commonwealth Government Securities (CGS), AusNet also proposed to extend the averaging period for the CGS yields from 20 business days to 8 months. AusNet suggested that this approach provided more stable and predictable outcomes for the businesses and consumers while still allowing more fundamental changes in the CGS market to be captured.

AGN, AusNet and Multinet for a revenue reset/access arrangement for the period 2018 to 2022, 3 March, p. 82.

[97] Bev Hughson, *AGN, AusNet Services and Multinet, Supplementary advice on the proposed return on equity by Victorian gas distribution network service providers*, 22 March, 2017, p. 8.

[98] AER Draft Decision AusNet Services, Attachment 3, p. 3-58.

[99] The CEG and Frontier studies had used five-year data, however, Frontier also provided an analysis of 10 year data and the associated equity beta was very similar to the Henry study findings.

[100] See for instance, AER Draft Decision AusNet Services, Attachment 3, p. 3-58. Note that as of 1 September, the AER has not published this study.

[101] See for instance, AER Draft Decision AusNet Services, Attachment 3, p.p. 3-60-61.

The AER rejected this proposal by AusNet. The NGR specifically states with respect to the return on equity that: **"regard must be had to the prevailing conditions in the market for equity funds"**.[102] The NGR places no such limitation on the return on debt estimation. This suggests that for the return on equity estimation the focus of attention is on 'prevailing' rate, which the AER interprets as 20 business days (BD) as close as possible to the start of the regulatory period. It would seem AusNet's proposal for an averaging period based on eight months could not meet that criterion. As the AER states:[103]

> *A short term averaging period* [20 BD] *is a pragmatic alternative to using a prevailing rate. This provides a reasonable estimate of the prevailing rate while not exposing service providers to unnecessarily volatility* [that would occur if the yield is assessed on the basis of a single day trading].

The AER also notes that there is a risk of bias or opportunistic selection of an averaging period if the averaging period that is specified by the network is extended back to enable averaging CGS yields over a period up to 8 months. This extended period may mean that the NSP and the AER would have some knowledge of the actual interest rates during part of the period and be able to select an optimum averaging period within those 8 months. The AER states:[104]

> *If an averaging period is chosen after the period occurs, the knowledge of the risk free rate at any past point in time influences the choice, creating an inherent bias. It would not matter if the period were chosen by the AER, the service provider, a user or consumer, the Australian Competition Tribunal or another stakeholder.*

CCP11 supports the AER's reasoning and conclusions on the averaging period proposal. In our initial submission, CCP11 stated that while the AER should not accept AusNet's proposal within the current round of regulated decisions, there was some merit in AusNet's proposal and it should be further considered following appropriate consultation (e.g. as part of the review of the Rate of Return Guideline). Having considered the AER's arguments, CCP11 is inclined to revise its initial recommendation and we agree that an 8-month extension to the averaging period is too open to exploitation and is not ultimately consistent with the ARORO.

7.2.4 AER's Draft Decision on the return on debt

Unlike APA VTS, the three Victorian gas distribution businesses have proposed few changes to the AER's Guideline approach. Most particularly, the businesses accepted the 10-year trailing average approach and the AER's approach to transition the cost of debt over a 10-year cycle from the 'on-the-day' assessment to the trailing average.

While the three gas distribution businesses did not propose to directly adopt the trailing average without transition, it is instructive to briefly summarise the AER's arguments in their Draft Decision with respect to the transition process as it highlights the principles (e.g. NPV = 0) and the risks that must be carefully considered when changing methodology from one regulatory period to the next. These arguments represent a useful evolution of the AER's thinking on this issue over the last three years.

For example, the AER states that while the 'on-the-day' and the 'trailing average' approach are both allowed under the NGR,[105] each approach has its own benefits and limitations.[106] However, moving

[102] NGR, r. 87(7)
[103] AER Draft Decision AusNet Services, Attachment 3, p. 3-71
[104] AER Draft Decision AusNet Services, Attachment 3, p. 3-72
[105] See NGR, r. 87 (8)-(12) and particularly (9)-(10)

directly from the on-the-day approach (i.e. the approach adopted in the current regulatory period) to the trailing average approach without a transition arrangement would violate the NPV=0 principle and would not satisfy the ARORO. As the AER concludes:[107]

