Consumer Challenge Panel (Panel 5)

Transmission for the Generations II

Response to:

AER Draft Decision

For:

AusNet Services' Transmission Revenue Review 2017-22

September 2016

1 The Consumer Challenge Panel

1.1 The role of the Consumer Challenge Panel

The Consumer Challenge Panel (CCP) was established on 1 July 2013 to be a 'critical friend' for the Australian Energy Regulator (AER), by considering regulatory issues from an end consumer perspective. The AER implemented this process as a part response to the information asymmetry that exists in regulatory processes, to the detriment of consumers.

The primary duty of the CCP is to provide advice to the AER on whether proposals by network operators meet the National Electricity Objective (NEO), in particular whether proposals are in the long-term interests of consumers. This means taking into account costs to consumers and other interests of consumers such as safety and reliability. To meet this duty the CCP is required to challenge the AER on decisions that go into its determinations by providing input on issues of importance to consumers and to provide advice on consumer engagement that has been undertaken.

The CCP's role is therefore to:

- advise the AER on whether a network business's proposal is justified in terms of the services to be delivered to customers; whether those services are acceptable to, and valued by, customers; and whether the proposal is in the long term interests of consumers; and
- advise the AER on the effectiveness of network businesses' engagement with their customers and how this engagement has informed, and been reflected in, the development of their proposals.

The CCP provides consumer perspectives to the AER to better balance the range of views considered as part of its decisions. However, its role is limited. There remains significant asymmetry between powers of demand and supply players in this market and the AER must still provide a surrogate for competition. The CCP is not designed to be **the** representative of the consumer or 'demand' side of the electricity market, but to carefully consider the National Electricity / Gas objectives with particular regard to the long term benefit of consumers.

The CCP is resource-constrained and cannot be expected to provide advice to counter all experts retained by network operators; such expert input must be reviewed and explained by the AER. The CCP can, however, provide advice to the AER on key areas where it is of the view that the long term interests of consumers are unlikely to be met under proposed arrangements, and where there is scope for the AER to exercise its judgment to better do so or to obtain expert advice that might assist it in reaching an independent view.

1.1 Subpanel for AusNet Services transmission

The CCP is organised into subpanels in order to deal with the large number of regulatory determinations made by the AER. The sub panel considering the AusNet Services Transmission Revenue Review (TRR) 2017-22 comprises Ruth Lavery and Mark Henley.

2 Context for the Draft Decision

The circumstances in which a revenue proposal are assessed and the conclusions that are drawn are critical elements of any regulatory process .We therefore suggest that some 'headline' contextual themes are worth stating before commenting on the significant elements of the AER Draft Decision concerning AusNet Services' proposal.

2.1 Form of regulation

The first contextual theme is that Australian energy regulation is 'incentive regulation' based on the notion that the revenue in any year is built on revenue in the previous year plus CPI (so that costs are constant in real terms), adjusted by a discount factor 'X' applied to set the expectation for consumers that the real costs of network services diminish over time. Thus, the regulatory framework should result in consumers receiving an 'efficiency dividend' and businesses being incentivised for continual improvement in their efficiency. Real costs to consumers should fall due to efficiencies achieved, and consumers should expect to see in their bills the benefit of efficiencies.

Further, Australian energy markets are in a situation of declining average demand for electricity, aggregated across all customer segments, meaning that the capacity of a network is unlikely to experience greater stress than in past periods, thereby diminishing the argument for expansion of networks or for incurring significant capital expenditure upgrades on networks. Costs – including past costs that that have accumulated in the Regulatory Asset Base – will need to be allocated across this declining demand, and borne by a possibly smaller group of most likely less well-off consumers.

In addition, yields on capital are low at the moment, compared to recent and historic levels. This applies both to domestic capital markets as well as global capital markets, from which most Australian based network businesses raise necessary funds. The impact of these low rates is felt by consumers both through the effect on the return on investment provided to network businesses through the regulatory framework and by ability of businesses to make capital raisings (and being capital-intensive businesses, this is important) at current rates and to assess capital expenditures using internal rates of return based on current rates.

2.2 Trust

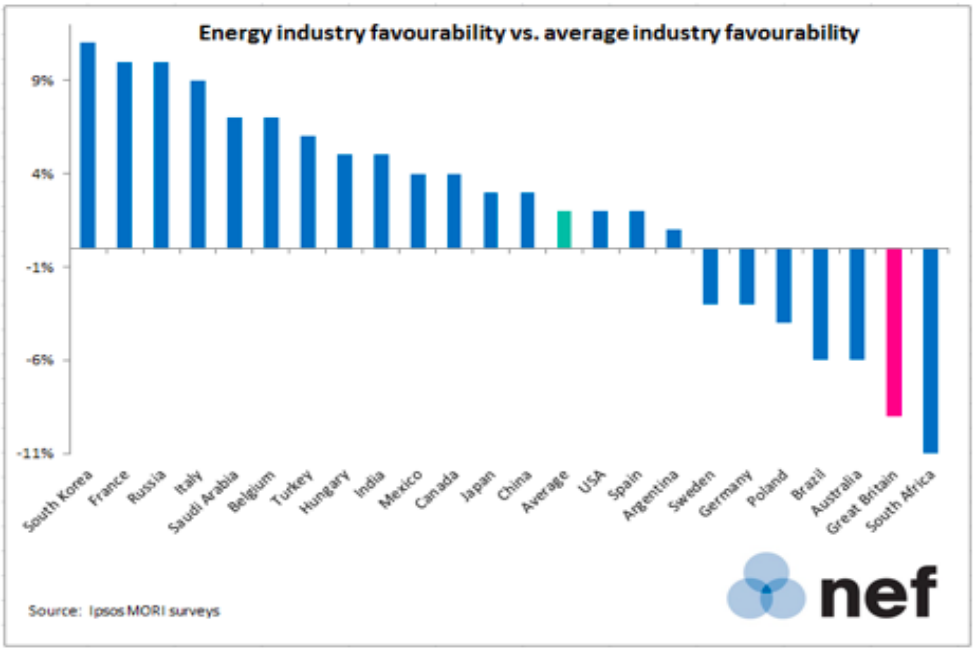
We note that levels of consumer trust in Australian energy markets are at low levels, as presented in Figure 1, produced by the New Economics Foundation based in the United Kingdom, which plots energy industry favourability against average industry favourability, with the finding that South African energy businesses have the lowest level of consumer trust of measured nations, followed by Great Britain and then Australia.

Low levels of trust across the energy market is a significant concern since efficient market operation and fair prices for consumers is a 'bargain' that should be reached based on a high degree of trust between parties. Low levels of trust can mean that some elements of the energy market will seek higher prices from customers than are efficient, and that customers will respond by seeking to block energy company developments, as a matter of course, rather than providing a 'social licence to operate' for efficient development.

Because of this low trust, it is incumbent on networks to explain the rationale for their funding proposals in a way that justifies to consumers why these revenues are required in order that the network operates efficiently to meet the needs of consumers.

Our comments about mistrust in the energy market are not aimed directly at AusNet Services, nor indeed transmission businesses in general, but transmission businesses are part of the energy supply chain and as such bear some of the odium of disgruntled consumers. Network businesses need to actively seek to build trust with consumers in all that they do, including developing a revenue proposal.

Figure 1: Energy Market Trust by Consumers



Source: New Economics Foundation, UK

2.3 Changing energy markets

We are also acutely aware that energy markets are changing rapidly in Australia and other parts of the world, with a substantial number of issues of direct relevance to consumers and energy network businesses alike, occurring almost simultaneously. These changes include:

- The reality of growing levels of renewable generation in energy markets, much of which is non-synchronous and with low levels of inertia and low 'system strength.' Predictability has also diminished in the wholesale market.
- Energy policy and climate policy have evolved at cross purposes to each other in Australia with current uncertainty about how Australia's commitment to the Paris climate change agreement still to play out, causing uncertainty for all energy market participants.
- Emergence of new technologies including storage - both sides of the meter, domestic scale generation through solar photovoltaic panels, home energy management systems and the likelihood of increased uptake of electric vehicles in the next five to ten years.

