

## **RCP INDEPENDENT REPORT ON AUSGRID 2024-29 REVENUE PROPOSAL**

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## Foreword

This report, the Reset Customer Panel's<sup>1</sup> second, responds to Ausgrid's 2024-29 revenue proposal (the Proposal) including the draft Tariff Structure Statement (TSS), which is being lodged with the Australian Energy Regulator (AER) by 31 January 2023. In doing so it builds on the commentary provided in the Panel's [first report to Ausgrid on 29 August 2022](#) (First RCP Report).

Ausgrid's Proposal is a modified version of the Draft Plan (and accompanying Appendices, Pricing Directions Paper and Resilience Investment Framework (Resilience Framework)) it published in September 2022. Feedback received from stakeholders and customers has informed both Ausgrid and the work we have done as a Panel. Since September we have engaged with customers to gain a more accurate understanding of their expectations and how they view the Draft Plan. At the same time we have continued to challenge Ausgrid on the content of its Draft Plan.

The co-operation and support offered by a large number of Ausgrid employees including the Chair, Directors and CEO since our appointment has been substantial. At all times we have been provided with the support and, importantly, the information we have needed to assist us in our work. What has impressed us most about Ausgrid is the desire of all we have worked with to improve the business and the services offered to more than 4 million customers located at 1.8 million sites.

Since the publication of its Draft Plan Ausgrid has provided the Panel with access to an extensive range of supplementary reports and documents which form the body of attachments to its Proposal. This is the first time this opportunity has been afforded to an external body ahead of a lodgement deadline. We are grateful for the opportunity which has enhanced our understanding of a number of matters and believe it speaks to the maturity of the reset process. Appendix D lists the supplementary documents and models that we were able to review in detail or at a high level in the time available. We commend Ausgrid for the initiative.

I remain grateful to my Panel colleagues who have displayed tremendous commitment since our formation in mid-2021. Over recent weeks as we have drafted this report I have been amazed by their capacity to find yet another hour in their exceptionally busy lives to devote to the task. All of them are to be commended for the enthusiasm and clear thinking they have brought to the Panel and I thank them sincerely for their hard work and their strong sense of shared purpose.

Following an Executive Summary and Key observations, this report is divided into four main parts which reflect key stages of our work over the past 18 months. Part 1 focusses on engagement, both by us of Ausgrid, and of customers by us and Ausgrid. Part 2 is organised around themes endorsed by customers through the engagement and views drawn from them at the October Town Hall. Part 3 discusses the Proposals' building blocks. The report concludes in Part 4 with a series of observations we have made about the revenue setting framework which we believe will, if adopted, enhance the voice of customers in future resets as well as make the process more efficient and comprehensive.

An important element of our work has been the novel holistic approach we adopted to assessing Ausgrid's productivity, a central concern of regulators for the effect it has on electricity distributor costs that customers are asked to bear. Our First RCP report<sup>2</sup> included a Draft Opex and Capex

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<sup>1</sup> In this report we refer to ourselves either as the RCP or the Panel

<sup>2</sup> See First RCP Report Appendix F pp 78-90

Productivity Note which we presented to Ausgrid in early 2022 as a guide to our thinking. Over the past few months we have refined the note and an updated final version is included at Appendix E.

In our view Ausgrid should be congratulated for lodging what we believe is an exceptional revenue Proposal. Prepared through a period of rising anxiety about inflationary cost pressures, Ausgrid has listened to its customers and agreed to a series of very significant initiatives including a new Customer Service Incentive Scheme (CSIS), a ground breaking set of governance principles around its Enterprise Resource Platform (ERP) and expanded ICT investment, and agreed to a set of affordability initiatives. It was able to do these things because it resourced a comprehensive customer engagement program, something that happened because of a deep seated commitment to make the business more customer focussed than ever before. Coming from a very different position a few years ago, this is a remarkable transformation and one which we believe Ausgrid's customers will welcome.

Readers will note that we have used a form of words repeatedly in conclusions to some chapters of this report where we state our satisfaction that the relevant element of the Proposal aligns with the expressed preferences of Ausgrid's customers as discerned through the engagement process. The form of words has been shaped by the guidance provided to us by the AER, particularly through its [Better Resets Handbook](#).<sup>3</sup> Readers will note we have not applied this approach universally as there are some highly technical elements (WACC, inflation, depreciation etc) that are much harder to test directly with customers. We offer briefer commentary on these elements and acknowledge they, like all aspects of the Proposal, will be scrutinised by the AER in coming months. For matters that we have not yet been able to reach a conclusion on we remain committed to continuing our consideration and constructive discussion with Ausgrid with a view to achieving finalisation in coming weeks. We will issue a further report commenting on these matters in 2023.

Readers should also note that we have repeatedly noted adjustments to figures under discussion in this report. As our report was being written Ausgrid advised us of numerous minor adjustments to some of its estimated costs, making them different from what was presented in its Draft Plan. This is not unusual and reflects the dynamic nature of revenue resets. We have attempted to note all of the adjustments in this report.

In closing, the Panel would welcome the opportunity to discuss our reports with the AER Board at their convenience.

Tony Robinson,  
Chair, Reset Customer Panel  
27 January 2023

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<sup>3</sup> Referred to in this report and elsewhere as the AER Handbook or the BRH

## Executive Summary

1. The Panel believes that Ausgrid's Proposal satisfies the requirements laid down in the AER's Handbook because it is based on a well-resourced, thoroughly prepared customer engagement program which has produced meaningful customer preferences which Ausgrid has incorporated into its Proposal;
2. The Panel has been provided with sufficient resources by Ausgrid to undertake its work, and has maintained its independence throughout its operation;
3. The Panel has been impressed with the co-operation of a large number of Ausgrid staff, from the Board down, which reflects a deep seated desire within the network to become a more customer-focussed business;
4. Ausgrid has listened carefully to its customers throughout its engagement with them and the range of initiatives in this Proposal reflect its sensitivity to their preferences and concerns around affordability;
5. Ausgrid is to be commended for its Resilience Framework and its subsequent Resilience Framework Implementation Plan (Implementation Plan), both co-designed with the Panel, which will shape the resilience investment case it will present to the AER;
6. Ausgrid is to be commended for its agreement to ICT governance principles, particularly insofar as they will guide its ERP investment;
7. Ausgrid is to be commended for the development, in partnership with the Panel, of a new Customer Service Incentive Scheme (CSIS);
8. Ausgrid is to be commended for its acknowledgement of the different approach in the Opex and Capex Productivity Note (Appendix E) for productivity sharing that the Panel drafted and which has facilitated agreement on key issues within the Proposal;
9. The Panel notes that while it is largely satisfied with Ausgrid's capex forecast, the AER will consider whether the proposed investments in the new resilience and Consumer Energy Resources (CER) Integration programs are prudent and efficient as well as assessing in particular the proposed ICT, cyber and fleet expenditure;
10. The Panel notes that while it is largely satisfied with Ausgrid's opex forecast, the AER will consider whether the proposed opex investment, including step changes, is prudent and efficient; and
11. The Panel has seen significant positive change and development in the organisational corporate culture of Ausgrid, including in the way Ausgrid engages with consumers and its community. The Panel notes the risk that these cultural changes could be temporary and

confined to the regulatory reset process, although we don't believe this will be the case. However, to mitigate this risk the Panel has sought commitments from Ausgrid and recommended specific oversight roles for the Customer Consultative Committee (CCC) to create ongoing accountability and continuous development to meet consumer and community expectations.

## Key Observations

1. Notwithstanding Ausgrid's success in securing a satisfactory insurance outcome for this renewal, insurance coverage in our view is becoming harder for electricity distributors to secure, due mainly to the influence that the growing incidence of severe weather events are having and are likely to continue to have on the insurance market. A secondary contributor to rising costs is the increasing focus on cyber security. Customers benefit when their distributors can maintain affordable coverage. As this becomes more challenging we think the Federal Government needs to consider whether it might be more efficient for the Government to bear some of that increasing risk.
2. The importance of robust cyber security was self-evident in late 2022 following highly publicised attacks against Optus and Medibank Private. As an electricity distributor Ausgrid has a number of relevant obligations including compliance with federal legislation governing critical infrastructure. We believe that national security considerations are becoming more important as cyber-attacks grow in number and intensity and that customers may not be privy in future resets to a comprehensive explanation of the relevant risks. If that is the likely scenario we think there may be limited value in seeking customer preferences around cyber security investment and instead leaving this for the Federal Government, AER and distributors to determine.
3. The current timing of revenue proposal lodgements is unhelpful as it unfairly impinges on the right of many distributor staff and customer councils to enjoy an end of year holiday. We think that moving the deadline from January 31 is justified and will reduce the pressure that falls on staff to complete proposals over the holiday period.
4. Accelerating the roll out of smart meters in New South Wales, particularly for residential customers, is vital if customers are to receive the maximum advantages of the energy transition they are largely funding. Optionality is being developed in energy supply and pricing but its realisation is dependent on customers having advanced meters installed. We urge Governments and regulators to expedite the roll out and, if necessary, prioritise lower income customer groups.
5. Tariff reform is well advanced in Ausgrid but requires the co-operation of electricity retailers if customers are to benefit fully. We urge Government and regulators to ensure that tariff reform implementation is supported by them where possible and is not delayed.
6. Our engagement has enabled us to identify three weaknesses in VCR<sup>4</sup> modelling which we believe need to be recognised and addressed. The first relates to the impact that momentary outages might have on productivity as working from home became a norm. The second is the interdependence of electricity and telecommunication services. The third relates to how to better assess the VCR in areas that are more exposed to severe weather events.

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<sup>4</sup> Values of Customer Reliability regulatory tool within electricity revenue resets. See [here](#) for a discussion of the current approach



## Part 1 – Engagement

### 1.1 Panel organisation and activity

In our First RCP Report<sup>5</sup> we detailed the formation, membership, purpose and independent functioning of the Panel and our engagement with Ausgrid. The Panel has remained very active since the completion of our First RCP Report. Details of our main activities since then, including interactions with Ausgrid, are listed in Appendix A<sup>6</sup>.

We have continued to remain independent and challenge Ausgrid where appropriate. The Challenge and Conflict Log established by us in 2021 continues to be populated by examples of how we have challenged what has been presented to us by Ausgrid. In addition it records instances of our declining invitations due to concerns about how they might impact our independence and/or perceptions of our independence. We will make the Challenge and Conflict Log available to the AER upon request.

The Panel has continued to operate within the budget provided for us by Ausgrid. At no point has our work been impeded by any budgetary concern. Nor has Ausgrid at any point withheld information requested by us.

All Panel members have been actively involved in our collective work and contributing to our First RCP Report as well as this report. We have since our appointment maintained a highly collegial approach to our task.

We acknowledge the guidance contained within the AER's Handbook on what an independent report reflecting customer views and preferences should comprise, notably the guidance at section 3.4.2:

1. *The purpose of the report is to help the AER assess the quality of the engagement process and the extent to which a proposal reflects consumer preferences and desired outcomes. The independent report should provide a consumer view of the effectiveness of the pre-engagement lodgement process in identifying consumer preferences and outcomes and how they have been incorporated into the proposal.*
2. *The AER expects that the independent report would contain the outcomes that networks are proposing to deliver in their regulatory proposals and whether customers support those outcomes.*
3. *The independent consumer report can also provide views on technical issues in the proposal in the case where consumers feel capable of putting forward positions on these elements of the proposal.*

In accordance with the guidance, this report:

- includes commentary on customer views of the effectiveness of the pre-lodgement engagement process, notably the views expressed by Town Hall participants in mid-October;

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<sup>5</sup> See First RCP Report Chapter 2 at pp 13-15

<sup>6</sup> The Panel has attended every meeting listed in the Customer Advocate Meeting Matrix which is Attachment 3.2 to the Proposal

- provides advice on customer views of multiple elements of Ausgrid's Proposal as well as our technical observations about a range of related matters that are built on points of documented customer interest. An example of the latter is the commentary contained within this report on network resilience in section 2.2; and
- has not been outsourced but undertaken wholly by Panel members (Handbook p.17).

We have also received positive feedback from the AER's Consumer Challenge Panel (CCP) members in late-2022 as to the CCP's impression of the Panel's independence, governance and our successful positioning as a 'critical friend' to challenge Ausgrid.

The Panel has turned its mind to the evolving role of independent customer representative committees in electricity resets, and will through 2023 consider how it can generate material that can be utilised by whatever body Ausgrid chooses to establish ahead of its 2029-34 reset.

### ***Customer research***

We indicated in our First RCP Report<sup>7</sup> that we were intending to utilise the customer research budget provided to us by Ausgrid in late-2022. However, to this point in time, with one exception, we have not identified any part of the Proposal we think lacks a robust evidentiary base. The exception involves the accuracy of customer sentiment around affordability which is being pressured by the highest inflation experienced in Australia for a generation and predictions of rapidly rising energy prices. We believe it prudent to continue testing customer views and at the October Town Hall we requested Ausgrid re-test the question in 2023. Ausgrid agreed to do this in June and October 2023 and we are confident this will provide the robustness required around an important customer priority. Beyond this agreement we remain committed to commissioning research where we feel it is necessary to inform the Proposal but are sufficiently impressed with what we have seen of the Voice of Community Panel (VoCP)<sup>8</sup>, Town Hall and other feedback mechanisms to accept its outputs as clear evidence of Ausgrid customer preferences.

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<sup>7</sup> See First RCP Report Chapter 11 at p.65

<sup>8</sup> This is to distinguish from Ausgrid's business as usual customer engagement program which is also referred to as the Voice of Community or the Voice of Community Program. See Proposal at p.22

## 1.2 The customer engagement process

### *The bd Report*

In our First RCP Report we detailed the customer engagement process up to the end of August 2022. Work has continued since then and is thoroughly documented in the Customer Stakeholder and Engagement Report prepared by bd infrastructure (the bd Report)<sup>9</sup>. The bd report forms a key element of the Proposal as it details the outcomes of the Lived Experience and Small Business engagement streams which the Panel was involved in designing with bd and Ausgrid.

The Panel confirms that the bd Report accurately summarises the development of the engagement framework and delivery of Ausgrid's engagement plan. We agree with bd's assessment that the engagement framework was *'ambitious, setting out a multi strand approach that sought to involve customers across a spectrum of interests, needs and levels of understanding. It aimed to attain customer participation at the Involve, Collaborate and Empower levels of the International Association of Public Participation (IAP2) spectrum, by removing barriers to participation.'*<sup>10</sup>

The detail of the Report and especially the section setting out the Overall Lessons Learnt (at pp 57 – 58) from the ambitious program are a useful resource for other networks and the industry more generally.

The bd Report (at p.8) accurately summarises Ausgrid's objectives in the engagement program it co-designed with the Panel. The objectives are:

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<sup>9</sup> The bd Report is Attachment 3.1 to the Proposal

<sup>10</sup> See bd Report at p.31

**Build trust and confidence:** Ausgrid's ambition is for customers to have trust in the engagement process and understand the rationale behind decisions, even if all positions are not agreed to. Above all, the business strives to ensure customers have confidence that it has genuinely listened and that investment decisions are in the long-term interests of customers.

**Reach diverse audiences:** Ausgrid aimed to achieve a breadth and depth of views and allow customers to meaningfully contribute, hearing from all types of customers across the spectrum of experiences and using a variety of channels to ensure all customers had appropriate access to engagement. Through this, it seeks to gain an improved understanding of customers' preferences and have these shape the Draft Plan and Regulatory Proposal.

**Drive cultural change:** Ausgrid aimed to build organisational capability to deliver quality engagement and customer outcomes and understand customer needs and aspirations. They achieved this through extensive staff and senior leadership participation in both the preparation and delivery of engagement.

**Be industry leading:** Ausgrid aimed to deliver an engagement program that builds on successful industry practices and of which staff could be proud. They utilised the AER's Better Resets Handbook, the AER's note on Resilience and the Consumer Challenge Panel (CCP) 17's evaluation of engagement, as well as extensive conversations with other DNSPs and even international utilities to understand what best practice engagement could be.

In the Panel's opinion each of these objectives has been achieved. Panel members have observed strong feedback from customers about how they felt they were heard and have witnessed how their input had directly shaped Ausgrid's Draft Plan and Proposal. We believe the customer feedback has enabled a more balanced Proposal to be formulated.

To date Ausgrid has been transparent with all customers about how trade-offs have been reached and has advised the Panel that it will continue to respond to customers' affordability concerns. The breadth, depth and diversity of voices in the engagement program has been excellent. The Panel notes that Ausgrid has been committed to seeking out the quiet voices not always heard within its customer base and finding ways to support all customers with the resources needed to participate (including in language for CALD customers).

As we note in this report Panel members are observing continuing cultural change in the organisation and staff continue to respond positively and openly to our suggestions (which are often challenging) about ways to enhance the engagement program during Phases 4 and 5<sup>11</sup>. The Panel believes that Ausgrid's engagement to support its Draft Plan and its Proposal has been exceptional and industry leading.

### ***Highlighting what customers can influence***

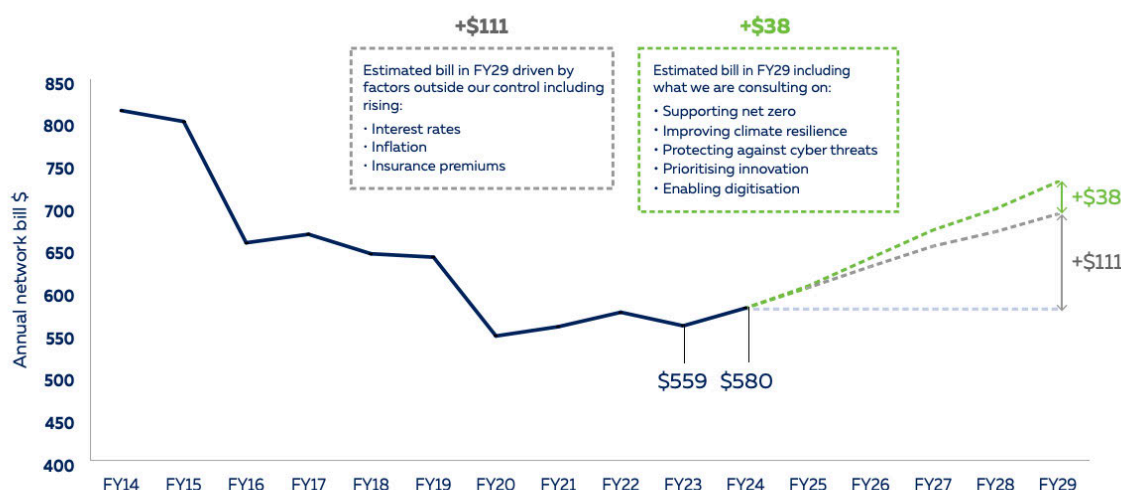
Our First RCP Report noted our request that Ausgrid break down its estimated average residential customer bill increase by 2028/29 into two components: that which customers through the Panel

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<sup>11</sup> See bd Report at p.10

were able to influence (controllable) and the balance which was the product of the anticipated formulaic treatment of component costs (uncontrollable). This led us and Ausgrid to identify \$38 of controllable costs in 2028/29 from six factors that had been identified in preceding months as important to customers - climate resilience, cyber, innovation, digitisation/ICT upgrade, net zero and customer service detailed in the Draft Plan - and uncontrollable costs of \$111 due to rising interest rates, inflation and insurance premiums.<sup>12</sup> Ausgrid presented this in its Draft Plan (p.13) in the following helpful graph<sup>13</sup>:

**Figure 1.2.1 Drivers of potential increases in household network charges (\$ nominal, excl GST)**



**Note:** Ausgrid total network charges include distribution plus pass through of transmission costs and the NSW Climate Change Fund. In FY24 our estimate of total network charges is \$580.

To further our understanding of customer views we requested that the October 2022 Town Hall include consultation around the six elements contributing to the \$38 and a seventh referred to as 'external factors'. These cost areas were referred to at the Town Hall as the Seven Pillars. Participants were invited to express their views at each of the Pillars, with Panel members introducing participants to the Pillars before inviting them to state their preferences. The outcomes of the Town Hall Pillars session including advice from the participants to the Panel are detailed in Appendix B.

As well as eliciting accurate feedback on specific future costs, the exercise also provided a useful check on whether we had missed any important part of the customer viewpoint. In introducing the Pillars we provided an opportunity for participants to express any concerns they had about the item under discussion that they felt had not been adequately explained. For example, the introduction to the ICT upgrade Pillar (responsible for \$12 of the \$38) invited participants to request more information as to what they were going to receive for the upgrade in terms of faster, cheaper or more diverse service. The fact that no participant raised any concern about this aspect of the proposed cost increase assured us that the engagement process to that point was robust and reliable.

<sup>12</sup> See First RCP Report Chapter 10 at p.62

<sup>13</sup> Both the \$38 and \$111 figures have changed since the publication of the Draft Plan and we discuss this further in section 2.1

As will be detailed later in this report, similar care was taken prior to the cyber security Pillar discussion. At our request Ausgrid provided advice on the very limited personal data it holds about customers, something we thought important given participant awareness of the ransomware attack on Optus which threatened the release of a much greater array of customer information, which had occurred in the weeks prior to the Town Hall.

These two examples demonstrate our focus on ensuring that at all times the customer engagement process was well executed. Our actions were not motivated by any concern that the engagement program we co-designed was in any way deficient or not delivered professionally. Rather, over the engagement period the world in which customers live continued to change and where we could take the opportunity to re-check assumptions on which the engagement was based we did so.

### ***Evidence that Ausgrid is listening***

As was the case in our First RCP Report we have been impressed with the effort made by Ausgrid to engage meaningfully with its customer base because that effort better informs its Proposal. At the same time we have witnessed how the opinions of customers expressed in forums attended by Ausgrid staff have encouraged staff to consider how various internal work streams might be amended to deliver better longer term customer benefits. This dimension of customer engagement is highly valuable both to electricity distributors and customers.

Much of the commentary in this and the following section details the engagement facilitated by bd but this was not the only form of engagement undertaken in recent months. Since our First RCP Report we have participated in a range of customer engagements, including small business customer street walks in Tuggerah and Lakemba and some large customer interviews. We have also noted feedback to Ausgrid's Draft Plan in submissions received, mainly from councils.

Between April and October 2022, the estimated price of new retail market offers increased by about \$300 per year, or 23 per cent, based on the median annual bill of a typical residential customer. As part of the Town Hall engagement Ausgrid committed to customers to retest affordability with them in line with their feedback. Following the October Town Hall, Ausgrid has decided to re-test all customers' attitudes to affordability at two further Town Halls in June and October 2023, something we had previously sought from Ausgrid<sup>14</sup>. We are currently designing this engagement with Ausgrid. To this engagement plan will be added a separate round of local consultations arising from the Resilience Framework we have developed with Ausgrid<sup>15</sup>.

We note the BRH guidance around customer engagement, namely that it should be sincere, respect customers and facilitate their meaningful contribution. We further note the need for it to be transparent, generate documented evidence and be shown to influence the shape of the Proposal.<sup>16</sup> Having co-designed the customer engagement process and actively observed its operation we are satisfied that these requirements have been met. We are particularly impressed that Ausgrid has embraced our requests to develop frameworks around its proposed resilience and ICT investments, something we acknowledge has generated substantial additional work for its staff. In our view this

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<sup>14</sup> See First RCP Report Chapter 1 at p.9

<sup>15</sup> This local engagement is discussed further in Section 2.2

<sup>16</sup> See BRH Chapter 3

willingness to work with us in this way reflects a marked sincerity of the business to develop the most informed Proposal possible.

In our opinion, Ausgrid's customer engagement process has enabled a well informed and accurate set of customer views and preferences to be generated. Care has repeatedly been taken to avoid any confusion for customers and Ausgrid has consistently been receptive to the evidence produced by the engagement and has demonstrated a willingness to shape its Proposal around this sentiment. In respect of its regard for customer views on affordability, possibly the sentiment most subject to external pressures at this time, Ausgrid has committed to further testing in 2023, something we believe emphasises its commitment to deliver a truly customer centric Proposal.

### ***Conclusion***

The Panel believes that Ausgrid has satisfied the guidance provided in the AER's Handbook on the nature, breadth, depth and sincerity of its customer engagement. We further believe that in respect of its willingness to re-test sentiment in relation to affordability at two intervals in 2023, Ausgrid has exceeded the BRH guidance. The commitment shown by Ausgrid to engagement was recognised recently through a well-deserved IAP2 Core Values award.

### 1.3 How customer engagement outcomes have shaped Ausgrid's Proposal

This section again acknowledges the guidance provided in the AER's Handbook which encourages independent reports supporting revenue proposals to explain how identified consumer preferences have been incorporated into the Proposal.

#### ***Progress since our First RCP Report***

Customer engagement has continued since our First RCP Report with the centrepiece being the VoCP Deep Dive into the Draft Plan in mid-September and the subsequent mid-October Town Hall workshop with all customer segments. As described in the previous section Town Hall participants provided feedback on a number of controllable costs identified in the Draft Plan. At the same session customer sentiment around overall affordability was tested to see how sensitive the expressed preferences were to overall price changes in the electricity bill as well as changes in the distribution part of the cost stack. Town Hall participant views were captured in a Final Recommendation report which also included advice to the Panel from customers. The Report is attached in Appendix B.

We observed at both the September VoCP deep dive session and the Town Hall that participants remained actively engaged in conversation and expressed enthusiasm for the process they were part of. Significantly, 80% of participants reported their satisfaction that Ausgrid had listened to them in the preparation of the Draft Plan and 75% expressed a strong confidence that Ausgrid's Draft Plan looks to the future and is fair.

#### **Voice of Community – Debrief Feedback from Town Hall<sup>17</sup>**

Question	Loathe	Lament	Live with	Like	Love
	%				
How satisfied are you that Ausgrid listened to you?	0	15	5	40	40
How comfortable are you the draft plan looks to the future and is fair?	0	10	15	60	15

The following comments detail the Seven Pillars discussion at the Town Hall. We think it instructive to note that participants demonstrated varying degrees of support across the different Pillars. In the case of the Customer Service discussion it should be noted that in earlier discussions the VoC had expressed a clear desire not to fund all of what Ausgrid initially proposed and were seeking for the proposed expenditure to be reduced to \$7m. VoC panellists did not believe that the chat bot service described to them aligned with their preferences, nor could they see value from their perspective of automated outage information exchange capability. As a result of this feedback Ausgrid removed the chat bot functionality from the package. As the bd Report notes at p.15 customer service was an area where Ausgrid needed to find the balance between different customer segments:

<sup>17</sup> Results from data supplied by Mosaic to Ausgrid referenced in the bd Report at p.148



Customers were presented with a package of solutions at different cost levels. The Voice of Community Panel was clear that the value of the higher spend was not a priority for them, but other customer groups like commercial and industrial customers did value some of the solutions, in particular the introduction of APIs (data sharing systems) to share outage information, and stakeholders like ASPs highly valued self-serve functionality and access to data.

The ability of customers to identify preferences that they were not willing to support is, we think, a marker of the authenticity of the customer engagement process.

**Pillar 1 - Resilience (\$204m = \$12/\$38 average residential customer bill increase in 2028/29)<sup>18</sup> (now \$202.1m)**

This proposed investment includes community solutions such as education campaigns and mobile community hubs, improved network assets, back up generation and micro-grids.

L-scale	Advice
<b>Pillar 1 – resilience</b> 	<b>Cost: \$204m; Bill impact: 2029: \$5 of the \$38</b>  The resilience program is well balanced. Keen to prioritise community-based solutions and involve the community in them – including in a commercial sense. Improve communications during emergencies; and be mindful of the importance of tree canopy when considering tree trimming. Partnership delivers outcomes. Improve indigenous engagement

**Pillar 2 Customer Service (\$20m = \$1/\$38) (now \$21m)**

This proposed investment includes funding to improve the timeliness and accuracy of outage information, website and SMS services improvements and an upgraded connections process for large customers.

Pillar 2 – customer service	Cost: \$20m; Bill impact 2029: \$1 of the \$38
	Why is the customer experience amount so high – higher than what the panel proposed? The spend would need to significantly improve customer satisfaction. If there are cuts to be made, make them in this area.

<sup>18</sup> Each of the dollar figures referred to in this section are real FY24 amounts based on the September 2022 calculations in the Draft Plan. Ausgrid has explained that variations in the numbers between the Draft Plan and the Proposal are due to refinement based on interest rates, refined analysis or feedback from customers

### Pillar 3 - Innovation (\$50m = \$2/\$38) (now \$54.5m)

Ausgrid's proposed innovation investment includes new innovative technologies that better integrate customer solar and electric vehicles (EVs), research and trialling advances in network equipment with the potential to improve safety and reliability.

Pillar 3 – innovation	Cost: \$50m; Bill impact 2029: \$2 of the \$38
<p>0%  Loathe it - 0-20%</p> <p>20%  Lament it - 20 - 40%</p> <p>5%  Live with it - 40-60%</p> <p>50%  Like it - 60-80%</p> <p>25%  Love it - 80-100%</p>	<p>Lots of support for innovation as a way of accelerating decarbonisation, improving resilience and reliability and lowering costs in the long run.</p> <p>Keen for Ausgrid to partner with research organisations and community organisations around innovation and to engage in innovative practice across all facets of the company</p>

### Pillar 4 - Net Zero (\$110 - \$153m = \$6/\$38)<sup>19</sup> (now \$126.1m)

This proposed investment was presented as a \$ range for reasons that are explained in section 2.3. The investment includes an upgraded Ausgrid capacity to give it better visibility of all parts of its network, resulting in a better understanding of two way energy flows across the network and an enhanced ability to monitor potential electrical faults that can cause safety hazards. Greater use of smart meter data is possible through the investment.

Pillar 4 – Net Zero	Cost: \$110-\$153m; Bill impact 2029: \$6 of the \$38
<p>0%  Loathe it - 0-20%</p> <p>0%  Lament it - 20 - 40%</p> <p>17%  Live with it - 40-60%</p> <p>61%  Like it - 60-80%</p> <p>22%  Love it - 80-100%</p>	<p>Work in partnership to deliver net zero and educate others on how they can play their part.</p> <p>Need to outline what is fair and reasonable around charging – customers are not being charged to export, they are being rewarded for shifting their usage and smoothing out load on the grid</p> <p>Prioritise community batteries in areas with high density, heritage limitations, lots of renters, ... so that they can benefit from renewables and reduced cost</p>

### Pillar 5 - Cyber (\$106m = \$11/\$38) (now \$111.7m)

This proposed investment will ensure Ausgrid's safeguards align with industry best practice, by reaching Cyber level 2 by mid-2027 and then progressively improving to Cyber level 3 by 2029.

Pillar 5 – cyber	Cost: \$106m; Bill impact 2029: \$11 of the \$38
<p>0%  Loathe it – 0-20%</p> <p>10%  Lament it – 20-40%</p> <p>10%  Live with it – 40-60%</p> <p>37%  Like it – 60-80%</p> <p>42%  Love it – 80-100%</p>	<p>Wise cyber investment can mean greater network stability/resilience. Cyber security will only become more important – we should stick with L3 if there is no negative impact on the customer. Invest now, to prevent a greater spend later – prevention is better than a cure!</p>

<sup>19</sup> The variance in the proposed DER investment is explained in Section 2.3

### Pillar 6 - IT systems upgrade (\$143m = \$12/\$38) (now \$149.4m)

This proposed investment will deliver a new ERP and improve a range of capabilities including the ability to innovate in areas such as pricing.

Pillar 6 – IT system upgrade	Cost: \$143m; Bill impact 2029: \$12 of the \$38
	General support for depreciating over a longer time – around 10 years but with firm guidelines and clarity about what is being delivered and how it can benefit organization and customers

### Pillar 7 - Other

This Pillar had no cost associated with it and sought participant views on non-proposal items that impact upon the Proposal such as cost of living pressures.

Pillar 7 – other	Changes to other parts of the bill and household expenses
	<p>Would not want to see much change in balance between the six pillars</p> <p>Need to consult again if external factors change significantly.</p> <p>Don't lose sight of what's important over the long term even if it takes longer to pay off or see benefits.</p> <p>Increase community engagement overall, particularly with indigenous communities</p>

In discussions with Ausgrid leading up to the Town Hall we expressed our interest in ensuring that the views of customers remained contemporary throughout the extended period in which the Proposal is being drafted and finalised. This is especially the case at a time when expectations of substantial price rises are growing. Ausgrid accommodated our requirement by asking customers to indicate what level of price increase in bills in 2023 necessitated a retesting of their views. The answer was clear – 60% registered a 20% increase as their threshold (Mosaic data).

### Customer attitudes on affordability

Affordability was discussed in depth at the Town Hall. Participants were presented with information that outlined Ausgrid's limited control over coming price increases. As noted above they were given the opportunity to indicate what quantum of total electricity price increase they could manage to bear and most acknowledged that prices were going to increase significantly but continued to support a range of new investments in areas they felt important such as resilience and CER.

In the days following the Town Hall the Federal Treasurer foreshadowed in his Budget speech that retail electricity prices would rise by around 50% over the next 18 months. These cost increases would be in addition to costs arising from the NSW Government Roadmap policy (the Roadmap). We discuss these costs in more detail below in section 3.1.

**Ausgrid's responsiveness to customer preferences on affordability**

Ausgrid responded to customer concerns around affordability in three ways:

- (i) by agreeing to a series of initiatives which were presented to us in November and to the CCC in January 2023. The initiatives and the bill impact in 2029 are:

Initiative	FY25-29 revenue impact (\$m)	FY29 household bill impact (\$)
Retain current depreciation method	97	11.0
Adopt 15 year ERP depreciation	32	4.0
Apply 0.5% productivity to capitalised overheads	1	0.14
Property rationalisation	85	10.0
Adopt VPN tax decision	79	9.0
<b>Total</b>	<b>294</b>	<b>34.1</b>

As Ausgrid notes in its Proposal (p.12) these initiatives will reduce the increase in the impact of the uncontrollable factors by \$34 in 2029. We commend Ausgrid for the speed with which it assembled the initiatives list following the Town Hall. It indicates to us that Ausgrid listened carefully to the views expressed and were willing to modify its Proposal to incorporate a clearly stated customer preference.

- (ii) By agreeing to two further Town Halls in June and October 2023 to re-test customer views on affordability and willingness to pay for the developing resilience expenditure.
- (iii) By agreeing to pilot the Resilience Framework to develop its Resilience business case. An Implementation Plan<sup>20</sup> will guide the application of the Resilience Framework in three of Ausgrid's Local Government Areas (LGAs) and will include testing of willingness to pay as part of its business case development for both the Proposal and the Revised Proposal.

**Conclusion**

This section details how Ausgrid's customer engagement program has enabled the preferences of its customers to be recognised and further explored in a way that was most meaningful to them. The resulting discussion and measurement of sentiment recorded varying responses including where customers would be prepared to see less expenditure. The development of a suite of affordability initiatives and the willingness to continue testing customer views on affordability are both examples of a process that has facilitated a Proposal that genuinely recognises and responds to Ausgrid's customers. We are satisfied that the requirements in the BRH for evidence that Ausgrid's customers have shaped its Proposal have been met.

<sup>20</sup> The Implementation Plan is Attachment 5.5.a to the Proposal

## 1.4 How the Panel has influenced Ausgrid's Proposal

While we acknowledge that it is the role of the AER to determine whether Ausgrid's Proposal satisfies its BRH guidance, we think it useful to comment on how we think our role has positively influenced the Proposal. Given that a number of Panel members were involved in the development of Ausgrid's 2019-24 revenue proposal, our perspective necessarily incorporates an appreciation of what differs this time from last, and how that difference has helped make this Proposal more customer centric.

### ***Holistic approach to productivity***

The Panel believes that the interdependencies between capex and opex, and increasing risk and uncertainty around weather related and cyber security events suggest a holistic approach to productivity and efficiency will deliver improved consumer outcomes compared with focussing on each element in isolation. We commend Ausgrid for accepting our request to engage with us in this new holistic way. We believe that our nuanced discussions of how the various productivity measures interact with each other and how that influences the allocation of risk between Ausgrid and its customers has led to a package of productivity and efficiency measures that will provide an appropriate incentive on Ausgrid to continue improving its relative productivity performance in 2024-29. Our First RCP Report contained the Draft Panel Capex and Opex Productivity Note we developed with Ausgrid and this report includes the updated version at Appendix E.

### ***ICT Governance***

From an early point in our engagement when Ausgrid first outlined its proposed ICT investment we expressed concern about the clarity of the expenditure and the criticality of the choices Ausgrid was making. This concern was based on familiarity with other distributor experiences with ICT investment choices, some of which ran over budget and extended beyond the original timetable. We were also aware that Ausgrid's implementation of the Advanced Distribution Management System (ADMS) project in the current period had run significantly over budget and time. Our emphasis from late-2021 onwards was that Ausgrid needed to be as certain as was possible that its ICT plans, notably the \$149.4m proposed for its new ERP (largely driven by a SAP upgrade), was as thoroughly developed as possible.