> *Given this,* ***while we adopt a trailing average for this determination, we do not consider this change in methodology would be justified in the absence of a transition****…Our view is supported by our consultants who note that "[a]n immediate switch to the trailing average* ***immediately gives risk to a regulated allowed return that exceeds the current required return****. Consequently, it immediately gives rise to economic rents and an incentive to overinvest." We agree with our consultants and consider such an outcomes would be inconsistent with both achieving the ARORO and achieving the National Gas Objective.* [emphasis added]

CCP11 supports the evolution of the AER's argument for a 10-year transition period as it is the only approach that will ensure that the process of changing the methodology produces outcomes in the next regulatory period that are consistent with the best estimate of the ex-ante efficient cost of debt. Importantly, the existence of a transition process (as set out in the Guideline) was an important factor in the consumer representatives accepting the 10-year trailing average approach during the development of the Guideline in 2013. The opportunity for significant gaming by the networks purely as a function of the change in methodology was readily apparent at the time.[108] The AER addresses the same issue in the Draft Determination from a somewhat different perspective:[109]

> *When we [AER] proposed moving to a trailing average in the Guideline, this proposal was contingent on applying a transition so that the value of the firm aligned with previous investor expectations under the on-the-day regime.*

The AER's more recent explanations of why the transition process is preferable in regard to contributing to the ARORO and the NGO (including the above quotation), also addresses the problems created by the legal analyses that underpinned the decisions of the NSW Tribunal and the Federal Court. The AER's current analysis which seeks to achieve, via the transition process, an NPV=0 position during the change from one methodology to another, gives much greater consideration to the outcomes of the transition/no transition arguments regarding the costs of debt and whether these outcomes are consistent with the ARORO and NGO and whether the outcomes provide the correct signals for efficient investment.

CCP11 agrees with the AER's consultants that the no-transition approach will not deliver an outcome that meets the ARORO; rather it will deliver a cost of debt that in this instance is higher than the efficient cost of debt purely as an artefact arising from the change in methodology. It is hard not to conclude that if the 10-year debt yields were increasing rather than decreasing (as they have since the peak of 2008-09), there would be no dispute from any of the networks about the AER's transition approach, irrespective of their actual debt portfolios.

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[106] AER Draft Decision AusNet Services, Attachment 3, p. 3-126.

[107] Ibid. The AERs quotation is taken from Partington and Satchell, *Report to the AER in relation to the cost of debt*, 9 April 2017, p. 29.

[108] See for instance, AER, *Explanatory Statement, Rate of Return Guideline*, December 2013, Table I.6, pp. 197-198 ("Transition to a trailing average"). Consumer groups generally expressed preference for 5-year transition period that would resolve the gaming issue. PIAC noted if this 5-year transition was not accepted by the AER, then the AER needed to consider mechanisms that will "reduce the risk of gaming".

[109] AER Draft Decision AusNet Services, Attachment 3, p. 3-131.

The fact that the three gas distribution networks (presumably with different portfolios of staggered debt, as suggested in the available annual reports) have included the AER's transition approach in assessing their efficient cost of debt in both their initial and Revised Proposals is itself indicative that the ARORO, NGO and the RPP can be satisfied by adopting the transition framework set out in the AER's Guideline.

Choice of third party data series for calculation of yield on 10-year BBB+ bonds

The AER's current methodology is to take the simple average of the 10-year yield estimate from the Bloomberg Valuation Services (BVAL) data series for Australian corporate BBB rated bonds, and the 10-year BBB series of non-financial corporate BBB rated data series by the RBA (RBA curve). Each of these series represents a broad BBB category (include BBB+, BBB, BBB-), and each has other limitations that require the AER to make some adjustments to the series. These adjustments are set out by the AER in its Guideline and in the current Draft Decision.[110]

Since 2013, the AER's use of these bonds, the credit rating, averaging process and the ex-post adjustments have been the subject of appeal. However, the Tribunal has upheld the AER's approach.[111]

However, notwithstanding the Tribunal's decisions, both AusNet and Multinet proposed some changes to the AER's approach in their initial proposals. AusNet proposed using the RBA series only, *or* if the AER decides to use the Bloomberg series, then the AER should use Thomson Reuters 10-year yield curve as well to obtain an average of the three series. Multinet proposed using a simple average of the RBA, Bloomberg and Thomson Reuters curves.[112] This is another example of networks introducing new elements to the rate or return assessments without adequate and objective consultation processes that involve all affected stakeholders. CCP11 strongly resists such an approach to changing key parameters in the rate of return assessments, particularly given the very significant effects such changes can make, as is witnessed in the case of the change in the approach the AER adopted to estimating the cost of debt.