- Growing numbers of embedded networks including in some new housing developments
- The rise of micro-grids, with the potential for growing numbers of communities to go 'off grid,' particularly in remote and smaller rural communities.

Consumers have responded to rising energy bills by being more creative about their use of technologies, by using energy efficient appliances, by shifting demand and by simply reducing per capita demand to some extent.

The Australian economy is in the process of shifting away from manufacturing and mining towards service, which means that energy consumption of the volume and load profile typically that of industry is reducing.

These issues, and the many elements that they involve, mean that the demand environment in which network businesses now operate in Australia is very different from 20 years, or even 10 years ago.

Electricity network businesses must confront and respond to the structural changes described above. That may be by focussing on the structure of remaining and new demand and considering the price sensitivity and likely growth of remaining and new demand, then investing and pricing in a way that meets the requirements and needs of that market.

2.4 The future of the grid

Linked to these issues, the future of the Australian electricity grid has been heavily debated recently with competing views about the long-term future viability of a nationally interconnected electricity grid. Some claim that the rise of renewable generation particularly solar PV at domestic and small business level, coupled with increasingly affordable battery storage and home energy management services will mean that growing numbers of households and even small businesses will leave the grid.

This conjecture and many other views about the future of Australia's electricity grid has been the focus of an extensive project undertaken between Energy Networks Australia (ENA) and the CSIRO, first looking at Australia's future grid and currently developing a roadmap for the future network.

Part of the analysis considers in some depth future consumer connection with the grid with four major customer typographies being considered, namely the rise of the 'prosumer' (people who are both consumers and producers of electricity), renewables thrive, leaving the grid, and business as usual. After extensive analysis and stakeholder consultation, a key finding is that:

> *"F 2.5; the updated scenarios continue to reflect electricity networks performing an evolving range of critical roles to 2050, supporting diverse energy use and services for customers."*[1]

We note this work and this finding in part because we are surprised that the AusNet Services regulatory proposal does not give much attention to its 'story' about how it

[1] A partnership between ENA and CSIRO Electricity Network Transformation Roadmap, Interim Program Report, ENA and CSIRO, December 2015, page 69, available at http://www.ena.asn.au/sites/default/files/roadmap_interim_report_final.pdf

perceives the future. Indeed we opine that the tenor of the regulatory proposal is one of muted pessimism about the future for, in this instance, a major transmission business. This attitude, we suggest, then has implications for the company's attitude concerning important topics for regulation, including depreciation approaches, maintenance and capital expenditure, for example.

AusNet Services summarised its hearing of consumer views about the future grid questions with the following:

> *"Generally, there were mixed views about the future role of the transmission network. Some advocates suggested that the transmission network would have a more important role in the future, as an enabler transporting cheap renewable electricity between states. Others suggested a more diminished role, with transmission providing a 'backbone' between major generators and metropolitan areas, but perhaps less needed in rural areas.*
>
> *There was a general consensus among advocates that price-related factors would play a key role in driving both residential and small business consumers towards the adoption of renewable technologies. That is, impending price decreases and subsequent improvements in the cost effectiveness of solar and battery technologies would likely decrease their reliance on the electricity network."*[2]

We remain surprised by the muted pessimism because AusNet Services says in its draft Engagement Overview that:

> *"All advocates indicated that their members had a strong interest in the long-term sustainability of the grid. The reliability of the grid is also very important, particularly for businesses, as the consequence of outages can be severe (for example, for smelters). Some consumer groups (particularly the vulnerable and disadvantaged) may take the sustainability of the grid for granted.*
>
> *It was also highlighted that AusNet Services has a strong interest in the sustainability of consumers, particularly large businesses."*[3]

This quote indicates that consumers across the board feel the grid will most probably continue to exist in the future, and want it to efficiently meet their needs.

2.4.1 Planning for the Victorian Grid

We note that at a stakeholder engagement forum on 16th August co-hosted by AEMO and AusNet Services, AEMO said "From the Victorian annual planning report the key driver for network augmentation is a shift away from the need to manage peak demand growth to integrating renewable generation." We recognise that this is a significant shift in focus, and that it is part of an appropriate response to the structural changes in the market, that is adapting to use the network in new ways.

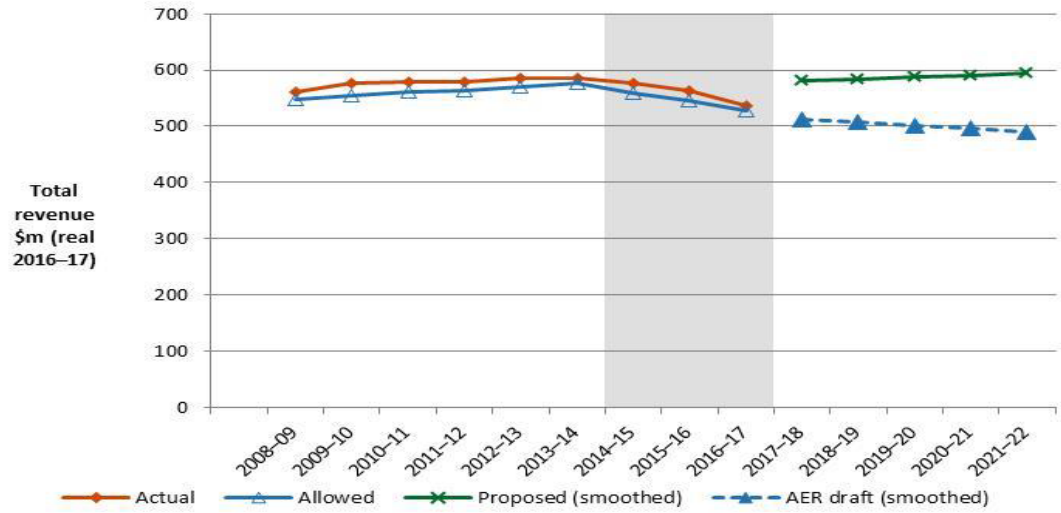
[2] Stakeholder perceptions of accelerated depreciation, Customer advocate interviews: DRAFT Report, June 2016, page 17, provided to participants at AusNet Services' workshop on accelerated depreciation on 7 July 2016
[3] Ibid page 24

The 2016 AEMO Electricity Statement of Opportunities[4] indicates that Victoria has very few issues with future reliability, up to 10 years out. Importantly, public announcements proposing 4,747 MW of new generation have been made in Victoria, over 70% for wind and about 20% for gas. There are over 30 projects ranging in size from 24MW to 600MW. All bar one are spread west of Melbourne from Bannerton near the Murray River to Port Fairy on the coast. These projects would have significant positive implications for AusNet Services over the next few years. All have financing, environmental and technical issues to surmount, and some will never eventuate, but the optimism of private sector generators regarding new investment is clearly demonstrated, and that optimism should be encouraging AusNet Services to adapt. AEMO will commence a RiT-T process for Horsham to Ballarat later this year, and has noted that if there is more than 400MW of firm committed (not just publicly announced) additional generation, then upgrading that section of the transmission line would be viable. Significantly, that sort of transmission augmentation will be of benefit to AusNet Services in adapting to changing market conditions.

3 The Draft Decision

The AER has decided in its Draft Decision to allow $2.695 billion ($nominal, smoothed) in total revenue over the 5 years, 2017-22, compared with the amount sought of $3.16 billion ($nominal), which is a reduction of 14.7%. A comparison of this allowed and proposed revenue with previous revenues is shown in figure 2.

