

Stakeholder Engagement Report

**Transgrid 2023-28 Revenue Proposal
Phase 2 (Post-Lodgement) Engagement Activities**

**Deep Dive Workshop 6
20 October 2022**

24 November 2022

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Inherent Limitations Disclaimer

This report has been prepared as outlined with The Trustee For The NSW Electricity Networks Operations Trust (Transgrid) in the Scope Section of the engagement letter/contract 28 June 2022. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

The findings in this report are based on a qualitative study and the reported results reflect a perception of Transgrid but only to the extent of the sample surveyed, being Transgrid's approved representative sample of stakeholders. Any projection to the wider stakeholder group is subject to the level of bias in the method of sample selection.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, stakeholders consulted as part of the process.

No reliance should be placed by Transgrid on additional oral remarks provided during the presentation, unless these are confirmed in writing by KPMG. KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

Notice to Third Parties Disclaimer

This report is solely for the purpose set out in the Scope Section and for Transgrid's information, and is not to be used for any purpose not contemplated in the engagement letter/contract or to be distributed to any third party without KPMG's prior written consent.

This report has been prepared at the request of Transgrid in accordance with the terms of KPMG's engagement letter/contract dated 28 June 2022. Other than our responsibility to Transgrid neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.



Introduction

Background

Transgrid operates and manages the high voltage electricity transmission network in New South Wales (NSW) and the Australian Capital Territory (ACT), connecting generators, distributors and major end users. Every five years, the Australian Energy Regulator (AER) undertakes a Revenue Determination to assess the revenue that Transgrid can recover from its customers for the transmission services it provides. This process is also known as a Revenue Reset. Transgrid's next regulatory period will occur from 1 July 2023 to 30 June 2028. The Revenue Reset for this period involves a comprehensive assessment of Transgrid's plans and forecast expenditure, and consideration of customer preferences.

On 31 January 2022, Transgrid lodged its initial Revenue Proposal, which outlined the revenue that Transgrid proposes to recover from electricity consumers through transmission network prices across the 2023-28 regulatory period. Prior to lodging the initial Revenue Proposal, Transgrid undertook consultation and engagement activities with its customers and stakeholders. These formed 'Phase 1' of Transgrid's engagement approach.

Since Transgrid lodged its initial Revenue Proposal, there have been a number of changes which may impact its Revised Revenue Proposal. Transgrid will lodge its Revised Revenue Proposal with the AER on 2 December 2022.

Transgrid has commenced a second phase of engagement (Phase 2) with customers and stakeholders in order to inform its Revised Revenue Proposal. Phase 2 engagement includes, among other activities, a series of 'Deep Dive' workshops with the Transgrid Advisory Council (TAC). The role of the TAC is to provide advice on strategic policy topics and Transgrid's business plans.

The TAC consists of Customer Advocates, Direct Connect Customers, Market Bodies, Industry Advocates, a Financial Investor and Expert Advisors. The AER and its Consumer Challenge Panel (CCP) are also invited to attend TAC meetings as observers. Transgrid facilitates 'business as usual' TAC meetings on a quarterly basis, with the Phase 2 Deep Dive workshops being scheduled in addition to these standing meetings.

Stakeholder engagement approach

Transgrid's approach to its Phase 2 engagement is detailed in its 2023-28 Revenue Proposal – Phase 2 (post-lodgement) Stakeholder Engagement Plan. This plan outlines Transgrid's engagement objectives and principles, which seek to demonstrate Transgrid's commitment to responding to feedback received from stakeholders after Phase 1 engagement.

Transgrid has stated that it seeks to demonstrate stakeholder engagement at the 'involve' and 'collaborate' level of the IAP2 Spectrum of Public Participation. Where appropriate, some topics of engagement may be targeted at the 'inform' and 'consult' levels of engagement. Transgrid will work with stakeholders to define appropriate levels of engagement for the specific topics considered.