The efforts to change these Guideline parameters within the context of a single regulatory proposal can seem opportunistic to consumers and, in any case, may have wide spread impacts on other stakeholders and on the stability and transparency of the regulatory framework. Importantly, the AER also recognises that the current assessment of the cost of debt already "includes several conservative features"[113] that are to the benefit of the networks rather than consumers.

The AER did not accept either of these two proposals although the AER notes that it is intending to undertake a "more comprehensive review" of the Thomson Reuters curve.[114] Whatever the merits or otherwise of the Thomson Reuters curve, the AER's response to reject these proposal is appropriate and supported by CCP11. Again, it is an issue that can be raised in the context of the AER's review of the Rate of Return Guideline, along with the selection of the industry credit rating and the use of 'adjustments' to the curve.

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[110] See for instance, AER, Draft Decision, Attachment 3, Tables 3-12 and 3-13.

[111] See for instance, Tribunal's decision in *Application by Public Interest Advocacy Centre and Ausgrid [2016] ACompt 1* @ [964-995].

[112] See, AER Draft Decision AusNet Services, Attachment 3, Table 3-11, p.p. 3-143-144.

[113] AER Draft Decision AusNet Services, Attachment 3, p. 3-144 - 145. The AER highlights that the assumption of the 10-year benchmark term is greater than the average issuance by NSPs, and the use of BBB curves where the AER's stated credit rating of an efficient network business is BBB+.

[114] AER Draft Decision AusNet Services, Attachment 3, p. 3-144.

As noted, CCP11 recognises that both AusNet and Multinet have withdrawn this approach in their Revised Proposal and have reverted to the AER's Guideline approach of averaging the Bloomberg and RBA series.

5.3 AER's Draft Decision and inflation expectations

The AER had adopted the same methodology for forecasting expected inflation across all its decisions since 2013. AGN adopted the AER's approach to estimating expected inflation. However, both AusNet and Multinet adopted a different methodology than the AER for estimating expected inflation in their initial proposals. In its Draft Decision, the AER did not accept the proposals by AusNet and Multinet.

CCP11 supports the AER's analysis and conclusions. CCP11 considers that the two NSPs did not provide sufficient or robust justification for the need to change the AER's approach to inflation in their initial proposals. Moreover, CCP11 holds to the principle that there must be very substantial reasons to change methodology. As consumers have found in regard to the change in the methodology for estimating debt costs (see above), such changes can have unexpected and unintended consequences. The proposed changes by AusNet and Multinet to the AER's approach to estimating expected inflation has not been adequately canvassed with all stakeholders prior to the initial proposal, nor has the approach been agreed to by all stakeholders.

CCP11 therefore acknowledges and welcomes the fact that both AusNet and Multinet have accepted the AER's Draft Determination on the forecast of inflation expectations. However, for completeness, the following sections in this submission will examine some aspects of the NSPs' initial proposals in the light of the AER's Draft Determination and recent developments in the approach to forecasting expected inflation that have emerged as part of the AER's program to review inflation forecasting and its role in the revenue determination.

AER review of forecasting expected inflation

CCP11 considers that the current review of inflation by the AER, which will engage multiple stakeholders over some 9 months, is the appropriate forum for discussing the issues identified by the networks associated with forecasting expected inflation.

The public review commenced with the AER publishing a discussion paper for stakeholder consultation in April 2017. A public forum was held in June and a stakeholder workshop in August 2017. A CCP working group was appointed to be part of this review and has been an active participant throughout the process.[115] To date, the review process has confirmed that the inflation issue can be conceptualised in two parts:

1. *`What is the best measure of <u>expected</u> inflation (using the standard All Caps CPI as the reference point) in the regulatory context?* Since 2009, the AER has adopted a forecast of expected inflation over 10 years that is based on the geometric average of the RBA's forecast of inflation expectations for the next 2 years and the midpoint of the RBA inflation target range (2%-3%) for the remaining 8 years. In its current Draft Decision for the gas NSPs, the AER has forecast expected inflation across the regulatory period as 2.45% using this approach.