At no time in discussions with Ausgrid staff were we disappointed with the level of detail they provided us, notwithstanding that translating the technical advice into measurable customer benefits is challenging. By August 2022 our concern about the proposed ERP plans was confined to the possibility of a cost overrun, something other distributors have encountered in their SAP upgrades. We advised Ausgrid that we thought customers deserved some protection from additional costs if the ERP implementation did not proceed smoothly. Our advice was the basis of a request in August (in the draft holistic approach to productivity note) that Ausgrid consider adopting a set of additional ICT governance principles which would protect customers from foreseeable cost overruns in major non-recurring ICT projects.

We were very pleased that Ausgrid, after internal discussion and consideration, agreed to the request. The governance principles are detailed in section 2.7 and will, we believe, serve not only

Ausgrid customers well but could be the basis of a useful protection for all electricity distributor customers if adopted as common practice in the sector.

### ***Longer depreciation of ERP***

Allied with the preceding matter is Ausgrid's willingness to agree to a longer period of depreciation for its ERP investment given the existing system has been in place for over 25 years.<sup>21</sup> This has benefits for customers through a modest bill reduction but our initial motivation was to orient the business towards a longer commitment to its new system, our feeling being that a shorter 5 year depreciation might inadvertently contribute to the business seeking to replace the ERP ahead of its useful life expiry if its implementation proved difficult. Ausgrid listened to our views and responded positively. Its decision to adopt a 15 year depreciation is contrary to what it has done in the past and broad industry practice for shorter 5 year asset lives for ICT, but more appropriate in our view for an asset with a longer anticipated life.

### ***Resilience Framework and Implementation Plan***

Ausgrid's revenue reset has coincided with a growing national conversation about resilience. Not long after our appointment it was obvious to us that containing this conversation was necessary if Ausgrid was going to be able to formulate an investment proposal with a defined resilience component that was capable of acceptance by the AER. While the AER prepared guidance in April 2022 on how it would treat resilience investment requests through the publication of its [Network Resilience Note](#) (AER Resilience Note) we worked with Ausgrid to co-design a Draft Resilience Framework, the first time this has been attempted by a distributor. The resulting Draft Resilience Framework was detailed in our First RCP Report<sup>22</sup> and has since been finalised<sup>23</sup> through further discussions between us and Ausgrid considering the feedback in the submissions on the Draft Framework.<sup>24</sup>

Applying the Resilience Framework provided an opportunity for us to co-design with Ausgrid an Implementation Plan for the three LGAs selected by Ausgrid for trialling its new community led investment approach: Lake Macquarie, Central Coast and Port Stephens. This work is still underway and is discussed in section 2.2.

### ***Cyber Security***

Ausgrid has not materially varied its investment proposal since the Draft Plan but the forecast investment proposes significantly increased cyber security expenditure compared with the current period. Ausgrid is to be commended for responding to the challenge of developing a clear cost benefit analysis of its proposed investment. As far as we are aware this is the first time a network has explained to customers the consequences and benefits of cyber security maturity and practices when responding to a cyber-attack in terms of the costs of manual network control, internal staff productivity and planned maintenance. The remaining issue for the Panel on Ausgrid's cyber security investment is that it remains unclear that achieving level 3 is necessary to comply with Ausgrid's

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<sup>21</sup> See the Proposal at p. 112 where Ausgrid states: 'Our existing ERP was initially deployed in 1996 and parts of it will have been in operation for 31 years by the time of its planned replacement in 2027.'

<sup>22</sup> See First RCP Report Chapter 6 at pp 30-33

<sup>23</sup> The final Resilience Framework is Attachment 5.5c to the Proposal

<sup>24</sup> The feedback in these submissions is discussed in Section 2.2

Federal and State regulatory obligations or its licence condition, although this is clearly the Ausgrid Board's policy and is supported by customers.

In our First RCP Report<sup>25</sup> we were concerned that the Ausgrid Board's approach was effectively requiring consumers to fund increasing cyber related insurance premiums, as well as increasing amounts for recurring opex and capex expenditure for cyber security. We challenged Ausgrid to review this as it appeared to the Panel that nearly all of the risk is being borne by customers. We are satisfied that in the Proposal Ausgrid is bearing some of this risk by agreeing to meet the costs of achieving level 3 maturity in 2024-29 within a \$4.96m capex scope factor given the likelihood that it will face increasing regulatory obligations. In Appendix F<sup>26</sup> we summarise our views on the evolving and complex suite of regulatory obligations imposed on Ausgrid in relation to cyber security and maturity as well as making comments on the proposed capex scope factor.

### ***Embedding the customer voice***

While Ausgrid is to be commended for the investment it has made in customer engagement and the progress made since its last revenue reset in listening to customer views, we have expressed the view that the journey to becoming a customer centric business is one that never ends. With this in mind we have encouraged Ausgrid to consider additional ways in which customer voices can be embedded as part of business as usual (BAU) operations, ensuring that the business is listening as carefully as it can to what its customers want, not just in the lead up to revenue proposal lodgements but constantly. Our discussions on this point have enabled us to reach agreement with Ausgrid that its CCC will have a key role to play in overseeing the ERP implementation, an important arrangement as the Panel's role will have finished by that time. We see this agreement as a step towards embedding customer voices within the business and believe Ausgrid appreciates the value of continuous listening now more than it has in the past.

More specific commentary about embedding the customer voice within Ausgrid's decision making is contained in the next section.

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<sup>25</sup> See First RCP Report Chapter 9 at p. 50

<sup>26</sup> Appendix F contains material that is confidential to Ausgrid. Ausgrid will provide a full version of Appendix F to the AER as part of its Proposal

## 1.5 Embedding customer voices in Ausgrid planning and decision making

Members of the Panel who were involved in the last Ausgrid revenue reset process can attest to the huge strides the business has taken since then to listen to its customers. In particular, the Voice of Community program, established in 2019 and now part of Ausgrid's BAU customer engagement, has enabled customer perspectives to be heard more clearly than ever before. In providing the following commentary we acknowledge the good work Ausgrid has done in respect of listening to customers. At the same time we recognise that becoming customer-centric is a process that never ends; the needs and preferences of customers continue to change. There is also an important ongoing need to embed the voices that are not traditionally heard as part of BAU engagement.

### ***Culturally and linguistically diverse (CALD) engagement***

Ausgrid has the most diverse customer base of any DNSP in the national electricity market (NEM). In our First RCP Report<sup>27</sup> we detailed the range and scope of CALD engagement and BAU practices undertaken by Ausgrid both in the past and during this reset process. We also highlighted that there were a number of opportunities for Ausgrid to embed CALD and Indigenous community engagement into BAU practice. These included:

- SMEs are customers that have proven difficult to engage, particularly small businesses as they are generally not members of peak organisations and hence have no recognised 'voice'. This is especially true for CALD small businesses and engagement with these consumers generally requiring bespoke and individual engagement. No DNSP has been particularly successful so far in engagement activities with these customers. Approximately 40% of small businesses in NSW have a CALD background and indigenous small business is a rapidly growing sector. Engagement activities with CALD communities including building on initiatives in this reset such as the Lakemba street walk could provide a base for specific small business engagement.
- Ausgrid's commitment to an enhanced CSIS, discussed in section 2.4, necessitates the development of new performance metrics. Consideration was given to including a CALD specific performance measure but no suitable metric was available, or capable of development ahead of the forthcoming reset. The opportunity exists, however, for Ausgrid to develop a suitable measure in the next few years so that it can be considered as part of a further enhanced CSIS ahead of the 2029-34 reset.
- Ausgrid could explore the possibility of parallel deliberative approaches (in language and culture) ahead of the 2029-34 reset process. This approach would build knowledge and capacity within the business and better inform that process.
- Exploring, collecting and analysing relevant data sources about customers and looking to find more accurate data sources would help Ausgrid build its knowledge of customer groups. Current customer data provided by MSAT<sup>28</sup> via retailers is at best patchy and incomplete. Particularly important is life support customer data but there are a number of customer

<sup>27</sup> See First RCP Report Chapter 4 at pp 25-26

<sup>28</sup> MSAT is AEMO's Market Settlement and Transfer System that records the movement of customers between electricity retailers



focussed activities (outage notifications, language and communications preferences among others) that would be made easier and more effective with better and more complete data.

#### Including CALD voices at the Town Hall

Leading up to the October Town Hall there was considerable discussion between Ausgrid, consumer advocates and Ethnic Communities Council of New South Wales (ECCNSW) facilitators about how to include CALD voices and opinions in the workshop. ECCNSW had already run 3 in language engagement sessions for Ausgrid as part of the engagement on the Draft Plan.<sup>29</sup> It was recognised that asking individual consumers who had not been part of the previous deliberative program would be especially problematic. Individual consumers acting as community proxies on their own added another layer of difficulty. To overcome these challenges it was decided to ask the ECCNSW bi-lingual facilitators (Arabic, Mandarin and Vietnamese) to provide feedback for their communities in the Town Hall process. On the day, the Arabic facilitator was unfortunately unable to attend but the Vietnamese and Mandarin facilitators, along with another Vietnamese community member, joined the workshop. All participants indicated how impressive and empowering they found the workshop and the opportunity to participate.

#### Making CALD engagement BAU

Given its very diverse customer base, Ausgrid faces a particular challenge in embedding ongoing CALD engagement into its everyday activities. Particularly challenging is the range of communities across its network and how the (sometimes) differing views of those communities can be explored, recorded and incorporated into everyday customer operations.

One suggestion was an ongoing deliberative engagement process with a few communities (one to three were explored), followed by a wider 'check in' with other communities on the results of their deliberations to provide wider validation across CALD communities. Discussions also included continued collaboration with the other two NSW DNSPs on CALD initiatives to provide as wide as possible input from CALD community members.

Ausgrid has started to institute cultural awareness training for some of its customer facing staff as well as exploring diverse and targeted staffing options for their call centre to provide in-language access for CALD customers. Some Panel members participated in a training session and commented positively on its benefit. Access to immediate in-language assistance obviates the (often) problematic interpreter service whereby three way conversations between customers, call centre staff and an interpreter can sometimes be complicated and challenging. The provision of dedicated in-language call centre staff fits well into the stated preferences of the VoCP in having a person at the end of the line.

Ausgrid is still developing its full BAU Customer Engagement Strategy and we look forward to understanding how Ausgrid will improve its CALD sensitivity within this strategy.

#### Future CALD specific CSIS metrics

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<sup>29</sup> Panel members observed some of these sessions even though they were in language (Arabic, Vietnamese or Mandarin). The participants were very complimentary of Ausgrid's investment in bi-lingual engagement in order to include CALD voices directly as part of the engagement on the Draft Plan

In the discussions about the development of its CSIS we raised with Ausgrid the possibility of a CALD metric being included. Reliable, long term data required by the AER in establishing a CSIS measure for CALD consumers is not yet available but we expect Ausgrid's longer term BAU CALD focus will provide an opportunity for further consideration of this possibility in the 2029-34 reset.

Our discussions with Ausgrid, including at Board level, around enhanced CALD and indigenous engagement are continuing. While we have not agreed to any specific service improvements we are committed to working with Ausgrid during 2023 to develop BAU CALD and Indigenous strategies that can lead to improved outcomes in 2024-29 and which will provide long-term data and metrics which could support a future CSIS measure in a future reset period.

### ***Indigenous engagement***

Ausgrid has contracted Indigenous Energy Australia (IEA) to undertake its engagement activities with First Nations communities. Panel members have met with IEA representatives in recent weeks and look forward to furthering our understanding of the opportunities that exist for Ausgrid to develop its understanding of indigenous needs.

We recognise that working with indigenous communities requires in most instances different approaches to consultation and engagement as well as additional preparation. There is a growing recognition that such engagement needs to be much more a BAU process than reset specific engagement and we look forward along with Ausgrid to undertaking some of this in coming months. One adjustment we will make is to seek much wider input into broader questions of land management as we believe this reflects a priority of indigenous communities. As a business whose day-to-day operations involve a range of land management functions we believe indigenous engagement can provide informative and instructive guidance to Ausgrid and continue to build on a constructive and ongoing dialogue with First Nations communities.

We are pleased that Ausgrid is prioritising involvement of the Batabah community as part of the Lake Macquarie LGA engagement in the resilience pilot as part of the Implementation Plan. We also note that there are further opportunities for Ausgrid to continue to engage with First Nations communities in their network area around employment, apprenticeships, training and small business support. As indicated earlier, indigenous small business is an emerging and growing sector and engagement activities with indigenous communities in this reset and beyond could provide valuable avenues for ongoing consultation and collaboration as well as employment opportunities for First Nations communities.

There is also a range of opportunities for collaboration with the other two NSW DNSPs who also have mechanisms in place for First Nations engagement. Network boundaries are arbitrary and often do not take into account community and cultural connections, particularly at the edge of networks.

### ***Consumer engagement not confined to regulatory resets***

It has become clear to the Panel that, due to the nature, extent, and pace of reform within the energy industry, Ausgrid is well served to continue its deep engagement with customers leading up to the new regulatory period and also throughout 2024-29. Given this, it is imperative that Ausgrid document not only the processes and nature of the engagement but also record how this engagement shapes and influences outcomes delivered to individuals and customers. Documenting these changes between the formal regulatory periods is important to show both the community and

the AER that Ausgrid is actively engaged with the community in delivering services that meet the evolving needs and preferences of its customers. The Panel also believes that this will better show the AER the changes that have occurred between regulatory periods, thus enabling Ausgrid to show the extent of the changes that have occurred. This is much better suited to the current energy landscape and also gives a better line of sight to the AER about the nature and extent of Ausgrid's response to customer expectations, rather than these all being caught up within a short time frame once every five years.

With this in mind, and with a particular focus on the quiet voices, we request Ausgrid document the consumer improvements that have occurred through the BAU activities for special interest groups, such as CALD and indigenous communities. This could lift up the pain points that have been revealed and Ausgrid's response.

The Panel also believes it is important through the next regulatory period for Ausgrid to map an engagement line that loops back to the community about the progress on fulfilling the commitments outlined in the Proposal. This enhances the consultation structures that have been developed and, in turn, lay the foundations for the next regulatory reset period whilst helping embed within Ausgrid a culture of connection and engagement with community. We recommend that where this engagement leads to changes of practice and enhanced or improved customer outcomes Ausgrid document them so as to demonstrate in its next regulatory proposal a continuous improvement culture.

#### ***Continuing to identify and rectify customer pain points***

Since commencing our role we have been impressed by the quality of work undertaken within Ausgrid's Customer Experience and Transformation function. The depth of analysis undertaken has greatly assisted discussions we have had and generates considerable energy for a broad reconsideration of what customers need from the business. To members of the Panel who were involved in Ausgrid's previous reset the establishment of this customer service improvement function within the business has had a profound influence on re-shaping Ausgrid's day to day approach to its customers. We are strongly of the view that Ausgrid should commit to maintain this function beyond the current reset determination because doing so will deliver significant further benefits to both it and its customers.

#### ***Ausgrid's previous commitments***

In our First RCP Report we drew attention<sup>30</sup> to commitments Ausgrid had given in its last revenue submission, lodged in 2018. Our view is that a measure of how well customer voices are embedded in Ausgrid's decision making and planning can be gleaned from an assessment of earlier given commitments. It was our intention to provide that assessment in this report but on reflection we see the commentary being part of a more informed set of suggestions about how future resets can more fully embrace the needs and preferences of customers. This commentary will be provided by us in 2023.

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<sup>30</sup> See First RCP Report Chapter 12 at pp 67-68

### **Case study - Vegetation management change of practice – No Go Zone (NGZ) trial**

Vegetation management is a critically important day to day obligation for Ausgrid and it works closely with local government to ensure mandated clearances around the low voltage network are maintained. Complaints to Ausgrid in 2017/18 about the speed and quality of work undertaken by contractors led Ausgrid and the NSW Department of Primary Industry and Environment to explore alternative management practices and Sutherland Shire subsequently agreed to trial a new approach.

Previously, all vegetation management work was co-ordinated through Ausgrid. The NGZ trial allowed Sutherland Shire to directly engage Accredited Service Providers (ASPs) and feedback was sought after 12 months. According to Local Government NSW, Sutherland Shire reported the trial enabled an immediate response to emergency and urgent tree works, a significant reduction in red tape and administrative burden and increased positive feedback from residents.

The reform shows how multiple benefits can be achieved by inviting feedback on performance and acting on the feedback. The NGZ trial has delivered improved customer satisfaction and response times while also reducing costs.

## Part 2 – Ausgrid’s Proposal

### 2.1 Preliminary comments on revenue

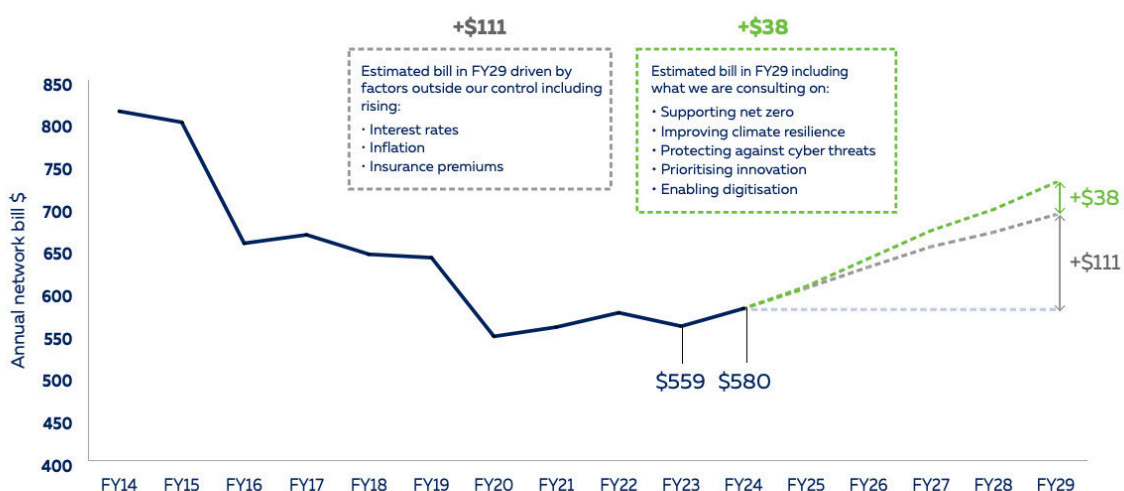
A key feature of Ausgrid’s development of its Draft Plan was its focus on deep engagement with customers on matters that are within Ausgrid’s control that customers value and can influence. These matters are:

1. Resilience;
2. CER (or DER) integration (also referred to as Net Zero by customers);
3. Customer Service;
4. Innovation;
5. Cyber Security;
6. ICT; and
7. Other factors impacting affordability.

Ausgrid presented all those engaging on the Draft Plan, including the participants in the Town Hall, with the following Figure from the Draft Plan (p.13) which showed that:

- expenditure within customers/Ausgrid’s control (e.g. resilience, CER integration, customer service, innovation, cyber security and ICT) would add \$38/yr to the average household network bill in FY29, and;
- increased costs outside of Ausgrid’s (and therefore consumers) control (rising interest rates, rising inflation and insurance premiums) would add \$111/yr in FY29 on to the average household network bill.

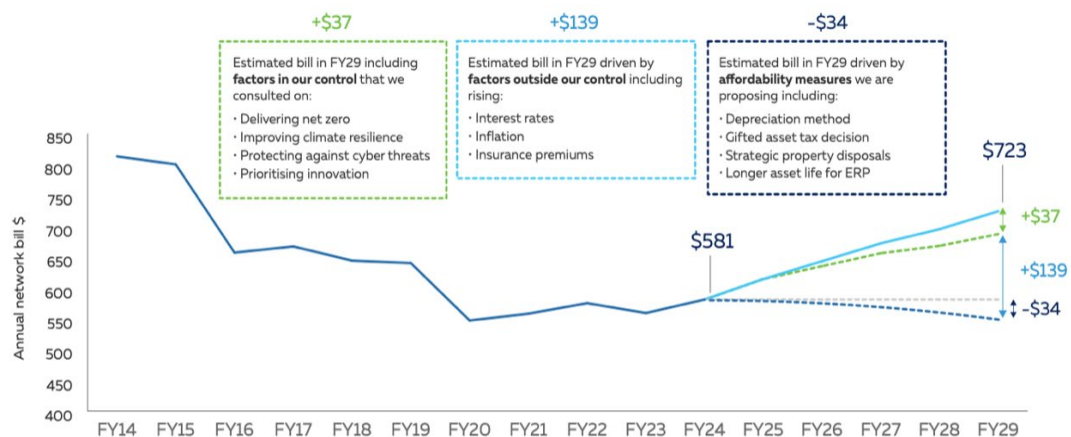
**Figure 1.2.1 Drivers of potential increases in household network charges (\$ nominal, excl GST)**



**Note:** Ausgrid total network charges include distribution plus pass through of transmission costs and the NSW Climate Change Fund. In FY24 our estimate of total network charges is \$580.

These figures have since been updated in the Proposal. Ausgrid's response to customer feedback on these measures will result in an aggregate \$37 (\$38 in Draft Plan<sup>31</sup>) increase to average household network bill in FY 2028-29, the last year of the Proposal period. This revised information is set out in the Proposal (p.12) in the following Figure:

Figure 1.3.1 Drivers of potential increases in household network charges (\$ nominal, excl GST)



**Note:**

- Ausgrid total network charges include distribution plus pass through of transmission costs and the NSW Climate Change Fund. In FY24 our estimate of total network charges is \$581.
- Bill calculated using 5,000 kWh per year, on EA010 to FY23 and EA116 from FY24 onwards.

The influence of factors outside of consumers or Ausgrid's control, especially rising interest rates and inflation, will add \$139/yr (\$111 in the Draft Plan) to the average household network bill in 2028-29, after taking into account the affordability measures totalling \$34 (not included in the Draft Plan). Falling interest rates were the major factor behind falling network charges over the previous 10 years.

We acknowledge that these six areas<sup>32</sup> which consumers can influence do not fit neatly into the AER's building block approach and contain both capex and opex. We also note that as a result of the Software as a Service (SaaS) accounting change expenditure trends have become more complex as capex is decreased and SaaS opex has increased. We admire Ausgrid's attempt to represent the shifting interrelationships between its expenditure programs, capex and opex in this Sankey diagram<sup>33</sup> on pp 62-63 of its Proposal:

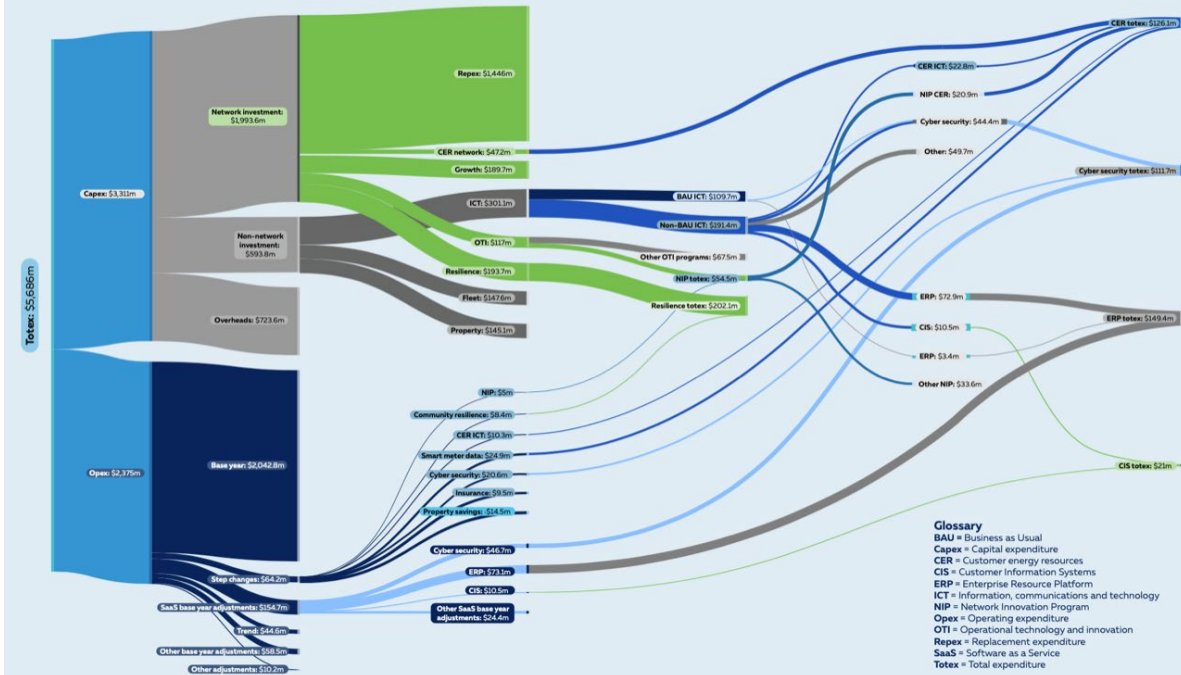
<sup>31</sup> The original \$38 and \$111 figures used in the Draft Plan and subsequent engagement were discussed in Sections 1.2 and 1.3

<sup>32</sup> The Figure from p. 12 above combines customer service and ICT into enabling digitisation – hence there are only 5 categories described in the \$37

<sup>33</sup> See a description on this diagram methodology [here](#)

## Interrelationships across our proposed expenditure

To help you navigate our Regulatory Proposal, this figure summarises where you can find information on each expenditure category and the other matters we are required to address in our proposal.



Part 2 of our report details the way that customers informed this process and presents the discussion on a totex basis for each of the seven factors listed above, finishing with a discussion of the TSS. We make observations about the more conventional reset building blocks in Part 3.

Seeing the potentially large impact of these external factors, the Panel sought to engage with Ausgrid on how it might be able to offset these rises to some extent through cost savings and improved productivity. This involved developing a new approach to considering productivity through a holistic approach to both capex and opex. Section 2.8 discusses our approach to productivity and the factors leading to the reduction of \$34/yr for the average household bill shown in the above figure.



## 2.2 Responding to customer preferences: Resilience

Ausgrid's Draft Plan included a commitment to invest up to \$204m (now \$202.1m) on climate resilience initiatives. The proposition was tested at the Town Hall in October and 90% of respondents reported either 'Like It' or 'Love It'. Since then we have been working with Ausgrid to align the proposed investment with the Resilience Framework which we co-designed with Ausgrid earlier in 2022.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on the future development of Ausgrid's resilience program. Some of the key advice is:

Urban areas already well served - so prioritise non-urban areas

The programme looks good, please reduce cost

Strong emphasis on community/individual independence and response, relative to network hardening.

Importance of better communication in emergencies - alternative ways of dealing with extreme heat

Prioritise Community based solutions

Partnership is a way to save money to get better and cheaper outcomes eg CSIRO; Councils; Aged Care providers through their workers

Ausgrid received feedback on the Draft Resilience Framework from three organisations and the AER. The City of Sydney supported Ausgrid's proposed co-funding of Aerial Bundled Cable (ABC) to replace overhead low voltage lines on the basis that this was an effective means of helping Councils achieve the target of 40% canopy cover in order to tackle urban heat. We acknowledge that when ABC is installed as a replacement for traditional overhead lines it potentially facilitates increased canopy coverage but this can take a number of years to be realised, and at a cost of several thousand dollars per span is not necessarily the most efficient use of the funding. It also remains the case that Councils are able, at substantially lower cost, to invest in additional tree planting along road reserves that have no electricity assets in order to achieve their canopy cover objective. The ABC co-funding plan is discussed in greater detail later in this section.

The Committee for Sydney made a number of useful observations including the need to remind customers that outages will continue to occur and that communities need to be ready to cope with them. A salient point that can be drawn from this feedback is that as climate impacts grow, maintaining network reliability becomes more difficult. In turn, the electricity industry's long held objective of maintaining reliability may become more challenging.

Energy Consumers Australia (ECA) observed the need to safeguard against resilience investment becoming a new means of realising an old problem, namely network gold plating. This risk has been



recognised by us, particularly in some of the modelling which was undertaken by Ausgrid and discussed with us through 2022. The conventional approach to valuing the benefits of any network investment is unserved energy calculation and this will always favour investment in more populated areas of the network. It is the case, however, that resilience concerns tend to be greater in less populated areas of the network. The interdependency of services and the reliance customers living in less populated parts of the network have in the services is discussed below.

The AER's feedback to Ausgrid was that it welcomed the detailed work in the Draft Resilience Framework and that the Resilience Framework is consistent with both the National Electricity Objectives (NEO) and, importantly the AER Resilience Note. The AER urged Ausgrid and the Panel to take into account ECA's feedback in finalising the Resilience Framework.

Ausgrid and the Panel have reflected all this valuable feedback in the final Resilience Framework and in the Implementation Plan.

In late-2022 we continued to discuss with Ausgrid its climate risk modelling with a view to identifying the quantum of investment that could be justified. Agreement was reached on trialling the Resilience Framework across three LGAs in 2023 under the Implementation Plan. More information on the trials will be available in early 2023. While the trials are underway the funding envelope of up to \$202.1m (\$194 capex and \$8.4m opex step change) remains as a placeholder in the Proposal pending the development of a detailed business case to be submitted to the AER later in 2023.

### ***The need for purposeful, fair and sustainable resilience partnerships***

As discussions about resilience have progressed, we have become increasingly aware that Ausgrid's role in developing a more resilient network is necessary limited, and that recognising this limitation is important if a purposeful, fair and sustainable outcome is to be achieved for customers. Two practical examples illustrate this point. The first arose in discussions with Ausgrid about the impact of flooding on network assets. In describing the damage floodwater does to underground assets in newer estates Ausgrid staff related the near failure of a flood levee in Singleton. The 2.7 km levee protects the town, including Ausgrid's underground assets which service new estates, from Hunter River inundation. It was originally constructed by the NSW Department of Water Resources in 1964 and extended twice by the Singleton Shire Council in the 1980s, with a section rebuilt to a higher level based on updated flood information.



Ausgrid does not own or manage the Singleton flood levee. It is not required to contribute to the maintenance of the levee and the business has no statutory or legal responsibility for the levee. However, Ausgrid's network performance is critically dependent on the levee continuing to prevent floodwater inundating its underground power assets, an outcome that would take several days to rectify. The community's resilience in this example depends on the levee being maintained properly but its maintenance requirements are the responsibility of a party unrelated to the electricity distributor.

A second example of interdependency arose from discussions with regional and rural customers. We have heard the frustration customers living in these areas experience when electricity supply is lost during a major event, as much for the impact it has on phone and internet services as anything else. In the real life experience of customers, electricity and telecommunications services are intertwined. Land lines are increasingly provided through the internet, not traditional phone lines, and the internet requires electricity to function. Land lines are not available as a back-up when an electricity outage prevents mobile phone recharging. Notwithstanding dialogue over a number of years between Ausgrid and telco providers, some of which was facilitated by Resilience NSW<sup>34</sup>, the electricity reset process doesn't oblige telecommunication businesses to be part of the resilience

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<sup>34</sup> On [16 December 2022](#) the NSW Premier confirmed that Resilience NSW would be disbanded and that some of its functions will be absorbed into the newly created NSW Reconstruction Authority

conversation or to contribute any funding to improving the performance of its assets during prolonged supply outages.

We have come to appreciate that the resilience conversation Ausgrid is undertaking with its customers has, in effect, become a clearing house for a range of concerns for which Ausgrid is only partially responsible and in some instances just as dependent as its customers on the actions of other agencies if its assets are to perform as customers would expect during challenging weather conditions. To not recognise this point risks Ausgrid becoming, by default, the resilience actor of first resort, bearing both higher costs (paid for by its customers) and greater responsibility than it properly should. Avoiding this requires careful consideration of how the responsibility for resilience should be shared among various parties.

We believe that Ausgrid's customers are best served when all utilities and authorities with responsibilities that impact directly and indirectly on the electricity network acknowledge their shared responsibility. Through acknowledgement comes the opportunity to develop purposeful partnerships that aim to reduce the vulnerability of the community to climate induced interruptions however they may materialise. Conversely, the absence of purposeful partnerships will result in the sub-optimal mitigation of risks.

#### **Case study – Narrabeen storm and prolonged outage December 2021**

A good illustration of shared responsibilities was the late-2021 northern beaches storm. Strong winds caused a tree to fall into an Ausgrid substation in Narrabeen, resulting in a prolonged outage to thousands of customers while the substation was repaired. Other damage arose when roofing material blew off multi-story apartment blocks into overhead high voltage lines, causing them to short and disrupt supply. Both incidents were not unpredictable: trees get blown down in storms and roofing ties in seaside suburbs are prone to corrosion.

A resilient network is achieved when the electricity distributor alerts other parties to network risks and these parties take practical steps to mitigate them. In the case of large trees adjacent to critical infrastructure like substations and switch yards, active pruning, or removal may be required. For nearby multistorey dwellings with metal roofing an education and compliance program around the standard of roofing ties may be prudent.

We believe that network resilience, something Ausgrid customers strongly support, can only be achieved when Ausgrid and other key resilience actors first develop purposeful partnerships from which a coordinated series of actions can be developed. Where additional funding is required to achieve the desired level of network protection, parties to the agreement should contribute fairly. We do not anticipate that developing a range of resilience partnerships along these lines will be easy

or quick, but it is a fundamental step in developing fair and sustainable resilience investment that deliver the best value for what Ausgrid customers are prepared to pay. This is a key feature in the Resilience framework. Over coming months as we progress with Ausgrid its resilience investment plans in three LGA based pilots we will be encouraging collaboration and co-funding outcomes.

### ***Aerial Bundled Cable initiative***

The Panel accepts that notwithstanding the risk mitigation that can be achieved through purposeful partnerships, Ausgrid will always need to consider investments in strengthening the capacity of its largely overhead assets to withstand changing climatic conditions. Wind presents continuing challenges, particularly in relation to vegetation which is blown onto bare conductors. As part of its proposed \$202.1m investment Ausgrid has indicated an investment in the order of \$13m for a local government partnership which would enable additional replacement of overhead low voltage lines with ABC. Prior to the publication of its Draft Plan Ausgrid proposed the funding be offered in the form of a subsidy to councils according to the municipality's canopy cover, a proxy for the exposure of the residents of the municipality to urban heat. The Panel raised concerns about the rigor of this proxy and Ausgrid has advised us that it is considering changing the proxy to urban heat mapping indexes.

We support the partnership approach but have outlined to Ausgrid our concern that ABC may not be the best treatment in all cases and that there may be other more cost effective ways in which councils can achieve canopy cover growth. We are also not certain that the funding will generate a significant amount of co-funding given the proposed subsidy ranges from 50% to 75%. That said, the support provided by councils for the initiative speaks to the potential value of a co-funding model in reducing the exposure of Ausgrid assets to weather events.

Changed activity patterns in areas featuring long established above ground electricity assets has exposed them as both potentially hazardous to pedestrians and motorists and a detraction from the amenity that residents instinctively seek. This has raised the possibility that other parties may be prepared to co-invest in the treatment of the assets in ways that improve network resilience. We are aware, for example, that there may be greater interest in property developers contributing to undergrounding of lines than currently exists if an incentive is made available to them. At the same time we acknowledge that Councils have the power to require undergrounding as part of development application approvals. We believe that Ausgrid's indicative \$13m investment for ABC overhead line treatment might, with further engagement of Councils, developers, homeowners and others, attract significantly greater co-investment and that this will ultimately contribute to an even more resilient network benefitting customers.

### ***Building Better***

By adopting the Resilience Framework to guide its investment Ausgrid has also acknowledged the need to consider every asset investment. Through the course of our engagement we have noticed that distributors have a different mix of assets. Ausgrid's concrete pole fleet (1.2% of total fleet) is less than other distributors. While the saline air in coastal locations does not always suit concrete poles, its heavy reliance on wooden poles may, in some instances, need to be tempered to achieve a physically more resilient network. Similarly, the anticipated increase in hot days and consecutive hot days may justify new transformers of greater capacity than in the past to ensure they are not as constrained when anticipated unfavourable conditions eventuate. These considerations and the

potential enhancements to network design standards will be incorporated into the work that we will undertake with Ausgrid on trialling the Resilience Framework across the three LGAs in 2023.

***Conclusion***

While this element of Ausgrid's Proposal is still under development we are confident it has the support of Ausgrid customers because it responds to their preferences as expressed through the customer engagement program. We believe that with appropriate further work the resilience investment will be capable of acceptance by the AER.

## 2.3 Responding to customer preferences: CER Integration

The investment proposed by Ausgrid in Customer Energy Resources (CER) was described as Distributed Energy Resources (DER) in Ausgrid's Draft Plan, the materials for the engagement on the Draft Plan (including the Pillars at the Town Hall) and in the First RCP Report. We acknowledge that Ausgrid has made the change of terminology to CER to better describe the relationship between the investment and the aspirations of its customers.

In its Draft Plan Ausgrid outlined a plan to invest up to \$153m<sup>35</sup> (now \$126.1m) totex to help drive its business towards a Net Zero future in which renewable energy would play a more important role. The expenditure was to support an additional 590,000 customer energy assets (rooftop solar systems, batteries, EVs and controllable hot water loads) to be connected to the grid by 2029 and lay a platform for a further 2.3 million such connections beyond then.