Transgrid will co-design agendas for all Deep Dive workshops with TAC stakeholders based on feedback from attendees about the topics of most interest and importance to stakeholders.

	Inform	Consult	Involve	Collaborate	Empower
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Source: IAP2's Public Participation Spectrum

Introduction

Stakeholder engagement approach (cont.)

The Deep Dive workshops form part of a wider stakeholder engagement strategy which includes several different forums. Each forum has a different purpose:

- Quarterly TAC Meetings – act as a key stakeholder advisor to Transgrid, offering consumer and industry insights and advice on strategic policy topics and Transgrid’s business plans.
- TAC Reset Deep Dives – the purpose of these workshops is for the TAC to actively participate in the design of Transgrid’s positions and proposal in its Revised Revenue Proposal.
- System Security Roadmap Workshops – to define the network infrastructure needs and operational capabilities necessary to manage evolving risk, focused on technical aspects of the investment including needs and drivers.
- Energy Transition Working Group – discusses issues arising from the transition of the energy market, including discussion on ISP projects being delivered by Transgrid.

The agendas for the TAC Reset Deep Dive workshops have been defined based on stakeholder feedback of what topics would be most valuable to explore.

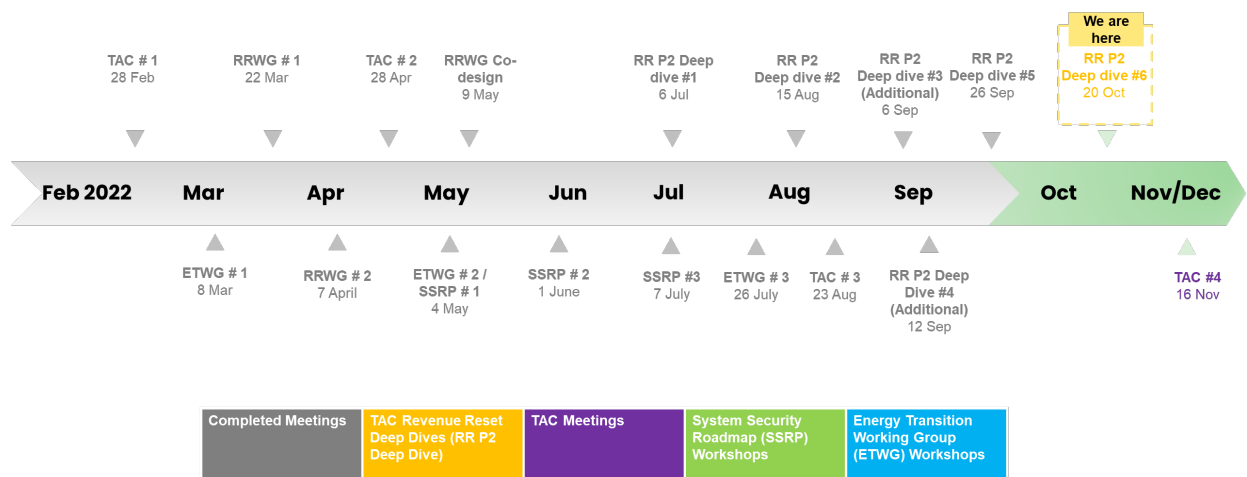
Co-designing topics and engagement approach

Transgrid sought feedback from stakeholders directly in the Deep Dive 1 workshop and for a period following the workshop, as part of the co-design of the forward agendas for Deep Dive 2, 3 and 4 workshops. Stakeholders were asked to prioritise proposed topics for Deep Dive workshops through an online voting tool. Stakeholders were also asked to identify any additional topics to be addressed in the workshops that may not have been captured in the proposed list.

To ensure a wide representation of views, stakeholders who were unable to attend Deep Dive 1 workshop were given the opportunity to vote and provide input via email communication following the workshop over a period of six business days. In total, seven TAC members provided input and the outcome of the stakeholder prioritisation has been detailed in the Deep Dive 2 Stakeholder Engagement Report.