[115] See for instance, CCP's papers on expected inflation can be found on the AER's website at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-expected-inflation-2017/initiation

2. *What is the impact of the AER's forecast when actual inflation differs significantly from the AER's forecast of inflation expectations?* In particular, some of the networks are concerned that the AER's expected inflation for the regulatory period (derived as above) is too high compared to actual inflation (which is currently below the target range). They claim that this has the effect of reducing the returns allowed to the network businesses below efficient returns. More specifically, the networks point to the design and interaction of the AER's revenue forecast models (the post-tax revenue model (PTRM) and the roll forward model (RFM)), and the annual pricing model.[116]

With respect to the *best measure of expected inflation* (1 above), AusNet and Multinet (along with some other NSPs) claimed in their initial proposals that the AER's measure based on RBA forecasts and targets does not reflect the current levels of actual CPI which has been below the RBA's target range. Moreover, the NSPs claim that this period of low inflation may be indicative of a long-term shift to lower inflation outcomes and/or that the RBA may no longer be able to 'manage' inflation outcomes in the way it has in the past. The two networks argued in their initial proposal that the AER should adopt a more market-based approach to estimating expected inflation and suggested that the 'placeholder' forecast of expected inflation using the market based approach should be 1.65% (AusNet) and 1.68% (Multinet) based on September 2016 averaging period. The AER has updated these estimates in its Draft Decision, suggesting that the forecasting methodology used by the two networks (see below) would result in a forecast of expected inflation of 1.93% for both AusNet and Multinet.[117]

There are two broad categories of market-based approaches to estimating inflation expectations. The first one is the 'bond break even inflation rate' (BBIR) approach where inflation expectations are derived from the difference between the yield on nominal CGS and indexed (inflation-linked) CGS.[118] This is the methodology proposed by the AusNet and Multinet in their initial regulatory proposal.

The second general category of market-based measures of expected inflation is to use data from the inflation swaps market. The networks do not canvass this option, although some theorists have argued that it is preferable to the bond break-even approach.[119]

The AER and the CCP inflation working group consider that there is not sufficient evidence to support this claim of a long term shift in inflation and note that long-term inflation expectations are relatively stable over time. Moreover, inflation is already moving upwards from the 'floor' seen in 2016 indicating that 2016 outcomes should not be the basis for claiming a permanent shift in expectations.

The most recent Statement of Monetary Policy by the RBA continues to note that inflation has increased since its 2016 low, as have inflation expectations. [120] The RBA also notes that: "long-term survey measures of inflation expectations have been stable at around 2.5 per cent".[121] These long-

[116] Under the CPI-X framework, the annual pricing model is applied each year to adjust the allowed revenues for actual CPI each year, while holding the X factor constant.
[117] AER Draft Decision AusNet Services, Attachment 3 and AER Draft Decision, Multinet, Attachment 3, p. 3-154.
[118] In this instance, the inflation forecast is derived from comparing yields to maturity of 10-year nominal CGS bonds and yield to maturity of 10-year CGS indexed bonds.
[119] See for instance, the ACCC working paper: Mathysen H., "*Working paper no. 11 – Best estimates of expected inflation*", 11 February 2017, @[227], p 101. https://www.accc.gov.au/regulated-infrastructure/about-regulated-infrastructure/regulatory-resources/working-discussion-papers
[120] RBA, Statement of Monetary Policy, August 2017, p.p. 55 and 58. https://www.rba.gov.au/publications/smp/2017/aug/inflation.html
[121] Ibid, p. 58.

term expectations are the most relevant measure within the regulatory framework. In contrast, the original proposals by the networks and the recommendations of their advisors appear to be concentrated on recent realised inflation and/or short-term inflation expectations.

In addition, neither the AER nor the CCP working group considers that the alternative approach proposed by the networks, the bond 'break-even' approach, is suitable at the moment for the regulatory purpose. Moreover, the break-even approach is not the only market-based measure of expected inflation as noted above, and it is not clear why one market-based measure should be preferred over the other.[122]

There are also issues around whether the indexed bonds market is sufficiently liquid to provide an unbiased estimate of the markets expectations of inflation; the liquidity in this market has increased but the volume of indexed bonds on offer is still subject to the policy decisions by the federal government on how it chooses to raise funds. In addition, there are significant issues around whether the spread between the yields on 10-year nominal and 10-year indexed bonds is a 'true' indicator of inflation expectations given the many other factors that may influence the yield on indexed bonds relative to nominal bond yields.[123]

With respect to the *impact of the AER's forecast of expected inflation*, as noted, some networks claim that where actual inflation is lower than expected inflation, then the AER's modelling framework (i.e. the PTRM, the RFM and the annual pricing models) does not provide adequate compensation to the NSPs over the forecast regulatory period. Conversely, if actual inflation is higher than expected inflation, then consumers will pay more than necessary for the regulated network services.