Figure 2.AusNet Services' past total revenue, proposed total revenue and AER Draft Decision total revenue allowance ($million, 2016-17)



Source: AER Draft Decision

The AER has used a standard 'building block' approach in calculating the total revenue amount that AusNet Services can collect, but we must draw attention to the fact that under this regulatory framework, AusNet Services is not tied to maintaining expenditure within

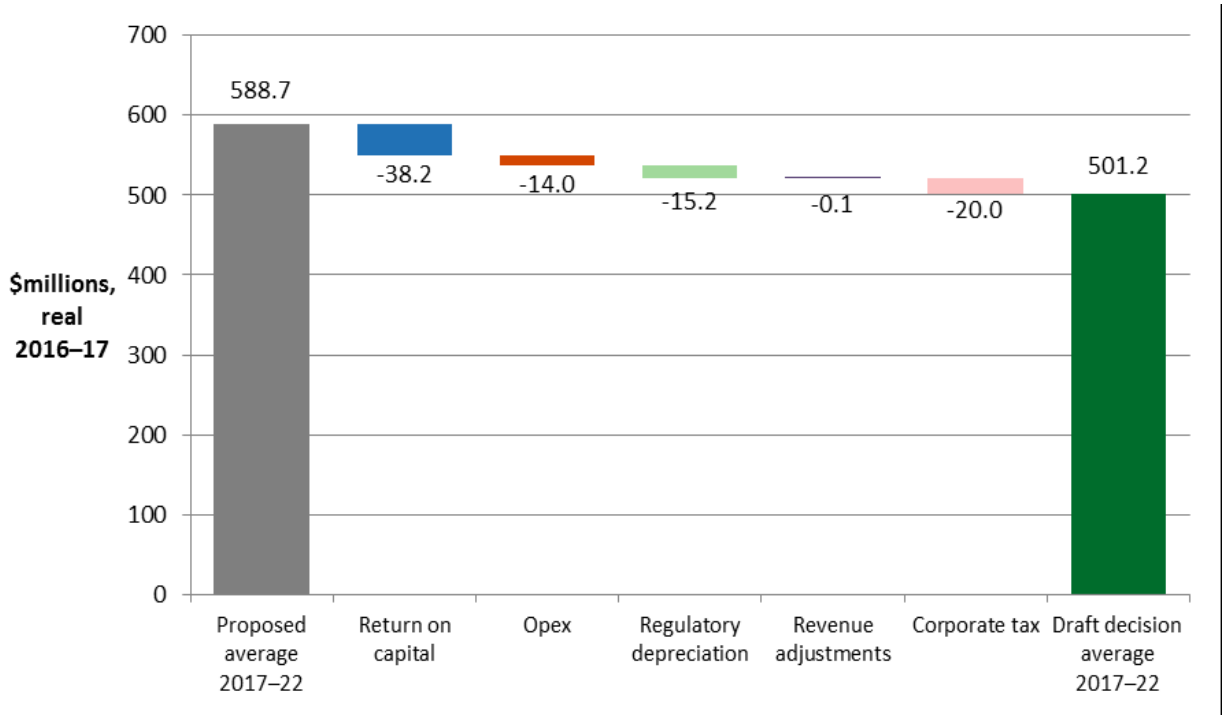
[4] Available at https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/NEM-Electricity-Statement-of-Opportunities

each notional building block allocation. The 'building block' amounts, in total, set the total revenue amount that AusNet Services can utilise as it deems best in all aspects of the business, in order to provide the most efficient service that it can deliver, in the best interest of consumers

We also note that the likely impacts of the Draft Decision on residential and small business bills, transmission use of systems charges only, is to hold prices constant over the 5 years, in nominal terms. This is a good outcome for those consumers, who continue to experience rising energy costs with deleterious impacts on household budgets and on small business opportunities.

In Figure 3, the main elements of the AER's reduction, compared with the AusNet Services proposal are shown. The main reduction is from a lower return on capital allowance ($38.2m), followed by reduced corporate tax allowance ($20m), with the value of gamma "ϒ", the most significant aspect. The third greatest reduction is related to depreciation.

Figure 3. AER's Draft Decision and AusNet Services' proposed annual building block costs ($million, 2016-17)



Source: AER Draft decision

3.1 AusNet Services' response to date

AusNet Services has said[5] that it agrees with or accepts the AER Draft Decision for the following aspects with regard to its 2015 proposal:

- Rate of return - AusNet Services will adopt the AER guideline for the cost of equity
- Capital expenditure - AusNet Services accepts the updated demand forecasts for Victoria

[5] Stakeholder Forum 16th August 2016.

- Depreciation - the AER decision to maintain straight line depreciation is accepted
- Operating expenditure - AusNet Services accepts this with regard to adopting the AER view of "base, step, trend" approach for insurance premiums.

We therefore do not intend to comment on these matters in any depth, as we also support the AER Draft Decisions on these matters.

3.2 This CCP response

We will focus on the aspects of the Draft Decision where there is no agreement or where we expect changes from its 2015 proposal in AusNet Services' revised proposal. These matters are closely correlated with the areas where the AER has proposed reductions, so we respond to these aspects of the Draft Decision, specifically:

- Safety aspects of capital expenditure
- Operating expenditure, with specific reference to decommissioning
- Return on capital
- Corporate tax (gamma)
- Depreciation

Our February 2016 submission in response to AusNet Services' proposal, which also covers some of these areas, is available on the AER's website.[6]

4 Capital expenditure, specifically safety issues

The AER's Draft Decision reduces AusNet Services' proposed capital expenditure (capex) by $159.1 ($m 2016-17) over the five years 2017/18 to 2021/22. Safety is a key driver of replacement capex for AusNet Services, and overestimated safety risk is the recurring theme in the AER's capex reductions, specifically for CBD station rebuilds, major stations replacement, asset replacement programs, and safety, security and compliance. The AER states that "AusNet Services has adopted an overly conservative approach to quantifying risk."[7]

Rather than looking at each of the capex categories separately, we will discuss the broader issue of safety and in particular the AusNet Services approach of 'embedding' (our nomenclature) safety criteria in considering all replacement capital expenditure projects. We suggest that this approach has not been widely used in the past, with network business revenue proposals typically seeking allocations for specific safety related projects. AusNet Services has told us that it has used this approach in past TRRs. It may be that the impact of this 'embedding' approach is greater in the current proposal than previously, which has attracted attention to it; in any event, what has been done in previous reviews should not dictate what is done this time, and it is most important that in this TRR, the AER applies the

[6] Available at http://www.aer.gov.au/system/files/Consumer%20Challenge%20Panel%20-%20Subpanel%205%20-%20Submission%20on%20AusNet%20Services%20electricity%20transmission%20regulatory%20proposal%202017-22%20-%208%20February%202016.pdf

[7] AER Draft Decision, Attachment 6, page 8

National Electricity Rules (NER) so that the long term interests of electricity consumers are met with respect to price as well as safety.

We have no doubt about AusNet Services' commitment to safety and understand that the business has worked diligently to incorporate safety understanding and practice across every aspect of the businesses' culture and practice. This is clear, laudable and well understood.

It is therefore not surprising that AusNet Services would include safety considerations as significant in its revenue proposal, including in its capex considerations. The reality is that no business can be completely safe, as much as this is desired. There is an all important trade-off between cost and benefit of additional safety expenditure for a business that has very low safety related risk problems. This 'proportionality test' is a crucial consideration for the AER in considering safety expenditure proposals. There is a point at which significant additional safety expenditure produces small amounts of safety gain and consequently is not in the best interests of consumers. The question of how much extra safety expenditure produces safety gain AND consumer benefit is the critical judgement call for the AER as well as for AusNet Services. In the rest of this section we seek to further disaggregate the various safety factors to contribute to consideration of this judgement call.