At the October Town Hall this aspect of the Draft Plan was discussed with the qualification that due to the varying progress of the business cases reflecting components of the investment (as well as the adoption of the [AER's CECV methodology](#)<sup>36</sup>), a forecast expenditure closer to \$110m was being developed. Ausgrid described this as a range of between \$110m and \$153m which provided participants with a more accurate sense of where Ausgrid was in developing the proposed investment. At the Town Hall the range was strongly endorsed with 83% of participants providing either a 'Like It' or 'Love It' response.

Participants were also asked to express their level of comfort with Ausgrid's approach to utilise non-network investment tools first, to better drive utilisation of the network before investing in the network. Over half of the respondents indicated that they 'Loved' the approach that Ausgrid was intending to take. One participant indicated that they could 'Live With' the approach. There were no respondents who indicated they would 'Lament' or 'Loathe' the approach suggested. Reasons for the choice ranged from 'It's a no brainer option - most cost-effective solution' to 'It's nice and balanced' and 'It just makes sense with a view to the future'.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on Ausgrid's proposed CER Integration program under the heading 'Net Zero'. Some of the key advice is:

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<sup>35</sup> This comprised \$96m in DER-related network capex, \$34m in ICT capex on DER enabling technologies and \$24m opex step change for smart meter data

<sup>36</sup> The difference between the AER's preferred methodology (developed by Oakley Greenwood) and the networks' preferred methodology (developed for the Energy Networks Association by Houston Kemp) and the Panel's reasons for supporting the AER's methodology were discussed in detail in the First RCP Report Appendix D at pp 73-74



Partnership with other institution, government agency, council to faster adoption on Solar, EV, batteries

Working with government and social housing to help educate everyone including the low income and vulnerable population on how they can be involved in the drive to Net Zero, how they can get a smart meter, etc.

.....explore other initiative that could contribute to Net Zero

Suggestion to prioritise community batteries in areas with high density, heritage limitations, lots of renters, ... so that they can benefit from renewables and reduced cost.

### ***Changes since the Draft Plan***

Figure 5.7.7 in the Proposal accurately summarises the clear support that Ausgrid received to its CER Integration investment. At the Town Hall customers questioned why Ausgrid had introduced the range of \$110m as they had previously given their clear support for the \$153m program. The Panel is very pleased that Ausgrid agreed to follow the advice in the First RCP Report that it should adopt the AER's CECV methodology. This has resulted in a reduction in the forecast expenditure to \$126.1m totex.

CER Integration is a new category of expenditure for Ausgrid this regulatory period and is based on the development of new cost benefit modelling it has developed.<sup>37</sup> Progress on the development of this modelling, including the assumptions and benefit categories, has been discussed with the Panel several times in the last 12 months. We acknowledge the detailed work of Ausgrid staff in responding to all our questions and are not surprised there have been changes in the forecast during the development of the Draft Plan and the Proposal.

In the course of our discussions Ausgrid shared with us its plan to include an assumed benefit of \$30 per tonne emissions reduction, which is consistent with the rate in the NSW Roadmap modelling. In August 2022 the Energy Ministers announced that the NEO would be amended to include an emissions reduction objective. A [draft bill](#) is currently open for consultation. The Panel understands why Ausgrid is seeking to include emissions reduction benefits within its network planning and the average \$30 per tonne seemed reasonable. However we expressed concern that by Ausgrid including this in its CER integration modelling that:

- It was pre-empting a change to the NEO; and
- consumers risked emissions reduction benefits being counted multiple times.

We look forward to the AER providing guidance to Ausgrid on both the appropriate emissions reduction figure and how it should be included in Ausgrid's CER modelling.

On 17 November 2022 the Panel attended a deep dive on the final CER Integration modelling underpinning the forecast in the Proposal. We are reassured that sensitivity analysis showed that

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<sup>37</sup> This was why Ausgrid excluded DER Integration from its Early Signal Pathway Expression of Interest with our support

the CBA to support the \$126.1m forecast for the CER Integration was positive, even when excluding the emissions benefits.

### ***Smart meters a priority***

We are strongly of the view that the full benefits of CER will only be maximised through an accelerated smart meter roll out. To this point in time we understand only 26% of Ausgrid customers have been provided with a smart meter, a rate behind Tasmanian and Victorian electricity customers. Given the potential cost savings that advanced metering provides customers, it is vital that the rollout in New South Wales be accelerated. We acknowledge that the authority to do this does not lie with Ausgrid. Unlike Victoria where new generation metering technology has been in place for almost 15 years following a State Government directive, NSW provides electricity retailers with the prerogative as to when and where the new meters will be deployed. We believe this is an unhelpful situation for customers and encourage the State Government to put in place measures that expedite the roll out. We are also hopeful that the current [AEMC metering review](#) will result in a decision requiring Ausgrid to develop a legacy meter retirement plan.

### ***Value for consumers in a strong CER Integration program***

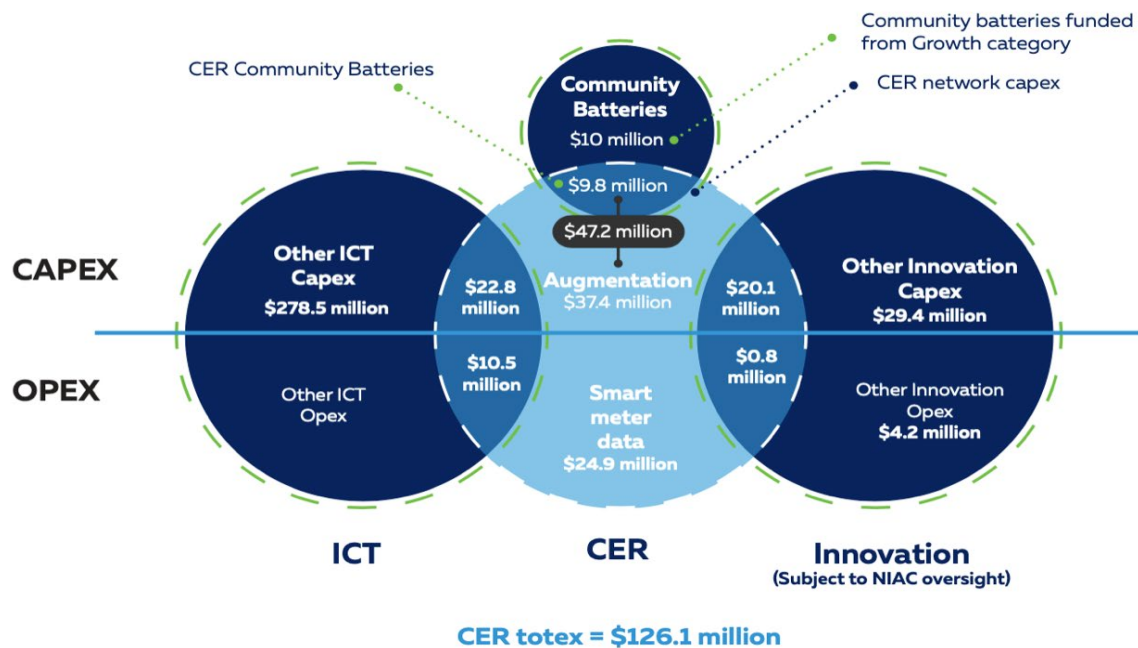
The Panel strongly endorses Ausgrid's integrated approach to CER Integration. This includes investing in ICT capability for this regulatory period and as a foundation for future localised pricing reform and Distribution System Operator (DSO) capability in 2029-34, the use of opex initiatives, the introduction of innovative tariffs, dynamic connection agreements and its hierarchy of potential responses to managing CER challenges. This is an area where it is critical that Ausgrid remain dynamic, innovative and responsive. The opportunities for customers in the transition if Ausgrid can maximise innovation are highlighted in the NIAC<sup>38</sup> Report discussed in Section 2.5 as well as in the following figure from the Proposal (p.86):

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<sup>38</sup> The Network Innovation Advisory Committee (NIAC) is an Ausgrid Advisory Committee, drawn from membership of its CCC. It was formed in 2019.



Figure 5.7.2 Our breakdown of CER integration expenditure (\$m, real FY24)



The integration of CER is driven by both government policy and community and individual expenditures, much of which is outside of Ausgrid's control. The Panel supports Ausgrid's approach to lay a foundation to respond to the uncertain take up environment, both in terms of investment and potentially new technologies. As we discuss further in section 2.9 on Pricing and in the First RCP Report, the Panel strongly believes that effective CER integration with the innovative pricing options in the TSS can lay the foundation for additional consumer value. In addition to the important work that NIAC will be managing on CER enabling technologies in the 2024-29 period, the Panel will be recommending that the CCC and the Pricing Working Group (PWG) (discussed in Section 2.9) seek regular briefings from Ausgrid on CER take up and the effectiveness of Ausgrid's approach to managing CER challenges including take up of innovative pricing arrangements.

### Conclusion

We are confident this element of Ausgrid's Proposal has the support of Ausgrid customers because it responds to their preferences as expressed through the customer engagement program.

## 2.4 Responding to customer preferences: Customer Service

We commend Ausgrid on the effort it has been making over recent years to improve customer service levels and have noted that not all customer service improvements generate a net cost on the business. Some produce outcomes that are beneficial for customers and the business at no additional cost or result in a reduction in cost. To illustrate this point we note that over the past two years Ausgrid has significantly reduced average complaint response time from 40 days to 10, a change that has the welcome consequence of reducing Energy & Water Ombudsman NSW (EWON) complaints and charges by 25%.<sup>39</sup> Observing this and other improvements has enabled us to appreciate the sincere efforts across Ausgrid to improve the experience customers have when they contact the businesses seeking assistance.

### Case study – service line safety compliance

Not all measures that achieve a more resilient network require new investment. A revamp of the procedure Ausgrid uses to alert property owners of service line safety defects resulted in a big improvement in compliance. For the 2021/22 summer Ausgrid achieved 91% rectification by customers following notification, a big improvement on the 25% response just two years earlier.

In its Draft Plan Ausgrid outlined a commitment to invest \$20m (now \$21m) to improve customer service through more timely and accurate information, a figure that had been reduced following early VoCP feedback. When the Town Hall participants considered the revised investment in October they provided mixed feedback. While 44% expressed a 'Like It' or 'Love It' response, the strongest sentiment (38%) was 'Live With It.' We noted that this response was the least impressive on the day, it did not mean that customers disagreed with it, only that they were less impressed by it than other elements of the Draft Plan.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on Ausgrid's proposed customer service initiatives. Some of the advice is:

What are the benefits from this huge increase in money to be spent?

Customer service improvement can lead to better customer retention that improve revenue

Need to ensure human customer service experience. If cuts need to be made, this area should be reduced in funding.

Quick response in case of emergencies and in the language of customers

<sup>39</sup> This may also reflect the fact that Ausgrid's Chief Customer Officer has been a non-executive director on the EWON Board since late 2019

By contrast, Ausgrid's large C&I customers gave strong support to this aspect of the Draft Plan as driving improved connections and managing outages with timely information are beneficial outcomes for them.

### ***Customer Service Incentive Scheme (CSIS)***

As noted in our First RCP Report<sup>40</sup> Ausgrid had responded positively to our support for a new CSIS, an initiative which continued to generate positive feedback from customers. Discussion between us and Ausgrid focussed on various elements of the scheme.

In November 2022 Ausgrid reported to us its concern that there was insufficient data available to establish a workable base line for the proposed performance measure 'average time to resolve quality of supply issues' (measure 1a in the Draft Plan). In arguing that it be removed from the scheme Ausgrid noted the AER's requirement that any incentive scheme measure needs to have accurate, reliable, objective and auditable data. Detailed investigations indicated this was not the case in respect of the measurement and, after significant discussion, we reluctantly agreed that the measure should not be included. We encouraged Ausgrid to continue developing data sets capable of supporting the measure ahead of the next reset in 2029.

At our December 2022 meeting with Ausgrid in-principle agreement was reached over the three key service areas to be included in the proposed CSIS:

- Core Services (Planned Outage Service Ease for Urban and Regional customers),
- Connections timeframe, and
- Customer Care (Website First Visit Resolution).

Each of the four components across the three service categories is proposed to have an annual reward/penalty of approximately \$2.175m (0.0125%) which together amount to the AER's maximum allowed 0.5% revenue at risk for Ausgrid.

We agreed with Ausgrid that the base performance figures for each element of the scheme would not be finalised until as late as early-2024 as this would allow a larger set of periodic measurements to inform the decision. At the same time it was agreed that for the website satisfaction measurement a dead-band would be used so as to avoid a situation in which Ausgrid might be rewarded for achieving less than 50% customer satisfaction. The dead-band will operate in a way that avoids this outcome and only rewards Ausgrid in years when more than half of the customers surveyed about their website usage experience report their satisfaction.

Ausgrid agreed that the annual performance data which underpins the scheme would be independently audited and proposed that the CCC be provided with that data. We welcome this commitment and believe all service incentive schemes require some form of objective oversight if customers are to have confidence that their distributor is being held to account for the commitment given to improve service levels.

Looking back on the engagement with Ausgrid around the CSIS we are impressed not only by the commitment of many staff to help formulate better outcomes for customers, but by the impression the discussions have already made on the business. It seems to us that customers will not have to

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<sup>40</sup> See [First RCP Report](#) Chapter 8 at pp 42-43

wait until 2024 for the benefits of the scheme to materialise as every discussion we have had to date with Ausgrid about the scheme has revealed a greater understanding within the business about factors that can drive positive change. A further reflection on this part of our engagement with Ausgrid has permitted us to conclude that no CSIS arrangement is perfect. All reflect a stage in the journey from existing customer service standards to something better. While the components of the proposed scheme align with what we have heard from customers we anticipate that in future, as the CSIS scheme is hopefully enhanced further, elements will be refined and added to reflect customer needs at that point in time. Ausgrid has agreed to share the revised CSIS metrics with the proposed Town Hall engagement in April 2023 to ensure customers understand and support the final design of the scheme.

### ***Face to face service***

A constant theme throughout our engagement has been the desire of customers to deal with an Ausgrid employee rather than an automated/AI interface. The VoCP exemplified this sentiment when pushing back against Ausgrid's plan to invest in a 'chat bot' service. As we have contemplated this feedback it has occurred to us that Ausgrid might consider at some stage trialling a face to face advisory service with a focus on the many thousands of small business customers, as they have struck us as having a hunger for information about their electricity supply and a need to find energy efficiencies within their businesses. In canvassing this idea with Ausgrid we are mindful of the AER's ring fencing rules which restrict distribution businesses from engaging in contestable work. However, we feel that there is a sufficient range of information and assistance directly relevant to the supply service that all distributors have with their small business customers to justify consideration of the initiative, and that the information that could be provided is not information that would be held by any other party.

As a guide the following areas of interest have arisen in discussions we have had with customers in the past 18 months and/or observed as being raised in discussions Ausgrid has initiated:

- Network tariff check,
- Solar connection assessment,
- Network point of supply safety assessment,
- Localised feeder line reliability information,
- On-premises supply quality advice, and
- Upcoming planned outage advice.

In part this need became apparent during small business street walks we attended where businesses would raise questions about maximising their solar investment or other tariff upgrade or efficiency questions. The following photo was taken by a Panel member of one of the joinery businesses that Ausgrid visited in the Tuggerah street walk. As noted in the RCP Observer report for this engagement:

*'Business established in 1999. 200 solar panels on the roof which can power the whole business in the middle of a sunny day. Was unaware how to maximise use of solar and we made suggestions about splitting lunchtime and running one machine throughout lunch rather than exporting solar in middle of the day. Ausgrid's initial visit was quite productive, and we returned the next day for further discussions with one owner, regarding his desire to progress renewable energy use in the business.'*

*They are a relatively energy-intensive business, with their energy cost tempered by a 50kW rooftop solar installation that was put in place about 5 years ago...'<sup>41</sup>.*



### ***Little things matter***

In the same vein we have raised with Ausgrid the importance of customers always being dealt with empathetically by Ausgrid staff. Empathy training is a very helpful means of ensuring that call centre staff always deal with customer calls in a positive and supportive way.

### ***Customers whose CER expectations cannot be satisfied***

While the vast majority of Ausgrid's customers who seek to make a CER connection are likely to continue be able to do so, we have raised with Ausgrid our interest in ensuring that those who are rejected receive an explanation as to why that decision was necessary. Network capacity is a constraint in some areas but it does not follow that every customer will understand this or be provided with accurate information as to when the constraint will be addressed.

We think it is important that Ausgrid develops a fair and consistent procedure when it finds itself unable to agree to a customer's CER request. Customers should be entitled to a detailed explanation as to why the application was declined, a right of internal review of that decision, and an explanation as to when Ausgrid anticipates that the constraint will be addressed.

### ***Customer experience continuous learning***

Since the Panel's appointment we have been impressed by Ausgrid's efforts to analyse customer pain points and reform through redesigned internal processes. It is not easy work but results speak for themselves.

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<sup>41</sup> In the First RCP Report Chapter 4 at pp 22-23 we described the practice that we adopted at the beginning of our establishment of creating independent observer reports for the engagement that Panel members observe. We are happy to make these reports available to the AER if requested.

### ***Conclusion***

We are confident that Ausgrid's CSIS design and customer service investment has the support of its customers because it responds to their preferences as expressed through the customer engagement program.



## 2.5 Responding to customer preferences: Innovation

The engagement with customers around Ausgrid's proposed \$54.5m innovation program (\$5m opex step change and \$49.5m capex) has revealed a level of tension between customers' clear willingness to fund innovation programs, Ausgrid's capability to deliver against that ambition and the AER's approach to this relatively new program. Innovation was the one stand-out area during engagement, where customers were not satisfied that Ausgrid's Draft Plan and proposed \$50m innovation program reflected their preferences. These strongly held customer views reflected a concern that Ausgrid had not gone far enough in the \$50m program and customers were keen for Ausgrid to allocate even more funds.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on the network innovation program. Some of the key advice is:

More work with vehicle to grid implementation

Look at other avenues other than batteries and whether they have long term capabilities

Not enough of spend

Priority of decarb and resilience relative to fairness and lowering cost other ways/actions should address fairness

Ausgrid should engage in innovative practice across all facets of the company . community innovation should be the priority particularly partnership with social organisations.

Trialling should consider geographic and social economic focus

All areas should be considered according to geographic and social economic conditions.

Innovation is super important but I can see how you have doubts about Ausgrid being able to deliver on it usefully good call.

The Ausgrid network innovation program was established as a key new initiative in the current regulatory period. The Network Innovation Advisory Committee (NIAC) was formed in 2019 to assist with the establishment and then to oversee the \$42m (real FY19)<sup>42</sup> capex innovation program to ensure that customers and technical experts were having a direct input into Ausgrid's innovation decision making. The independent NIAC members have prepared a detailed report which strongly supports Ausgrid's proposed 2024-29 innovation program (the NIAC Report) that accompanies the

<sup>42</sup> Ausgrid has advised the Panel that in real FY24 terms the 2019-24 innovation allowance is \$50.5m. The escalation factor from real FY19 to real FY24 is 1.2027

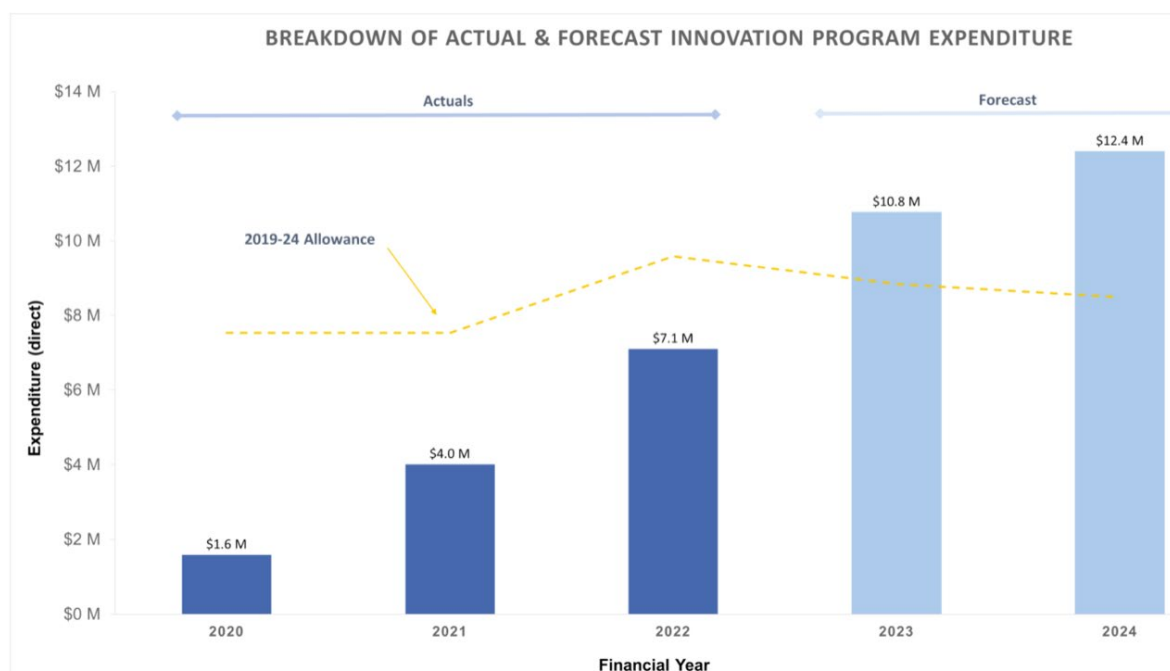
Ausgrid Proposal.<sup>43</sup> The Panel supports their detailed recommendations to Ausgrid on ways in which it can improve the innovation program and more importantly lift its internal capability.

The commentary provided in this section does not speak for the NIAC which operates under its own Terms of Reference.

As the NIAC Report notes, the AER's Final decision in the 2019-24 determination expressed concern and scepticism about Ausgrid's innovation program and the role of NIAC. Ultimately the AER approved the program as there was very clear support from customers at that time for the program. The Panel notes that customer support has increased since the previous AER decision.

At the mid October 2022 Town Hall the Panel explained to customers that we supported Ausgrid's proposed \$50m (now \$54.5m) innovation program rather than a higher program being sought by the VoCP. The Panel's views were informed by advice from the NIAC members on the Panel<sup>44</sup> who did not have confidence that Ausgrid would have the internal capability to deliver a larger program by 2024-29. The following graph from p.10 of the Network Innovation Program project justification<sup>45</sup> shows the expected forecast spend against the allowed \$42m (FY 19\$) revenue in the current regulatory period:

Figure 2 Network Innovation Program 2019 - 24 Actual & Forecast Expenditure



The Panel is not surprised to see the gradual increase in expenditure in the first 3 years of the program. This is because all new programs involve changes to internal processes to support a new form of delivery as well as the establishment of governance and operating principles. The Panel also notes that the recent period of rapid transformation in Ausgrid's BAU processes, planning and

<sup>43</sup> The NIAC Report is Attachment 5.8.h to the Proposal

<sup>44</sup> 4 of the 8 independent members on NIAC are also members of the Panel

<sup>45</sup> The Network Innovation Program and Overview & Justification is Attachment 5.8a to the Proposal




delivering in order to achieve the necessary opex savings would also have impacted the ability to progress additional change at a faster pace.

The NIAC Report and NIAC Mid-term review<sup>46</sup> clearly show the strong emphasis on governance with an excellent reporting system in place to regularly monitor progress. The key issue for the Panel is whether the innovation program is delivering the benefits that customers are keen to see. During the VoCP and the Town Hall meetings we observed that customers see large potential for innovation to help with delivering their resilience, CER integration and decarbonising ambitions. A strong key message from customers was for Ausgrid to maximise partnering opportunities with universities, researchers and across the industry. The Panel notes that the open nature of the NIAC trials and the sharing of information with other DNSPs and collaboration opportunities are consistent with this partnering objective<sup>47</sup>.

As part of the recent Mid-term review of the functioning of NIAC, Ausgrid sought to refresh the innovation principles with NIAC members. The Panel members on NIAC encouraged Ausgrid to broaden customer input by testing both the innovation principles and how they should be weighted more broadly with the Town Hall participants. This is important as these principles, set out in the slide below, will be used to determine which projects are pursued by Ausgrid and NIAC.

## Innovation principles



Here is how we propose to prioritise our innovation projects

Purpose of the principles

- To help us to prioritise direction of \$50m innovation funding

Principle	Example
Improves safety for employees and the community	New technology to detect electric shock hazards
Improves fairness	Improving access to new technology across geography and inter-generational considerations
Accelerates decarbonisation	Improves uptake of CER and reduces carbon
Improves resilience	Improving network resilience against the impact of climate change and improving communities' ability to respond before during and after emergency events.
Lowers costs for customers	Optimises network utilisation, new technology offering alternative to network investments.

With regards to the battery conversation the Panel confirms that consumers are very keen on innovation, research and development. They see that as an opportunity to optimise their own distributed energy resources, whether that be export or load. We believe this links to the tariff conversation and the community battery pilot in NIAC. Customer feedback on these 5 principles sought to give greater weighting to both decarbonisation and resilience, consistent with their overall priorities. They also questioned the use of the term 'fairness' and felt if this was about access or

<sup>46</sup> The Mid-term Review is Attachment 5.8.b to the Proposal

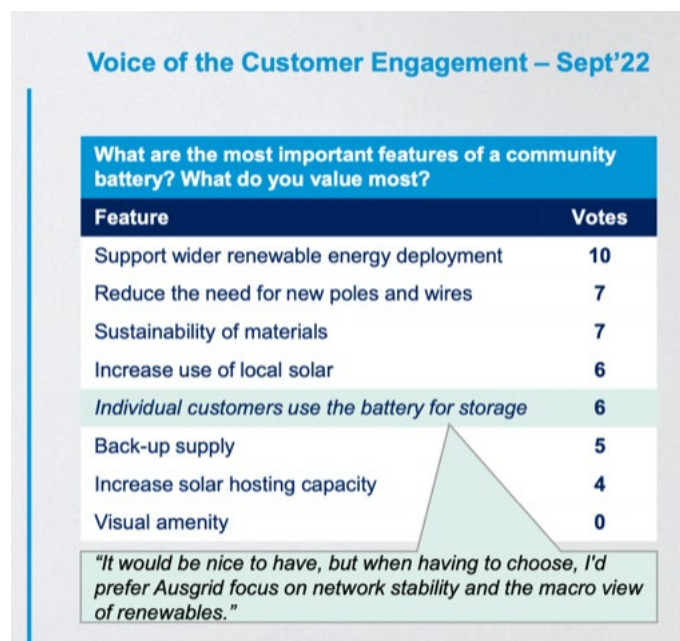
<sup>47</sup> For example Project Edith, which is funded through the innovation program, is a key collaboration project that is delivering important learnings for future tariff reform

equity it should be rephrased. We are pleased that Ausgrid tested this issue with the broader customer segments.

Town Hall participants also strongly supported the proposed innovation expenditure being divided into 3 workstreams as proposed by Ausgrid:

- Safe, intelligent networks – 67%.
- DER support and enablement – 25%
- Community resilience – 8%

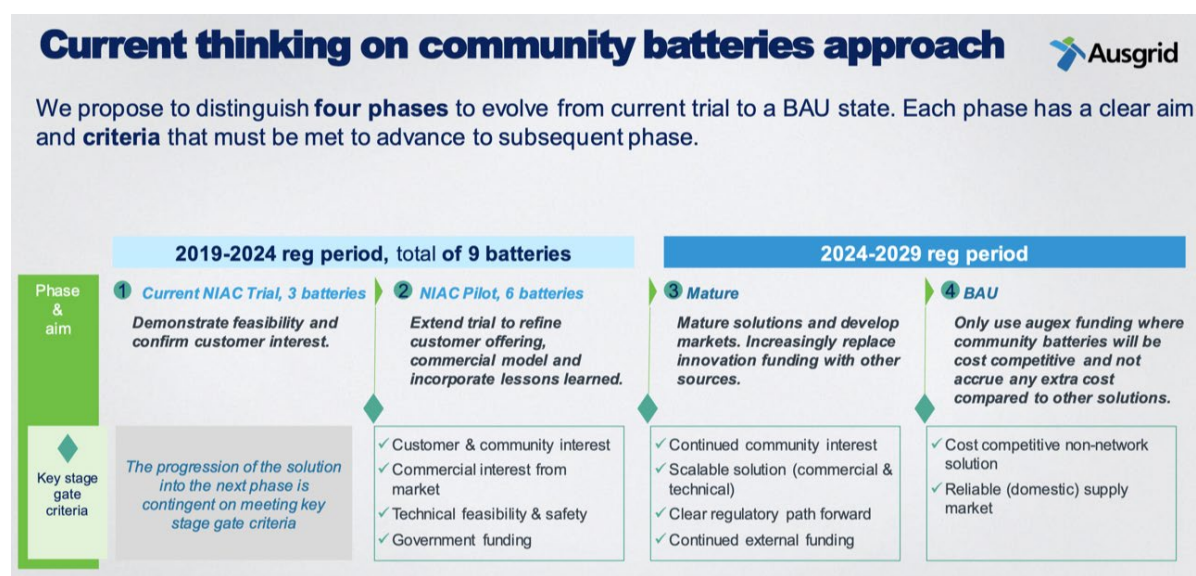
A very significant investment to date by NIAC has been in Ausgrid's community batteries trial, which is reviewed extensively in the Mid-term review and is highlighted in the NIAC Report. The Panel has observed that customers have given strong support to the potential roll out of community batteries. The VoCP was consistently strongly focussed on community batteries in its deliberations and made recommendations for Ausgrid to continue to advocate for regulatory change to enable Ausgrid to roll out community batteries both for community and network needs.<sup>48</sup> The Panel observed customers expressing support for community batteries due to their perceived community value even when they were told the business case for community batteries was not justified by pure economic modelling. Ausgrid has been doing important work to explore what it is about community batteries that customers value. In the September VoCP recall and Deep Dive day customer feedback showed that the contribution batteries make to decarbonisation is most important, even more important than the potential financial savings. The results revealed:



Ausgrid has engaged the RPS Group, under NIAC's oversight, to do further research to better understand customer values and expectations from community battery solutions and the Panel will be interested to review the results.

<sup>48</sup> We discussed the VoCP recommendations in the First RCP Report Chapter 4 at pp 22-23

The Federal Government's [community battery policy](#) will result in partial funding being made available by the Government for numerous community batteries to be rolled out within Ausgrid's network area between now and 2030. The Panel notes that the NIAC community battery trials have provided clear information to Ausgrid and its customers about the potential benefits, design constraints and costs of implementing community batteries. The Panel supports Ausgrid's plan to enhance the innovation trial to a pilot within the innovation program under the supervision of NIAC. The Panel believes that customers are better served from a staged trial-pilot approach before a wider roll out. This approach was shared with the Panel and with NIAC in December 2022 and is reflected in the following visual:



### Conclusion

We are confident this element of Ausgrid's Proposal has the support of Ausgrid customers because it responds to their preferences as expressed through the customer engagement program.

**Case study – Merriwa micro-grid**

A good example of how innovation impacts positively on the lives of customers is found in the Upper Hunter Valley township of Merriwa. Identified by the Panel as a typical edge of network locality whose residents have a keen sense of Ausgrid's strengths and weaknesses, we have followed with interest reactions to both a feeder line upgrade and the proposed micro-grid. The two projects are related as the line upgrade has necessitated constant planned outages, highlighting the town's exposure as an end-of-line community. Ausgrid's \$5.1m micro-grid will provide the town with a valuable supply independent of the network when outages occur in future. Importantly, Ausgrid has consulted with residents about their expectations of what a micro-grid could deliver, and Panel members participated in some of this discussion in November 2022. Consultation is invaluable as it permits insights into what local residents want, challenging and refining what people living outside the town think they need. More broadly, the project speaks to the way Innovation investment can deliver bespoke solutions for different customers across Ausgrid's network.

## 2.6 Responding to customer preferences: Cyber Security

Of all the elements of Ausgrid's Proposal the external environment changed most markedly in the second half of 2022 in respect of cyber security, following revelations that two large Australian businesses, Optus and Medibank Private, were subjected to cyber-attacks resulting in customer records being published on-line as well as offered for sale.

In October, with revelations of Optus' cyber security problems emerging, Ausgrid customers participating in the Town Hall gave strong support for ensuring adequate protections were in place: 87% responded either 'Like It' or 'Love It' when asked to assess Ausgrid's plan to invest an additional \$18.3m of Opex (now \$20.6m) and \$88m in capex (now \$91m) to achieve SP-3 level maturity.

To ensure the response provided at the Town Hall was accurate we requested that Ausgrid provide a clarification to participants. This involved an explanation that Ausgrid, unlike Optus, held very little personal data. In the vast majority of cases other than customer name and address, and details of medical conditions of life support customers, virtually no financial information is retained by the distributor.<sup>49</sup> This, it was explained to participants, made the more likely consequence of any successful cyber-attack on Ausgrid a shutdown of some or all of the electricity distribution system.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on Ausgrid's investment in cyber security. Some of the key advice is:

Ausgrid should ensure the cyber protection processes are well-researched and transparent to customers and stake holders.

Cyber security is a necessity of the highest level.

Wise cyber investment can mean greater network stability/resilience.

To what extent is there a crossover between Cyber and IT - what is being spent where?

Cyber security will only become more important - we should stick with L3 if there is no negative impact on the customer

Invest now, to prevent a greater spend later. Prevention is better than a cure!

We believe that, inexorably, cyber-protection will become even more important for electricity distributors in future. We further believe that customers appreciate this, and that the recent publicised cases involving Medibank Private and Optus have only strengthened this sentiment.

<sup>49</sup> Ausgrid has subsequently informed the Panel that it does hold additional information on customer bank details (only for customers with historical claims settlements), opinions (feedback, complaints, surveys), load information (NMI), load volumes, e-mail, mobile and location (spatial co-ordinates are of the address of an asset, not of a person)

Ausgrid is to be commended for developing a cost benefit case to support the highest level of cyber maturity, something that is consistent with what it has heard from its customers.

The challenge for networks engaging customers around this subject is seeking ways to balance:

- customers' expectations that networks will invest and take the steps necessary to ensure as far as is reasonably practicable that the network is resilient to cyber-attacks;
- the increasing expectation of Federal and State Governments that operators of critical infrastructure improve their cyber security maturity; and
- the DNSP Board's risk assessment frameworks and the availability and cost of cyber insurance cover.

This is a rapidly evolving area which requires a consideration of how this increasing risk should be shared between networks and customers. Our detailed observations on Ausgrid's cyber investment and the Panel's understanding of the current regulatory obligations and Ausgrid's approach to managing this risk are set out in Appendix F.<sup>50</sup> Our thoughts on how cyber security might be managed in future as a revenue reset element are detailed in Section 4.1.

### ***Conclusion***

Noting that the AER will examine the cyber-protection forecast closely and reach its own decision as to the prudence and efficiency of all elements, we are confident this element of Ausgrid's Proposal has the support of Ausgrid customers because, in an environment of escalating concern about cyber security, it responds to their preferences as expressed through the customer engagement program.

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<sup>50</sup> We also discussed cyber security in detail in the First RCP Report Chapter 9 at pp 48-50 and Appendix G.

## 2.7 Responding to customer preferences: ICT

In our First RCP Report<sup>51</sup> we acknowledged that considerable parts of Ausgrid's proposed ICT investment are incorporated into separate parts of the Draft Plan: the proposed CER investment, for example, includes \$34m (now \$22.8m) of the total ICT investment. This section focusses on the ERP which Ausgrid indicated to customers would cost \$143m (now \$149.4m).

We acknowledge the need for an upgrade of the platform as it will replace a number of systems that are or will shortly no longer be fit for purpose as they are reaching end of life status with reducing vendor support. Our concerns have been focussed on three elements of the investment:

- implementation governance;
- project contingency; and
- depreciation.

### **Customer views**

Customer views were sought at the mid-October 2022 Town Hall. Following an explanation of the proposed expenditure of \$143m (now \$149.4m) on a new ERP, panellists expressed satisfaction that both the need for and the benefits of the proposed investment had been adequately explained: 86% responded with either 'Like It' or 'Love It'. This was unsurprising as panellists had not previously expressed any disquiet about the need for a replacement system. We took the opportunity to test two related points with panellists, both of which arose out of our discussions with Ausgrid:

- Should customers be provided with some protection against a cost blow out in the implementation of the new ERP?
- Should the investment be depreciated over a longer period than five years, noting that there was a modest financial benefit to customers in a longer depreciation?

Panellists responded positively to both questions. They believe that Ausgrid should be held to account for any project cost overruns and were supportive of an arrangement which denied Ausgrid the opportunity of requesting as part of its next revenue proposal (2029-34) additional revenue to complete the ERP task in the event of cost overruns that were reasonably foreseeable. Most participants also responded positively to a depreciation change that would benefit them financially. We used their affirmations as the basis of further discussions with Ausgrid which are detailed in the following discussion.