This is a complex argument that has been considered in some detail at the recent August stakeholder workshop. CCP's preliminary analysis suggests that, taking the three models together, the networks **do** receive adequate compensation for efficient financing costs over time, even when actual inflation is less than the expected inflation set by the AER for the regulatory period.[124] It must be noted, however, that this conclusion is based on the premise that the focus of an investor in regulated assets is on certainty in receiving the real rate of return) that was allowed by the AER rather than the nominal rate of return. Some networks (but not AGN, AusNet or Multinet) have suggested, for instance, that investors are seeking certainty in nominal returns rather than real returns. Other networks (such as APA VTS) are suggesting that the rate of return should deliver certainty on the nominal return for debt and the real return for equity.

It is expected that both these issues around the measurement of expected inflation and the modelling framework would be further discussed as part of the AER's two current reviews of inflation and of the Rate of Return Guideline. At this stage, however, CCP11 considers there is no reason to change the AER's approach in the current Draft Determination. Such a change is likely to introduce new risks and/or a shift in risk allocation between networks and consumers that, in turn, has wider implications for the rate of return framework. For instance, if the AER were to adopt the proposed

[122] For example, like the bond break-even approach, the swaps market measure has strengths and weaknesses that need to be carefully assessed. At this point in time, the swaps market measure is higher than the bond market measure which may have been a consideration for the NSPs given the potential benefits of the AER forecasting a lower inflation.

[123] A more detailed description of these factors is set out in AER Draft Decision, Attachment 3, p.p. 3-156 – 168, particularly Tables 3-18 and 3-19 and in the technical papers provided by the AER (see for instance, ACCC working paper cited above).

[124] See for instance, "CCP –Core scenario models – 2 August 2017", at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-expected-inflation-2017/initiation

bond break-even approach, then the risk that actual inflation will be higher than forecast increases, as does the risk of allowing a higher real rate of return that does not satisfy ARORO and the NGO.[125]

As a result, any change in approach should only be made following a very thorough review of all the options for estimating expected inflation – to reiterate, it is unacceptable to the CCP in general that new methodologies with significant impacts on outcomes for consumers are proposed during a regulatory determination without accompanying evidence of extensive consultation with independent experts and consumers and without a coherent industry-wide position. CCP11 supports the AER's view as stated in the Draft Determination:[126]

> *We also consider that alternative methods for modelling the impact of inflation on regulated revenues and asset values raise a number of matters that require robust testing…We do not consider that the implications of alternative methods have been sufficiently discussed in the [AusNet Services] regulatory proposal.*

As noted above, CCP11 supports the industry-wide review process proposed by the AER and acknowledges that both AusNet and Multinet have now adopted the forecast of expected inflation set out in the AER's Draft Decision.

5.4 AER's Draft Decision and value of imputation credits (gamma)

The AER had adopted a value of gamma of 0.4 across all its decisions since 2013 notwithstanding various appeals by the networks to the Tribunals. The NSW and SA Tribunals have made conflicting decisions on the approach to valuing gamma; the NSW Tribunal found in favour of the networks and their 'market' based approach, while the SA Tribunal upheld the AER's approach and decision to value gamma at 0.4.

The AER successfully appealed to the Full Federal Court regarding the NSW Tribunals decision. SA Power Networks (SAPN) has, in turn, appealed to the Federal Court against the decision of the SA Tribunal in favour of the AER. The SAPN appeal was heard in May 2017. However, the Full Federal Court decision has currently reserved its decision.

The different conclusions on what are basically the same facts indicate how complex the decision on gamma is and the uncertainty created by the way the rules are framed. That is, at the heart of the debate lies different perspective on what the rules mean when they refer to "the value of imputation credits".[127]

In their initial regulatory proposals for 2018-22, three of the four Victorian gas networks (AusNet, Multinet and APA VTS) proposed a gamma of 0.25 rather than 0.4, the effect of which was to increase the building block allowance for taxation costs.