AusNet Services are using a safety risk approach summarised by the following equation; equation 1:

Safety risk cost	=	**Asset failure rate**	X	**Probability of safety related failure**	X	**Risk consequence**

The three elements of '***Safety risk cost'*** warrant further consideration.

We consider that the '***Asset failure rate'*** is itself a combination of factors:

'Asset failure rate' = f(equipment age, ***maintenance history***, asset age, ***manufacturer knowledge***) – (2)

By '***maintenance history'*** we mean regular maintenance over the life of an item, any repairs being undertaken to manufacturer specifications and assessment of breakdown risk.

'***Manufacturer knowledge'*** refers to tapping into the combined experience of the manufacturer of similar items in other locations and any available risk 'intelligence' from them.

We are not convinced that AusNet Services has fully explained its understanding of these factors in its 2015 revenue proposal. We understand a great deal of technical information has been provided to the AER , and rely on the AER's technical staff and technical advisers to review these documents and reach a view as to whether AusNet Services has provided sufficient information to allow these factors to be taken into account in an appropriate way.

We also contend that '***Probability of safety related failure'*** is a function of various elements.

Probability of safety related failure = f(potential magnitude of failure, impact area, knock on impacts) – (3)

The third element, '**Risk consequence'** is also a function of a number of elements.

Risk consequence = f(physical impacts on staff in event of explosive failure, physical impact on public in event of explosive failure, hazard zone occupancy at time of failure, post failure psychological impact on AusNet Services staff, reputational risk to AusNet Services from explosive failure, insurance premium changes, liability costs) – (4)

In considering equations (2) to (4) the next question is about which elements of the functions are controllable by AusNet Services and which ones are not. We regard all aspects of '***Asset failure rate***' to be known by AusNet Services and so mainly 'controllable'. Similarly the elements that we have identified for '***Probability of safety related failure***' should be known and so can be managed if not fully controlled (eg. AusNet Services has some but not full control over managing public spaces neighbouring its sites.)

We also suggest that the factors that comprise '***Risk consequence***' are known, less controllable but can be managed.

Table 1 below, which we have constructed, disaggregates the elements of the '***Safety risk cost'*** equation to further explore AusNet Services' role and risk in order to better consider the safety risk embedded in capex.

Table 1: Assessment of safety risk components

	Known to AusNet Services	**Degree Controllable**	**Degree Manageable**
Asset failure rate			
Equipment age	Yes	High	High
Maintenance history	Yes	High	High
Supplier knowledge	Yes	low	High
Safety related failure			
Potential magnitude of (explosive) failure	Yes	Low	Medium
Impact area	Yes	Low	Medium
Flow-on impacts (eg building collapse risk)	Yes (though with some limits)	Medium	Medium
Risk consequences			
Impact on staff- physical	Yes	Medium	Medium
Impact on public - physical	No	Low	Low
Impact on staff - psychological	No	Low	Medium (This is a standard aspect of OH&S and so not directly relevant to

	Known to AusNet Services	Degree Controllable	Degree Manageable
			safety)
Reputational risk	Yes (with some limits)	Medium	Medium (This is a consequence of thousands of interactions, of which safety is one)
Hazard zone occupancy rate- AusNet Services	Yes	Medium	Medium
Hazard zone occupancy rate – public	No	Low	Low
Insurance premium	Yes (with some limits)	Medium	High (and included in operating expenditure)

Source: CCP sub-panel 5 analysis

We have attempted to be comprehensive in identifying a range of factors, some of which impinge on safety but are more substantively dealt with in other aspects to the business; notes in the table reflect this.

We make the following observations based on information in table 1:

- AusNet Services has a high level of control over a number of elements
- AusNet Services has, or has access to, almost all of the information needed to consider specific and aggregate safety risk.
- It is unclear what information AusNet Services has used to assess the safety risk to the public on spaces neighbouring AusNet Services' property, and the extent to which this risk has been addressed in AusNet Services' proposal
- '***Asset failure rates'*** are known, controllable and manageable for AusNet Services.
- Regarding '***Safety related failure'***, AusNet Services has solid information and (at least) medium levels of controllability, despite the inherent uncertainly, particularly of explosive risk.
- '***Risk consequences'*** are the most difficult criteria to quantify and manage

The first and last observations are the nub of the issue, which is minimising the risk of injury or death from an explosion which can occur when some major items of equipment fail.

For the elements with high levels of controllability by AusNet Services it is important to recognise that it should not be assumed that these controls will fail. We suggest that AusNet Services has implicitly made this assumption and in so doing has overstated the degree of safety risk. We accept that AusNet Services has risk controls in place, based on the statement in its risk framework statement that "Potential Exposure will be estimated for each risk in terms of the total plausible worst case impact arising from a risk assuming all

current controls fail."[8] If AusNet Services has the right risk controls in place, and we believe that they have, then surely all will not fail? So the safety risk is overstated.

Regarding '***Potential magnitude of (explosive) failure'*** rates, the potential magnitude and type is hard to predict and is about whether it is consequence or probability; it is consequently difficult to determine that a failure is safety related.

We agree that there should be minimal risk of human injury from equipment failure and also understand that completely eliminating risk, while highly desirable, is impossible – there is always a modicum of risk. Of course, the intent is to replace equipment before there is any modest risk of explosion and consequently risk to staff or members of the public. We accept that some large items of equipment are located close to public locations and so a potential explosion cannot be contained to AusNet Services managed space and staff cannot be kept away from any heightened risk of explosion. As shown in table 1, this public risk is the most difficult for AusNet Services to know and manage. We also understand that there is no direct correlation between risk of explosion and equipment age, though probability of explosive failure increases with equipment age.

The AER has said ". . . we have identified some concerns regarding AusNet Services' analysis of asset failure rates and safety related failure rates."[9] It says that equation 1 misses an important factor, and rewrites it as equation 5 below.

Safety risk = (***Asset failure rate***) x (***Probability of safety related failure***) x (***Hazard zone occupancy rate***) x (***Risk consequence***) – (5)

Specifically, the AER introduces the variable '***Hazard zone occupancy rate'*** into the safety risk cost equation. We suggest this is a variable that makes up '***Risk consequences'***, albeit a very important variable within risk consequences. We support the overt conclusion of '***Hazard zone occupancy rate'*** as part of the '***Risk consequences***' set of variables in equation 1. We also think that there are other risk consequence elements that warrant more overt consideration by the AER.

The AER concludes that "…AusNet Services' assumed 100 per cent hazard zone occupancy rate is unrealistic, and that our alternative 1 per cent estimate is likely to be a conservative but reasonable approximation of this probability."[10]

We agree that a 100% occupancy rate is an unrealistic estimate of hazard zone risk. We are not in a position to proffer a percentage figure to form a definitive view, between 1 and 100, however we expect AusNet Services to have historical data to help inform an alternative view that we expect to be included in its revised proposal, so will wait for additional information before forming a final view.

We consider that there are a number of additional safety risk related factors, beyond "***Hazard zone occupancy rate***" which we have included in table 1. These factors also need to be considered in weighting safety related risk. Further, we are of the view that all key safety

[8] Page 49 of Attachment 6 to the AER Draft Decision
[9] Page 46 of Attachment 6 to the AER Draft Decision
[10] Page 56 of Attachment 6 to the AER Draft Decision

risk factors are known by AusNet Services as a responsible business, and most factors are manageable to a significant degree, by AusNet Services, reducing the risk factor for capex from levels proposed by AusNet Services.