Appendix B sets out the Town Hall participants' specific suggestions to the Panel on Ausgrid's significant ICT program. Some of the key advice is:

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<sup>51</sup> See First RCP Report Chapter 9 at pp 53-54



Firm guidelines and clarity about what is being delivered and how benefit organization and customers

Essential but must be tightly managed

We can't afford to not upgrade system.

Important to do but is there any potential to recover in longer periods.

If the system is not old you have to upgrade sooner rather than later. Can probably argue to recover costs over 10 years. But Prioritize ongoing development . Make sure not delayed for next time.

Support longer depreciation to reflect longevity of investment

### ***Governance principles around ERP implementation***

We first raised the possible need for governance of the proposed ERP investment at a meeting with Ausgrid in early August 2022 as part of our holistic productivity discussions. This followed on from our recognition that while a very significant investment in a new business operating platform was justified, implementation was never straight forward. In the event the planned implementation runs over budget, is delayed beyond its 2027 introduction date or proves to be less successful than anticipated, customers will be short-changed in service output or, worse, be asked to fund additional implementation costs beyond 2029. The Town Hall advice to us was clear – customers do not want to have to pay twice and they therefore support arrangements being put in place to protect them. Since October we have been in discussion with Ausgrid about what a fair and practical set of ERP project governance principles might be and have discussed what role Ausgrid's CCC could play in monitoring the ERP implementation.

In December 2022 we agreed with Ausgrid the following ICT project governance principles:



## ICT Governance focus for achieving customer outcomes

Keeping ICT expenditure prudent and efficient enabling customers to extract maximum value from investments

### ICT Governance Overview

- Purpose:** to deliver customer confidence in our forecasting of ICT expenditure and the realisation of benefits

### Post Implementation Reviews (PIRs)


- Focus** on scope, schedule, costs, expected benefits and share learnings with Customer Consultative Committee (CCC).
- Perform** PIRs on two largest ICT investments ERP (large transformation) and ICT DER (new capability).
- Measure** ERP program progress against Ausgrid's key implementation milestones and good industry practice.
- Demonstrate** application of lessons learnt from PIRs in future business cases.

### Ongoing engagement with CCC

- Update** CCC on Cyber Security maturity level achievement to date as required.
- Share** dynamic pricing benefits realisation progress from ERP Program with Pricing Working Group (PWG).
- Share** key non-recurrent projects for 2029-34 projects at least two years before next period with CCC.
- Share** progress against ten-year expenditure template with material deviations discussed with CCC.
- Report** qualitative benefits realisation progress during 2024-29 and quantify benefits and efficiencies in 2029-34.

### FY30-34 regulatory proposal commitment

- Commit** to our FY30-34 regulatory proposal not including costs for the ERP Program that were reasonably foreseeable at the time of the initial business case.



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### Depreciation

The VoCP feedback on depreciation encouraged us to seek Ausgrid's consideration of a longer depreciation period than the originally proposed five years. As well as the clear preference of customers we believe a longer 15-year write down is justified by both the projected useful life of the ERP asset and the transformational nature of the new platform. The Panel believes that the proposed longer asset life will help to discourage any early replacement, which would pass on extra costs to customers.

Ausgrid received our suggestion positively and advised us in November 2022 that it would propose a 15 year write down in its Proposal<sup>52</sup>, a move that will reduce customer costs by \$3 in FY29. The total cost saving to customers between 2024-29 is estimated to be \$32m. Ausgrid is to be commended for agreeing to this request as Ausgrid has committed not to seek additional revenue in 2029-34 for the ERP Program that were reasonably foreseeable as of January 2023 (see the last principle referring to the FY 30-34 regulatory proposal commitment in the ICT governance principles above).

### Contingency

Ausgrid has included a 20% contingency in the \$149.4m ERP investment and we initially queried whether this was appropriate, our concern being that too generous an allowance could foster looser project governance oversight. Discussions with Ausgrid, reinforced by strong customer feedback at

<sup>52</sup> See p.57 of the Proposal

the Town Hall, led to us seeking the adoption of project implementation governance principles. The contingency will still be subject to the Capital Expenditure Sharing Scheme (CESS) so Ausgrid remains incentivised to only use the contingency if absolutely necessary.<sup>53</sup> Following Ausgrid's agreement of the ICT governance principles detailed above, our concern about the contingency has been addressed.

### ***Conclusion***

In view of Ausgrid's adoption of the ICT governance principles detailed in this section and noting the AER will examine the ICT investment forecast closely and reach its own decision as to the appropriateness of all elements, we are confident this part of Ausgrid's Proposal has the support of Ausgrid customers because it responds to their preferences as expressed through the customer engagement program.

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<sup>53</sup> The Panel discusses the important role of the AER's incentive schemes for ICT projects in the productivity note in Appendix E

## 2.8 Responding to customer preferences: affordability

The AER's regulation of monopoly networks is designed to replicate what happens in a 'workably competitive' market. A key feature of this type of market is the incentive that competition provides to improve productivity and reduce the real level of costs. In our First RCP Report<sup>54</sup> we referred to our interest in pursuing a different approach to considering productivity sharing between Ausgrid and its customers. We considered that the current regulatory approach to productivity – a required 0.5%/yr for opex plus the opex Efficiency Benefit Sharing Scheme (EBSS) incentive and for capex the CESS incentive – should be reconsidered in an holistic way, that is to say capex and opex together. We saw the interdependencies between capex and opex, particularly in the increased risk and uncertainty around extreme weather events and cyber security events.

We are pleased that Ausgrid accepted our challenge. Appendix E describes the approach we proposed to Ausgrid and the outcome of extensive discussions over more than 12 months.

The Panel has concluded that the following package of productivity and efficiency measures combine to provide the appropriate incentive structure on Ausgrid to continue improving its relative productivity performance in 2024-29:

- the opex productivity at the AER required level of 0.5%/yr;
- a range of costs being absorbed in the opex cost base: higher GSL payments; higher recruitment of apprentices and graduates (which together equate to 0.2%/yr improved productivity); and higher potential costs of weather related events that do not meet the 1% annual revenue hurdle for a pass through;
- the improved governance structure around repex that has contributed to a forecast 5% reduction in 2024-29 repex compared with the forecast for the current period;
- the decision to apply the 0.5%/yr productivity factor to capex overheads;
- retaining the current depreciation method;
- adopting an ERP asset life of 15 years;
- the ICT governance principles;
- excluding the application of the CESS and the EBSS to the resilience and innovation investment programs;
- the proposed property rationalisation;
- absorbing increased insurance costs incurred during the period by using the 2024 premiums for the step change; and
- adopting the VPN tax decision (which may have been mandated by the AER in the future).

These measures not only lay a foundation for longer term productivity improvement but are an important contribution to the decrease of \$34/yr for a household customer discussed in Section 2.1.

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<sup>54</sup> See First RCP Report Chapter 9 at pp 47-48 and Appendix F at pp 78-90

## 2.9 Pricing

In our First RCP Report we commented on Ausgrid's Pricing Directions Paper published on 1 September 2022.<sup>55</sup> Ausgrid has an active PWG and five members of the Panel are members of the PWG. Those members have been actively involved with the consultation between Ausgrid, the PWG, customers and the AER in the development of Ausgrid's TSS which details the pricing arrangements for customers through 2024-29.

The commentary provided in this section does not speak for the PWG which operates under its own Terms of Reference.

While noting the process for determining the TSS we think the interdependencies between the TSS, customer preferences and core aspects of Ausgrid's Proposal justify some commentary in this report. Tariff reform is foundational for the emergence and development of products and services that customers have demonstrated strong interest in and support for. Reform generates new market participation as businesses are attracted to opportunities involving new technology, thus stimulating future development of services attuned to the needs and preferences of customers. New tariffs, technology and innovation create customer choice and accelerate the potential for more customers to reduce their energy costs while simultaneously reducing their carbon footprint. Finally, tariff reform that results in more cost reflective tariffs assists the efficient transition to increased CER through efficient network utilisation. The first answer is not always to spend more capex. Rather, it may be to move to more cost reflective pricing. This approach is reflected in Ausgrid's hierarchy of responses to CER challenges (see Figure 5.7.4 at p.88 in the Proposal) where innovative pricing ranks first and network augmentation expenditure ranks 6<sup>th</sup> in the hierarchy<sup>56</sup>.

The Panel notes the significant ambition Ausgrid continues to demonstrate for tariff reform which, once adopted and passed through by retailers, will deliver benefits to customers. In particular Ausgrid has shown leadership in its development and introduction of cost reflective tariffs. That said, we are concerned about the slow roll out of smart meters which, given their enhanced capability, are the means by which customers can take advantage of cost savings that the new tariffs offer. Our concern about the criticality of expediting the smart meter roll-out is mentioned at several points in this report and in our First RCP Report.

We continue to encourage Ausgrid to develop a customer facing narrative that reflects the above mentioned interdependencies and the opportunities they generate for customers. We see important benefits for customers in Ausgrid's TSS and approach to pricing generally, including:

- greater tariff choice provides the opportunity for customers to better manage their electricity through behaviour change (switching some of their electricity usage to the lower cost 'window') or extracting increased value from their investment in new technology, which will reward them if they export during evening peak periods.<sup>57</sup> At a time of widespread rising

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<sup>55</sup> See First RCP Report Chapter 5 at pp 27-29

<sup>56</sup> As we discussed in section 2.3 the hierarchy received strong endorsement by the VoCP

<sup>57</sup> Another example would be to charge hot water or EVs on the controlled load tariff

concern about affordability the opportunity to have greater control over usage and cost is one that customers appreciate;

- new tariffs will act as a platform for the provision of new services to customers and assist Ausgrid as it transitions to dynamic operating envelopes (DOEs). The implementation of Ausgrid's ERP commencing in 2027/28 will provide the opportunity to offer localised and dynamic pricing to customers;
- cost reflective tariffs are by their very nature inherently more equitable than non-cost reflective tariffs and align with the sentiment repeatedly expressed by customers regarding fairness;
- customers have demonstrated strong support for Ausgrid's net zero ambition and tariff reform accelerates decarbonisation through its integration of local CER and grid scale DER; and
- new tariffs will foster greater utilisation of the network which will lead to lower network costs, something that is needed if customers are to enjoy more affordable supply in future.

Ausgrid received several submissions in response to its Pricing Directions Paper. Concerns were expressed around a range of issues including:

- Ausgrid's modelling of the two way tariff charge and its calculation of the basic export level (BEL), as well as the need for a customer information campaign to explain the rationale for the tariff;
- the effect of the introduction of the embedded network tariff and customer impact;
- Ausgrid's justification for the shift in the peak demand window from 8pm to 9pm;
- managing the impact of EV charging; and
- the design of storage tariffs to encourage grid scale storage projects.

In the last few months Ausgrid, the PWG and the AER have engaged on each of these topics and Ausgrid has responded to each of these issues in its TSS.

### ***Two way tariffs***

A new two-way tariff has been the subject of extensive consultation with the PWG, the VoCP, other customer segments, the AER pricing team and the October Town Hall participants. The AER is for the first time reviewing the introduction of export tariffs under its recent [Export Tariff Guideline](#). For a new two-way tariff to succeed it is necessary that a balance is struck between Ausgrid, CER and non-CER customers which allows:

- Ausgrid to earn revenue to cover its efficient costs;
- the fair unwinding of the existing cross subsidy between exporting and non-exporting customers; and
- a timely introduction which takes advantage of higher BELs and lower export charges.

We welcome Ausgrid's response to the feedback it received regarding the Long Run Marginal Cost (LRMC) export charge and reward pricing. This led to additional information being made available regarding timing of charging windows, residual costs for exports and reward pricing, and has led to adjustments of the import and export tariff in the TSS. An example of Ausgrid's responsiveness to feedback is the reduction of the export charge from 1.85 c/kWh to 1.18 c/kWh and the increase in

the export reward from 1.85 c/kWh to 2.19 c/kWh. These changes in effect reduce the time taken for a CER customer to recover the cost of their investment.

We also note and support the effort made by Ausgrid to consider non-CER customers in the design of its two way tariff. However, the decision to exclude up to \$5m per annum residual from the export LRMC will have the effect of requiring non-CER customers to contribute more than they would if the concession was not made. Continuous care will need to be taken if a fair balance is to be maintained between the export reward charge and amount recovered from CER customers. It may be that more residual can be paid for by CER customers in 2029-34. Maintaining that balance is important if the circumstances of non-CER customers are to be properly recognised; we have heard repeatedly that an inability to install rooftop systems denies customers a practical means of achieving more affordable electricity, something they increasingly desire.

An issue generating significant interest in the consultation was whether assignment to the secondary two way tariff should be mandatory or elective. In June the VoCP recommended an opt-in arrangement, its feeling being that Ausgrid had not presented sufficient information to justify support for mandatory assignment. Following the provision of additional information the VoCP view changed to supporting a mandatory arrangement. When participants were asked about their level of comfort around a mandatory 'everyone now' export tariff in 2025, 64% of participants<sup>58</sup> reported 'Love it' and 3 participants (21%) reported 'Live with it'. The main justification provided by participants for their decision was the sense of it being 'fair for everyone' and having minimal impacts on customers. For the 2 customers who 'Liked it'<sup>59</sup> the reasons offered were 'customers will have paid off their investments by then – it makes sense' and 'because 2025 is a little way off'. For those who could 'Live with it' the reasons were similar – 'it is logical'; 'it is fair for everyone'; 'by 2025 everybody having solar panels will be ready for the new approach'. Participants made it clear, however, that their support was conditional on Ausgrid developing an information campaign explaining the new tariff rationale as well as the opportunities it will provide for solar and other exporting customers, and the consequential benefits to the entire network during peak demand periods.

### ***Electric vehicles***

While some stakeholders have called for a specific EV tariff, we are not supportive of the proposal at this time. We think the utility of a special tariff is undermined by the mobility of vehicles which can be charged at any number of locations and by different methods. Imposing a new tariff now would also generate significant administrative costs.

There are a number of challenges involved in the different EV home charging options that customers can choose. There is the slow (trickle) charging option, multiple level two charging options and fast charging where the homeowner has access to, or is prepared to fund an upgrade to, three phase power.

Our resistance to a specific EV tariff is partly based on our belief that several features of Ausgrid's current and proposed cost reflective tariffs will mitigate the impact of EV home charging. The new tariffs should be allowed to operate in order to understand how they influence the timing of EV

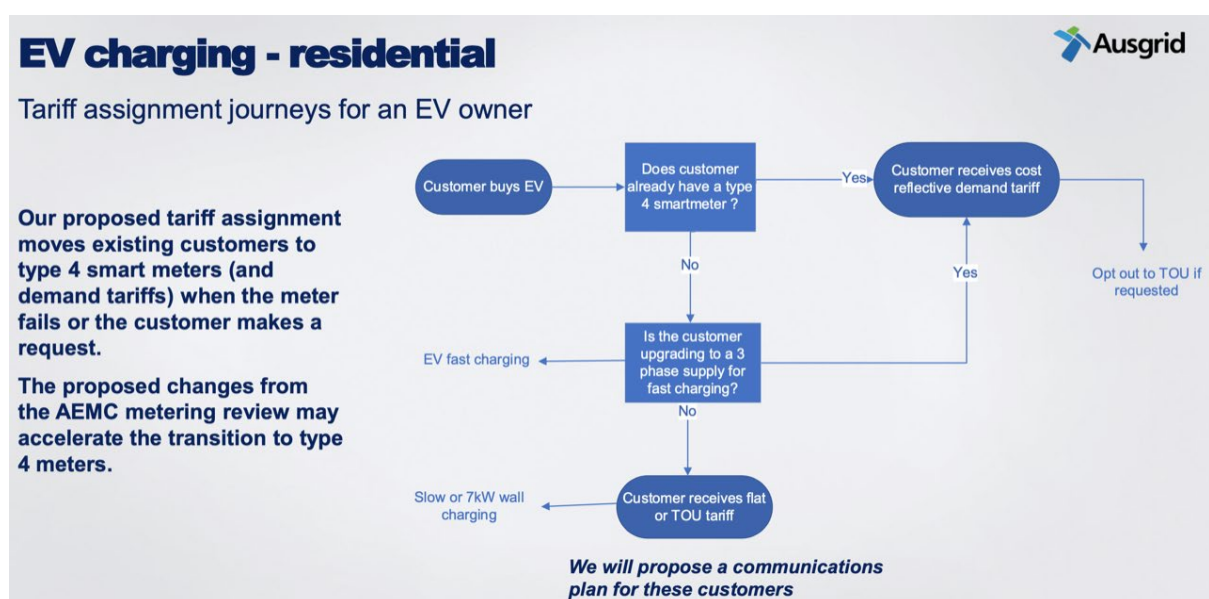
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<sup>58</sup> See bd Report at p.142

<sup>59</sup> Ibid

charging. Any specific EV charging tariff can then be designed around the network demand profile resulting from the new tariffs.

The flow chart below was presented to the PWG in December 2022. The chart captures the choices that Ausgrid's EV owning customers will have as new tariffs are introduced. We do note that EV owning customer behaviour will be influenced by the presence of a smart meter and that currently there is no automatic upgrade to a smart meter when a customer acquires an EV. We think this can be addressed if Ausgrid invests in a tariff reform education campaign, including a special focus on EV owners, particularly at the point of vehicle sale for new EV customers, encouraging them to request a smart meter upgrade from their retailer in order to take advantage of favourable tariffs. An education campaign would also benefit those unable to access a smart meter by alerting them to the controlled load tariff options.



### Customer information

A feature of the customer engagement was the support expressed for information about the way that new tariffs will enable customers to optimise the way they use electricity in the future. Indeed, the support expressed for two way tariffs was, as noted earlier, conditional on an information campaign being developed. We encourage Ausgrid to continue discussing with VoC participants what type of information they think will be most useful.

We have similarly encouraged Ausgrid to consider how it might develop information for EV owning customers that will enable them to access affordable charging in ways that place less demands on the network. As mentioned above one solution we recommended is that at points of EV sale, purchasers are advised that Ausgrid will offer them an off-peak controlled load tariff or a time of use tariff with low daytime charges if they obtain a smart meter. The advice would include the additional option of trickle charging via the standard tariff or an upgrade to phase 3 power. Ausgrid has accepted this suggestion and plans to develop this information in conjunction with Endeavour.

In our First RCP Report<sup>60</sup> and as discussed above, we noted the initial reluctance of VoC panellists to embrace pricing reform. Since then it has become apparent to us that the interest expressed may be a product of the slow rollout of smart meters across New South Wales. As discussions proceeded with the VoCP, interest in the agency that customers gain from advanced metering grew, reinforcing our belief that the attitude of customers is intrinsically linked to the pace of the digital meter roll out. Although Ausgrid does not control the roll out it is in the network's interest that it proceed quicker as this will provide more choice to customers.

We believe Ausgrid needs to develop information for targeted customer groups regarding their options to access a smart meter. Currently, advanced meters are only automatically available when households install specific appliances such as PV or a meter needs to be replaced due to failure. As a result of this, the smart meter roll out is patchwork, limited to specific households, and as such can create not only significant issues for the network in the long-term, but also limits overall customer choice.

### ***Smart meter roll out***

The drawbacks of the slow take up rate are evident when considering the Ausgrid customer who is buying an EV. A replacement smart meter does not come with the purchase of the vehicle and as a result the new proposed tariffs that would facilitate an orderly use of the network through smarter charging within the network linked to cost reflective tariffs do not automatically come into operation. All customers are disadvantaged by this outcome. Similarly, smart meters do not automatically come to 'load only' households, some of which could significantly benefit from the new proposed daytime off peak tariffs if they choose to shift usage to these times. This could offer a significant benefit to many low income and disadvantaged households if they are supported to understand the new tariffs and wish to shift household load as a way to manage their electricity bills.

### ***Conclusion***

In respect of the work done by Ausgrid on pricing we acknowledge the extensive consultation undertaken with customers and have seen how the needs of customers are accommodated by the proposed tariffs. In addition we acknowledge that Ausgrid has given commitments to further work, including information campaigns to encourage greater customer benefit to be derived from the proposed tariffs. As a result we believe that Ausgrid has met or exceeded the guidelines outlined in the AER's Handbook on tariff structure statements.

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<sup>60</sup> See First RCP Report Chapter 5 at p.29



## Part 3 – General observations on Ausgrid’s Proposal

### 3.1 Factors outside Ausgrid’s control

As we noted above in section 1.2, a key feature of Ausgrid’s engagement was its deep engagement on matters that were within Ausgrid’s control which customers valued. These matters added \$38 to an average residential consumer’s bill in 2028-29. However, matters beyond Ausgrid’s (and therefore customers) control (rising interest rates, inflation and insurance premiums) added \$111 to that bill in 2028-29. In the First RCP Report we discussed many of the domestic and international factors that drive the final price customers pay for electricity.<sup>61</sup>

The updated figures in the Proposal, discussed above in section 2.1, show that the cost of the factors outside of Ausgrid’s control is now forecast to be \$139 in 2028-29. This section discusses additional factors that Ausgrid is unable to quantify that will contribute to further uncontrollable costs – the Australian Energy Market Operator’s (AEMO) Integrated System Plan (ISP) and the NSW Roadmap – and which have not been included in Ausgrid’s engagement nor in its Proposal.<sup>62</sup> We conclude with a discussion of Government moves to limit overall price rises and increase concessions to vulnerable consumers.

#### **ISP Costs**

The ISP is developed by the AEMO every two years. It provides a comprehensive roadmap for the optimal network investment from a consumer perspective required so the NEM can build the required renewable generation and storage to transition towards net zero emissions. The [2022 ISP](#) published in June 2022 provides for extensive transmission network investment in NSW.

The prices presented by Ausgrid in its Proposal assume transmission network charges based on the [AER’s Draft Decision](#) on Transgrid’s 2023-28 revenue proposal published last September. The following table from [Transgrid’s revised proposal](#) to the AER in December 2022<sup>63</sup> shows the capex changes from its initial proposal, the AER Draft Decision and their revised proposal. It shows Transgrid has applied for a 54% increase in capex over the Draft Decision approval.

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<sup>61</sup> See First RCP Report Chapter 1 at pp 6-9

<sup>62</sup> Ausgrid highlights the potential for these additional costs in several places in its Proposal see for example pp 9, 12 and 161

<sup>63</sup> See p.58

Table 4-1: 2023-28 capex – our initial forecast the AER's Draft Decision and our revised forecast capex (\$M, Real 2022-23)

Capex category	Initial Revenue Proposal	AER's Draft Decision	Revised Revenue Proposal
Repex	797.6	675.9	883.7
Augex	253.6	240.3	422.8
Non-network ICT	86.9	77.4	88.0
Non-network Other <sup>1</sup>	71.4	75.6	75.9
Capitalised overheads	159.0	151.4	174.3
<b>Total (excluding pre-approved capex)</b>	<b>1,368.5</b>	<b>1,220.6</b>	<b>1,644.7</b>
Pre-approved EnergyConnect capex	532.8	530.7	989.3
Pre-approved HumeLink capex	0.0	0.0	69.8
Asset disposals	(22.0)	(22.0)	(27.4)
<b>Total (including pre-approved capex)</b>	<b>1,879.4</b>	<b>1,729.3</b>	<b>2,676.4</b>

This Transgrid revised proposal also excludes the costs of three ISP projects with a 2022 ISP indicative cost of nearly \$6b.

ISP Project	\$m (2021/22)	Target Commissioning Date
Humelink (excluding early works)	\$2,994	Mid 2026
Sydney Ring	\$880	July 2027
New England Renewable Energy Zone (REZ)	\$1,905	July 2027
<b>Total</b>	<b>\$5,779</b>	

The ISP Indicates that the cost accuracy of the ISP projects is  $\pm 50\%$ .<sup>64</sup> Recent experience with other ISP projects suggests a large increase is almost certain for such large projects as a result of social licence, supply chain pressures and labour shortages. Overall, there is plenty of scope for a significant rise in Ausgrid network charges from what has been presented to customers during engagement so far. While the AER's final decision on Transgrid's 2023-28 revenue on 30<sup>th</sup> April will provide Ausgrid with more certainty on the transmission tariffs for the further affordability engagement with customers it has planned for June and October 2023, that will still not include the impact of the three ISP projects in the above table.

<sup>64</sup> See the individual project description pages in [Appendix 5](#) of the 2022 ISP

### NSW Roadmap scheme costs

In our First RCP Report<sup>65</sup> we noted our discussion with the NSW Department of Energy and Primary Industries (DEPI) regarding future NSW Roadmap costs that would be passed through to Ausgrid customers under State jurisdictional schemes. At the time only generalised information was available and we indicated in that report that we would continue to seek advice as it pertained to the price that customers would be paying in and beyond 2024. A copy of the Department's advice to us in August is published in Appendix C. In meetings with the NSW Office of Energy and Climate Change (OECC) we understood that more information about the likely costs would become available gradually in late 2022 and into 2023.

At our request in mid-October 2022 Ausgrid modelled likely flow through price impacts in 2023/24 on a range of customers for every \$100 million of Roadmap costs to be recovered by Ausgrid under the jurisdictional pass through schemes. The estimate assumes that the charge will be allocated entirely as a variable energy charge and spread equally across all customers.<sup>66</sup> The advice we received from Ausgrid for the impact of \$100m in FY24 by customer type is set out in the following Table 1:

**Table 1 indicative cost outcomes if \$100 million was passed through to Ausgrid customers for the NSW Roadmap scheme in FY24**

#### FY24 impacts

Customer	Average	Median	Top 25% quartile	Bottom 25% quartile
Residential (excluding controlled load)	\$21	\$17	\$26	\$11
Small business	\$47	\$17	\$45	\$5
Medium business	\$358	\$251	\$390	\$148
Large business	\$6,113	\$4,190	\$6,864	\$3,034

Some context for the Ausgrid estimate is helpful. At the Town Hall panellists were advised that an average Ausgrid customer total electricity consumption bill was (mid-2022) \$1,654.

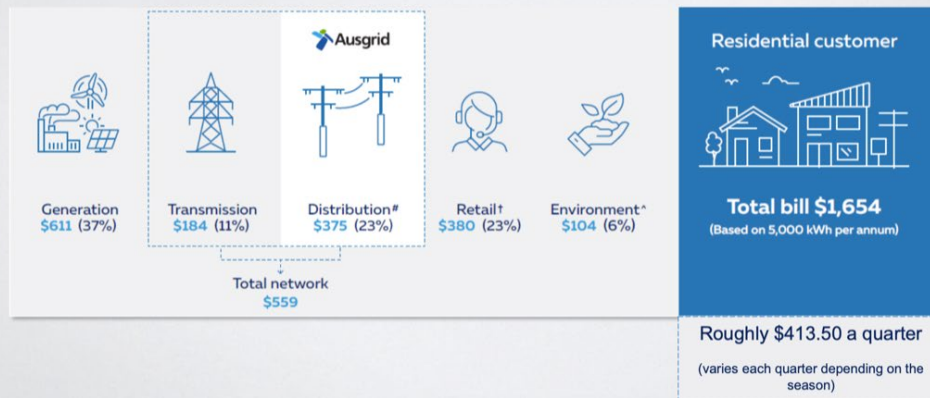
<sup>65</sup> See [First RCP Report](#) Chapter 10 at pp 55-58 and Appendix H at pp 100-101

<sup>66</sup> We also asked Ausgrid to model recovery of each \$100m as part of its fixed charge. Ausgrid assumed that this would be allocated equally to all of its residential and business customers. Ausgrid advised us this approach would result in an additional \$56.21 for each \$100m recovered in FY24 from each customer in its network, regardless of their size or annual usage. Ausgrid modelled that the recovered amount would fall to \$54.07 (-3.8%) in FY29, due to forecast customer number increases over the next few years. Ausgrid advised that it was unable to recover the Roadmap charges as part of peak demand as most of its customers are still on accumulation meters.

## What if????



Prices are changing, inflation rising etc:



What if factors outside our control caused prices to increase even more – how does that influence your views?

Adding 50% in retail price increases, as foreshadowed by the Federal Treasury, lifts the average annual bill to \$2,481 by the end of next year. Adding an additional \$21 in network charges to the residential customer segment for every \$100m in Roadmap costs raises the bill further to over \$2,500, a total increase of 51% on the figure presented to the panellist's only weeks earlier. Further multiples of \$21 may be imposed depending on how much of the initial Roadmap cost is allocated to Ausgrid as the largest NSW distributor. Even without knowing at this stage how much Roadmap cost will be borne by Ausgrid customers it is clear that customer attitudes to affordability will need to be retested in 2023 and we are pleased that Ausgrid agreed to our request for this to happen. We think this is particularly needed in respect of business customers who, on the modelling Ausgrid has provided, will be asked to bear a heavier share of the Roadmap cost pass-through. We plan to consult with businesses in early 2023 on this matter. We next discuss the latest public information on forecast Roadmap costs.

In November we expressed concern about Roadmap costings to AEMO in the Panel's submission to the Draft IIO Review. A copy of AEMO Services' response to our submission is also included in Appendix C. On 2 December 2022, AEMO Services published the [final 2022 IIO report](#) (the 2022 IIO). Appendix A of the 2022 IIO sets out a forecast of both wholesale costs and Roadmap scheme costs. These are set out in Figure 24 (p.46) and in Table 7 in that report and reproduced below:

Figure 24: Forecast of annual costs for the supply of wholesale energy services to NSW customers

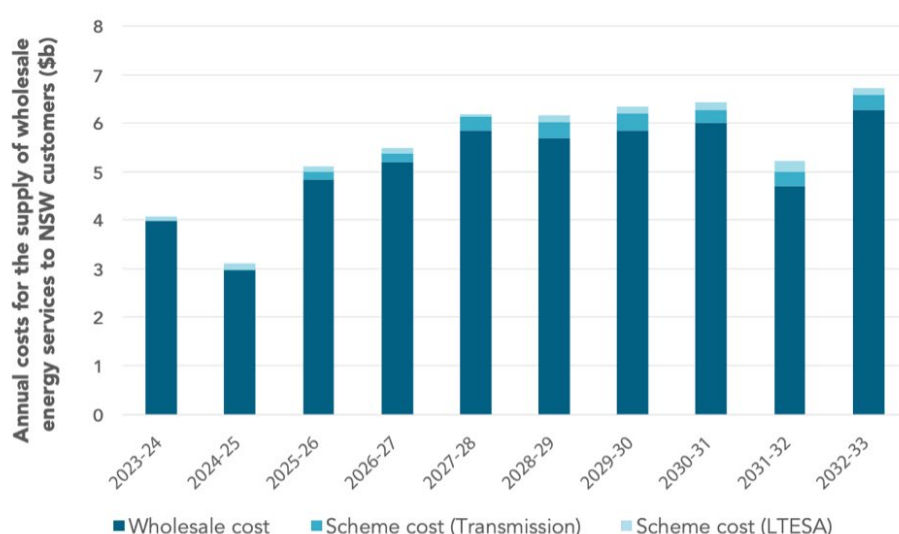


Table 7: Present value of forecast costs over 10 years

Present value of forecast costs over 10 years (\$b)	
Wholesale costs	40.08
Scheme costs (Transmission)	1.47
Scheme costs (LTESA)	0.99
<b>Total cost</b>	<b>42.54</b>

AEMO Services also published the underlying data for the calculations in Figure 24 and Table 7 calculations [here](#). As can be seen in the following extract from AEMO Services data the total (including wholesale costs and scheme costs) in this data totals \$54.81B between 2023-2033.

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Wholesale cost	3.99	2.97	4.84	5.21	5.85	5.72	5.88	6.03	4.73	6.32
Scheme cost (LTESA)	0.09	0.13	0.09	0.11	0.05	0.12	0.15	0.16	0.24	0.15
Scheme cost (Transmission)	0.00	0.00	0.16	0.16	0.28	0.32	0.32	0.24	0.25	0.25

The same cost categories for the same 10 year period in Table 7 in the 2022 IIO totals \$42.54B. We confirmed in correspondence with the OECC that the numbers in Table 7 have been discounted by a real discount rate of 5.5%.

It is the Scheme costs (Transmission and LTESA) that are passed onto the 3 NSW DNSPs for recovery in distribution charges. Ausgrid has been informed that it is required to recover 47% of these costs from eligible customers. Set out in Table 2 below is the combined detail of the nominal data supporting Table 7 and Ausgrid's 47% of those costs:

Table 2

Column1	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	total
Wholesale cost (\$B)	3.99	2.97	4.84	5.21	5.85	5.72	5.88	6.03	4.73	6.32	51.54
Scheme cost (LTESA) (\$B)	0.09	0.13	0.09	0.11	0.05	0.12	0.15	0.16	0.24	0.15	1.29
Scheme cost (Transmission) (\$B)	0.00	0.00	0.16	0.16	0.28	0.32	0.32	0.24	0.25	0.25	1.98
											54.81
LTESA+											
Transmission (\$B)	0.09	0.13	0.25	0.27	0.33	0.43	0.47	0.40	0.49	0.40	3.01
Ausgrid share (\$B) @ 47%	0.04	0.06	0.12	0.13	0.16	0.20	0.22	0.19	0.23	0.19	1.54

The costs in Table 2 do not represent all Roadmap costs as these figures exclude strategic benefit payments, [latest CSIRO gen cost report](#) (significant increase in renewable generation costs) and are likely to underestimate the REZ capital costs. We will have a better idea of the last variable following the announcement of the successful tenderer for the Central West Orana REZ.

The Panel has been keen to develop a minimum picture of the bill impacts of the recovery of the Roadmap costs and we will update this as more information becomes available. The bill impacts in Table 3 have been created by applying the information from Ausgrid on bill impacts in FY24 of each \$100m in RoadMap costs discussed above in Table 1 applied to the data in Table 2.<sup>67</sup> This reveals the following minimum bill impacts for 2024-29 based on median \$ value by customer class and then also by mean \$ value by customer class. The data provided by Ausgrid for each customer class is 'right skewed' (i.e. mean > median) and so the median values may be a more accurate measure of the floor for bill increases as it minimises the effects of outlier values.

<sup>67</sup> This basic approach assumes that usage and volumes are constant across the 5 year period



**Table 3 Minimum bill impacts of recovery of Roadmap costs by customer type as at late January 2023**

Customer cost \$ (median value)	2024-25	2025-26	2026-27	2027-2028	2028-2029	TOTAL
Residential (excluding controlled load)	\$10.02	\$20.04	\$21.71	\$26.71	\$33.39	\$111.87
Small business	\$10.41	\$20.82	\$22.56	\$27.76	\$34.70	\$116.26
Medium business	\$150.52	\$301.04	\$326.13	\$401.39	\$501.73	\$1,680.81
Large business	\$2,514.30	\$5,028.59	\$5,447.64	\$6,704.79	\$8,380.99	\$28,076.30
Customer cost \$ (mean value)	2024-25	2025-26	2026-27	2027-2028	2028-2029	TOTAL
Residential (excluding controlled load)	\$12.64	\$25.28	\$27.39	\$33.71	42.13	\$141.14
Small business	\$28.23	\$56.47	\$61.17	\$75.29	94.11	\$315.26
Medium business	\$214.80	\$429.60	\$465.40	\$572.80	716.00	\$2,398.60
Large business	\$3,367.57	\$7,355.15	\$7,946.41	\$9,780.20	12,225.25	\$40,954.58

We are in further correspondence with DPIE to better understand the data in the IIO Report and will update this Table 3 as more information becomes available.

***Government actions to reduce the impact of these uncontrollable costs***

At the Federal level the Government [announced late last year](#) a number of measures to reduce the level of wholesale prices (e.g. gas and coal price caps) and to provide targeted and temporary relief on power bills to eligible Australian households and small businesses to operate in addition to existing State based energy concessions. The fuel price caps appear to have contributed to the recent significant fall in forward wholesale price.

At the State level we note that state concession packages are not identical. Victoria has historically had a greater reliance on gas for domestic heating and cooking and this may explain the relative sophistication of Utility Relief Grants offered there in contrast to New South Wales. We feel there is clearly room for NSW to enhance its energy concessions package and hope that with a state election looming, improvements are delivered in 2023.

Energy concessions are an important asset for vulnerable households experiencing payment difficulty. Extremely high energy bills and expectations of volatility resulting from the energy transition have increased the need to scrutinize the operation and impact of concessions and assess them for equity, adequacy, effectiveness, reach, and flexibility. To this end we note the potential for the [AER's Game Changer](#) or other regulatory support initiatives to improve outcomes for consumers experiencing payment difficulty and entrenched hardship.

In the Town Hall meeting customers suggested that fairer and more accessible energy concessions would go a long way towards addressing affordability concerns, but that Ausgrid should not rely on such changes eventuating. Appendix B includes the Town Hall participants' suggestions to the Panel on their perceptions of the impact of other factors outside Ausgrid's control and how that might impact key aspects of Ausgrid's Proposal.

Some of the key advice is:

Would not want to see much change in balance between the six Pillars. Need to consult again if external factors change significantly. Should be pushed for government support for innovation, resilience and for financial support for low income consumers.

Prioritise long term investments e.g. net zero - will take longer to see benefit but impacts every other aspect.

Priority is EVs and community batteries to achieve net zero.

IT is the priority as is cyber. Net zero needs to be dealt with and results will be seen long term.