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[125] For example, if the forecast of expected inflation is on average 1.68% for 2018-2023 (as per the initial 'placeholder' proposals by AusNet and Multinet), then it is more probable than not that actual inflation will be greater than forecast. The effect of this is that the AER would 'lock in' a higher real rate of return than would be the case under the AER's approach given that the AER's three models work together to deliver the allowed real rate of return over the regulatory period.

[126] AER Draft Decision AusNet Services, Attachment 3, p. 3-157.

[127] See NGR, r. 87A which sets out the calculation of the corporate income tax, including the proposed "value of imputation credits". Corporate income tax is one of the important building block components in its own right but imputation credits are also relevant to the assessment of the return on equity. For example, NGR r. 87(4)(b): 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. The AER's approach must be set out in the rate of return guidelines including is approach to determining the value of imputation credits (NGR, r. 87(14)(b)).

The AER's Draft Decision rejected the initial proposal by the three gas networks and confirmed its view that the value of gamma most consistent with the ARORO and NGO is 0.4 based on a dividend pay out ratio of 0.7 and a utilisation rate (theta) of 0.6. The most controversial element of the gamma calculation is the value of theta, the utilisation rate. While there is some empirical data to support the pay out ratio and both the networks and the AER agree on a value of 0.7, there is no such evidence available to calculate the utilisation rate; the rate must be inferred from other data.

The AER considered a variety of methods for estimating theta, including the dividend drop off studies, but also noting there is no one method agreed by practitioners. Its conclusion is important as it emphasises the point that the regulatory framework requires the AER to make decisions on a transparent and repeatable basis. While conceptually useful, the difficulty of the dividend drop off studies is what McKenzie and Partington (2013) described as the "allocation problem", i.e. the allocation of the change in share prices cum and ex-dividend (i.e. pre and post dividend) between the value to the investor of the dividend stream, the value of the franking credits attached to this stream, and general market noise. As McKenzie and Partington stated: "the problem with allocations is that by their nature they are arbitrary".[128] Other commentators talk of the problem of the "noise" associated with trading activity around ex-dividend dates.

All three networks, including APA VTS have now submitted Revised Proposals that include a gamma of 0.4. This follows the decision by the Full Federal Court that the AER did not make an error in its approach to calculating the value of gamma and its components, thus turning over the NSW Tribunal's decision.

While we did not make a submission on the networks' approach to gamma, CCP11 generally supports the AER's Draft Decision. The various papers provided over the years by the networks do not adequately address this allocation problem, leaving open the opportunity for cherry picking and further disputes over the 'right' allocation.

While CCP11 appreciates the AER's evolving explanation of the value of gamma, it is also noted that in the 'real world' of infrastructure businesses (including the gas network businesses), actual taxation payments and policies and practices around the distribution of franking credits appear to be removed from average market based activity calculated in the dividend drop-off studies.

[128] See for instance, AERDraft Decision APA VTS, Attachment 4, p. 211. The AER cites a report by McKenzie and Partington to the Queensland Resources Council: McKenzie and Partington, *Report to the Queensland Resources Council: Review of Aurizon Network's draft access undertaking*, 5 October 2013, p.p. 33-34.

6. Tariffs

6.1 CCP advice on the regulatory proposals

CCP11 advice to the AER on the distribution businesses' regulatory proposals covered:

- Support for the decision by AGN to respond to stakeholder engagement not to align the Victorian and Albury tariffs;
- The complexity of some gas distribution tariffs for residential and commercial customers; and,
- Multinet's proposed a change from price cap to revenue cap.

6.2 The AER's Draft Decisions regarding distribution business tariffs

Regarding the points where CCP11 had provided tariff related points on the distribution businesses' regulatory proposals, the AER's Draft Decisions regarding distribution business tariffs:

- Accepted that AGN did not need to align the Victorian and Albury tariffs;
- Did not seek to remove any complexity in the gas distribution tariffs; and
- Proposed to retain Multinet's current price cap control mechanism.

The AER's Draft Decisions regarding distribution business tariffs did not raise any new issues on which CCP11 had concerns that it had not previously raised.