The '***Hazard zone occupancy rates'*** for both AusNet Services and the public are more about probability than consequence; the occupancy rate will affect outcome but through probability, not direct consequence.

The other question that is raised by AusNet Services' approach to capex is what we are calling the 'embedding' of safety risk into all capex expenditure considerations by making safety risk a core assessment criterion for new capex. On reflection, we are comfortable with this approach, conceptually. However, the key application issues are about the weighting of safety risk, with other capex replacement assessment criteria and the development of 'agreed' elements of safety risk, as per equation 1, the AER response in the Draft Decision and our discussion above.

In considering the 'proportionality test', we suggest that the full level of safety related capex expenditure by AusNet Services would not lead to proportional safety benefits and so is not in the best interests of consumers.

The Australian Competition Tribunal (ACT) have considered this issue in Western Australia, where ATCO challenged the Economic Regulation Authority, citing safety issues as justification for further capex. This case in part looked at the tension between the National Gas Rules' requirements for expenditure to be 'prudent' and 'efficient', but also 'necessary' or 'required'. The ACT found in favour of the regulator, stating the following in their judgement:

> *"It is also wrong to consider "prudency" in isolation to the surrounding words. It is not prudency simpliciter. It is a prudent service provider "acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services". These surrounding words provide context (in the regulatory scheme under the NGR) to the considerations that ought to be in the mind of a prudent service provider."*[11]

The Draft Decision by AER to reduce safety embedded capex is at this point supported by the CCP. We recognise that further data and discussion will follow this draft determination and will hold our final thoughts on this matter until after AusNet Services' revised proposal is lodged, however indicate that at this stage, we believe a Final Decision near to the level proposed in the Draft Decision, is likely to be prudent and responsible, and in the best long term interests of consumers.

[11] Paragraph 273 of decision released 13 July 2016, available at http://www.judgments.fedcourt.gov.au/judgments/Judgments/tribunals/acompt/2016/2016acompt0010

5 Operating expenditure, specifically the proposed decommissioning step change

The AER's Draft Decision did not allow any of AusNet Services' proposed $13.5m ($2016-17) in step changes. Included in that amount was $4.3m in 2017-18 related to decommissioning synchronous condensers and Morwell Power Station assets.

In our February 2016 submission to the AER on AusNet Services' December 2015 proposal, we expressed the view that this proposed expenditure was not a step change because it was not unexpected and was part of normal operations, albeit a larger expenditure.[12]

At the AER's public hearing held on 9 August 2016, AusNet Services gave a more comprehensive explanation as to the nature of these costs than was included in its 2015 proposal, saying that in the past, decommissioning expenses were included in capital expenditure as part of the cost base of its replacement assets; however, the synchronous condensers and Morwell assets will not be replaced (as part of AusNet Services' response to declining utilization of the network) and consequently the cost of decommissioning will constitute operating expenditure. AusNet Services suggested there will be more such decommissioning without replacement, and that the expenditure should form an operating expenditure (opex) step change as the business transitions to a lower level of replacement capex. AusNet Services said that as this is a new type of decommissioning there are no 'revealed costs' and that is why they claim it as a 'step change' rather than a more standard cost.

AusNet Services' treatment of decommissioning costs by capitalizing them within the cost base of replacement assets is in accordance with accounting standard AASB 116 Property, Plant & Equipment: [13] Paragraph 16(c) of that standard outlines the elements of cost, which includes dismantling and restoration costs. The effect of this standard accounting treatment on the building block regulatory methodology is that decommissioning costs where the asset is replaced, are rolled into the RAB, and AusNet Services earns revenue through Return On and Of Investment, whereas revenue is derived through the opex component of the methodology when there is no replacement. Given that what AusNet Services does is in accordance with accounting standards, there is no question that these decommissioning costs should be expensed and should be part of opex; there is no reason for the regulatory framework to differ from the accounting standard's requirements.

The two issues we suggest are pertinent are a) whether a step change is necessary (and if so, what the amount should be) and b) whether this proposed 2017/18 step up followed by a step down in 2018/19 is in fact a step change or whether it is a new way to forecast expenditure.

[12] Available at http://www.aer.gov.au/system/files/Consumer%20Challenge%20Panel%20-%20Subpanel%205%20-%20Submission%20on%20AusNet Services%20Services%20electricity%20transmission%20regulatory%20proposal%202017-22%20-%208%20February%202016.pdf, page 26

[13] Available at http://www.aasb.gov.au/admin/file/content102/c3/AASB116_07-04_ERDRjun10_07-09.pdf

5.1 Is a step change necessary?

We expect that AusNet Services has, in the past, incurred decommissioning expenditure irrespective of whether there was replacement, and consequently we believe there is likely to be a level of decommissioning costs within base opex, which should, under the methodology set out in the AER's Guideline on expenditure forecasts, form the revealed cost. If there are decommissioning costs in previous years' opex, then the claimed $4.3 million is not a new cost, but a larger variation on an existing cost and is unusual by size rather than by rarity.

We take this opportunity to ask AusNet Services to provide details of past expensing of decommissioned assets that are not replaced, regardless of the size of the expenditure. This will assist in assessing whether there is a revealed cost and a justifiable step change in accordance with the AER's Guideline before the AER makes its Final Decision.

5.2 Is this a step change, or something else?

We observe that the AER's Guidelines do not contemplate an approach where there is a step up for a particular opex item in one year followed by a step down for the same item in the following year. [14]

The Guideline on expenditure forecasts states that "Step changes may be added (or subtracted) for any other costs not captured in base opex or the rate of change that are required for forecast opex to meet the opex criteria.' It does not anticipate a step change for costs of decommissioning, but does state that "If it is efficient to substitute capex with opex, a step change may be included for these costs (capex/opex trade-offs)."

In its explanatory document regarding forecast expenditure, the AER said:

> *We then adjusted base year opex to account for changes in circumstances that will drive changes in opex in the forecast regulatory control period. These adjustments included:*
>
> - *escalating forecast increases in the size of the network ('scale escalation')*
> - *escalating forecast real cost changes for labour and materials ('real cost escalation')*
> - *adjusting for efficient costs not reflected in the base opex, such as costs due to changes in regulatory obligations and the external operating environment beyond the NSP's control (step changes) . . .*
>
> *. . . Under the base-step-trend approach to setting opex, step changes caused by incremental changes in obligations are likely to be compensated through a lower productivity estimate that accounts for high costs resulting from changed*

[14] Better Regulation Expenditure Forecast Expenditure Guideline for Electricity Transmission November 2013 , available at http://www.aer.gov.au/system/files/Expenditure%20Forecast%20Assessment%20Guideline%20-%20Transmission%20-%20FINAL.pdf, page 24

> *obligations. Under this approach, only changes in costs that demonstrably do not reflect historic 'average' changes will be compensated as separate step changes in forecast opex . . .*
>
> *. . . NSPs will be expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options. We will also look for the NSPs to justify the step change by reference to known cost drivers (for example, volumes of different types of works) if cost drivers are identifiable. If the obligation is not new, we would expect the costs of meeting that obligation to be included in revealed costs. We also consider it is efficient for NSPs to take a prudent approach to managing risk against their level of compliance when they consider it appropriate (noting we will consider expected levels of compliance in determining efficient and prudent forecast expenditure).* [15]

We are not aware of this last-mentioned justification of the step change having been undertaken by AusNet Services.

Of course, these quotes are taken from explanatory notes to the AER's Guidelines, which themselves are not enforceable. And the quoted passage does not specifically address the type of step change proposed by AusNet Services in this instance. What we wish to draw out is that the AER has not to date contemplated the type of step change proposed. Because it is added in then taken out, it is a new type of adjustment to revealed costs.