Prioritise safety and resilience, innovation and cyber over others.

Increase community engagement overall, particularly with indigenous communities.

Prioritise equity in decision making about where to locate community batteries and investment.

Don't lose sight of what's important over the long term even if it takes longer to pay off or see benefits.

### ***Concluding comments***

The surge in energy prices combined with ongoing high inflation levels and increasing interest rates is placing significant pressure on Ausgrid to minimise expenditure to help constrain bill increases. While Ausgrid cannot control the way in which electricity is being used and how its value is being assessed by customers, we note that the external environment may necessitate further consideration of whether additional expenditure reductions can be made, such as optimal timing of investments and a strong awareness of the needs of vulnerable consumers, both small and large.



Customers have made clear that they expect Ausgrid to re-engage in light of recent bill increases and with the cost of electricity representing a major concern for households and businesses. We commend Ausgrid for their commitment to retest key elements of its Proposal later this year prior to lodging their final Proposal with the AER in December 2023.

## 3.2 Observations on Capex

### *Overview*

Ausgrid is seeking a marginal increase in capital investment in the 2024-29 period when compared to the forecast expenditure in the current period. In summary:

- The Panel notes that Ausgrid has made good progress in applying a more prudent and transparent approach to asset replacement and responding to the feedback from the AER's 2019-24 Draft Decision. We believe the challenge of ageing assets is being met with a genuine attempt to identify risk and seek innovative solutions that keep the goals of long-term affordability and stable network performance in mind.
- We consistently challenged Ausgrid to observe the AER's Handbook guidance relating to capital investment and the maintenance of a downward trend in the value of the Regulated Asset Base (RAB) per customer.
- Consistent with other utilities, Ausgrid is experiencing a reduction in investment related to network growth and connections. The Panel has spent considerable time examining the new priorities – resilience, CER integration and ICT.
- Ausgrid at all times made key staff available to the Panel to work through the many capex-related issues, with over ten deep dives with Panel members taking place and many ad-hoc discussions on specific issues occurring. We believe that we had quality, transparent and fulsome access to Ausgrid staff throughout the reset process.
- As we discuss in Section 1.3 and in Appendix E it is very pleasing to see that Ausgrid has agreed to apply the 0.5% productivity factor to capitalised overheads. Ausgrid is the first DNSP that the Panel is aware of that has proposed this productivity factor on capitalised overheads and we are hopeful that this will lead to other distribution and transmission networks offering a similar productivity sharing with customers.

### *Proposed capital investment*

The proposed capital investment for the 2025-29 period is \$3,311m, a 1% increase on the forecast expenditure in the current period<sup>68</sup>, as shown in the table below.<sup>69</sup>

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<sup>68</sup> Direct trend and category comparisons with the current period have been made more complex by the SaaS accounting change

<sup>69</sup> Table derived from Figure 5.1.1 in the Proposal at p.67

Capex category	FY20-24 period	FY25-29 period	% change
Replacement	1,523	1,446	(5)%
Resilience	0	194	n/a
Growth	207	190	(9)%
CER integration	4	47	n/a
Operational Technology and Innovation (OTI)	204	117	(43)%
ICT	282	301	7%
Fleet	138	148	7%
Property	174	145	(17)%
Overheads	743	724	(3)%
<b>Total</b>	<b>3,277</b>	<b>3,311</b>	<b>1%</b>

The reduction in 'core network' investment and the completion of the large OTI project is balanced by significantly increased new expenditure planned for the ICT refresh (+\$19m), resilience (+\$194m), CER integration (+\$43m) and fleet (+\$9m).

Despite these increases, Ausgrid continues to demonstrate a largely stable capital investment profile overall when compared to the current period and a significant reduction in the capital investment in the longer trend.

### **Approach**

As we noted in the First RCP Report<sup>70</sup> one of the Panel's earliest priorities was to understand what improvements Ausgrid had made since the 2019-24 regulatory reset to its capex governance and investment management. In 2019 each of the AER, its consultant EMCa and consumer advocates lacked confidence that Ausgrid's investment management and governance processes were adequate to ensure efficient capital expenditure. A key focus of our early meetings with Ausgrid in 2021 was to better understand the governance, drivers, forecasting and investment case process now used by it.

In our analysis, we focussed on three areas:

- a) 'Core network' activities of maintenance, demand driven augmentation and customer connections;
- b) basic support services of property and fleet; and

<sup>70</sup> See First RCP Report Chapter 9 at pp 45-47

- c) investments that relate to the changing customer expectations of resilience, CER and new information technology capability.

The final category was examined in the most detail by the Panel. Detailed commentaries on these activities are in Part 2 of our report.

### ***RCP assessment priorities***

The Panel recognises that the AER will use their own expert resources to assess the prudence and efficiency of Ausgrid's proposed capital investments. In our consideration we examined several important features of the Ausgrid capital investment planning, focussing on six largely qualitative aspects of their Proposal:

1. that the Ausgrid investment planning reflects the broad sentiments expressed by consumers throughout the stages of engagement including a keen awareness of rising costs and affordability, identifying targeted improvements and supporting sustainability initiatives;
2. that Ausgrid exercises a prudent and widely implemented asset management strategy that links the overall company strategy and articulates their risk appetite and intended customer outcomes;
3. related initiatives such as Ausgrid's tariff strategy are consistent and supportive in driving prudent asset investment and efficient use of the network;
4. evidence that a contemporary, robust, well-implemented capex investment governance framework exists;
5. that Ausgrid has learned from the AER's advice and response to the capital expenditure plans for the 2019-24 decision and implemented these learnings in the Proposal; and
6. Ausgrid can demonstrate consideration of, and compliance wherever possible with, the capital investment guidance in the AER's Handbook.

Several Panel members with considerable experience in capital and investment planning and asset management spent significant time in multiple sessions with Ausgrid staff from the capital planning area in a 'mini deep dive' format. We were able to participate in several full-day deep dives with Ausgrid staff which allowed a highly interactive format. Ausgrid provided adequate information to illustrate points, and in the majority of cases meaningfully considered and incorporated Panel feedback wherever reasonable. We are satisfied that the engagement by Ausgrid for capital investment matters was clearly in the Involve/Collaborate range when compared to the requirements of the IAP2 framework.

The Panel is satisfied that improvements Ausgrid has made to capital planning, including to governance and its NPV modelling, set out in figure 5.3.1 in its Proposal (p. 71) and in attachment 5.2b, are robust. This has led to the Panel being comfortable in this report to responding to Ausgrid's proposed capital expenditure at a category level. We have already discussed many of the capex categories in Part 2 of this report. In this section we make some general observations at a category level about repex, ICT, fleet and property.

### ***Repex Governance Framework and Asset Management Strategy***

In considering our six customer-focussed criteria and their relation to Ausgrid's asset management strategy, as highlighted in Appendix D we asked to review many Ausgrid processes, including:

- the network strategy,
- the customer value framework,
- the reliability program, risk analysis and decision criteria,
- Network maintenance program, risk analysis and criteria,
- initiatives for productivity improvement and innovation,
- CBA approach for replacement programs, and
- a number of project justification documents.

Our conclusion is that Ausgrid's approach to repex modelling is industry leading and the strong internal focus it has on benchmarking unit rates has led to the forecast reduction in repex and growth for the period.

### ***ICT***

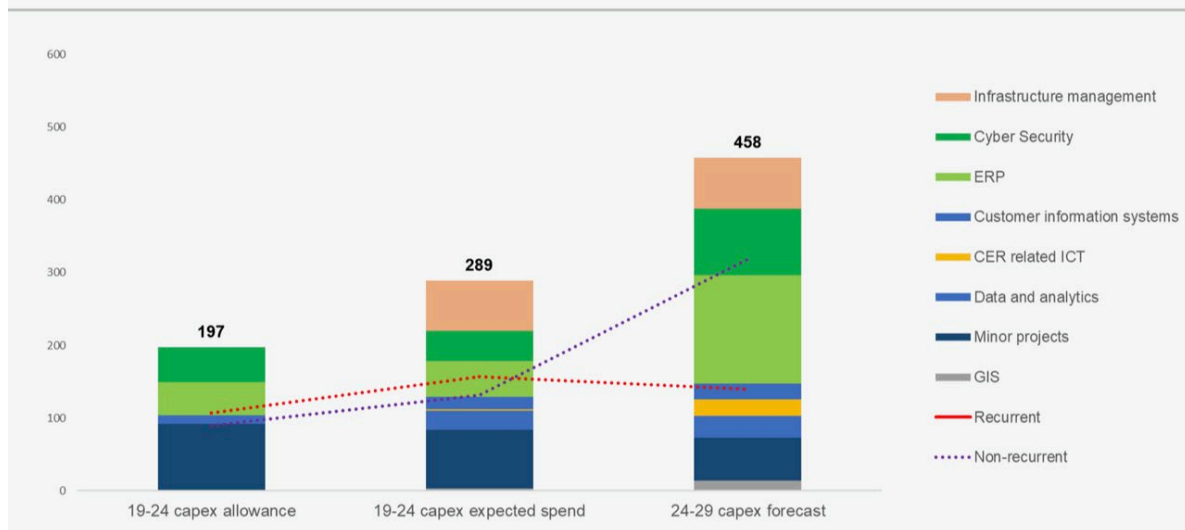
Ausgrid's proposed \$301m ICT capex investment comprises BAU investment as well as 3 new projects:

- ERP \$76m capex;
- Cyber \$44m capex; and
- CER Integration \$20m (capex).

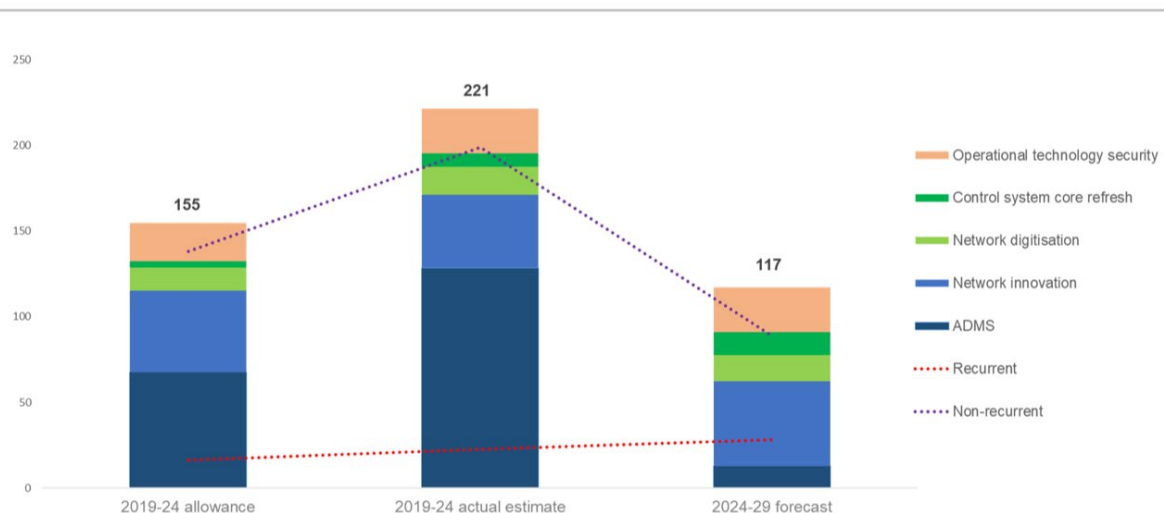
We have discussed these 3 major projects on a totex basis in Part 2 of our report.

One of the important initiatives that Ausgrid has agreed to as part of the new ICT governance arrangements is to report to the CCC (and any future RCP) on its OTI and ICT investments over a 10 year period against allowed and forecast and recurring and non-recurring expenditure. This request reflects the Panel's desire to gain confidence in Ausgrid's ability to forecast, spend and manage this increasingly important area of expenditure efficiently. Ausgrid's reports to the Panel of the 10 year trend in ICT and OTI are reproduced below:

### ICT 10-year investment (\$m, FY24 real)



### OTI 10-year investment (\$m, FY24 real)



These charts have revealed a concerning trend in the recurrent GIS, minor projects, customers and ICT infrastructure programs showing an increase from \$92m allowance in 2019-24 to \$164m forecast for 2024-29. We raised concerns with Ausgrid about this and anticipate that the AER will also be reviewing this as part of its analysis.

#### **Fleet**

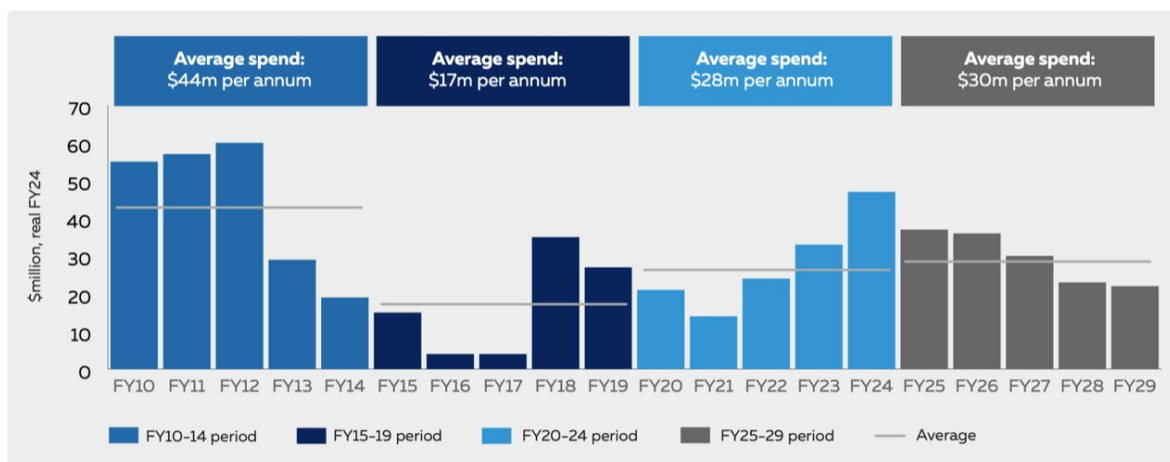
Ausgrid's forecast fleet capex shows a 7% increase from this period, from \$138m to \$148m. We challenged Ausgrid early in our discussions on its fleet forecast to improve its modelling and we are satisfied that Ausgrid has responded to our request. One of the things that we raised with Ausgrid is our view that customers benefit from a reduction in the peaks and troughs in fleet and plant capex. As Ausgrid notes in its Proposal in section 5.10.3 at pp 117-118 one of the causes of the troughs in 2015-2017 in fleet investment was an internal capital freeze implemented to meet Ausgrid's banking

covenants. We do not believe that it is fair that customers are now bearing an increase in investment in the current period as Ausgrid plays catch up in response to its own discretionary capital spending priorities.

We recognise however that a positive step outlined in Ausgrid's Proposal is securing some elevated work platforms (EWP) build slots, which is in customers' interests given recent highly publicised vehicle supply chain constraints.

Ausgrid has acknowledged our concerns about seeking to reduce the peak and troughs and notes that its decision to secure EWP build slots earlier will reduce future peaks. This table from the Proposal (p. 117) shows a steadying in average fleet investment:

Figure 5.10.4 Our fleet and plant capex forecast (\$m, real FY24)



We remain concerned, however, about the impact in future regulatory periods when the 15 year lifecycle of EWPs expires concurrently in a period as a result of historical build slots and we encourage Ausgrid to proactively manage this to stabilise fleet investment profiles as soon as it reasonably can.

### Property

Ausgrid has developed a new property model to underpin its reduced property forecast of \$145m, which is 17% less than in the current period. We are confident that Ausgrid is managing its property portfolio to dispose of surplus property when it can and with a focus on realising market value for customers reflected in reductions in RAB per customer. One of the important affordability initiatives that Ausgrid has proposed is the strategic disposal of property totalling \$10 of the proposed \$34 affordability initiatives.

### Conclusions

Our conclusions are:

1. Regarding capacity-driven augmentation, asset replacement and connections expenditure we are satisfied:

- Ausgrid has in place adequate governance controls over its forward capex investment;
  - Ausgrid's overarching asset management strategy and cost-benefit analysis framework provides a solid basis to forecast the expected costs and benefits of required repex programs and projects; and
  - Ausgrid's modelling provides information to help target programs and projects, and to identify assets with the highest level of risk.
2. With respect to the AER's Handbook Ausgrid has demonstrated an overall downward trend in their capital investment forecasts for several of the significant existing categories including repex, growth, OTI expenditure and property and a stable and sustainable RAB.
  3. Customer engagement on most of the capital investment has been targeted to a small number of key issues including the new capex resilience and CER integration programs, ERP and cyber investment, consistent with the Panel's expectation and advice.
  4. Ausgrid has been compliant with our requests for more information and has adopted a number of our suggestions.
  5. We believe that Ausgrid has met the expectations of the Handbook in relation to its proposed capex. However, we recommend that a number of the programs (resilience, CER Integration, ICT and fleet) require detailed review by the AER to assess their prudence and efficiency.



### 3.3 Observations on Opex

#### Overview

Ausgrid has developed its operating expenditure forecast following the AER's base, step, trend approach. Our comments in this section also follows that structure. In summary:

- we acknowledge the significant effort from all parts of Ausgrid to deliver the substantial fall in opex since 2015;
- this fall is being consolidated in 2024-29;
- we understand that AER staff have informally advised Ausgrid that its proposed 2022/23 base year opex of \$380m (\$FY24) is likely to be considered not materially inefficient. This is a welcome outcome from the significant hard work to reduce opex over recent years;
- we support Ausgrid's proposal to use a 5 year average of actual costs for its storm allowance adjustment; and
- we support the proposed step changes subject to the AER review showing the proposed expenditure to be prudent and efficient.

Appendix E 'A Holistic Approach to Productivity Sharing' discusses many of the issues around opex efficiency in more detail.

#### Proposed opex

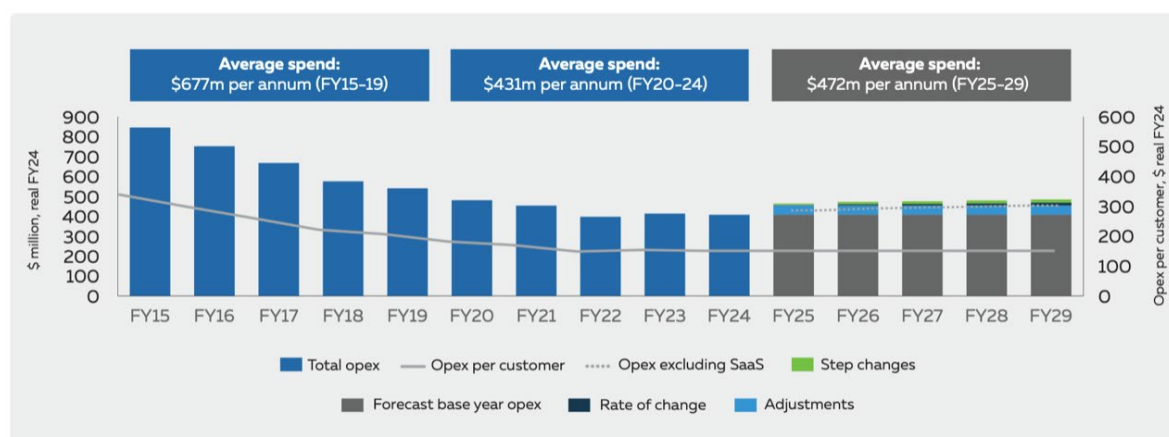
Proposed opex is 14% lower than the current period opex allowance; 10% higher than the current period forecast spend (2% higher if the SaaS IT accounting change - previously capex, now opex - is excluded); and 5% higher than the Draft Plan. See forecast opex figure at p. 126 of the Proposal:

Figure 6.1.1 Forecast opex, 2024-29 (\$m, real FY24)

Opex	FY25	FY26	FY27	FY28	FY29	Total period
Opex excluding debt raising costs	463.6	472.1	475.8	479.9	483.7	2,375.0
Debt raising costs	9.0	9.1	9.1	9.1	9.1	45.4
<b>Total opex</b>	<b>472.6</b>	<b>481.2</b>	<b>484.9</b>	<b>489.0</b>	<b>492.8</b>	<b>2,420.4</b>

The significant reduction since 2015 is shown in the following graph at p. 126 of the Proposal.

Figure 6.2.1 Forecast opex for 2024–29 compared to actual/estimated opex for 2015–19 and 2019–24 (\$m, real FY24)



53 Debt raising costs are added to total opex to cover, for example, arrangement fees, credit rating fees, and issuer legal counsel fees associated with raising debt.

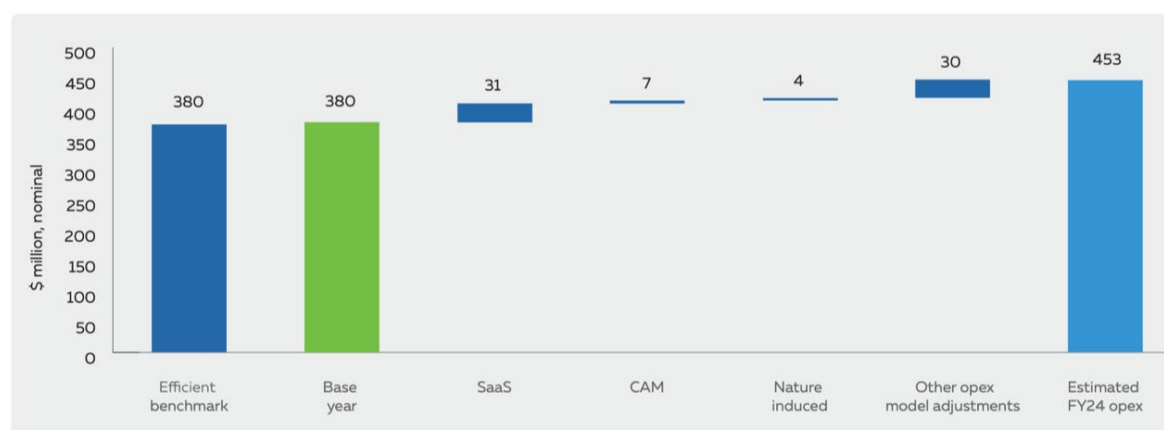
54 In April 2021, the IFRIC decided the costs associated with configuring and customising SaaS ICT solutions must be treated as opex, rather than capex as previously was the case. We have included these costs in our forecast opex as a base year adjustment.

The increase compared to the current period is due to SaaS accounting treatment, step changes, and changes to Ausgrid's cost allocation methodology (CAM) approved by the AER in late 2022, that allocates more costs to standard control services (SCS).

### Base year

Ausgrid is proposing a base year of \$380m prior to various adjustments shown in the following figure from p. 132 of the Proposal:

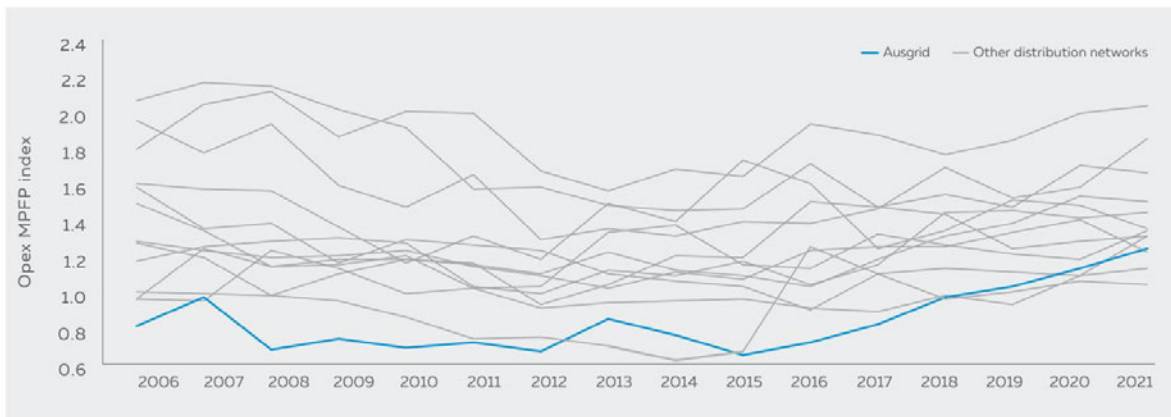
Figure 6.5.3 Ausgrid estimate of the efficiency of our base year opex and estimate of FY24 opex (\$m, nominal)



We understand that AER staff have recently informally advised Ausgrid that its proposed 2022/23 base year opex of \$380m (\$FY24) is likely to be considered not materially inefficient. The Panel recognises that this outcome is the result of a significant business transformation process since 2015. It is reflected in the significant improvement in absolute and relative opex productivity reflected in

the following chart from the AER's [2022 benchmarking report](#) showing improvement between 2006-2021:

Figure 6.5.1 Ausgrid opex MPFP continues to improve in 2022



### Base year adjustments

In relation to the 4 adjustments proposed to its base year illustrated in the chart on the previous page, the Panel offers the following observations:

1. SaaS – we understand that this approach reflects discussions with AER staff that this change in accounting treatment (from capex to opex) should be treated as a base year adjustment rather than a step change;
2. CAM – we understand that this is an output from the recently approved new CAM;
3. Nature induced – this is an adjustment to Ausgrid's storm allowance using a 5 year average of actual costs; we support this approach and discuss it further in Appendix E; and
4. Other adjustments – no comment.

We look forward to the AER confirming that Ausgrid's approach to its opex base year is consistent with the AER's Expenditure Forecast Assessment Guideline.

### Case Study – Ausgrid's MoU with other DBs

Ausgrid has developed a MoU with other distributors which proposes an agreement to share resources following major events. We believe this is a potentially very useful step and will give customers confidence that efficient usage is being made of the resources that different distributors have, rather than them being required to over-invest in assets for their exclusive use. Networks do not often simultaneously experience the same major event. This means some capacity exists in other networks to support Ausgrid (and vice versa). Documenting how this sharing works is important, and we welcome the MoU, which is a modest but still instructive example of how even small efficiencies can be achieved.

### Step changes

The changes to the proposed step changes from the Draft Plan to the Proposal are shown in the following chart at p. 128 of the Proposal:

Figure 6.3.2 How we responded to customer feedback in developing this proposal (\$m, real FY24)

	Draft Plan (\$)	Regulatory proposal (\$)	Difference (\$)	Reason for change
Insurance premiums	27.8	9.5	(18.3)	Adjusted based on renewal negotiation outcomes
Smart meter data	23.5	24.9	1.4	Update reflects inflation
Community resilience	25	8.4	(16.6)	Updated analysis, feedback from Voice of Community Panel and storm costs moved into base year adjustments
Cyber security	18.3	20.6	2.35	Update reflects inflation
Network Innovation Program	5	5	No change	No change despite strong support by Voice of Community Panel to increase (see <b>Section 6.6.5</b> )
ICT enablement program for CER integration	N/A	10.4	10.4	New step change that evolved as CER analysis progressed but included within \$126.1 million CER totex
Property step change	N/A	(14.5)	(14.5)	Reduced land tax and other costs associated with property sales

The Panel offers the following observations on the 7 proposed step changes:

#### 1. Insurance premiums

We have had extensive discussions with Ausgrid on this step change. We have also had the opportunity to review the confidential Marsh report.<sup>71</sup>

We understand that under Ausgrid's obligations it is required to maintain minimum levels of specified insurance cover. This requirement effectively locks in Ausgrid's insurance premium costs for that specified cover in line with market rates. Ausgrid's premiums have increased by 87% over the last 2 years and are forecast to increase another 46% between now and 2028-29.

There are three elements to Ausgrid's cost of managing risk – insurance premiums, the expected costs of self-insured risks and the extent to which Ausgrid's liability is limited by the ability to pass through unexpected costs. Ausgrid takes out insurance to cover property, liability (e.g. bushfires), Directors and Officers, cyber, works compensation and a range of other ancillary matters (e.g. motor vehicle). It retains exposure to risks of towers and lines (no insurance available), deductibles and some workers compensation costs.

The Marsh report highlighted the pressures Ausgrid is facing in securing its insurance over 2024-29:

- significant increases in property and liability coverage related to increased severe weather events risk;
- increased premium cost and limits on the availability of cyber insurance; and

<sup>71</sup> The Marsh Report is Attachment 6.3 to the Proposal

- increased deductibles that have the effect of increasing Ausgrid's expected value of uninsured risks.

Ausgrid's estimates of its premiums over 2024-29 are based on a number of factors:

- continuing hard market conditions resulting in premium increases, coverage reduction, which will increase deductibles and cause capacity contraction, but which Marsh expects to soften throughout the regulatory period; and
- the absence of any catastrophic event causing a major claim.

The proposed step change is \$9.5m, a significant reduction from the Draft Plan at \$27.8m. This was due mainly to two factors – the AER's advice that the step change should be calculated relative to the actual spend in 2023/24 rather than the base year of 2022/23, and updated advice from Marsh. Marsh concluded its review of Ausgrid's insurance program and (p.8):

'...considers its approach to risk management to be prudent and to reflect good industry practice.'

On the basis of a review of the Marsh report and our discussions with Ausgrid, including detailed responses to the questions we raised in the First RCP Report<sup>72</sup>, we believe that the proposed step change represents a reasonable sharing of the additional insurance risks between Ausgrid's customers and its shareholders. We acknowledge the work that Ausgrid has done in securing insurance coverage in a challenging market. The effort undertaken by key Ausgrid staff in engaging directly with insurance representatives, explaining the specific requirements of the network and negotiating lower premiums, is commendable and has delivered a better outcome for customers.

## 2. Cyber Security

The proposed step change is \$20.6m. We have discussed this in detail in sections 2.6, 4.1 and in Appendix F. In summary we support the approach being taken by Ausgrid and leave it to the AER to assess whether the expenditure sought is prudent and efficient.

## 3. Smart meter data

The proposed step change of \$24.9m has been updated from the Draft Plan for inflation. As we indicated in our First RCP Report<sup>73</sup> and in Section 2.9, we strongly support an accelerated roll out of smart meters and this step change so that Ausgrid has access to data to efficiently use the smart meters. However we do not believe that it is in customer's long term interests for each network to be purchasing their customers' smart meter data in this way.

We support the views expressed by PIAC to the AEMC's [current metering review](#). In short, the existing framework fails to recognise that smart meter data belongs to consumers (not metering providers or retailers). Consumers pay for their meter. It is their data and their right to access it should be recognised. It is unreasonable to make consumers install a smart meter, make them pay for it, make the data available to their retailer, their DNSP, and other market participants,

<sup>72</sup> See First RCP Report Chapter 9 at p. 52

<sup>73</sup> See First RCP Report Chapter 5 at p. 27

while not giving consumers access to the data that they need to manage their own electricity generation and demand.

As PIAC notes, a reasonable smart metering framework would first and foremost recognise that consumers should have free access to local, near real-time meter data in a form that enables them to orchestrate devices behind the meter so that they can engage constructively with cost reflective (e.g. demand-based) tariffs, DOEs and other reforms to enable a two-way electricity network.

Ideally, the smart meter framework would recognise that:

- DNSPs require certain smart meter data to efficiently operate the network (as proposed by Ausgrid in this step change) and
- retailers require certain smart meter data to inform their product offerings and assist their customers with managing their energy use.

This basic data should be provided to DNSPs and retailers free of charge. In the interim until a more appropriate consumer data regime is developed we support the need for this step change.

#### 4. Network innovation

This step change of \$5m is discussed in detail in Section 2.5. While the VoCP strongly supported a larger expenditure, the Panel supported the Ausgrid approach for a lower expenditure given Ausgrid resource limits and advice from NIAC. We support this expenditure in principle, given the strong NIAC governance framework that is in place to monitor actual expenditure and its exclusion from the EBSS.

#### 5. Community resilience

This step change of \$8.4m is discussed in Section 2.2 where we support resilience expenditure in principle, but further work will be undertaken in 2023 to refine the scope and hence required level of expenditure – both opex and capex.

#### 6. CER ICT systems

This step change of \$10.3m is an opex/capex trade off resulting from Ausgrid's decision to invest in subscription based third party services for ICT rather than bespoke Ausgrid capex solutions. The Panel supported the opex approach to ensure that industry solutions were being pursued. We note that this is within the total \$126.1m totex for CER integration that we discussed in Section 2.3.

#### 7. Property strategy

This negative step change of \$14.5m is one of the affordability measures that Ausgrid is proposing. We discussed this in Section 1.3. The advice provided by the Panel to Ausgrid in late November 2022 was:

*'The RCP believes that the best interests of Ausgrid customers are served by Ausgrid disposing of property that it is not using productively or unlikely to be used productively in the foreseeable future.'*

*‘As to the manner in which surplus property is disposed of, the Panel acknowledges a range of risks including uncertainties around rezoning applications, planning controls, contaminated site obligations and costs, changing market conditions and the NSW land tax regime. While the Panel is not equipped to offer an informed opinion about the impact of these factors on any specific proposal that Ausgrid might develop we maintain that best interests of customers are not served if the realised value of disposed surplus property is contingent upon any of these uncertainties.*

*‘The Panel recommends that any disposal involving related entities must be subject to probity control to ensure that customers receive the benefit of the best possible sale price.’*

### **Trend**

The calculation methodology follows the Handbook approach for each component – price (including labour costs), output and productivity growth. Appendix E discusses whether the productivity factor should have been greater than the AER required 0.5%, concluding that other cost efficiencies lead the Panel to support the proposed 0.5%.

The Panel believes that following the roll out of the new ERP in 2027 there may be further opex productivity gains. Part of the ICT governance principles we agreed with Ausgrid discussed in Section 2.7 is for Ausgrid to undertake a detailed post implementation review of the implementation of the ERP including the realisation of benefits including efficiencies. This is an issue that we will highlight for review by the next reset panel to assess actual impact.

### **Conclusion**

We are confident this element of Ausgrid’s Proposal has the support of Ausgrid customers because it responds to their preferences as expressed through the customer engagement program. Subject to the AER’s assessment, the Panel believes that Ausgrid has met the guidelines outlined in the AER’s Handbook on operating expenditure forecast proposals.

### 3.4 Observations on other matters

#### ***Depreciation***

Currently Ausgrid uses the weighted average remaining life (WARL) method to calculate return of asset (depreciation). For several years Ausgrid has been wanting to move to the year-by-year tracking method. The year-by-year method should improve intergenerational equity as future customers will then be paying return on asset in a way that reflects the remaining useful life of assets. Our understanding is that the WARL method can lead to over estimation of remaining useful lives due to the cumulative effect of averaging assets within asset classes.

Ausgrid proposed to change to the year-by-year method in its Draft Plan which the Panel supported. However in the context of increased cost pressures, Ausgrid subsequently decided to retain the WARL method in its Proposal. Retention of the WARL method for the 2024-29 period results in \$97m lower revenue than year-by-year tracking.

Ausgrid has not proposed any accelerated depreciation of assets. With the exception of the asset life for the ERP being extended from 5 years to 15 years discussed above, Ausgrid is maintaining a stable approach to its regulatory depreciation profile.

#### ***Conclusion***

The Panel believes that Ausgrid has met the guidelines outlined in the AER's Handbook on regulatory depreciation.

#### ***Incentive schemes***

Ausgrid proposes to apply all incentive schemes – CESS, EBSS and STPIS and has developed a CSIS which is discussed in Section 2.4. We discuss CESS and EBSS in more detail in Appendix E. Our support for proposed innovation and resilience expenditure is based in part on Ausgrid agreeing that they are excluded from these incentive schemes.



## Part 4 – Other Panel observations

### 4.1 Other Panel observations

Our engagement with Ausgrid has fostered wide ranging discussions and at times we have recognised that the best outcomes for customers are sometimes dependent on influences beyond the reach of us and Ausgrid. Rather than remain silent on these matters we have operated on the basis that where additional information needs to be sought in order to better inform ourselves and Ausgrid customers ahead of their deliberations, we should seek that information; pursuing the NSW DEPI around the future costs of the NSW Roadmap is an example of this constructive curiosity. Another set of influences are more global and although beyond any single person's authority, deserve commentary insofar as positive reforms will benefit customers in the future.

#### *Timing of revenue reset lodgements*

For some years NEM distributor revenue proposals have been required to be lodged with the AER in late-January. We believe it is time for the AER to consider whether the lodgement date should be moved. In our view the date imposes unhelpful pressure on distributor staff who prepare proposals and customer councils (and reset panels) who are increasingly providing detailed feedback on revenue proposals in advance, because it necessitates a great deal of work through the Christmas and New Year period. Distributors and the AER require proposals to contain accurate information and the refinement of data continues until very shortly before the lodgement date. This demands that many staff and customer advocates take truncated holidays or in some instances none at all, in the weeks prior to the deadline. Our experience has been that it has not been feasible for the Panel to review all of the documents we requested (set out in Appendix D) in preparing this report. This has been a learning experience for both the Panel and for Ausgrid and we will include some observations on which attachments should be prioritised by a future reset panel in our final advice to the CCC later this year.