CCP11 consider that the AER's Draft Decision to retain Multinet's current price cap control mechanism was consistent with the previous CCP11 advice that the AER should consider consistency, as well as the risk assignment between the business and consumers when deciding whether Multinet's request for a revenue cap form of price control should be accepted.

Multinet has accepted that it will retain its current price cap control mechanism.

6.3 Complexity of distribution network tariffs

This leaves complexity of distribution network tariffs as the only remaining distribution tariff issue for CCP11 at this stage in this regulatory process.

CCP advice on tariff complexity in the regulatory proposals

CCP advised (3 March 2017), without reference to any particular distributor:

> *The Victorian gas distribution tariffs for residential and commercial customers are particularly complex, with many consumption bands. In many cases, retailers do not pass through this complexity. Some retailers have stated their preference for less complexity in the tariffs. We suggest that there may be further opportunity for more discussion of tariff structures to reach a more agreed approach between distributors and retailers.*

Comments on tariff structures in the AER's Draft Decisions

The AER's Draft Decisions each included a similar paragraph expressing satisfaction with the distributors' tariff structures:

AGN: *"We are satisfied AGN's proposed reference tariffs have been designed with regard to whether customers are able or likely to respond to price signals. We consider the existing tariff structures are*

well known to AGN's customers, which allows them to respond to the prices within each block (or band) by adjusting their consumption."[129]

AusNet: *"We are satisfied AusNet's proposed reference tariffs have been designed with regard to whether customers are able or likely to respond to price signals. We consider the existing tariff structures are well known to AusNet's customers, which allows them to respond to the prices within each block (or band) by adjusting their consumption."*[130]

Multinet: *"We are satisfied that in proposing its reference tariffs Multinet has had regard to whether customers are able, or likely, to respond to price signals. Multinet's existing price signals are well known to its customers and allow them to respond to prices by adjusting their demand."*[131]

Proposed (and existing) tariff structures

The following are copied and pasted from the distribution businesses' regulatory proposals. While the amounts to be charged have changed in Revised Proposals, the structures have not, and it is the tariff structures rather than the tariff amounts on which CCP11 is focusing here.

AGN

Prices for residential and commercial customers consist of a number of volumetric (or consumption) based charging parameters (in dollars per GJ per day) and a fixed supply charge (in dollars per day). Prices for our industrial customers are capacity based and consist of a number of banded charging parameters (in dollars per GJ of Maximum Hourly Quantity (MHQ)). All prices decline as usage increases to promote better network utilisation.

Table 14.1: Charging Parameters by Customer Type

Residential (Tariff R)	Commercial (Tariff C)	Industrial (Tariff D)
Fixed Charge	Fixed Charge	0 – 10 GJ MHQ
0 – 10 GJ	0 – 18 GJ	Next 40 GJ MHQ
10 – 18 GJ	18 – 201 GJ	Additional GJ MHQ
>18 GJ	201 – 500 GJ	
	>500 GJ	

The breakpoints shown above are annual, whereas tariff breakpoints are actually expressed by GJ/day. Thus, the Residential tariff structure is expressed as:

- Base Charge ($ per day)
- Charge for the first 0.0274 gigajoules of gas delivered per day ($ per gigajoule)
- Charge for the next 0.0219 gigajoules of gas delivered per day ($ per gigajoule)
- Charge for additional gas delivered per day ($ per gigajoule)

The first 10 GJ per annum are equivalent to the first 0.0274 GJ per day.

The next 8 GJ per annum are equivalent to the next 0.0219 GJ per day.

129 AER Draft Decision AGN Attachment 10 – Reference tariff setting, Section 10.4.4

130 AER Draft Decision AusNet Attachment 10 – Reference tariff setting, Section 10.4.4

131 AER Draft Decision Multinet Attachment 10 – Reference tariff setting, Section 10.4.3

AusNet

Tariff V Haulage Reference Service
Central • Fixed Charge per day • Peak (0 - 0.1) • Peak (0.1 - 0.2) • Peak (0.2 – 1.4) • Peak (>1.4) • Off Peak (0 - 0.1) • Off Peak (0.1 - 0.2) • Off Peak (0.2 – 1.4) • Off Peak (>1.4)

(Central zone is shown here; other AusNet zones have the same tariff structure).