The fact that it might be a new type of adjustment does not in itself indicate it should not be allowed by the AER. The bigger issue for the CCP is that the network is driving the expenditure forecast methodology, and that is not in consumers' best interests. Consumers are entitled to clearly defined boundaries within which changes to expenditures and methodologies between regulatory periods can be made. Consumers are as entitled to regulatory certainty as networks are.

A tighter definition, and more comprehensive explanation of what constitutes 'revealed cost', would assist in ascertaining what genuine step changes are, and what other adjustments to revealed costs might be anticipated and permissible under the NER and in accordance with the NEO. It would be in the better interests of consumers to have more certainty about how the base-step-trend approach to the opex component of the building block methodology will be applied by the AER, and will provide clearer guidance to networks in the future. We urge the AER to include a revision of its Expenditure Forecast Assessment Guidelines in its future work program, to protect consumers from the flexibility currently accorded networks by this Guideline.

On the basis that consumers benefit financially from allowing a step change in opex as opposed to paying tariffs based on revenue that includes Return On and Return Of

[15] Better Regulation Explanatory Statement Expenditure Forecast Assessment Guideline November 2013, page available at https://www.aer.gov.au/system/files/Expenditure%20Forecast%20Assessment%20Guideline%20-%20Explanatory%20Statement%20-%20FINAL.pdf

Investment over a long period, then we are inclined to support AusNet Services' proposal to include this relatively modest one-year non-recurrent opex expenditure, but not regard it as a 'step change'. We are reluctant to allow it as a precedent. However, if investigation of AusNet Services' historic costs indicates that there are revealed costs, then we remain of the view that this step change should not be allowed by the AER in its Final Decision.

6 Return on capital

We note that there are a number of appeals currently in progress with regard to rate of return issues, and that there is considerable uncertainty over whether there will be appeals on decisions from those current appeals and whether there will be more appeals about upcoming decisions over the next year or more. Some issues we raise in this section will be affected by the results of those appeals. In any event, we briefly set out below our views on some Return on Capital issues for AusNet Services.

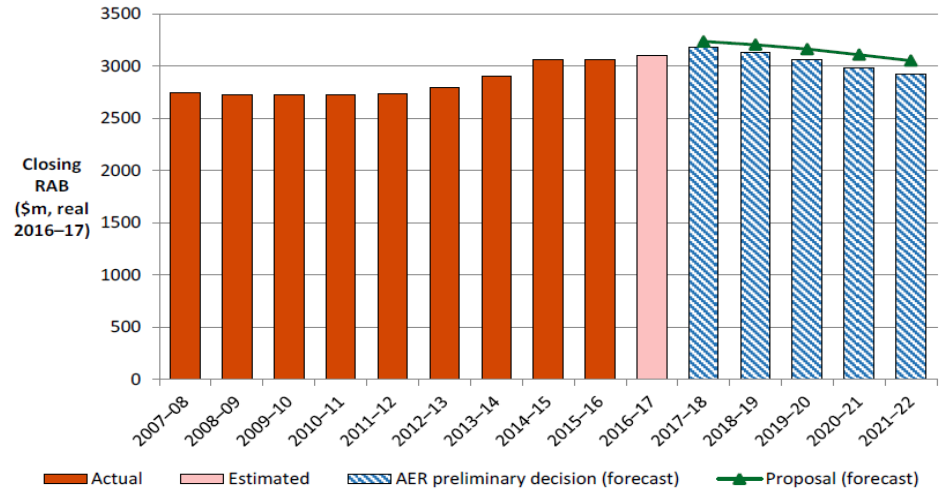
6.1 Regulated Asset Base

The Regulated Asset Base (RAB) is the value of capital upon which return is determined, and as such is a significant variable in terms of total network revenue and consequently a key factor in determining the cost to consumers.

The Draft Decision is for an opening RAB of $3.194 billion, 1.1% lower than proposed by AusNet Services. T he RAB at the end of the regulatory period is $3.296 billion, 4.2% lower than proposed. This is primarily driven by the lower capital expenditure that has been allowed by the AER. The change in RAB as reflected by the Draft Decision is shown in figure 4 below.

The CCP supports the gradual winding back of the value of RAB, in line with declining demand and associated weakness in multifactor productivity for networks. We note that the draft determination starts to bring the RAB back towards the longer term trend levels that existed pre-GFC.

Figure 4. AusNet Services' actual RAB, proposed forecast RAB and AER draft decision forecast RAB ($million, 2016-17)

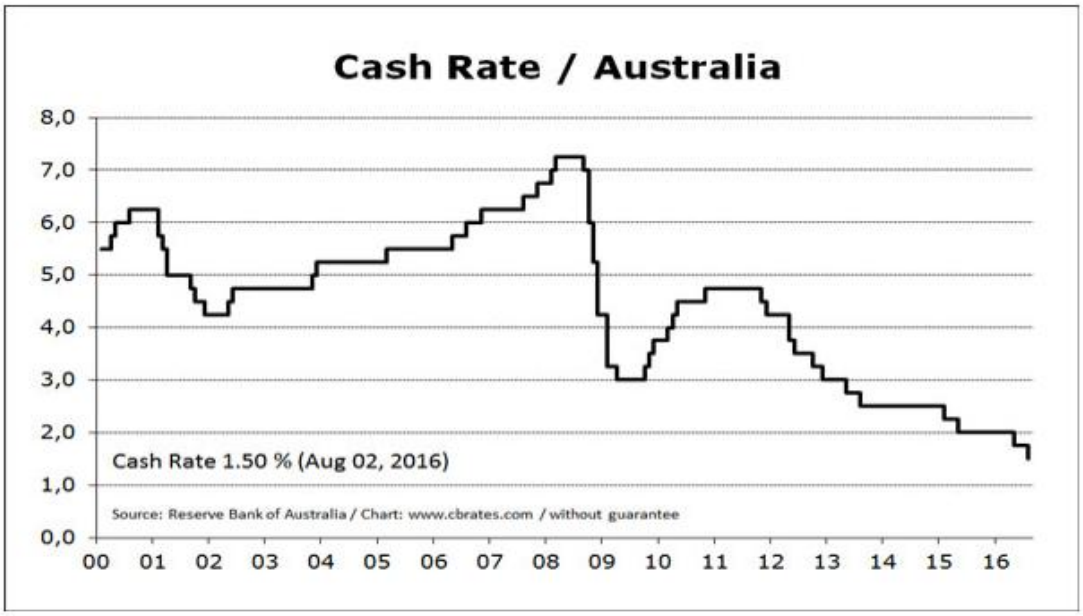


Source: AER analysis.

6.2 Interest rates

Current global and Australian prices for capital (interest rates) are very low by historical standards. They reflect sluggish economic growth across the world. The following graph, figure 5, shows the 'official' Australian cash rate since 2000, with current low levels self evident.

Figure 5. Australian 'official' rate (overnight money market interest rate)



Source: Reserve Bank of Australia

The following table shows current official interest rates for a number of nations. Note that Australian interest rates are higher than many other nations, despite rates being art historical low levels. Swiss and Japanese interest rates are negative.

Table 2. Selected international 'official' interest rates

Central banks	Current interest rate	Next meeting	Last change
Swiss National Bank	-0.75%	15 Dec 2016	15 Jan 2015 (down 0.5%)
Bank of Japan	-0.10%	21 Sep 2016	29 Jan 2016 (down 0.1%)
European Central Bank	0%	6 Oct 2016	10 Mar 2016 (down 0.05%)
Bank of England	0.25%	3 Nov 2016	4 Aug 2016 (down 0.25%)
Bank of Canada	0.50%	19 Oct 2016	15 Jul 2015 (down 0.25%)
Federal Reserve	0.50%	21 Sep 2016	16 Dec 2015 (up 0.25%)
Reserve Bank of Australia	1.50%	4 Oct 2016	2 Aug 2016 (down 0.25%)
Reserve Bank of New Zealand	2.00%	10 Nov 2016	10 Aug 2016 (down 0.25%)

Source: Bank websites

Energy and other utility businesses are regarded as lower risk investment, and this, combined with historically low interest rates, means that return on investment, both debt and equity, need to reflect current financial realities.