#### *Cyber*

Our engagement with Ausgrid around its cyber security needs was informative insofar as it enabled customers to express a view around protections they believe need to be put in place. It is not clear, however, that the perspective customers bring to this subject are nearly as broad and deep as the actual risk of cyber-insecurity. Over recent years the Commonwealth government has enacted policy that obliges distributors to have protections in place, the basis of its interest being national security of critical infrastructure. We believe this focus on national security will increase in the future, thus making the views of customers, while still significant, less influential. It seems to us there may be a growing case for excluding cyber security from direct discussion with customers in future resets on the basis that the discussion will never acquaint customers with all the factors that ultimately determine the amount of money that needs to be invested.

### ***Some suggested improvements in measuring VCR***

Our engagement with customers has alerted us to some improvements in the way the AER can measure the Values of Customer Reliability (VCR). Attitudes to outages, drawn from extensive customer surveys, have long been used to establish monetised values on supply disruption, and this forms a key economic reference point for the industry. However, outages are not taken to include momentary outages which, in the digital age, impact an increasing number of customers' lives. In the past two years large numbers of customers have been forced to work from home and are familiar with the problems that momentary interruptions to supply cause them while working on computers. Our engagement with customers has allowed us to hear this complaint. We believe that this phenomenon will increase in future if more people choose to work from home in digitally enabled professions, and should be considered in future valuations of electricity supply.

Our second issue is the intersection of electricity and telecommunications services. The two are often viewed by customers as the same, insofar as to their importance, particularly at times when communities are confronted by floods, bushfire and large storms. We note also that isolation brings with it a need for information and the absence of electrical supply regularly interrupts communication services. We have been struck by repeated references by customers to the loss of communications as being the most frustrating feature of a power supply interruption. In the minds of customers communications and the electricity supply which facilitates it are one and the same thing notwithstanding that in a regulatory sense they are unrelated services. As customers depend more on entwined services the ability of a regulatory model covering only one of them to deliver outcomes that fully meet the needs of customers may become more difficult if for no other reason than the telecommunications providers are not parties to the reset. As digital data becomes the norm we think it is timely for regulators and the Federal Government to consider how the regulatory framework can be modified to ensure that customers are better served through a co-ordinated response to their needs by distributors and telecommunication providers.

The third issue is that the current VCR measures only look at interruptions up to 12 hours and so do not address the impact on customers of a major and prolonged outage from severe weather events. We recognise the AER's attempt to address this issue through the [WALDO consultation](#) in 2018 and agree with their decision to not pursue the matter because of uncertainty of the proposed methodology, particularly around the inclusion of social costs. The recent increase in severe weather related events is expected to continue. This suggests it is time for the AER to revisit the WALDO issue and develop a more rigorous methodology.

### ***Customer involvement in future resets***

At different points in our engagement we have reflected on the evolution of customer perspectives in electricity distributor revenue resets and how, ideally, future resets can benefit from previous resets. With the AER's NewReg and Handbook approach taking hold across the NEM we believe that drafting a document at the end of our engagement might be of considerable value to any similar group established when the subsequent revenue proposal (2029-34) is assembled. This is not to suggest that Ausgrid needs to declare now how it will undertake that task. We are confident that Ausgrid sees value in having customers deeply involved in the development of revenue proposals and are confident that whatever form of customer involvement is chosen ahead of 2029, guidance from us will be of assistance. Over coming months we intend to prepare a document explaining how

the next revenue proposal can deliver even better outcomes for customers on the back of matters that have been discussed in depth through this reset.

***Customer impressions of affordability as shaped by external policies***

Affordability is key concern of customers and every electricity distribution revenue reset seeks to understand customer feeling on the subject. But the view customers have on affordability is shaped by some factors beyond the distributor's control including the concessional support policies offered by the Federal and State Governments. We have noted that the timetable of our seeking customer views has not aligned with statements offered by Government; the Commonwealth Government announced in late-2022, weeks after our Town Hall, that its energy price package will provide \$1.5 billion in rebates to vulnerable Australians. The timing of the relief is unknown at the time of writing this report but it is likely to shape the thinking of customers as to overall affordability. Not announced, but possible in the near future, are changes to the New South Wales Government's energy concession arrangements. With an election due in late-March and energy prices being a subject of great debate, any announcement by Government or Opposition about additional relief will also help shape current attitudes.

We make these observations to point out that notwithstanding Ausgrid's excellent investment in a quality customer engagement program, external announcements continue to influence customer views. By agreeing to test views again in 2023, both in June and in October, Ausgrid intends to capture any change of view.

## **Appendix A – Panel activity**

### ***RCP only meetings***

5 September

4, 17 & 31 October

14 & 28 November

12 & 13 December

### ***RCP meetings with Ausgrid***

6, 9 & 27 September

7, 21 & 26 October

4 & 18 November

2 December & 20 January

### ***RCP meetings with Ausgrid CCC***

16 November

### ***RCP meetings with Ausgrid RREC***

13 December

### ***RCP meeting with PIAC***

4 October

### ***RCP meeting with DEPI re NSW Roadmap***

11 September & 12 December

### ***Public lighting session***

29 September

### ***Voice of Community workshops***

17 September & 15 October (Town Hall)

### ***Other***

The NIAC meeting held on December 1, 2022, touched on parts of the Proposal. The committee comprises members of Ausgrid's CCC, some of whom are also Panel members.

Resilience workshops and discussions involving Ausgrid staff, Panel members and on some occasions AER observers, were held on 17 September, 17 & 27 November and 9 & 13 December.

Appendix B – Town Hall 15 October 2022 Final recommendations

# **Ausgrid's Draft Plan**

## **Voice of Community Panel + Wider Community Feedback**

**15 October 2022**

## PILLAR 1 - RESILIENCE

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<b>Resilience</b>  Cost: \$204m  Bill impact 2029: \$5 of the \$38	A program of investments.  Benefits include: <ul style="list-style-type: none"> <li>Maintain future climate change risk to the network and communities by installing network and community solutions.</li> <li>Reduced outages for worst served customers by creating redundancy in 100 areas to allow the network to get back on faster (network investment example).</li> <li>Provide community support before, during, and after events by deploying 5 mobile community hub caravans (community support example).</li> </ul> Community solutions such as education campaigns and mobile community hubs account for approx. - \$25m	4. Resilience is \$5 of the \$38 ... about 15%  5. Customers have indicated that there is an expectation that Ausgrid take steps to prepare for climate change, in particular more severe and frequent storms, extreme bushfire risk and network stress on consecutive hot days. Their modelling suggests that new expenditure of about \$5 on the \$38, or 15% or the new work is needed. Does that feel right to you ?  6. The investment can be targeted at being proactive - that is to 'harden the network' in highest risk areas, or to cover the risk of where	Urban areas already well served - so prioritise non urban areas  The programme looks good, please reduce cost  Seems like a good balance - diversity of strategies  Consider environmental impact of solar panels in the future  Community based solutions, demand or supply side, we want to be a part of the solution, potentially in a commercial sense.  Strong emphasis on community/individual independence and response, relative to network hardening. Ensure solar pv/batteries don't rely on grid power - defeats object..  Importance of better communication in emergencies - alternative ways of dealing with extreme heat

	Improved network assets, back up generation, microgrids and other network based investments account for approx. - \$179m	<p>the weather may or may not hit by</p> <p>extending an effective recovery response to respond during and after the event. Where do you think the balance should lie ?</p> <ul style="list-style-type: none"> <li>• Responding to supply risks on hot days, such as local overloads, are infrequent and can be widely scattered, and as such, can be considered as not a priority for significant investment. However, we recognise the major health and community safety risks for loss of power on consecutive hot days. Should we raise the priority of this type of network investment ?</li> </ul>	<p>Employ dedicated meteorologist to anticipate disasters</p> <p>Prioritise Community based solutions</p> <p>Needs to be aware of heat affect - not always about tree maintenance. Could also liaise with councils for “trees in urban areas”</p> <p>Heat issue - significant for people but Ausgrid is not always responsible for the solution with information people may resolve the issues for themselves.</p> <p>Look at cheaper effective solutions that do not involve Ausgrid workers - e.g. send people affected to a hotel for a few days versus sending out workers to fix the issue.</p> <p>Partnership is a way to save money to get better and cheaper outcomes eg CSIRO; Councils; Aged care providers through their workers</p> <p>Community engagement. Engagement with Indigenous communities in particular is really lacking.</p> <p>Recommendation 5</p> <p>21 respondents:</p>
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			<p>6 Love this</p> <p>12 Like it</p> <p>2 Can live with it</p> <p>Noteworthy that there were no negative responses</p>
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## PILLAR 2 - CUSTOMER SERVICE

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<p><b>Customer Service</b></p> <p>Customer Service</p> <p>Cost: \$20m</p> <p>Bill impact 2029: \$1 of the \$38</p>	<p>Investments to improve the timeliness and accuracy of outage information - \$10m</p> <p>Website and SMS services improvements - \$2.5m</p> <p>Improving our connections process for large customers \$7.5m</p> <p>Benefits include: Seamless experience for connecting customers when communicating with Ausgrid from enquiry to energisation 43 minutes saved per customer to seek information and get things done with us</p> <p>Proposing that the AER apply a Customer Service Incentive Scheme (CSIS) to us from 1 July 2024. Whereby</p>	<p>Concerns, perspectives or potential areas of challenge from the RCP:</p> <ul style="list-style-type: none"> <li>• How comfortable you are that the Draft addresses your expressed concerns about call centre empathy, ability to speak with a person, support for vulnerable consumers (LSC, CALD, financially vulnerable etc)?</li> <li>• Regarding the proposed CSIS – are there any areas that might need to be accentuated/altered/added?</li> <li>• The difference between your (VoC) preference for a \$7m spend on improving customer experience and the Draft's \$20m proposal do you agree with/understand Ausgrid's rationale/reasoning?</li> </ul>	<p>Responses:</p> <ul style="list-style-type: none"> <li>• LOVE IT: 4</li> <li>• LIKE IT: 3</li> <li>• LIVE WITH IT: 6</li> <li>• LAMENT IT : 3</li> <li>• Money in draft plan is three times what the VOC proposed amount? Why?</li> <li>• What are the benefits from this huge increase in money to be spent?</li> <li>• Customer service improvement can lead to better customer retention that improve revenue</li> <li>• Need to ensure human customer service experience. If cuts need to be made, this area should be reduced in funding.</li> <li>• I would like to know that the investment is being used to significantly</li> <li>• improve customer satisfaction.</li> </ul>

	we return up to \$43 million to customers if we do not improve our customer service.		<ul style="list-style-type: none"><li>• More of the focus on your residential customers even when you don't interact with them.</li><li>• Quick response in case of emergencies and in the language of customers</li></ul>
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## PILLAR 3 - INNOVATION

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<b>Innovation</b>  Cost: \$50m Bill impact 2029: \$2 of the \$38	Trials based on 'innovation investment principles' Testing new innovative technologies that better integrate customer solar & EVs, conducting research and trialling advances in network equipment that have potential to improve safety & reliability	Concerns, perspectives or potential areas of challenge from the RCP: <ul style="list-style-type: none"> <li>• How NIAC is delivering benefits for customers</li> <li>• What is proposed in the \$50m innovation program in the Draft Plan?</li> <li>• Are the innovation principles correct and how should they be weighted?</li> </ul>	5 love it 10 like it 1 live with it 4 lament it 22 people signed <ul style="list-style-type: none"> <li>• more work with vehicle to grid implementation</li> <li>• Look at other avenues other than batteries and whether they have long term capabilities</li> <li>• Need to look at cable capacity</li> <li>• Lower the cost to increase reliability</li> <li>• Good idea to spend \$ on intelligent network as it would be cheaper to discovery of faults as well as more accurate info</li> <li>• spend more in accelerating decarbonisation</li> <li>• Not enough of spend</li> <li>• priority of decarn and resilience relative to fairness and lowering cost other ways /actions should address fairness</li> </ul>

			<ul style="list-style-type: none"> <li>• innovation can significantly reduce cost in the long term. Resilience and cost are equally important</li> <li>• intelligent network e.g partnership with CSIRO, Unis, etc to come up with community solutions</li> <li>• Ausgrid should engage in innovative practice across all facets of the company . community innovation should be the priority particularly partnership with social organisations.</li> <li>• Trialling should consider geographic and social economic focus (from 2 people</li> <li>• all areas should be considered according to geographic and social economic conditions.</li> <li>• innovation is super important but I can see how you have doubts about Ausgrid being able to deliver on it usefully good call.</li> <li>• Offer community the opportunity to be involved in solutions.</li> <li>• Put resilience up the list on weighting because resilience pays forward both</li> </ul>
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			<p>in money cost and personnel capability.</p> <ul style="list-style-type: none"><li>• innovation in intelligent network, where smart grid, access, and new technologies can be used to improve the system.</li><li>• innovation principles 1 accelerating decarbonisation 2. improve resilience</li></ul>
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## PILLAR 4 - NET ZERO

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<b>Net zero</b>  Cost: \$110-\$153m Bill impact 2029: \$6 of the \$38	<p>New processes and tools, including upgrading our systems to give us better visibility of all parts of our network.</p> <p>Including, better understanding 2-way energy flows across the network and monitor potential electrical faults that can cause safety hazards, by investing \$24m in smart meter data.</p> <p>Benefits include:</p> <p>Remove barriers, and enable customers to maximise their energy investments Connect 110,000 new solar customers ~ 1GW of clean energy</p> <p>350,000 Electric Vehicles ~ 262,500 tonnes/CO<sub>2-eq</sub> emission reductions</p> <p>p.a.</p>	<p>Concerns, perspectives or potential areas of challenge from the RCP:</p> <ul style="list-style-type: none"> <li>We heard you want to mandate the new pricing platform as of 2025. Is this desire dependent on anything else?</li> <li>We understand customers need information to make the best use of new tariffs. How should Ausgrid encourage the uptake of smart meters that are needed to make best use of those tariffs?</li> <li>We heard that you want batteries but we need to be certain you understand that the benefits are uncertain and will, if realised, not be shared amongst every customer. Are you comfortable with that? If not does Ausgrid need to do more research and development on batteries?</li> </ul>	<ul style="list-style-type: none"> <li>Majority (11/18) "like it". 4 "love it", 3 "live with it".</li> <li>We recognised that Ausgrid is limited in what it can do in contributing in this area</li> <li>Partnership with other institution, government agency, council to faster adoption on Solar, EV, batteries</li> <li>Working with government and social housing to help educate everyone including the low income and vulnerable population on how they can be involved in the drive to Net Zero, how they can get a smart meter, etc.</li> <li>Remember to consider just Solar Panels or Batteries, explore other initiative that could contribute to Net Zero</li> </ul>

	100,000 residential battery systems ~ 1GWh of storage		<ul style="list-style-type: none"><li>• More education, explanation to the public about how the tariffs contribute to the cost. And why it is a reasonable and fair change. Things to</li></ul>
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			<p>emphasise: customers are not being charged to export, they are just being rewarded a little bit less; and they are being rewarded for shifting their usage and smoothing out load on the grid.</p> <ul style="list-style-type: none"><li>- Suggestion to prioritise community batteries in areas with high density, heritage limitations, lots of renters, ... so that they can benefit from renewables and reduced cost.</li><li>- Provide customers with more info on battery technology, e.g. lifespan, suitability.</li><li>- Double-check the numbers in the draft plan for mistakes/typos.</li></ul>
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## PILLAR 5 - CYBER

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<p><b>Cyber</b></p> <p>Cost: \$106m</p> <p>Bill impact 2029: \$11 of the \$38</p>	<p>Ensuring our safeguards align with industry best practice.</p> <p>Gradually increasing our cyber compliance by reaching Cyber level 2 by mid 2027 and then progressively improving to Cyber level 3 by 2029.</p> <p>Benefits include:</p> <p>Reduced likelihood of a cyber incident affecting integrity of customer data and/or safe supply &amp; restoration of energy</p>	<p>Concerns, perspectives or potential areas of challenge from the RCP:</p> <ul style="list-style-type: none"> <li>How important do you consider cyber security is compared with other issues Ausgrid is seeking to balance eg enabling export of roof-top solar, building a grid that is more resilient to climate change?</li> <li>What factors do you consider have changed since the VoC discussion that may lead you to have a different view to when you were part of the VoC?</li> <li>Do you think that Ausgrid has any choice in the level of cyber security it should seek?</li> </ul>	<p>Ausgrid should ensure the cyber protection processes are well-researched and transparent to customers and stake holders.</p> <p>Cyber security is a necessity of the highest level.</p> <p>Wise cyber investment can mean greater network stability/resilience.</p> <p>To what extent is there a crossover between Cyber and IT - what is being spent where?</p> <p>Cyber security will only become more important - we should stick with L3 if there is no negative impact on the customer</p> <p>Invest now, to prevent a greater spend later. Prevention is better than a cure!</p>

## PILLAR 6 - IT SYSTEMS UPGRADE

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<p><b>IT system upgrades</b></p> <p>Cost: \$143m</p> <p>Bill impact 2029: \$12 of the \$38</p>	<p>Improving our capability through system upgrades, that enable us to be more efficient, and improve our ability to innovate in areas such as pricing.</p> <p>Making an upfront commitment to reduce our operating costs by \$32 million over the 2024-29 period.</p> <p>Benefits include:</p> <p>Maintain reliability of market transactions and billing processes in line with obligations to adjust to changing market drivers e.g. dynamic tariffs</p> <p>Maintain operational costs at current levels by offsetting cost increases in other areas of the business</p> <p>Improves customer experience by supporting simpler internal processes</p>	<p>Concerns, perspectives or potential areas of challenge from the RCP:</p> <ul style="list-style-type: none"> <li>• Are the benefits from the proposed IT investment tangible enough for you to support the expenditure?</li> <li>• Should Ausgrid be held to account for any cost overruns in implementing the new I.T. system and if so, how?</li> <li>• Is it in your interest for the proposed investment to be depreciated over a longer period than five years?</li> </ul>	<ul style="list-style-type: none"> <li>• Firm guidelines and clarity about what iws being delivered and how benefit organization and customers</li> <li>• 2,definite interest in distribution over cost over a longer period of time if environment(financial) alters significantly.</li> <li>• depreciate investment over shortest time. Keep IT accountable'</li> <li>• Essential but must be tightly managed.</li> <li>• Ausgrid or(preferably) contractors for cost overruns. Depreciate over AER allows wperiods of</li> <li>• We can't afford to not upgrade system.</li> <li>• Important to do but is there any potential to recover in longer periods.</li> <li>• Important to do and make it friendly with all people</li> <li>• 8 smart grids</li> </ul>

	Enables Ausgrid to provide more innovative service offerings, such as dynamic supply and pricing options.		<ul style="list-style-type: none"> <li>• depreciate over 10 year period 15 too long and 5 too short.</li> <li>• Definite no over spend</li> <li>• If the system is not old you have to upgrade sooner rather than later. Can probably argue to recover costs over 10 years. But Prioritize ongoing development. Make sure not delayed for next time.</li> <li>• Consider recovery of costs over longer period of time. 12. Ausgrid should be accountable for any cost overrun.</li> <li>• Consider other improvements being implemented in other areas.</li> <li>• Support longer depreciation to reflect longevity of investment</li> <li>• love it - 6: Like it 10: Live with it -3.</li> </ul>
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## PILLAR 7 - OTHER

Topic	What we have done with what we heard.	RCP questions and concerns.	Panel Suggestions for the RCP
<p><b>Other</b></p> <p>Other parts of the bill and your household expenses are likely to change.</p>	<p>Inflation and interest rate increases will impact Ausgrid's portion of your electricity bill, but other parts of the supply chain will also be impacted.</p> <p>The costs of transforming our electricity supply to renewable one will impact different parts of the bill.</p> <p>Many items in your household budget have risen recently and are likely to continue to rise.</p>	<p>Concerns, perspectives or potential areas of challenge from the RCP:</p> <ul style="list-style-type: none"> <li>What initiatives across the six investment areas should</li> </ul> <p>Ausgrid prioritize in the next five years? Which initiatives do you consider essential? Which can be pushed into the future?</p> <ul style="list-style-type: none"> <li>How do potential changes in external factors* affect your perspective on Ausgrid's proposed investments?</li> </ul> <p>o *i.e. inflation, interest rates, concessions, hardship support, roadmap costs, government subsidies</p> <ul style="list-style-type: none"> <li>Should Ausgrid be required to get back to you if there are changes to these external factors? If so, what types of change should trigger the requirement to re-engage?</li> </ul>	<p>IT upgrade benefits: such as increased productivity and efficiency. Would this be able to reduce cost?</p> <p>Would not want to see much change in balance between the six pillars. Need to consult again if external factors change significantly. Should be pushed for government support for innovation, resilience and for financial support for low income consumers.</p> <p>Prioritise long term investments e.g. net zero - will take longer to see benefit but impacts every other aspect.</p> <p>Priority is EVs and community batteries to achieve net zero.</p> <p>IT is the priority as is cyber. Net zero needs to be dealt with and results will be seen long term.</p>

			<p>Prioritise safety and resilience, innovation and cyber over others.</p> <p>Increase community engagement overall, particularly with indigenous communities.</p> <p>Prioritise equity in decision making about where to locate community batteries and investment.</p> <p>Don't lose sight of what's important over the long term even if it takes longer to pay off or see benefits.</p>
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## **Appendix C – Correspondence with DPIE regarding NSW Roadmap Costs**

### ***DPIE advice to RCP 4 August 2022***

Thank you for your letter and feedback on behalf of the Ausgrid Reset Consumer Panel (RCP) in relation to informing Ausgrid's 2024-2029 revenue proposal. I would like to apologise for the time taken to respond to you.

It was a pleasure to meet with you and the panel on 21 June. You raised in your subsequent letter of 29 June that the Reset Customer Panel would like information on the costs over 2024-29 as a result of the Electricity Infrastructure Roadmap (Roadmap).

The first annual contribution determination by the AER, due for publication by 28 February 2023, will be the most accurate information on costs available for the Roadmap. At the time of the first determination the best estimate of the cost for the year 2024-25 will be equal to the 2023-24 determination. Prior to the contribution determination, the Consumer Trustee's Investment Objectives Report (IIO Report) published in December 2021 remains most recent publicly available information for costs.

Please note that there have been significant changes to the energy market since the release of the IIO report and due caution should be exercised.

In the development of the Electricity Infrastructure Fund policy, we consulted publicly as well as closely with distribution businesses on guiding principles for the apportionment of costs to distribution businesses. The approach, now set out in the Electricity Infrastructure Investment Regulation, is designed to deliver revenue adequacy, apportion costs equitably in a relatively simple manner, and be auditable. How distribution businesses apportion their share of scheme costs across their customers has not been prescribed.

In the time since we met with you, we have lodged an application with the AER for a supplementary NSW Jurisdictional Scheme in relation to exemptions. Also, on 1 August it was announced that the Minister has directed the Consumer Trustee to conduct a firming tender round to address a forecast breach of the Energy Security Target. An IIO Report is expected to be published in November 2022 to account for this. More information about the firming round is available on the Consumer Trustee's website.

I would be happy to discuss these matters with you and the panel.

Kind regards

Office of Energy and Climate Change

## **AEMO Services (response to RCP's IIO Review submission) 2 December 2022**

*Note – Updated advice on the information provided is added by the RCP in bolded type at the end of each section.*

Thank you for taking to time to provide feedback on the Draft 2022 IIO report. We acknowledge the time it takes to provide a submission and appreciate the consideration you have given to the Draft. The feedback you provided has helped shape the final version of the report. Please find attached the final version of the 2022 IIO report, and responses to the feedback provided below.

*“Who prepared the forecasts – internal AEMO Services/AEMO staff or a consultant?”*

AEMO Services engaged AEMO to undertake market modelling, including cost calculations, to inform the preparation of the IIO Report. **This is noted in section 5 of the report and has been clarified in Appendix A in the final version of the report.**

*“The assumptions (including discount rate) and methodology for the wholesale price forecasts”*

The figures in Table 7 in Appendix A of the report were calculated using a 5.5% (real, pre-tax) discount rate, in line with the central assumption in AEMO's 2021 Inputs, Assumptions and Scenarios Report (2021 IASR). **This has been clarified in Appendix A in the final version of the report.**

*“What costs are included e.g. are the recently announced Strategic Benefit Payments scheme included and what was that component costed at per year?”*

As noted in Appendix A, the assumptions regarding the costs of transmission projects were taken from AEMO's 2021 IASR. Those assumptions did not include the costs of the Strategic Benefit Payments scheme, which was announced after the modelling was undertaken for this report. It is expected future IIO Report will include updated transmission cost forecasts that reflect the costs of the Strategic Benefit Payments scheme. **This has been clarified in the final version of the report.**

*“What causes the year to year variation e.g. the fall in 2024/5 and 2031/32?”*

Higher wholesale costs are generally associated with generator retirements and/or higher demand. Lower wholesale costs are generally associated with new investment in generation and/or transmission capacity. Scheme costs associated with LTESAs and transmission investment are expected to increase over time as infrastructure is added incrementally but are offset by lower costs in the wholesale market. **This has been clarified in the final version of the report.**

*“Are the costs of the two Roadmap components (LTESA + REZ) in each year reflective of the gradual build over the period to 2030 so that by 2031 the costs include the costs in year 1 of the full amount of generation and storage to be built as set out in the Draft 2022 IIO Report?”*

The forecast of costs reflects the construction of firming, generation and long-duration storage infrastructure (in accordance with the Development Pathway) to 2032-33. This includes the achievement of the minimum legislated objectives for generation and long-duration storage by the end of 2029. As noted above, scheme costs associated with LTESAs and transmission investment are expected to increase over time as infrastructure is added incrementally but be offset by lower costs in the wholesale market.

*“Why the cost forecasts in Table 7 are referred to as NPV, not NPC? If NPV, where are the estimates of the benefits?”*

**This has been corrected in the final version of the report** to refer to the ‘present value’ of the costs of supplying wholesale energy services to NSW customers (note that this is not net of the associated benefits).

*“How this modelling compares to the modelling released in 2020 when the Roadmap policy was originally announced.”*

Previous modelling undertaken by Aurora Energy Research in 2020 when the Roadmap was established demonstrated the Roadmap would provide an overall net benefit to NSW customers. Direct comparisons between this modelling and the modelling for the 2022 IIO Report are not possible, given the fundamental difference in objectives of the two modelling exercises, as well as the use of different models, modelling teams, inputs, assumptions and methodology. **It is expected updated modelling regarding the net benefits of the Roadmap to NSW customers will be available from the NSW Government in 2023.**

*“How the \$2.46b in costs to 2031 is to be divided among the three NSW DNSPs”*

This is not required to be included in the IIO Reports. As noted in the final version of the report, modelling and cost calculations are undertaken to assess the relative cost impacts of different build trajectories. This information is used to inform decisions about the design of the Development Pathway (although, as noted in the report, there was no material difference in cost outcomes under the three scenarios modelled for the firming element of the Development Pathway). The process and methodology of the contribution determination process are set out in the AER’s [NSW Contribution Determination Guidelines](#). Information about the specific costs, to be divided among the three NSW DNSPs for the FY24 period will be included in the contribution determination, published by the AER no later than 28 February 2023.

We trust this clarification, together with the Final Report assists you in achieving your objectives. Should you have any further questions with regards to this, please do reach out at any time.



## **OECC advice to RCP**

### Central West Orana REZ

*What are the cost pass through provisions available to the successful tenderer? What overrun (cost and schedule) risk does the successful tenderer bear? E.g., what is the level of liquidated damages a successful tenderer will have to pay if there is a delay in consumers getting the benefits that the modelling suggests? What timetable/cost risk do consumers bear?*

Network infrastructure project costs will be determined through a competitive procurement process, which will be subject to an Australian Energy Regulator (AER) determination. This is expected to occur in 2023. The risk of delivery of the project in accordance with the regulatory determination by AER rests with the network operator. The Network Operator will be paid service payments based on the availability of the Renewable Energy Zone (REZ) network infrastructure and the connection of renewable generators. This creates a strong alignment of incentives between the Network Operator and consumers.

### Cost recovery arrangements for transmission connected customers

*What is the rationale for recovering costs through distribution charges when recovering from transmission is fairer (in terms of a beneficiary pays basis)? We know a lot of consumers that are direct connected to the transmission system are EITE exempt, but how many (GWh/yr) are not?*

The Electricity Infrastructure Investment Act 2020 (EII Act) allows the Scheme Financial Vehicle (SFV) to recover costs from the Electricity Infrastructure Roadmap (Roadmap) via contribution orders from Distribution Network Service Providers (DNSPs) and provides for AER determined cost recovery as a jurisdictional scheme under the National Electricity Rules. Distribution businesses can pass costs onto customers from July 2023. The Office of Energy and Climate Change (OECC) has consulted extensively with DNSPs on how the SFV will apportion costs. OECC has consulted on the development of a fair apportionment methodology which is a combined volumetric and peak demand method, designed to fit a framework of principles which were also consulted on. The guiding principles for apportioning Roadmap costs are being adequate, auditable and equitable. Of the customer base of direct transmission connected customers, emissions-intensive trade-exposed entities (EITEs) represent nearly all of the electricity consumption in terms of gigawatt hours (GWh). This means, even if these customers were distribution connected, they would still be mostly exempt from Roadmap generation costs. The EII Act requires the Act to be reviewed after five years, which provides an opportunity to review.

*Have any EITE entities or green hydrogen producers applied or expressed interest in an exemption under the recent AER approved jurisdictional arrangements?*

For emissions-intensive trade-exposed entities Roadmap exemptions are provided to EITEs who are also exempt from the Energy Savings Scheme (ESS). If exempt from the ESS, then EITEs are also exempt from part of their Roadmap costs. EITEs are publicly listed on a Ministerial order published in the Gazette by December each year. In 2021, there were 34 EITEs that had been granted exemption from the ESS (see Gazette). It is anticipated that the list of exempt EITEs will be similar in 2022.

Green hydrogen producers in NSW will be able to apply for exemptions to the following charges:

- Climate Change Fund.
- Energy Savings Scheme.
- Peak Demand Reduction Scheme.

- Electricity Infrastructure Roadmap.
- Network use of system charges.

The production of green hydrogen will not be exempt from the Renewable Energy Target. The OECC is finalising the enabling regulations and administrative process for the green hydrogen exemptions. The intention is that green hydrogen producers will complete a single application, covering all possible exemptions. Projects under the NSW Government's hydrogen hub initiative are expected to be commissioned and eligible around FY 2024-2025 and 2025-26. One small scale green hydrogen project is currently in operation and could apply for the exemptions once the administrative process is open. OECC will assess the project at the time of its application, if one is made, to determine if it meets the eligibility requirements. Further detail on the application process will be available to industry, network operators and retailers as part of the implementation of the NSW Hydrogen Strategy.

*What is the estimated cost impact on non-EITE/green hydrogen producers of these exemptions?*

Roadmap contribution determinations are split into two broad cost categories:

1. Generation costs representing the cost of Long-Term Energy Service Agreements (LTESAs) for generation
2. Capacity costs which represent all the other costs.

EITEs are exempt from 90% of their share of Roadmap generation costs. In years where the wholesale price of electricity is high (like the current environment) it is anticipated the generation portion of the contribution determination will be low as there is no expectation that LTESAs will be optioned or paid out. Therefore, the current estimated cost impact of exemptions from EITEs is small.

We are not able to provide an estimated cost impact number as it will depend on the size of the contribution determination and the proportion of Roadmap costs which are generation costs. Green hydrogen producers are exempt from a percentage of all Roadmap costs on a sliding scale.

Year commissioned	FY of first exemption	% exemption	Period of exemption
2028 or earlier	2029-30 or earlier	90	10 years
2029	2030-31	60	10 years
2030	2031-32	30	10 years
2031 onwards	Not applicable	0	Not applicable

At present there are no green hydrogen producers commissioned and eligible for exemptions.

*How is the OECC proposing to recover Roadmap costs from those direct connected transmission customers which are not EITE?*

This is a known issue that was flagged in OECC's policy consultation paper in October 2021. Currently, Roadmap costs are not recovered from transmission connected customers. We stated in that paper that this issue will be considered in the 5-year statutory review of the EII Act.

*Our aim is now to understand more about the mechanics of the Roadmap costs as they will be revealed to distributors and feed into prices from the start of the new regulatory period in mid-2024.*

The Australian Energy Regulator (AER) gazettes the contribution determination by February 28 each year. The AER is to publish the contribution determination calculation model each year under the EII Act. The Scheme Financial Vehicle (SFV) will issue to each DNSP four contribution orders for the amount they will be required to pay to the SFV at the end of each quarter.

Contribution Order date	Payment schedule
1 July	1 Nov
1 Sept	1 Feb
1 Jan	1 May
1 Apr	1 Aug

DNSPs submit annual pricing proposals to the AER including the jurisdictional scheme costs (Roadmap costs). DNSPs will recover costs from customers from 1 July onwards.

## Appendix D – Ausgrid Proposal Attachments received by the RCP by 18 January 2023

Chapter name	Document name	Written attachment	Model	Review High level review or Date Received
	Message from the Chair			Review
<b>1 Executive Summary</b>				Review
<b>2 Context for our Proposal</b>				
	Document map / supporting materials list	√		
	Key assumptions and Directors' certification of key assumptions	√		
	CEO Statutory Declaration	√		
	Confidentiality claims	√		
	NER compliance table	√		
<b>3 Our customers' priorities</b>				
	Engagement Overview	√		Review
	Customer engagement matrix	√		Review
	Customer advocate meeting matrix	√		Review
	Customer engagement materials (VoC, Small business etc)	√		Review
	Engagement framework	√		Review
	Draft Plan – Submissions received			Review
<b>4 Proposed Revenue</b>				
	Ausgrid's 24-29 Revenue	√		Received 13 Jan 23
	CESS Calculation for distribution		√	Received 13 Jan 23
	CESS Calculation for Transmission		√	Received 13 Jan 23

<b>5 Capital expenditure</b>				
	Ausgrid's proposed capital expenditure	√		
	Master list of capex projects and programs	√		High level review
	Network strategy	√		Review
	Investment Governance Framework	√		High level review
	Cost estimation approach	√		High level review
	Customer value framework	√		Review
	Principles of Cost Benefit Analysis	√		High level review
	CBA overview	√		
	CBA approach for replacement programs	√		Review
	Resourcing and delivery strategy for 2024-29 period	√		Received 18 Jan 23
	Replacement program summary	√		Received 22 Dec 22
	Independent review of CBA modelling	√		Received 18 Jan 23
	Climate resilience program	√		Received 18 Jan 23
	Climate Impact Assessment Report	√		Received 18 Jan 23
	Climate Impact Assessment Report - customer facing	√		Received 18 Jan 23
	Climate Resilience Framework (final version)	√		Review
	Climate resilience Implementation Plan	√		Review
	KPMG Partner Letter for Climate Impact Assessment work	√		Received 18 Jan 23
	Risk Frontiers Letter for Climate Impact Assessment work	√		Received 18 Jan 23

	Resilience summary view		√	
	Electricity Demand Forecasts Report	√		Review
	Project justification for sub-transmission cable replacement	√		Review
	Project justification for 11kV switchgear	√		Review
	Project justification reliability programs	√		Received 18 Jan 23
	Connection Policy	√		Review
	Review of demand and customer forecasts	√		Received 18 Jan 23
	CER integration strategy	√		
	CER integration program	√		Review
	CER forecasting approach and modelling methodology	√		
	CER additional information and supporting documentation	√		
	Ausgrid's strategic innovation program	√		
	Network Innovation Program Overview & Justification	√		Review
	NIAC - feedback on Ausgrid's Innovation Program	√		Review
	Network innovation program - PIR	√		Review
	Technology Plan 2024-29	√	√	Received 22 Dec 22
	ERP Upgrade	√	√	High level review
	Cyber Security Program Brief	√	√	Received 22 Dec 22
	ICT & Infrastructure Program Brief	√	√	Received 22 Dec 22
	Fleet strategy	√		Review

	Fleet business case – EWPs	√		Received 6 Jan 23
	Fleet business case – Light commercial vehicles	√		Received 6 Jan 23
	Fleet business case – Heavy commercial vehicles	√		Received 6 Jan 23
	Fleet business case – Crane borer	√		Received 6 Jan 23
	Fleet model		√	
	Non-network Property Plan 2024-2029	√		Review
	Capitalisation Policy	√		Received 18 Jan 23
<b>6 Operating expenditure</b>				
	Ausgrid's proposed operating expenditure (incl Step Changes)	√		Received 13 Jan 23
	Opex model	√		Received 13 Jan 23
	Step changes		√	
	Network maintenance opex plan	√		Review
	Marsh insurance report	√		High level review
<b>7 Incentive schemes and pass throughs</b>				
	Application of incentive schemes	√		
	CSIS	√		Review
	Nominated cost pass through events	√		
<b>8 Tariff Structure Statement</b>				
	Tariff Structure Statement	√		High level review
	Tariff Structure Statement Explanatory Note	√		
	Bill impacts	√		Received 18 Jan 23

	Long run marginal cost import methodology report	√		Received 13 Jan 23
	Price and asset linkages	√		Received 18 Jan 23
	Indicative Pricing Schedule - DUOS	√		Received 18 Jan 23
	Indicative pricing schedule - ACS	√		Received 18 Jan 23
	Demand forecast volumes and customer number	√		Received 18 Jan 23
<b>9 Ancillary control services</b>				
	Ausgrid's public lighting services	√		Received 18 Jan 23
	Public Lighting Investment Plan	√		
	Ausgrid's metering services	√		Received 18 Jan 23
	Real material escalation report (assumptions)	√		Received 22 Dec 22
	Real cost escalation report (assumptions)	√		Received 22 Dec 22

We previously reviewed other documents being included as Attachments to Ausgrid's Proposal, when we prepared our First RCP Report.