Multinet

Table 21-2: Tariff V Residential usage blocks

	Consumption Range (GJ/day)
Usage Block 1	0 - 0.05
Usage Block 2	>0.05 - 0.1
Usage Block 3	>0.1 - 0.15
Usage Block 4	>0.15 - 0.25
Usage Block 5	>0.25

Table 21-3: Tariff V Non-Residential usage blocks

	Consumption Range (GJ/day)
Usage Block 1	0 - 0.25
Usage Block 2	>0.25 - 1.0
Usage Block 3	>1.0 - 1.5
Usage Block 4	>1.5 - 5.0
Usage Block 5	>5.0

Both Residential and Non-Residential Tariff V customers have seasonal usage charges ($/GJ) for the following periods:

- Off Peak Summer Period (November to April inclusive);
- May Shoulder period (May);
- Peak Winter period (June to September inclusive); and
- October Shoulder period (October).

Summary of distribution network tariff structures for residential customers

AGN has a three-block tariff.

AusNet has a four-block peak tariff, and a four-block off-peak tariff, making a total of eight blocks.

Multinet has a five-block tariff, each for four different seasons, making a total of twenty blocks, each of which can have different prices. [Note in the past the May and October shoulder prices have been the same, so there have been only three different seasons, making a total of fifteen differently priced blocks, but there is nothing in the proposed AA that requires the May and October shoulder prices to be the same.]

Further, though the tariffs are expressed as blocks of usage per day, without daily metering the daily usage can only be estimated. The actual charges therefore depend on when the meter is read as well as when the gas is used.

Retailer's comments

AGN reported that its retailer reference group (RRG) "indicated a preference for simplifying and consolidating prices in order to avoid unnecessary transaction costs", and "To simplify prices, the RRG also indicated a preference to remove the declining pricing bands in favour of a single pricing band. We did not support this initiative in our Draft Plan on the basis that the existing declining pricing bands aligned with our obligation to promote efficient use of the network. We did not receive any direct feedback on this matter in response to the Draft Plan."

Retailer tariffs

Retailers are free to structure their tariffs as they wish. They tend not to pass through all the blocks in their retailer tariffs. This does not surprise us given the complexity of the tariffs. We would not expect to see retail tariffs of such complexity.

CCP11 views

Clearly the Multinet network tariff structure is more complex than the AusNet tariff structure which is in turn more complex than the AGN tariff structure. We are not aware of having seen justification from the networks with the more complex structures (Multinet in particular) as to why its tariff structure is justifiably that much more complicated. Nor have we seen probing on this from the AER.

We do not find justification for the AER's comments in the Draft Decisions that the AER is satisfied that the proposed reference tariffs have been designed with regard to whether customers are able or likely to respond to price signals, and that the existing tariff structures are well known to customers, and allow them to respond to the prices within each block (or band) by adjusting their consumption.

To the contrary, end-use customers cannot know well or respond to price signals to which they are not exposed. Leaving retailers to approximate the price structures must be sub-optimal. It would potentially be more efficient if networks created tariff structures that could be passed through. Further, the price structures are declining block, which are at best blunt instruments to achieve demand response.

We are also not saying that the distributors necessarily have to accept whatever price structure retailers say that they are prepared to pass through. If retailers know they have an effective veto on complex price structures, they may drive all tariffs to the simplest single rate tariffs, which will not achieve desired outcomes.

Coercion of retailers or distributors to achieve specific results is not the solution here, and we also recognise that it is now too late to design new tariff structures in the current regulatory process.

Instead, we suggest that there are opportunities for future access arrangements for the AER to work with the interested stakeholders:

- To probe a bit further with the distribution networks whether their more complex price structures are justifiable and effective; and
- To encourage further dialogue primarily between retailers and distributors, but also including consumer engagement, to try to achieve a more agreed approach between the parties.

This may be something that can be taken forward as part of the more collaborative approach between the AER and key stakeholders that the AER has recently announced that it is proposing to implement.[132]

[132] See *Working together to improve engagement on network revenue proposals*, AER communication 11 August 2017, at https://www.aer.gov.au/communication/working-together-to-improve-engagement-on-network-revenue-proposals

CONCLUSION

There are a few remaining areas where CCP11 is concerned that the proposals from the NSPs may not be in the long term interests of consumers.

CCP11 commends to the AER the issues raised in this advice and consider the comments made on remaining issues of concern.

Deemed Signed

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Chris Fitz-Nead **Sub-panel Chairperson**	Bev Hughson	David Prins	Robyn Robinson