It is a fundamental issue of fairness that consumers and networks should bear interest rate fluctuations symmetrically, meaning that the current low interest rates should flow to consumers through lower electricity prices, having endured high prices and rapid price

increases. Economic regulation of energy networks should not limit the potential for consumers to benefit from low interest rates, while bearing the brunt of past high rates.

6.4 Weighted Average Cost of Capital

AusNet Services' proposed Weighted Average Cost of Capital (WACC) parameters were too high for prevailing economic conditions, and the AER is right to reduce them.

Table 3. Weighted average cost of capital

	AusNet Services' proposal	AER Draft Decision
risk free rate	3.02%	2.57%
equity risk premium	7.24%	4.55%
market risk premium	8.17%	6.50%
equity β	0.89	0.7
RoE (nominal post tax)	10.00%[16]	7.10%
Return on debt (nominal post tax)	5.37%	5.54%
gearing	60%	60%
WACC (nom vanilla)	7.22	6.16
Forecast inflation	2.35	2.44
Value of imputation credits γ	0.25	0.4

Source: AusNet Services' 2015 proposal and AER Draft Decision

We note that the AER's Draft Decision for return on debt of 5.54% is higher than AusNet Services' proposal of 5.37% suggesting to us that the Final Decision for return on debt should be lower than the Draft Decision, but depending on where interest rates are sitting when the Final Decision is made. We are aware that AusNet Services does not agree with the AER's approach to cost of debt. As set out above, we are of the view that the cost of debt included in the WACC must reflect current market conditions.

The CCP has regularly stated that AER's value for β of 0.7 is too high. We maintain that view, citing the Olin Henry analysis commissioned by the AER in 2014[17] as rationale for a lower β. We suggest a value of 0.5 would be in the better long term interests of consumers, while still meeting the requirements of the NER.

Given that world, including Australian, interest rates are currently low, the AER's WACC of 6.16% and risk free rate of 2.57% are high when looking at the current global financial realities. This is coming off a period of high interest rates related to uncertainty as a result of the global financial crisis. Since the GFC, Australian energy consumers have endured high and rising electricity prices. Interest rates flow through into the WACC as the basis for both cost of debt and cost of equity, and we reiterate that our view is that the AER must allow

[16] We understand that AusNet Services will accept the AER's methodology on cost of equity

[17] Estimating β: An update, June 2014, Ólan T. Henry, University of Liverpool Management School, available at http://www.aer.gov.au/system/files/Olan%20Henry%20%E2%80%93%20%20Estimating%20Beta%20%E2%80%93%20An%20update%20%E2%80%93%20April%202014.PDF

the current low interest rates to be reflected in the Return On Capital now, and in the future, as a matter of policy, in the long term interests of consumers

6.3 Value of imputation credits

The AER initially set the value of γ at 0.5, but in the Draft Decision has set it at 0.4, while the AusNet Services proposal has it at 0.25

There is NO 'correct' value for γ, it is a uniquely Australian quirk in building block regulation and recognition of our dividend taxation arrangement.

While there is no 'correct' approach, method matters. The approach proposed by AusNet Services is too restrictive and applies a much narrower methodology than the approach employed by the AER.

A recent report by academic Martin Lally for the QCA, has proposed that γ should be set at 0.83. [18] That report lists several areas where Lally disagrees with the structure of the 'Officer model' and the way γ is taken into account, and inconsistencies in the way it was used by the ACT.

While we feel a γ of 0.83 would be in the better interests of consumers than both the γ set by the AER in its Draft Decision and that proposed by AusNet Services, our view is that there is considerable imprecision around estimating this parameter, and that academics and consultants will be finding areas on which to disagree, forever. It is an issue quite unique to the Australian regulatory system, is disregarded by private sector investors in Australian assets, and there are a great many assumptions that must be made in finding benchmarks or comparators.

We believe that the AER's approach is more robust than the methodology generally sought by Australian network businesses which we feel is opportunistic in emphasising approaches to calculating it that result in a lower γ than the AER's approach. We do not believe the AER should buy into technical arguments that contain so many debateable assumptions, but should use its judgement in the long term interests of consumers and revert to a γ of 0.5 as originally suggested in its Guidelines.[19]

7 Depreciation, specifically accelerated depreciation

In its 2015 proposal, AusNet Services suggested depreciation costs for 2017-22 that continued to apply straight line depreciation to existing assets (at the end of the current regulatory period 2014-17) and introduced declining balance depreciation to accelerate the

[18] Review of the ACT's gamma decision, Dr Martin Lally, Capital Financial Consultants Ltd, 13 July 2016, available at http://www.qca.org.au/getattachment/365cc597-6971-4679-ba2d-59b744f965af/Review-of-the-ACT-s-gamma-decision-Dr-Martin-Lally.aspx

[19] Better Regulation, Rate of Return Guideline, December 2013, page 23, available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline

return of new assets from 1 April 2017. The AER's Draft Decision rejects this proposal, but opens the door by approving "a new 'accelerated depreciation' asset class for those particular assets being identified as being (or becoming) unused over the next regulatory period."[20]

AusNet Services has stated that it will accept the AER's Draft Decision with regard to accelerated depreciation. We make the following comments in order to emphasise our views on this issue. Our earlier submission on AusNet Services' proposal also provides our views on accelerated depreciation.[21]

During 2016, AusNet Services has undertaken more consultation, including putting a structured qualitative research framework around its analysis of consumer responses, to try to better understand consumer views on this issue. We thank them for doing that; it's a good step.

AusNet Services has also done considerable work on modelling various sculpted profiles for accelerating depreciation. It is our view that this work is premature, as the underlying case for accelerated depreciation has not yet been established. AusNet Services concluded from its 2016 customer advocate interviews that "ambiguity in findings highlights the complexity of this issue"[22]; our suggestion to AusNet Services is that perhaps the ambiguity is because there is not yet a real case for depreciation.

AusNet Services has also claimed that accelerated depreciation will 'improve intergenerational inequity by reducing the cost burden on the future customer base"; our response to this is also to point out that consumer advocates were not keen on intergenerational equity, telling AusNet Services that "the notion of intergenerational equity as a rationale for accelerating the rate of depreciation for the transmission network did not sit well with many advocates – it will be a *'hard sell'* ."[23]

No reason has been established to fast track recovery of the large 'overhead' that exists, in the form of the RAB, through accelerated depreciation. We are pleased that AusNet Services has decided to change this aspect of its 2015 proposal.

However, we close by again drawing attention to our previous advice to the AER on this issue[24] because the AER has left open an opportunity for accelerated depreciation and because we anticipate this issue will be raised again in future reviews. The issues raised in that submission remain relevant.

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[20] AER Draft Decision Attachment 5, footnote 71 on page 27

[21] Available at http://www.aer.gov.au/system/files/Consumer%20Challenge%20Panel%20-%20Subpanel%205%20-%20Submission%20on%20AusNet%20Services%20electricity%20transmission%20regulatory%20proposal%202017-22%20-%208%20February%202016.pdf

[22] Stakeholder Perceptions of Accelerated Depreciation, Customer Advocate Interviews: DRAFT REPORT, June 2016, page3, provided to participants at AusNet Services' accelerated depreciation stakeholder workshop on 7 July 2016

[23] Presentation distributed to participants at Accelerated Depreciation Stakeholder Workshop 2017-12 Transmission Revenue Reset, 7 July 2016, page 8

[24] Consumer Challenge Panel - Subpanel 5 - Submission on AusNet Services electricity transmission regulatory proposal 2017-22 - 8 February 2016, available at http://www.aer.gov.au/about-us/consumer-challenge-panel/statements-and-advice#subpanel-5

8 Consumer engagement

One of the roles of the Consumer Challenge Panel is to provide observation to the AER about the extent and value of consumer engagement undertaken by network businesses. The 2013 Better Regulation, consumer engagement guideline provides a useful base for both network businesses and for commentary.