## Appendix E – Updated opex and capex productivity note

### A holistic approach to productivity sharing between Ausgrid and its customers

#### Summary

The RCP has been engaging with Ausgrid throughout the reset process on the appropriate level of productivity improvement in both opex and capex to include in its Proposal.

This discussion has been driven by the AER data on Ausgrid's productivity performance over the medium to long term. The just [published data for 2021](#) shows that while Ausgrid improved significantly compared to 2020 and is one of the best improvers over the last 10 years, it is still the poorest performer of all 13 DNSPs on overall multifactor total productivity measure. Significantly improved opex productivity (like many other DNSPs) has been offset by relatively poor capex productivity (like other DNSPs).

Network productivity (and efficiency) is usually approached in a relatively siloed way, with generally separate consideration of ways to improve opex and capex productivity. In seeking to understand how we might assess ways of challenging Ausgrid to continue to improve its productivity, our starting proposition was that:

- it is better to look at opex and capex productivity holistically rather than individually as is currently the case, and
- 'productivity' is best seen as an umbrella term to cover a range of measures that improve capex and opex efficiency with the aim of reducing costs and addressing affordability concerns.

The Panel believes that:

- the interdependencies between capex and opex, and
- increasing risk and uncertainty around weather related and cyber security events

suggest a holistic approach to productivity and efficiency could lead to improved consumer outcomes compared with focussing on each in isolation. The Panel supports a nuanced discussion of how the various productivity measures interact with each other and how that influences the allocation of risk between Ausgrid and its customers.

This Appendix discusses the basis for that proposition and reports on discussions we have had leading up to Ausgrid's submission of their Proposal on 31 January 2023.

We have concluded that the following package of productivity and efficiency measures combine to provide the appropriate incentive structure on Ausgrid to continue improving its relative productivity performance in 2024-29:

- the opex productivity at the AER required 0.5%/yr;
- a range of costs being absorbed in the opex cost base e.g. higher GSL payments; higher recruitment of apprentices and graduates (which together equate to 0.2%/yr improved productivity); and higher potential costs of weather related events that do not meet the 1% annual revenue hurdle for a pass through;
- the improved governance structure around repx that has contributed to a forecast 5% reduction in 2024-29 repx compared with the forecast for the current period;
- the decision to apply the 0.5%/yr productivity factor to capex overheads;
- retaining the current depreciation method;

- adopting an ERP asset life of 15 years;
- the ICT governance principles;
- excluding the application of the CESS and the EBSS to the resilience and innovation expenditure;
- the proposed property rationalisation;
- absorbing increased insurance costs incurred during the period by using the 2024 premiums for the step change; and
- adopting the VPN tax decision (which may have been mandated by the AER in the future).

We look forward to working with Ausgrid and the AER on the details of how some of these measures will be implemented.

## Background

AER regulation of electricity networks is designed to replicate what happens in a ‘workably competitive market’. This means that, like businesses in a competitive market, regulated networks should continually seek to improve their efficiency and consumers should benefit from this. It is fundamental to the achievement of the NEO.

The level of productivity improvement is driven by the allocation of risk (where the likelihood of outcomes is known with some certainty) and uncertainty (where outcomes are unknown) that can be assigned between Ausgrid and its customers.

The AER seeks to achieve the ‘workably competitive’ outcome through incentive-based regulation. Networks have access to a range of schemes that incentivise networks to spend less than their AER capex and opex allowances e.g. CESS for capex, and EBSS for opex, where reductions under AER allowances (and increases above) are shared 30% network/70% consumers<sup>74</sup>. A review in 2018 led to the AER mandating a 0.5%/yr opex productivity improvement factor for all DNSPs. This means consumers get 100% of the first 0.5% improvement in opex and 70% of any further improvement.

The AER publishes annual benchmarking data on all 13 DNSPs opex, capex and overall efficiency to show changes in an individual network’s productivity over time and how a particular network compares to the ‘productivity frontier’ i.e. the best performing DNSP.

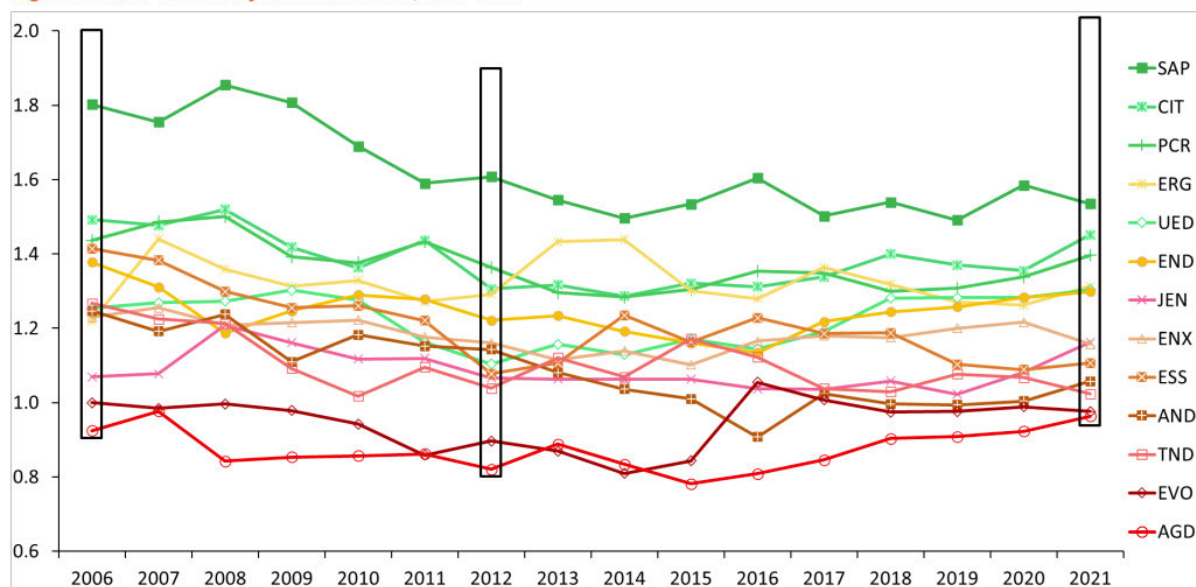
The recently published AER data for 2021 showed that, compared with the 13 DNSPs measured, Ausgrid (‘AGD’):

- (i) was bottom on overall multilateral total factor productivity despite having the second best improvement of all DNSPs over 2012-21:

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<sup>74</sup> Though we note how the EBSS share has changed over time since the 2013 Guideline with the recent fall in WACC leading to the current 18/82 network/consumer share – see the discussion at p.11  
<https://www.aer.gov.au/system/files/AER%20-%20Draft%20decision%20-%20Review%20of%20incentive%20schemes%20-%20December%202022.pdf>

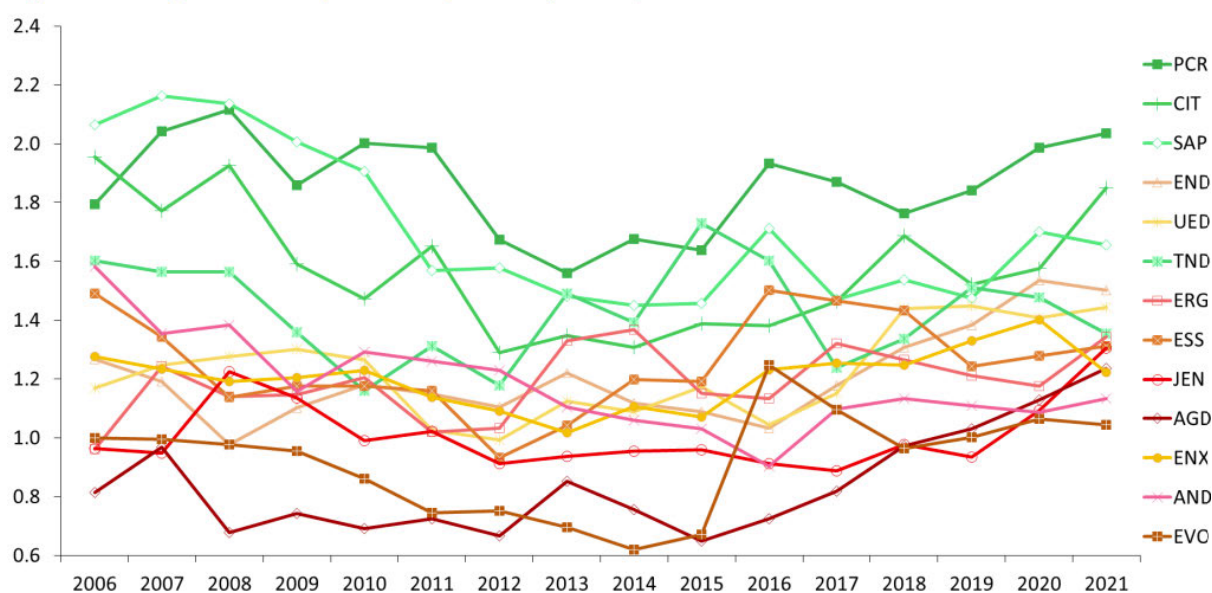
Figure 10 MTFP indexes by individual DNSP, 2006–2021



Source: Quantonomics; AER analysis. Note: These results do not reflect the impact of a range of material OEFs (see Section 7).

- (ii) had achieved significant improvement in opex productivity since 2015 (bottom) to 2021 (10<sup>th</sup>) in 2021:

Figure 11 DNSP opex multilateral partial factor productivity indexes, 2006–2021



Source: Quantonomics; AER analysis. Note: These results do not reflect the impact of a range of material OEFs (see Section 7).

In assessing a network's proposed opex expenditure, the AER first assesses whether the 'base' year opex is 'not materially inefficient' compared with the benchmark of not less than 75% of the most efficient network on the 'efficiency frontier'. If so assessed, then networks are set an opex allowance that reflects an annual productivity factor of 0.5% designed to reflect the improvement expected by a prudent and efficient network operating at the frontier.

It is not meant to cover any 'catch-up' that a network needs to do to get to that frontier – something that Ausgrid still has a lot to do. In the current 2019-24 reset period, Ausgrid has an effective 0.85%/yr (0% in year 1 and 1% in years 2-5) which will provide some 'catch-up'.

Other more efficient networks are achieving their higher productivity through increased outputs, not through opex reductions. Below we present AER data showing Ausgrid's relatively poor asset utilisation.

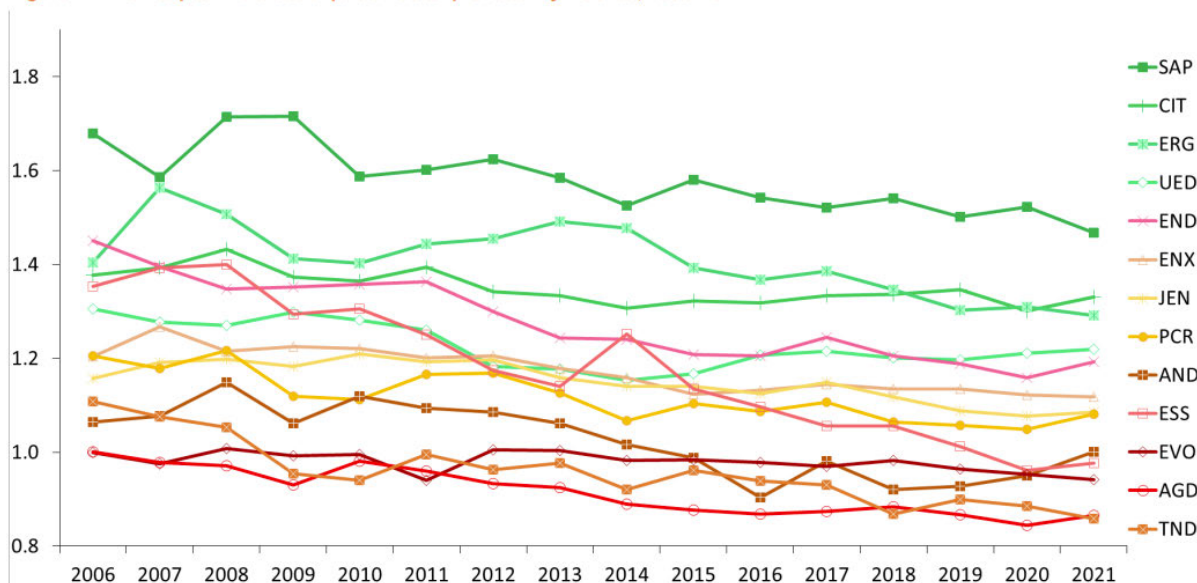
Consumers have previously questioned what they consider is an overly conservative approach to measuring relative efficiency<sup>75</sup>. It is pleasing to see that the AER in its [recent Draft Decision](#) on incentive schemes concluded at p.6:

"As we refine our benchmarking techniques there may be a case to revise the 75 per cent target so that benchmarking is applied at a point closer to the efficiency frontier. We will consider this further and report on it in future benchmarking reports."

Any review by the AER will only apply to Ausgrid's 2029-34 proposal.

- (iii) was second bottom on capex productivity having a trend decline (like most other DNSPs since 2006):

Figure 12 DNSP capital multilateral partial factor productivity indexes, 2006–2021



Source: Quantonomics; AER analysis. Note: These results do not reflect the impact of a range of material OEFs (see Section 7).

While Ausgrid has some legitimate concerns about the methodology used by the AER, adjusting for that is unlikely to significantly improve its relative position. Ausgrid's position, like that of other DNSPs in NSW, Queensland and Tasmania is disadvantaged by the long tail legacy of large, long life investments during 2005-2015 to meet various State imposed reliability standards.

There is no corresponding mandated requirement for capex productivity to the 0.5%/yr opex productivity, with the incentive left to CESS. The AER considers that the revealed costs basis to opex productivity is not applicable to capex because capex is less recurrent. It is difficult to agree on specific indicators for measurement of current capex performance that are not overly influenced by

<sup>75</sup> See the discussion at pp 10-14 <https://www.aer.gov.au/system/files/CCP%20-%20Submission%20to%20the%20AER%20Opex%20Productivity%20Growth%20Forecast%20Review%20Draft%20Decision%20Paper%20-%202020%20December%202018.pdf>

the legacy of past investment decisions. It is also difficult to know whether consistent underspend in capex allowances is the result of efficiency or deferral. The AER relies more on assessing the information provided by the network, along with various tools e.g. repex model and guidelines to assess prudent and efficient expenditure in various categories.

### **What do we mean by a ‘holistic’ approach?**

While the substitutability of capex and opex has long been recognised, its scope has expanded in recent years and will continue to expand e.g.:

- in house (capex) vs third party (opex) ICT and cyber along with changing accounting rules on what is opex and what is capex;
- ICT capex to deliver operational efficiencies and service improvements e.g. ADMS;
- capex vs opex resilience expenditure; and
- ICT capex expenditure to enable better visibility on network CER capacity to optimise future CER capex.

Our approach reflects the interdependencies between capex and opex and suggests that a totex approach to productivity might be more appropriate. Relevant issues we explored with Ausgrid included:

- ICT expenditure in the current period should lead to improved opex productivity in 2024-29 – is this a factor in arguing for more than 0.5% or is it required simply to achieve the 0.5%? Does Ausgrid have an incentive to propose additional ICT capex that allows a >0.5% opex productivity factor in 2029-34, particularly in the current external environment with heightened affordability concerns?
- Resilience capex in the next period may lower opex expenditure in the next and subsequent periods from severe weather related events – is this a factor in arguing for more than 0.5%?
- Why should the 0.5% productivity factor apply to opex overheads and not capex overheads?
- More productive maintenance practices could mean lower capex required in the next period as plant and equipment will last longer.
- A move to more cost reflective pricing to improve asset utilisation combined with a robust governance framework for capex business case evaluation may mean a lower capex requirement.
- There may be a case for Ausgrid to argue that the current incentive framework is not sufficiently flexible to manage uncertainty associated with resilience and cyber security.

### **Guiding principles to frame the discussion**

We proposed the following principles to underpin our discussions with Ausgrid:

1. Network efficiencies should not come at the expense of safety nor enabling the network to meet its distribution licence obligations on network performance.
2. Ausgrid should continue to be incentivised through all existing mechanisms.
3. Productivity targets should be stretch and decided in a broader context. (This is especially true for the 2024-29 period when input costs will be rising and bills will be rising).
4. Consumers should be willing to accept at least some share of agreed increased risk/uncertainty from weather related events and cyber with that share informed by an understanding of the party best able to manage that risk/uncertainty.

5. Network innovation expenditure should remain excluded from EBSS and CESS to encourage innovation and trials to support staged investments.
6. CESS should not apply to specific resilience capex above what would be allowed under the AER's replex model.
7. EBSS should not apply to opex step changes associated with resilience.
8. Non-recurring ICT investment should be covered by CESS and EBSS, with Ausgrid showing how the forecast benefits and efficiencies have been realised on a project basis in the following regulatory period.
9. Networks should strive to deliver customer outcomes; increase grid utilisation and maximise non network solutions by taking advantage of all aspects of the regulatory framework. A holistic qualitative review of other factors relevant to customers' confidence in the final revenue proposal can also inform a discussion of the opex productivity factor. Examples of these factors include:
  - Ausgrid's approach to BAU customer engagement and engagement for the regulatory proposal and demonstration of that engagement shaping investment decisions;
  - stakeholder confidence (including the AER) in Ausgrid's investment business case modelling and expenditure governance framework;
  - the level of absorption of expected future cost increases in base opex;
  - the extent of Ausgrid's ambition for cost reflective tariff reform to improve grid utilisation; and
  - how well the proposed expenditure supports a cohesive forward looking strategy.

In the course of our discussions, Ausgrid agreed with all the principles with the exception of 3. We contend that the regulatory framework is designed to replicate what would occur in a workably competitive market where stretch targets are everyday business. Firms quickly lose their competitive position without achieving stretch targets on their costs.

## Opex Productivity

There are two aspects to this discussion:

- (i) is the base year opex, 'not materially inefficient' – if it is not, then the AER provides an alternative (lower) base year opex<sup>76</sup>; and
- (ii) whether, and if so by how much, the annual productivity improvement should be more than the minimum 0.5% to allow for catch-up to the frontier network.

### (i) Base year opex

As noted above, the AER assess base year opex as 'not materially inefficient' if it is at or above a benchmark comparison score of 0.75 i.e. part of the upper quartile (adjusted for OEFs)<sup>77</sup>. We

<sup>76</sup> A recent example is the Draft Decision on Jemena for 2021-26; <https://www.aer.gov.au/system/files/AER%20-%20Draft%20decision%20-%20Jemena%20distribution%20determination%202021-26%20-%20Attachment%206%20-%20Operating%20expenditure%20-%20September%202020.pdf>

<sup>77</sup> We note Ausgrid's concerns about the AER's application of OEFs that disadvantages its relative position and this may also be relevant to a holistic approach



understand that AER staff have informally advised Ausgrid that its proposed 2022/23 base year opex of \$380m (\$FY24) is likely to be considered not materially inefficient.

(ii) Expected level of productivity improvement and the role of 'catch-up'

The [AER's Final Decision](#) on the 2019-24 allowed revenue was done at the time of the AER's review of opex productivity that led to a required minimum of 0.5% pa. In the current period Ausgrid committed to opex productivity of zero in year 1 (due to legacy employment obligations) and 1% in each of years 2-5 equivalent to 0.85% annually. This equated to \$45m to bring total allowed opex to \$2.3b (\$18/19)<sup>78</sup>.

The AER's Handbook expectation at p.45 is:

“...for electricity, using a forecast no less than the AER's preferred productivity growth forecast, which is currently 0.5% per year for electricity distribution.”

As noted above, consumers get the full benefit of the 0.5% productivity factor, but only 70% of any improvement beyond that. Our starting position for discussions with Ausgrid was that there is an arguable case for it to be higher than 0.5% on the basis of:

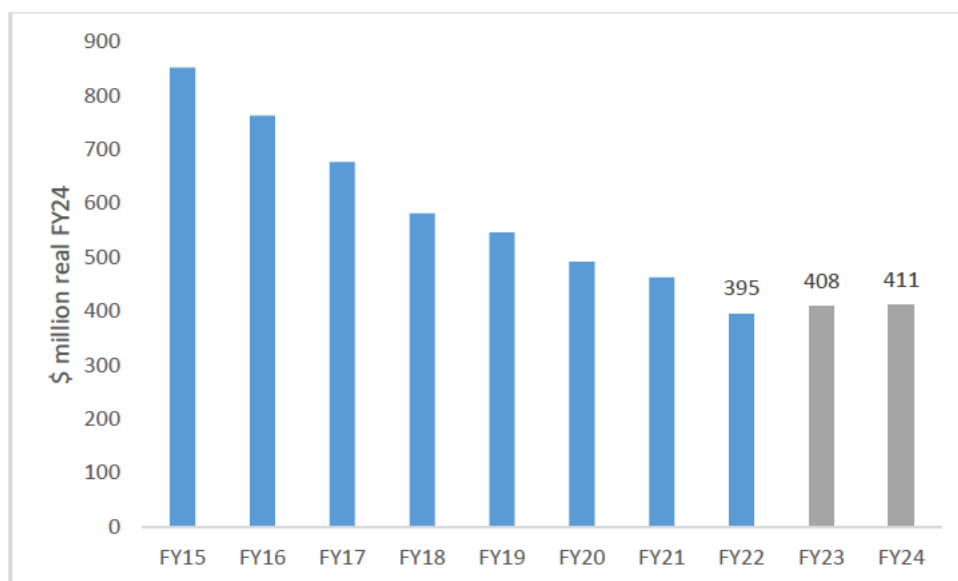
- despite the considerable improvement since 2015, Ausgrid was still in the bottom quartile in the latest AER results for 2021;
- Ausgrid has shown that it is possible in the current period;
- it has major capex investment in the current period e.g. SAP upgrade and ADMS, that is designed to lower opex in future periods; we discuss ICT PIRs below to provide transparency around actual vs forecast opex benefits; and
- it needs a sustained level of productivity above the minimum 0.5%/yr to 'catch-up' to the frontier network and improve its poor ranking.

In response Ausgrid argued that:

- the significant level of improvement since 2015 makes improvement beyond the required minimum of 0.5% harder to achieve in the future:

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<sup>78</sup> See p.45 of the AER's Final Decision



- the 1% commitment from 2020-24 will mean that its relative position in the 2021 and 2022 benchmarking reports will show improvement (it did improve to 4<sup>th</sup> bottom in 2021 from second bottom in 2020 – it remains to be seen if this improved relative position is maintained or improved in 2022, 2023 and 2024);
- the most efficient DNSPs at the cost frontier have achieved that position through load/customer growth rather than falls in the real level of opex; and
- Ausgrid is absorbing a range of costs in its base year cost referred to above. These additional costs are equivalent to 0.2%/year increase in productivity.

Item (millions real FY24)	FY25	FY26	FY27	FY28	FY29	Total
GSLs	0.5	0.5	0.5	0.5	0.5	2.7
Graduates and apprentices	2.1	2.4	2.4	2.5	2.5	11.9
Total	2.7	2.9	3.0	3.0	3.0	14.6

Two areas highlight an interaction between opex and capex and the need for a holistic approach and where risk and uncertainty are increasing - weather related events and cyber security. To what extent is Ausgrid taking on additional risk in these areas where there is considerable uncertainty around when such an event will occur, how long it will last and the seriousness of the consequences – mean that productivity of greater than 0.5% is less likely?

The regulatory framework provides some mechanisms to allow Ausgrid to mitigate these risks including:

- increase in opex (e.g. through the proposed \$9.5m step change for insurance or other new opex expenditure) and capex (through increased capex for resilience including the proposed \$111.6m totex for cyber);



- the pass-through mechanism for ‘positive change events’ which can cover capex and opex (the predominant component of pass-through costs) for an event that costs more than 1% of the annual revenue requirement;
- A base year storm cost allowance - \$6.4m in 2017/18 the base year for 2019-24, which Ausgrid proposes to be increased by \$10m in 2024-29 reflecting the average of its revealed costs for the previous 5 years; and
- Opex (\$5m)/capex (\$49.5m) for NIAC to trial possible ex ante solutions consistent with the AER resilience Guidance Note.

To the extent that Ausgrid absorbs costs in base year opex rather than seeking step changes, this may enable Ausgrid to make a case for the annual opex productivity factor to be closer to 0.5%. If Ausgrid seeks step changes, then they will be assessed on their merits.

Ausgrid argue that there are limits on the effectiveness of the insurance market and pass-through mechanism. The Panel would argue that simply increasing resilience capex can be a blunt and inefficient approach to address risk and uncertainty.

#### *The limits of the insurance market*

The insurance market capacity has shrunk because of the market’s uncertainty on the impact of weather related and cyber events. Some risks and uncertainties are becoming simply uninsurable. Where insurance is available, premiums have increased significantly. The industry update in the Marsh report presented to the RCP and attached to the Proposal, also highlighted the increasing problem of estimating insurance costs five years hence. The market is now so volatile that even making an estimate a year or two ahead is tricky.

This suggests that use of the step change mechanism may not address all the increase in risk and leads to a discussion of how that increase in risk should be allocated between Ausgrid and consumers. This is a reason supporting a factor closer to 0.5%.

#### *The limits of cost pass through and STPIS methodology*

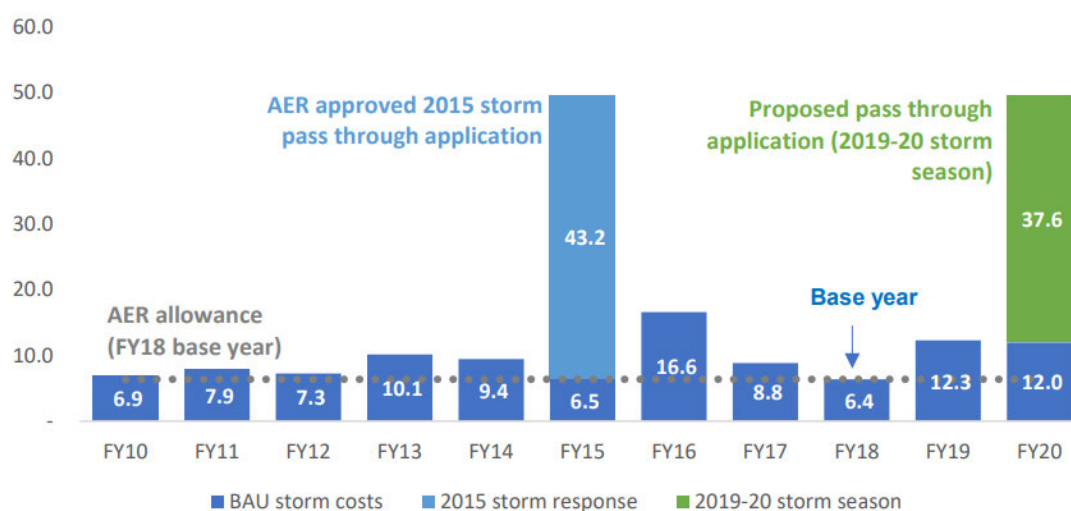
Weather related incidents are expected to increase in frequency, but there is uncertainty about the probability of these more frequent incidents each having a cost greater than the 1% maximum allowed revenue trigger. Ausgrid has also claimed that the design of the cost pass through mechanism means that it is self-funding an increased number of Major Event Days (MEDs) that fall below the cost pass through threshold. Ausgrid is also claiming that it is being disadvantaged by the STPIS scheme from the way in which MEDs from weather related events impact the STPIS calculations<sup>79</sup>. We are unaware of any data that might suggest Ausgrid is more affected in this matter than other DNSPs.

Ausgrid’s [application for a cost pass through](#) for the 2019/20 summer storms covered four separate storms over the November to February period. The application was for \$37.6m – the amount above the BAU storm costs in 2019/20 (p.3):

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<sup>79</sup> Ausgrid did not raise this issue in its 9 March 2022 [submission](#) to the AER as part of the AER’s review of the STPIS scheme. Ausgrid has advised the RCP that it has raised this concern informally with the AER outside of its review of incentive schemes

**Figure 1 Historical and FY20 storm response costs (\$ nominal)**



The AER rejected Ausgrid's argument that all the storms were connected and, because of that, only one of the February storms met the pass through requirement under the rules. This led to the AER allowing \$26.3m (nominal) cost pass through with \$18.9m in the current period. Ausgrid had to bear the costs of the other three storms within its existing opex allowance. The proposed base year adjustment to increase the base storm allowance to reflect the increased risk, would address, at least in part, Ausgrid's concerns about the exclusion of MEDs in STPIS.

If the AER does not approve the increase in the base storm allowance then the cost pass through mechanism may not address all the increase in risk and leads to a discussion of how that increase in risk should be allocated between Ausgrid and consumers - another factor supporting 0.5%. Given the extensive ongoing discussions between the RCP and Ausgrid around Ausgrid's resilience proposal and its climate modelling, the RCP is supportive of Ausgrid seeking to use the average of its 5 year revealed costs for its storm allowance in 2024-29. We see that this goes some way to meeting Ausgrid's concerns about the cost pass through trigger. Our support of this approach means that in the 2029-34 proposal the 5 year revealed costs approach should be reviewed and a base year adjustment should be made if those costs are lower than in 2024-29 due to improvements in network resilience.

#### *Increasing capex*

The AER Resilience Note sets out guidance on what a network is required to provide to justify prudent and efficient resilience opex and capex spend. It needs to show:

- a causal relationship between the proposed expenditure and the expected increase in extreme weather events;
- proposed expenditure is required to maintain service levels and is based on option(s) likely to achieve greatest net benefit; and
- consumers have been fully informed of different resilience expenditure options.

So it is simply not a matter of reducing opex risk by open ended capex resilience expenditure. They have to be considered together in assessing an opex productivity factor.

## Capex Productivity

Here we discuss Ausgrid's trend performance over the last 15 years on measures of asset efficiency provided by the AER and how we used this as a basis for our discussions on what Ausgrid is proposing for 2024-29.

(i) Some history

The AER's capex benchmarking is less relevant to assessing Ausgrid's relative capex efficiency, given the historical capex over investment in NSW to meet former State Government imposed reliability standards. The RCP discussed a range of metrics with Ausgrid that might indicate capex efficiency. For example:

- capex overheads;
- trends in asset utilisation and age;
- trend by capex category - any evidence of capex efficiency by category vs previous periods;
- benchmarking repex unit rates;
- capital evaluation and governance framework;
- movements in RAB and line length per customer;
- trends in SADI/SAFI/raw data;
- extent of Ausgrid's ambition for cost reflective tariff reform to improve grid utilisation; and
- how CESS is calculated.

As context for this discussion, the table below shows [AER data](#) on comparator network utilisation:

	2006	2015	2021
Ausgrid	0.53	0.29	0.32
Energex	0.50	0.39	0.41
Endeavour	0.65	0.44	0.49
Jemena	0.57	0.53	0.50
United	0.65	0.57	0.56
<b>DNSP average</b>	<b>0.57</b>	<b>0.45</b>	<b>0.45</b>

This table shows AER data on regulatory service life of major equipment categories:

	Overhead lines <33Kv (wires and poles)		Distribution substations and transformers		Zone substations and transformers	
	2006	2021	2006	2021	2006	2021
Ausgrid	14	15	23	16	21	15
Energex	24	13	14	13	22	19
Endeavour	12	14	7	12	13	9
Jemena	32	28	21	28	28	23
United	14	15	14	15	36	39
<b>DNSP av</b>	<b>25</b>	<b>26</b>	<b>23</b>	<b>21</b>	<b>25</b>	<b>24</b>

Ausgrid did express some limitations of the AER measures. Their alternative utilisation measure based on capacity utilisation showed considerably higher utilisation than Energex but still a fall for Ausgrid from ~61% in 2006 to ~42% in 2020. While the limitations of the data are well recognised (e.g. increased CER lowers asset utilisation, newer assets take time to be fully utilised, influence of

obligation to connect), our proposition to Ausgrid was that it is reasonable to conclude that this data suggests that Ausgrid has relatively lower utilisation from a similarly or slightly older asset base to its likely peers. This suggests there should be scope for driving assets harder and improving capex efficiency.

(ii) Discussions on options for improvement

We engaged with Ausgrid across the following possible options to improve capex productivity and how some form of target might be included in the Proposal:

- (i) capex overheads;
- (ii) capital evaluation framework and governance structure;
- (iii) review of how Ausgrid applies CESS;
- (iv) allocation of risk between ex ante capex and ex post opex; and
- (v) staging of projects.

Capex overheads

Under the [Ausgrid capitalisation policy](#) 'overheads' are allocated to opex and capex according to the shared cost allocation methodology. To the extent that costs such as ICT or finance or HR are allocated between opex and capex it seems reasonable to expect that a 0.5% productivity factor should be applied to that which is allocated to capex as it currently does to that which is allocated to opex.

It is very pleasing to see that Ausgrid has agreed to apply the 0.5% factor to capitalised overheads. The cost impact in 2024-29 is relatively small (~\$12m) given the asset lives the overheads are depreciated against, but the benefits will increase in coming periods. Ausgrid is the first DNSP that the Panel is aware of that has proposed this productivity factor on capitalised overheads and we are hopeful that this will lead to other distribution and transmission networks offering a similar productivity sharing with customers.

Capital evaluation framework and governance structure

The [Expenditure Forecast Methodology](#) (EFM) outlines the approach Ausgrid takes to capital evaluation. The EFM says (p.19):

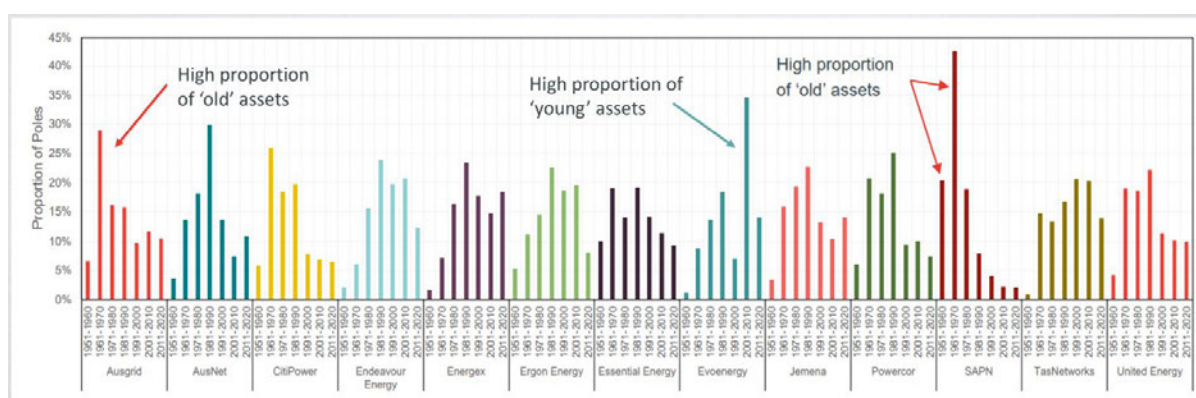
“As part of this process, our goal is to prioritise our programs and projects from highest to lowest net present value (NPV). This process allows us to compare the benefits and costs of projects across our business and develop a risk adjusted prioritised investment plan (PIP).”

Ausgrid has developed its Principles of Cost Benefit Analysis report which is Attachment 5.2.d to the Proposal. We believe that this provides a strong framework for the evaluation of both augex and repex. Ausgrid's Proposal shows the confidence it has that its improved asset management will support an increase in average asset age/service life. The following table shows different levels of repex based on different criteria. It shows that were investment to be based on a simple age based assessment then it would be \$6.7b, or just above \$1.2b based on the AER's repex model. Ausgrid is proposing just below \$1.2b, a 5% reduction compared to the forecast for the current period.

Figure 4. Forecast method expenditure comparison (real \$m, FY24)

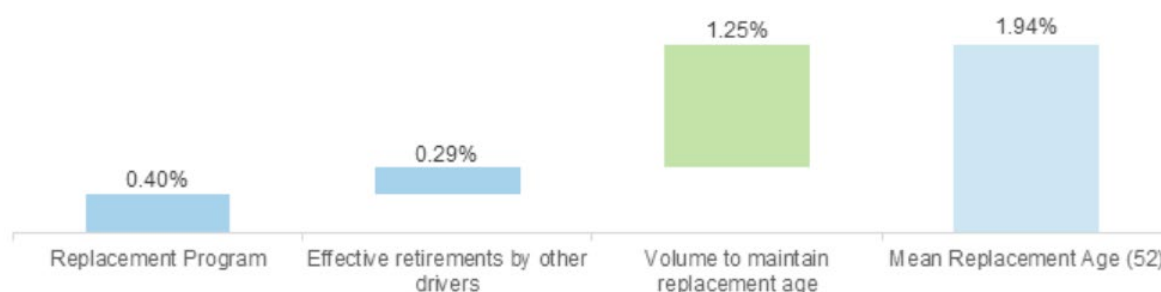
	Forecast	CBA	Maintain Risk	Historical Trend	Repx Model	Age-based Assessment
Overhead Support Structures	\$194	\$215	\$488	\$200	\$224	\$519
Overhead Mains	\$312	\$329	\$148	\$216	\$218	\$579
Underground Cables	\$286	\$303	\$492	\$289	\$341	\$1,641
Transformers & Reactive Plant	\$99	\$102	\$138	\$102	\$108	\$2,898
Switchgear	\$128	\$154	\$185	\$123	\$90	\$645
Communications, Control & Protection	\$69	\$61	\$212	\$75	\$113	\$422
Buildings, Grounds & Land	\$106	N/A	N/A	\$138	\$124	N/A
<b>TOTAL</b>	<b>\$1,195</b>	<b>\$1,164</b>	<b>\$1,664</b>	<b>\$1,144</b>	<b>\$1,218</b>	<b>\$6,704</b>

Looking more closely at the category of pole replacement, Ausgrid argues that it has a high proportion of older assets so any discussion of asset age should look beyond the averages.



The following chart shows that Ausgrid's proposed annual replacement rate for poles in 2024-29 as a % of total population is, at 0.40%, which is 1.25% lower than the rate (1.94%) required to maintain current average age.

Figure 17. Annual Population replaced by driver for Overhead Support Structures – Poles



## How Ausgrid apply CESS

The recent [AER Discussion Paper](#)<sup>80</sup> on incentive schemes highlighted the concern that consumers have around the difficulty of assessing whether underspend is the result of efficiency or deferral. We think there is an opportunity for a more explicit agreement on how Ausgrid will apply CESS that goes beyond the general provisions in the AER capital expenditure incentive guideline. We consider two periods:

### *Current period 2019-24*

A more transparent assessment of the CESS benefit has two aspects:

- (a) Where actual capex is lower than allowed capex because of deferral rather than efficiency gains

We are unlikely to support a CESS benefit applying to reductions in capex for reasons such as COVID delays, protected industrial action during EBA negotiations and the internal application of banking covenants which had the effect of delaying capex spend.

- (b) Where actual capex differs from allowed capex because of inefficient project implementation

Take the example of Stages 1 and 2 of ADMS. Due to forecasting risk Stages 1 and 2 of the ADMS project were excluded from CESS in the current period. This is a blunt way to respond to forecasting risk and in the case of ADMS, consumers are paying all of the significant increase over forecast (to the extent that total capex spend is within allowance).

### *Next period 2024-29*

- (a) Managing forecasting risk for ICT and cyber

We discussed different methods of addressing forecasting risk for major ICT and cyber programs e.g. through level of contingency and how contingency risk is shared to bring this expenditure back into CESS to better manage the forecasting risk. Ultimately the Panel proposed and Ausgrid agreed to the ICT governance principles as the best way to increase customer confidence in Ausgrid's capacity to forecast and deliver major ICT programs. This is discussed below.

- (b) Managing forecasting risk for resilience

For the 2024-29 period we would propose that CESS does not apply to specific resilience capex above what would be allowed under the current AER repex model. We have had preliminary discussions with Ausgrid on how this might work in practice and we look forward to further discussions with Ausgrid and the AER on the details of how it might work in practice.

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<sup>80</sup> See Chapter 5

### Allocation of risk between ex ante capex and ex post opex

In theory the higher the level of resilience capex the lower the probability of a pass-through event. But theory may not apply in practice e.g. the resilience capex may be spent in the wrong locations with weather related events impacting on areas that did not benefit from increased resilience capex.

This is a discussion around how to allocate capex vs opex risk and what impact that will have on opex productivity (e.g. lower resilience capex, support for factor closer to 0.5%?) and capex productivity (higher resilience capex, support for factor higher than 0.5%?).

### Staging of projects

In relation to new capex programmes including resilience, cyber and CER integration, the Panel believes that in addition to meeting the criteria in the AER's Expenditure Forecast Assessment Guidelines and other approaches referred to in section 4.1 of the Handbook (including evidence of Ausgrid pursuing efficient non network solutions in place of network solutions), Ausgrid should pursue a staged investment approach wherever possible where there is a high level of uncertainty in project net benefits. An example would be the approach to community batteries – NIAC trial in 2019-24, limited pilot in 2024-29 and more extensive rollout post 2029.

This staged approach will allow Ausgrid to take advantage of improved technology overtime. Ausgrid should continue to invest in and support the NIAC and the important role it plays in identifying investments to meet the increased risks of weather and cyber events by trialling and developing proof of concept for new technology in one regulatory period before a more extensive roll out of solutions in the subsequent periods. The Panel encourages Ausgrid to share the learnings of its trials and pilots with other networks.

### **Non-recurring ICT investments (opex and capex)**

In RCP's experience, networks are investing more in recurring and major non-recurring ICT investments as part of their digital transformation. In the 2019-24 period customers are funding stages 1 and 2 of the ADMS project. In 2024-29 Ausgrid is seeking large amounts of expenditure for an upgrade of its SAP system (ERP) (\$149.5m including SaaS implementation opex) as well as \$12.8m (real FY24) for stage 3 ADMS. In each case Ausgrid has forecast benefits from the investment including improved service outcomes for customers as well as operational efficiencies.

Given the significant overrun in cost and delivery timetable for stages 1 and 2 ADMS, the RCP sought improvements in the investment governance and accountability for these large non-recurring ICT investments. We proposed that Ausgrid do a PIR of material non-recurring ICT projects to identify how the benefits have been realised and shared with customers. Our suggestion for the scope of the PIR is an analysis of:

- Benefits (efficiency and increased performance) claimed compared to benefits realised;
- Costs forecast compared to costs incurred;
- Time forecast compared to actual project delivery;
- Lessons learned to be factored into next ICT project to improve Ausgrid forecasts of benefits, costs and delivery;
- Approaches to managing forecasting risk for future projects; and
- Opex/capex efficiency being passed on in the subsequent regulatory period.

The Panel is really pleased that the Ausgrid Board agreed to new ICT governance principles (including a PIR of ERP and ICT CER capability) to support customer confidence in Ausgrid's forecasting of ICT expenditure, delivery of these programs and realisation of forecast benefits. Ausgrid is the first DNSP that RCP is aware of that has proposed this approach to ICT governance and we are hopeful that this will lead to other distribution and transmission networks offering similar approaches.

Where the operational efficiencies are not captured in the opex base year for the 2029-34 regulatory period then this could be accounted for by either:

1. a negative step change or
2. an increase in the productivity factor above 0.5%.



## Appendix F - Panel's analysis of the cyber security investment

### Expenditure Proposal

Ausgrid proposed a significant investment in cyber security in the Draft Plan. The growing risk of a cyber-attack and the potentially huge consequences have been highlighted since the publication of the Draft Plan with the successful cyber-attacks on both Optus and Medicare. Ausgrid has not materially varied its investment proposal since the Draft Plan but the forecast investment proposes significantly increased cyber expenditure compared with the current period:

	2019-24 (\$FY24)	Draft Plan 2024-29 (FY\$24)	Proposal 2024-29 (FY\$24)
Capex	\$45	\$87.0 <sup>81</sup>	\$91.1 <sup>82</sup>
Opex step change	\$0	\$18.3	\$20.6 <sup>83</sup>

Ausgrid states in the Proposal that it believes that this level of investment is needed to adopt practices and protections in line with Security Profile 3 (SP-3) of the Australian Energy Sector Cyber Security Framework (AESCSF):

*Our plan for the 2024-29 period is to invest in the capabilities needed to reach a maturity level known as SP-3. It will best prepare Ausgrid and our network to implement and maintain the required Risk Management Program in the SOCI Act and respond and, in line with our duty to our customers, minimise our exposure to cyber risks in the first place<sup>84</sup>.*

The choice of SP-3 is driven by several factors including:

- the Ausgrid Board's Risk Management Framework that results in a very risk averse approach to cyber security risks;
- the AESCSF which rates Ausgrid as a "High" criticality service provider;
- risk based quantification of the benefits associated with SP-3 compared to SP-1 and SP-2; and
- independent assessment that Ausgrid should target SP-3.

As Ausgrid notes in its Proposal:

*SP-3 will best prepare Ausgrid and our network to implement and maintain the required Risk Management Program in the SOCI Act and respond to an Electricity Supply Act electricity supply emergency declaration, should one occur. It will also minimise our exposure to cyber risks (generally) in the first place, relative to lower security profiles<sup>85</sup>.*

In our First RCP Report<sup>86</sup> we requested Ausgrid's advice whether:

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<sup>81</sup> The \$87m comprises \$31m capex and \$56m SaaS opex

<sup>82</sup> The \$91.1m comprises \$44.4m in capex and \$46.7m in SaaS opex

<sup>83</sup> Ausgrid advises that this is the same as the \$18.3m proposed in the Draft Plan and that the update reflects inflation

<sup>84</sup> See Proposal at p.110

<sup>85</sup> See Proposal at p.111

<sup>86</sup> See First RCP Report Chapter 9 at p.48

- all the proposed opex and capex will be recurring in future periods or if any of the capex is a one-off investment in uplifting capability in 2024-29, and
- the proposed capex includes any contingency.

Ausgrid provided the following information which shows that the majority of the cyber ICT expenditure is non-recurring:

Current classification	Old classification	Recurrent / non-recurrent	2019-24 capex (allowance)	2019-24 capex (expected)	2024-29 capex (forecast)	2024-29 SaaS opex	2024-29 total
Cyber Security	ICT security (cyber)	Non-recurrent	24	24	29	38	68
		Recurrent	-	18	15	8	23

We understand that the opex will be largely recurring funding as it represents staffing and licensing costs.

Ausgrid also confirmed that there is no contingency in any of the SP-1 or SP-2 expenditure in the above table, however there is a \$4.96m additional scope factor in the SP-3 capex (capex scope factor) to meet likely increased regulatory obligations in the period.

The Panel's discussion on the proposed cyber security expenditure in the Proposal focusses on the level of security Ausgrid is proposing and the quality of its business case. We leave it to the AER to decide if the proposed expenditure is 'prudent and efficient'.

#### Cyber security investment in the current 2019-24 period

This was the first time there was a serious level of engagement in developing the proposed expenditure level. Cyber security risks were increasingly identified as important. The first Commonwealth Government cyber legislation – Security of Critical infrastructure Act – came into effect in July 2018 and cyber obligations for Ausgrid's operational technology (OT) were included as part of Ausgrid's Distributor Licence Conditions<sup>87</sup>. The relevant infrastructure licence condition<sup>88</sup> applying to Ausgrid's OT (but NOT its non-network ICT) is:

#### 9.2 The Licence Holder:

- must, by using best industry practice for electricity network control systems, ensure that operation and control of its *distribution system*, including all associated ICT infrastructure, can be accessed, operated and controlled only from within Australia, and that its *distribution system* is not connected to any other infrastructure or network which could enable it to be controlled or operated by persons outside Australia;
- must notify the *Commonwealth Representative* if it enters into a contract under which it outsources the operation and control of its *distribution system*, including any associated ICT infrastructure; and
- will be taken to have satisfied condition 9.2(a) for the period of 12 months after the date of this *Licence* if the *Licence Holder* undertakes the steps that are required to be undertaken in that 12 month period as set out in an implementation plan approved by the *Minister*.

During the engagement on Ausgrid's 2019-24 revised revenue proposal, notwithstanding the terms of the licence condition and the Commonwealth legislation, customer advocates and the AER

<sup>87</sup> See [Ausgrid Revised Regulatory Proposal](#) at p.117

<sup>88</sup> Distributor's licence under the Electricity Supply Act 1995 issued to the Ausgrid partnership by the Minister for Industry, Resources and Energy on 28 November 2016

expressed uncertainty about the efficiency of the proposed additional \$19.6m investment and also the customer benefits<sup>89</sup>. Ausgrid's proposed program was to deliver investments to deliver:

- additional capability to increase level of maturity and meet industry practice; and
- uplift, enhancement or refresh of existing capability.

Ultimately customer advocates and the AER accepted Ausgrid's request for the additional \$19.6m investment in 2019-24 with some caveats:

1. the expenditure was excluded from CESS;
2. Ausgrid agreed that the expenditure would be reviewed by Ausgrid's Technology Review Committee – one of its customer committees;
3. the AER found that Ausgrid had not demonstrated its additional cyber security capex program against the capex criteria<sup>90</sup>;
4. whilst Ausgrid demonstrated a need for cyber investment it did not establish the consumer benefit of the expenditure (despite an expert report from Ernst and Young); and
5. there is room for disagreement on what Ausgrid needs to do to satisfy its state licence requirement to meet 'best industry practice'.

In accepting Ausgrid's 2019-24 proposed expenditure, the AER sounded the following note of caution for future regulatory proposals:

*In the case where EY's expectation of best industry practice in the future exceeds what is realistically required, Ausgrid's forecast will represent costs that will be above prudent and efficient costs<sup>91</sup>.*

#### Does Ausgrid have an obligation to meet external legislative or regulatory requirements?

##### *Commonwealth Government legislation*

Ausgrid is subject to legislated cybersecurity obligations under the following Commonwealth Acts:

- the Security of Critical Infrastructure Act 2018 (SOCI),
- the Security Legislation Amendment (Critical Infrastructure) Act 2021 (SLACI); and
- the Security Legislation Amendment (Critical Infrastructure Protection Act) 2022 (SLACIP).

Ausgrid has confirmed in meetings with the Panel that it is currently compliant with the SOCI and the SLACI but is yet to comply with the increased cyber obligations under the SLACIP and is in discussions with the Department about what this involves and to what extent those obligations apply to Ausgrid. There remains no clear answer, however Ausgrid advises that its discussions with the Department remain ongoing.

The Panel understands that whilst the 3 levels of cyber protection maturity are often referred to as requirements under the SOCI and SLACI, only SP-1 is mandated as the bare minimum level for compliance for all entities using the AESCSF Framework<sup>92</sup>. We are also aware that the Commonwealth was considering which electricity and gas businesses would be mandated at the higher SP-2 or SP-3 level but this has not yet occurred. The Panel's understanding is:

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<sup>89</sup> Ausgrid had sought \$19m in its original revenue proposal

<sup>90</sup> Despite this the AER approved Ausgrid's overall capex program including the additional cyber security noting: "However this does not change our position on Ausgrid's capex forecast overall as we do not consider this program has a material effect on the overall capex forecast." See [AER Final decision](#) at p.5-54

<sup>91</sup> AER Final decision at p.5-54

<sup>92</sup> The criteria for energy organisations is defined by the AEMO AESCSF assessment criteria [here](#)

- SP-1 - is the entry level and all electricity and gas businesses have to meet this;
- SP-2 - the Commonwealth is in discussions with energy businesses about mandating SP-2 for energy but this has not yet occurred; and
- SP-3 - is the highest level of maturity and gives the greatest protection.

The Panel has concluded that Ausgrid is not yet required by legislation to invest to achieve SP-3 level and Ausgrid agrees with this conclusion.

#### *Australian Energy Sector Cyber Security Framework (AESCSF)*

The AESCSF, initially developed in 2018, is a cyber security framework that has been developed and tailored to the Australian energy sector. It is a collaboration with industry and government stakeholders, including the Australian Energy Market Operator (AEMO), Australian Cyber Security Centre (ACSC), Cyber and Infrastructure Security Centre (CISC), and representatives from Australian energy organisations<sup>93</sup>. The AESCSF's purpose is to enable participants to assess, evaluate, prioritise, and improve their cyber security capability and maturity.

It is currently under review and a revised version was due in late 2022. Ausgrid had advised the Panel that this is still under review by the Minister and June 2023 is currently the best estimate. Ausgrid has advised the Panel that one possible outcome of the review will be the lifting of the maturity levels so that what is currently SP-2 might be closer to SP-3 in the revised framework to achieve continuous improvement and that additional practices may be added to each level. The Panel has asked Ausgrid to keep it updated about this review and any possible lifting of maturity levels. Ausgrid anticipates that the next review of the AESCSF will occur during the 2024-29 period and that standards will continue to be lifted to match the evolving threat. Ausgrid includes ongoing AESCSF reviews as one of the factors supporting its SP-3 capex scope factor of \$4.96m for future likely regulatory obligations.

The AESCSF includes two key components: a criticality assessment as well as a cyber security capability and maturity self-assessment. There is a specific electricity distribution criticality assessment tool (CAT E-DNSP) that Ausgrid uses to determine its criticality rating. Ausgrid advised the Panel that the result of the application by it of the CAT E-DNSP to its network leads automatically to a high criticality rating supporting SP-3 due to the factors included in the CATE-DNSP<sup>94</sup>.

The AESCSF refers to 2 different types of security capability and maturity. These are Maturity Indicator Level (MIL) and the SP. The MILs derive from the leading international cyber maturity model developed in the United States known as the C2M2. The locally designed AESCSF builds on the C2M2 by including both MILs and SP levels as well as positive practices consistent with a maturity and bad practices known as anti-patterns which are evidence of poor maturity for that level. The AESCSF operates as a cumulative framework including 282 practices and anti-patterns spread across the three levels. See Table 1<sup>95</sup>:

<sup>93</sup> See <https://aemo.com.au/en/initiatives/major-programs/cyber-security/aescsf-framework-and-resources>

<sup>94</sup> The relevant factors supporting this assessment are Ausgrid customers (NMIs) being greater than 2m; GWh distributed on Ausgrid's network greater than 25,000 and Ausgrid's critical and commercial customers exceeding 7,500

<sup>95</sup> See [AESCSF Framework Overview](#) at p.9

Table 1 indicates which SP an organisation in the electricity sub-sector should achieve based on their criticality (as determined by the E-CAT).

Security Profile (SP)	Participant criticality	Practices and anti-patterns			Total required to achieve SP
		MIL-1	MIL-2	MIL-3	
<b>Security Profile 1 (SP-1)</b>	Low	57	27	4	88
<b>Security Profile 2 (SP-2)</b>	Medium	0	94	18	200 (112+88 from SP-1)
<b>Security Profile 3 (SP-3)</b>	High	0	0	82	282 (82+200 from SP-2)

Table 1: Target State Maturity and Security Profiles


Ausgrid argues that it has appropriately applied the relevant CAT E-DNSP to its network, correctly concluded that its self-assessed critical rating is high and that it should therefore be targeting the SP-3 practices under the AESCSF. Ausgrid has advised the Panel that PWC has independently validated that Ausgrid should be a SP-3 organisation. (The Panel has not seen the PWC evaluation). However, the Panel does not believe that this conclusively answers the question whether investment targeting SP-3 is mandated. Indeed, the overview of the AESCSF supports the Panel's view:

*The CAT should be treated as general guidance only. Results obtained from the CAT do not indicate that an entity has obligations under, or is compliant with applicable Commonwealth (Cth) legislation<sup>96</sup>.*

<sup>96</sup> See p.3 <https://aemo.com.au/-/media/files/initiatives/cyber-security/aescsf/aescsf-framework-overview.pdf?la=en>

### *Ausgrid's current maturity level?*

Ausgrid has confirmed with the Panel that AEMO has assessed Ausgrid's maturity as of July 2022 as 36% of SP-2 when measured against the MIL-2 practices and anti-patterns in the AESCSF. The Panel has been advised that the most recent external specialist advice that Ausgrid has received to benchmark its maturity was from Capgemini in November 2021. Ausgrid is aiming to achieve 100% of SP-2 maturity in 2027 and then 100% of SP-3 in 2029.



The Panel is aware that each DNSP will be developing its cyber security maturity individually in accordance with its own risk assessments, starting levels of maturity and individual Board strategic priorities. In some cases the Commonwealth and State obligations are being imposed on DNSPs at different times, which also means that maturity levels will differ between DNSPs, although all energy businesses using the AESCSF must achieve SP-1 by the same date.

### The AER's view

The AER continues to consider the question of what level of maturity is realistically required as part of draft network decisions. Relevant examples are AusNet Services 2021-26; APA VTS access arrangements 2023-27 and Transgrid transmission 2023-28. These decisions have informed the Panel's views and are showing Ausgrid what the AER expects to see to support cyber expenditure proposals.

### *AusNet Services (draft Decision 2022-27 September 2020)*

AusNet was seeking capex of \$19.8m and an opex step change of \$4.7m (\$FY21) to meet MIL3 following its self-assessment under the AESCSF Cybersecurity Capability Maturity Model. AusNet argued that it anticipated that AEMO would impose MIL3 as a regulatory obligation sometime during 2021-26.

Given the confidential nature of this issue, only limited information is provided in AusNet's proposal and the AER's Draft Decision to reject the proposal for MIL3. The AER, based on advice from AEMO's Chief Security Officer, concluded that the timing was uncertain and in the absence of that certainty MIL3 is:

*...not yet a proven regulatory obligation and therefore not a compliance obligation<sup>97</sup>.*

And that:

*We consider MIL2 is sufficient for a distribution network<sup>98</sup>.*

Given that a majority of its capex is related to reaching MIL3 the AER did not allocate specific capital to cyber:

*... we do not consider an additional adjustment for cyber security capex is required as we consider our overall capex substitute is reasonable.*

The opex step change was also rejected as not efficient based on advice from EMCa:

*In its assessment EMCa did not consider that the proposed cyber security step change was warranted, although it noted that with escalating threats from cyber-attacks it is prudent for AusNet Services to improve its cyber security posture. We have not included this step change in our alternative estimate as while we consider it prudent for businesses to meet the standards set by the AESCSF, we do not consider AusNet Services proposed approach and cost to achieve and maintain this standard is efficient<sup>99</sup>.*

AusNet's final proposal that a 'major new cyber event... that is not considered an act of terrorism' be a pass through event was not accepted by the AER<sup>100</sup>. The AER considered that while major cyber events cannot be completely ruled out, to allow a pass through would provide no incentive in AusNet to proactively mitigate that risk occurring nor the extent of the damage that may be caused. AusNet has a regulatory obligation to ensure its systems are sufficiently robust and resilient to withstand cyber-threats:

*This risk should be largely borne by the network service provider, who is best placed to manage it, rather than consumers. We consider accepting the broadly defined proposed major cyber event is likely to have the effect of passing AusNet Services' cyber-security risk to consumers and erode its incentives to manage this risk efficiently and prudently.*

The AER confirmed its view that the nominated 'terrorism' pass through event could include cyber-terrorism.

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<sup>97</sup> See p.6.57 opex chapter

<sup>98</sup> See [AER - Draft decision - AusNet Services distribution determination 2021-26 - Attachment 5 - Capital expenditure - September 2020.pdf](#) at p.28

<sup>99</sup> See [AER – Draft Decision - AusNet Services Distribution determination 2021-26 - Attachment 6 – Operating expenditure - September 2020](#) at p.55

<sup>100</sup> See [AER Final Decision – AusNet Services distribution determination 2021-26 – Attachment 15 Pass through events – April 2021](#) at pp 5-13-5-14

### APA VTS access arrangements 2023-2027

More recently the AER released its draft decision in the APA VTS access arrangements for 2023-2027. The AER concluded that APA's risk assessment failed to show the risks are 'material' under the legislation:

*APA have submitted a plan to upgrade its security arrangements but it has not demonstrated that the existing security arrangements are insufficient to manage the current level of risk. The lack of a substantive risk analysis as contemplated by the Bill Exposure Draft and now as required by the Act means that we are unable to determine that the proposed expenditure for the physical security and program parts of the SoCI project is prudent and efficient. We therefore do not approve the physical security and program components and have made a replacement forecast of \$0<sup>101</sup>.*

The AER's draft decision sets out what it believes a network needs to show to justify expenditure under the SoCI:

*We consider that in its revised proposal APA will need to submit a risk analysis supported by relevant evidence to show that each of the risks proposed to be managed is a material risk as contemplated by the SOCI Bill, how the proposed reduction in the current level of risk meets the requirement of 'so far as it is reasonably practicable' (SFAIRP), and that the proposed risk reduction is efficient in meeting the SFAIRP requirement<sup>102</sup>.*

### Essential Energy cost pass through application March 2021

In February 2019, the NSW Government amended Essential Energy's licence conditions as a result of Essential's network being classified under the Commonwealth legislation. The specific critical infrastructure licence conditions required Essential Energy to prepare a plan setting out how it is to comply, for approval by IPART. In March 2021 the AER approved Essential's cost pass through decision. The AER's role in the case of Essential's cyber security plans was more limited as it was a cost pass through application.

### TransGrid transmission 2023-28

TransGrid's initial revenue proposal included an opex step change of \$25m and ICT capex of \$11.9m in order for it to achieve SP-3 level maturity by 2028. The AER's draft decision supported Transgrid's claim that the combination of Federal and State legislation required it to meet SP-3 maturity. Based on the advice of EMCa the AER reduced the proposed opex step change in its draft decision as it found Transgrid's proposal was not prudent and efficient.

In paragraphs 494 and 495 EMCa concluded:

*In addition to the CI Bills, Transgrid notes that it also needs to comply with other new legislative requirements, including:*

- *Energy Legislation Amendment Bill 2021 (NSW) ('NSW Bill');* and
- *Ransomware Payments Bill 2021.*

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<sup>101</sup> See [AER- Draft decision – APA VTS gas access arrangement 2023-27 – Attachment 5 – Capital expenditure – June 2022](#) at pp 43-44

<sup>102</sup> See AER- Draft decision – APA VTS at p.44



*Transgrid has provided a compelling analysis of the Federal and State legislation changes and timing to support its position that...:*

- *It is appropriate for it to achieve an AESCSF maturity indication level of SP-3 based on the combination of legislation, appropriate risk management, and the urgent request of the Australian Cyber Security Centre (ACSC) to adopt an enhanced cyber security posture.*

The AER expressed its decision on the need for Transgrid to achieve SP-3 referring to this being justified for transmission companies for the combination of the following 3 factors:

*We agree with Transgrid and consider it prudent for Transgrid, as a transmission network service provider, to uplift its security and particularly to achieve SP-3 maturity. This is also supported by our consultant, EMCa, who provided expert advice on the assessment of this step change. EMCa considers that it is appropriate for Transgrid to achieve an AESCSF maturity indication level of SP-3 based on the combination of legislation, appropriate risk management, and the urgent request of the Australian Cyber Security Centre to adopt an enhanced cyber security posture.*

*Given the cyber security threat landscape, we consider it prudent for a transmission network service provider to uplift its cyber security maturity with appropriate urgency.*

The AER's consultant, EMCa, put significant weight on the Electricity Legislation Amendment Bill 2021 ('NSW Bill') and the Ransomware Payments Bill 2021 when forming the view that Transgrid should go to SP-3. These requirements have the same level of application to Ausgrid.

The NSW Bill amended section 94A of the Electricity Supply Act 1995 (ES Act 1995) to make a cyber security incident grounds for an "electricity supply emergency" declaration from the NSW Premier. In particular, the NSW Bill added section 94A(c) to the ES Act 1995 to include provisions expressly capturing a cyber security incident involving Transgrid's network as well as "a distribution system" and "a distributor" such as Ausgrid.

It appears that the Ransomware Payments Bill 2021 is [now not proceeding](#) and is not referred to in Ausgrid's business case.

#### Ausgrid's Proposal for SP-3

##### *Cost difference between SP-2 and SP-3*

Ausgrid has told the Panel that it is keen to pursue SP-3 level protection, even if it isn't mandated, in order to meet the Board's risk appetite that Ausgrid follow best industry practice SFAIRP to protect the network and avoid prolonged outages. In addition, Ausgrid has indicated that the increased digital transformation of its network, such as ICT for greater CER integration and dynamic pricing reforms, requires higher levels of cyber maturity to maintain the same levels of protection. In support of the \$20.6m opex step change Ausgrid states:

*We aim to deliver an experience for our customers that takes advantage of digital technologies, while still maintaining a reliable network service with robust protections against the growing risk of cyber security breaches<sup>103</sup>.*

However, to date the Panel has not seen any modelling or evidence to support this view.

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<sup>103</sup> See Proposal at p.137

Ausgrid has forecast the expenditure needed to meet all three of the SP levels. The opex and capex numbers below align to the Proposal, which excludes overheads and presents the SCS component only i.e. the direct SCS cyber capex:

SP Level	Opex step change \$FY24m	Direct SCS Capex and SaaS implementation opex \$FY24m
1	9.0	25.1 (13.5 in capex and 11.6 in opex implementation costs)
2	19.3	65.6 (34.8 in capex and 30.8 in opex implementation costs)
3	20.6	91.1 (44.4 in capex and 46.7 in opex implementation costs)

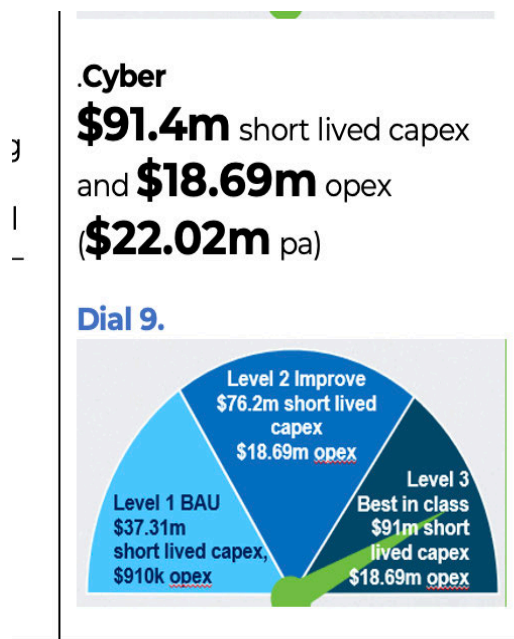
The Panel notes that in the context of Ausgrid's forecast capex program there is a relatively small uplift in investment costs (capex and SaaS implementation opex) between the \$65.6m proposed for SP -2 and the \$91.1m proposed for SP-3, given that the \$91.1m includes the additional \$4.96m capex scope factor for likely increased SP-3 regulatory obligations. However, the Panel makes no observation as to whether the opex or capex proposed by Ausgrid is prudent and efficient.

#### *Customer feedback*

Given the AER's decision on AusNet Services and that Ausgrid aims to be at 100% SP-2 maturity by 2027, the Panel's advice to Ausgrid in the first half of 2022 was that Ausgrid's proposed 2024-29 expenditure should be to maintain SP-2. When the Panel discussed the form of engagement with the VoCP on this matter with Ausgrid, we recommended that Ausgrid did not use the terminology 'best in class' when referring to SP-3. The Panel did not support Ausgrid being given a blank check to spend whatever other unregulated businesses might choose to spend if it cannot establish the benefit to customers in terms of lowering the risk.

As part of the deep engagement with the VoCP, Ausgrid asked about customers' willingness to support its proposed investment in cyber. Following strong feedback on the need for cyber investment, Ausgrid asked if the VoCP supported Ausgrid investing to achieve SP-3 maturity. Ausgrid proposed a dial (dial 9)<sup>104</sup> showing the costs of investing in level 1, 2 and 3, with level 3 described as 'best in class.'

<sup>104</sup> From p.10 Ausgrid response VoCP Day 7



Several Panel members observed the VoCP's discussions about this issue on 4 June 2022. The views in the room were divided and the debate between participants on this topic and the drafting of the VoCP's recommendation was observed by the Ausgrid CEO and the Chair of the Ausgrid board. We observed that customers agreed that:

- the risk of a cyber-attack was real and increasing<sup>105</sup>;
- the potential consequences of a successful cyber-attack are very serious;
- all customers are becoming more dependent on electricity as part of the transition and electrification of transport; and
- the minimum investment needed was to achieve SP-2.

Ultimately the majority of the VoCP concluded in June 2022 that it could not recommend investment for level 3 or 'best in class' as they did not think Ausgrid had presented a business case showing the additional benefit/reduced risk customers would receive from the additional investment. This is reflected in the final VoCP recommendation 6:

*Investment of \$2.96/pa as a base, giving Ausgrid the option to go to the AER to shift up to greater investment (example \$3.30 p/a) if Ausgrid can show that it's needed or there are more benefits in order to protect the grid.*

We note that the only minority report in the VoCP recommendations is in relation to cyber investment, where a minority supported 'best in class' investment in cyber security giving the following rationale:

*Our rationale is based on the scale of current cyber-attacks, as well as the significant costs of even just one day of no energy. This could include financial costs and costs to lives. Ausgrid needs the best people to protect against the best cyber attackers and emerging technology and approaches for attacks.*

We commented on the diversity of views and the lack of the business case in our first RCP Report<sup>106</sup>.


<sup>105</sup> This view was strongly held amongst customers even before the Optus and Medibank cyber-attacks

<sup>106</sup> See First RCP Report Chapter 9 at pp 49-50

### *Ausgrid engagement with the Panel*

This led to a series of detailed discussions with Ausgrid as we sought to challenge them on their business case for SP-3. On 16 August 2022 Ausgrid presented the Panel with the detailed analysis of the risks and benefits for consumers between SP-2 and SP-3 based on a Cutler Merz risk model. VCR was used to calculate customer impact.

The following visual shows



As far as we are aware this is the first time a network has explained to customers the consequences and benefits of cyber security maturity and practices when responding to a cyber-attack in terms of the costs of manual network control, internal staff productivity and planned maintenance.

As a result of this detailed analysis the Panel believes that Ausgrid successfully responded to our challenge and the VoCP feedback from June to clearly explain the level of risk (even if it is very small) and the benefits from Ausgrid moving from SP-2 to SP-3. In the Town Hall in October 2022 the Panel informed the participants that we believed that Ausgrid had done the work to explain the consequences and benefits for customers of investing to achieve SP-3 maturity. The Town Hall participants gave its support for investment at SP-3. Again the Panel made no comments on whether the proposed \$105.8m totex was prudent and efficient.

The remaining issues for the Panel on Ausgrid's cyber investment are:

- given that at this stage it does not appear to be mandated by Government, it is unclear that achieving level 3 is necessary to comply with Ausgrid's licence condition and there is still no evidence that the levels in AESCSCF will be increased as part of the current review. However we note the AER's view in the recent draft decision for Transgrid that it needed to reach SP-3 to comply with its regulatory obligations.
- We understand that the cyber threat is increasing (since the publication of the Draft Plan both the Optus and Medibank cyber-attacks occurred) and that future regulatory obligations are also

likely to increase. In our First RCP Report<sup>107</sup> we were concerned that the Ausgrid Board's approach was effectively requiring consumers to fund increasing cyber related insurance premiums, as well as increasing amounts for recurring opex and capex expenditure for cyber security. We challenged Ausgrid to review this as it appeared to the Panel that nearly all of the risk is being borne by consumers. Ausgrid notes that by limiting the capex scope factor for SP-3 to \$4.96m it is bearing some of this risk. This is not by Ausgrid accepting a lower SP level of protection, but by agreeing to meet the costs of achieving SP-3 in 2024-29 (however defined under the evolving AESCSF and legislative obligations) from the \$4.96m capex scope factor, given the high likelihood that it will face increasing regulatory obligations.

Finally the Panel notes that in the Transgrid Draft Decision the AER found that Transgrid had not taken sufficient and the prudent steps needed to increase its cyber maturity during 2018-23:

*Given the cyber security threat landscape, we consider it prudent for a transmission network service provider to uplift its cyber security maturity with appropriate urgency. Transgrid provided information that showed it had achieved progress in its cyber security maturity in the early years of the 2018–23 period.<sup>80</sup> However, our assessment indicates Transgrid has subsequently deferred progress of some work from the current 2018–23 period to the 2023– 28 period. Transgrid submitted that this was reasonable based on the delay in the issuing of the relevant Acts and their associated regulation.<sup>81</sup> However, we are not satisfied that the profile of expenditure proposed by Transgrid reasonably reflects the efficient costs of a prudent operator. This view is supported by advice from EMCa, who considers that this represents an unnecessary risk and does not represent the approach of a prudent network operator of the NSW transmission system.<sup>82</sup> EMCa further notes that Transgrid provided no business-related reason for having slowed its security enhancement program in the final 2 years of the current 2018–23 period<sup>108</sup>.*

The Panel does not believe that there is a similar issue of delay in Ausgrid's approach to achieving cyber security maturity. By contrast the Panel has observed that the Board's risk management framework has been placing pressure on Ausgrid management to increase its maturity as quickly as possible. Nevertheless, the Panel wanted to achieve ongoing transparency for customers about progress of Ausgrid's cyber maturity in the current period and in 2024-29. Ausgrid has agreed under the ICT governance principles to update the CCC on its progress on achieving SP-2 and SP-3 practices. In our future letter to the CCC the Panel will be recommending that the CCC seeks this update annually from Ausgrid on cyber issues; its evolving maturity and its compliance with its evolving regulatory obligations.

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<sup>107</sup> See First RCP Report Chapter 9 at p.50

<sup>108</sup> See [AER Draft Decision Transgrid 2023-28](#) Attachment 6 Operating expenditure at p.22