In our initial response to the AusNet Services proposal, we said that it was our opinion that AusNet Services has made genuine effort to effectively engage with the breadth of consumer interests. We also recognise that transmission businesses have historically been regarded as perhaps too 'upstream' to need to engage with end consumers. A view has been put in the past that the customers of a transmission business are generators, distribution businesses and a handful of very large, transmission connected, energy intensive businesses. However, transmission businesses are part of the price stack that becomes the electricity bill for any customer, so engagement with the breadth of customers is vital for transmission businesses, particularly now that customers have somewhat more choice about their energy use and energy sources. For some households and businesses, going 'off grid' is becoming cost competitive with retaining grid connection.

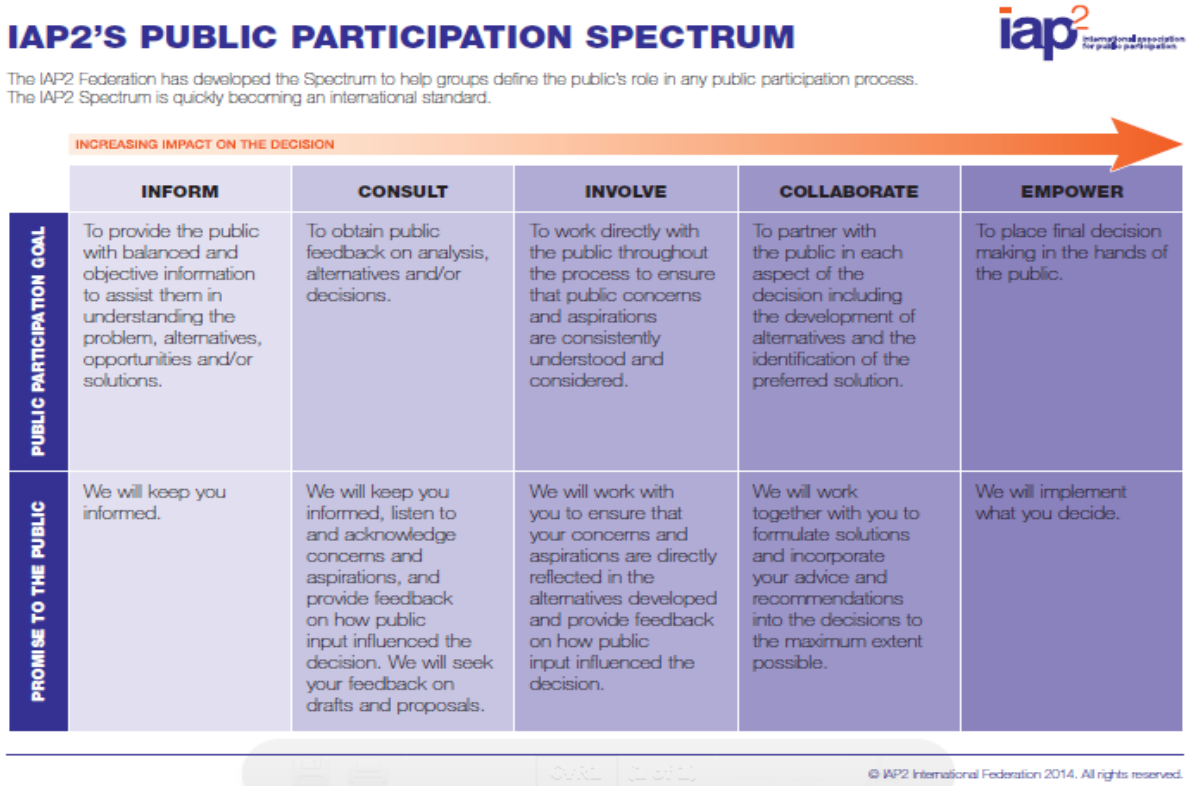
Since AusNet Services lodged its 2015 revenue proposal, we have observed genuine and continuing efforts to engage with end consumers. A discussion paper regarding accelerated depreciation has been prepared and circulated to interested stakeholders with a forum conducted by AusNet Services in June 2016. A further forum was held in August 2016, shared with AEMO, with a significant number of stakeholders, to consider key aspects of the AER Draft Decision on the promise that was made by a senior member of the AusNet Services staff that "we will respond to all stakeholder feedback."

We have no questions about the sincerity and desire of AusNet Services to actively and meaningfully engage with stakeholders, including consumer interests and we continue to observe good progress being made in efforts to engage.

An observation of ours is that sometimes AusNet Services (and other NSP's, we note) has tended to regard stakeholder engagement processes as mechanisms to convince stakeholders of an AusNet Services 'position', when more open methodologies would be more helpful. AusNet Services has been keen to embrace this feedback.

Our other observation relates to the use of the IAP2 spectrum for public participation, copied below, where to progress has been made in moving towards the right of the spectrum regarding the "public participation goal", where there have seen processes at 'inform', 'consult', 'involve' and 'collaborate' levels. However the aspect of the spectrum dealing with the "promise to the public" is less developed and we assess that at this stage the 'promise to the public' action is somewhere between 'inform' and 'consult' aspects of the spectrum.

Figure 7, IAP2 public participation spectrum:[25]



IAP2'S PUBLIC PARTICIPATION SPECTRUM

The IAP2 Federation has developed the Spectrum to help groups define the public's role in any public participation process. The IAP2 Spectrum is quickly becoming an international standard.

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Source, International Association for Public Participation

9 Applying the Reasonableness Test

The reasonableness test requires the regulatory decision, Draft Decision in this case, to be considered in total, to take a wholistic view and test this against the National Electricity Objective. In short, is the Draft Decision in total, reasonable from a consumer perspective?

This decision is required at a time when total energy use, on average is declining, Australian and world capital markets are set at low rates of interest and end consumer capacity to pay for essential and commercial business use is severely challenged after many years of high and rising prices.

The Draft Decision retains operating costs at levels close to those of recent years, with an efficiency adjustment; reduces capital expenditure in line with diminishing to flat expectations of future demand changes and rejects step changes that were sought, particularly for decommissioning of retired assets and increased cyber security. The AER has carefully considered the importance of safety considerations and has considered intergeneration equity in terms of proposals for changes depreciation schedules.

On balance, the AER's Draft decision has used the building block approach to determine a level of aggregate revenue that is reasonable in providing enough revenue for AusNet Services to continue to operate an efficient and safe business, without unfair or excessive burden on consumers, both current and future.

[25] Available at https://www.iap2.org.au/resources/public-participation-spectrum

We conclude that the Draft Decision for AusNet Services transmission services in Victoria, meets the reasonableness test.

10 Conclusion

In 2.3 of this submission we referred to the structural changes in the energy market that are occurring. We emphasise that it has not been established definitively by AusNet Services that energy transmission is a declining or waning business. The text book response to a waning business in a non-monopoly business would be to generate the highest possible revenue while reducing investment, which is to some degree what AusNet Services' 2015 proposal did do. We feel this approach is unjustified, and definitely not in the best long term interests of consumers. AusNet Services should be better adapting to the changing operating environment, rather than loading up consumers with costs that result in higher energy prices that drive further change.

We ask the AER to consider the consumer's best interests in each decision that it makes.