Stakeholders provided feedback in Deep Dive 2 that additional time was needed to engage on some of the topics discussed in that workshop in further detail. Transgrid took this on notice and following Deep Dive 2 workshop, Transgrid proposed adding two workshops to the schedule, consulting the TAC to maximise availability, particularly for Consumer Advocates. This was positively received by stakeholders and two additional Deep Dive workshops were scheduled (Deep Dive 3 and 4 workshops).

The below outlines the planned stakeholder engagement at the commencement of Deep Dive 6 workshop, which was shared with stakeholders, including the addition of two new workshops: Deep Dive 3 workshop on 6 September 2022 and Deep Dive 4 workshop on 12 September 2022.



Source: Transgrid (presented to stakeholders in Deep Dive 6)



Introduction

Role of KPMG

KPMG was engaged by Transgrid to support its Phase 2 engagement. KPMG will:

- Support the design of appropriate stakeholder engagement activities
- Facilitate co-design workshops between Transgrid and its TAC
- Document stakeholder views to ensure commentary is accurately and fairly reflected for consideration

Transgrid remains responsible for workshop content including information specific to its Revenue Proposal.

Purpose of this report

This report summarises the key items of discussion from Deep Dive 6 workshop including the views expressed by and questions raised by stakeholders, and the response Transgrid gave to stakeholders during the workshop.

The purpose of the Deep Dive 6 workshop was to:

- Recap on feedback from Deep Dives 1-4 and how Transgrid has and is responding
- share feedback from Deep Dive 5 and outline how Transgrid is responding
- To share information with stakeholders on AER's Draft Decision and involve and collaborate with TAC to incorporate their positions in our Revised Revenue Proposal

Introduction

Deep Dive 6 workshop details

In addition to the Deep Dive 6 workshop on 20 October 2022, Transgrid held additional meetings to accurately and comprehensively capture a consolidated TAC view (particularly consumer advocates' views) on Transgrid's proposed response to the AER's Draft Determination. The purpose of these meetings was to either:

- accommodate TAC members who were unable to attend Deep Dive 6 workshop on 20 October 2022 (Meeting #1 and #2), or
- discuss further the topics in the Deep Dive 6 workshop (Meetings #4 and #5).

Meeting	Date	Time (AEST)	Purpose
Meeting #1	18 October 2022	2:00 – 3:00pm	Transgrid met with Gavin Dufty (St Vincent de Paul Society Victoria) due to unavailability to attend the scheduled Deep Dive 6 workshop on 20 October 2022
Meeting #2	19 October 2022	10:30 – 11:30am	Transgrid met with Andrew Richards (Energy Users Association of Australia, EUAA) due to unavailability to attend the scheduled Deep Dive 6 workshop on 20 October 2022
Deep Dive 6 (Meeting #3)	20 October 2022	9:30 – 12:30pm	Transgrid held the Deep Dive 6 workshop with the TAC. At this meeting, stakeholders requested an additional meeting to discuss contingent projects and STPIS on the basis that time ran out to discuss these topics in detail at the meeting. A follow-up meeting was scheduled for 25 October 2022.
Meeting #4	25 October 2022	1:00 – 2:00pm	Transgrid met with the TAC to discuss contingent projects and STPIS. At this meeting, the TAC requested a further meeting to discuss the new additional contingent projects. The TAC also requested the AER to present its view on this matter at the meeting. A follow-up meeting was scheduled for 31 October 2022.
Meeting #5	31 October 2022	1:30 – 2:30pm	Transgrid met with the TAC and the AER, to discuss the new additional contingent projects that were intended to manage the risks that could arise for customers in the event that Transgrid is not able to secure a non-network solution.

KPMG facilitated Meeting #3 and attended Meetings 1,2,4 and 5 as an observer. For the purposes of this report, all meetings are considered to form part of 'Deep Dive 6'.

Introduction

Deep Dive 6 workshop details (cont.)

This report presents these meetings as follows:

- Section 1 details Meetings #1, #2, #3 discussions as the views expressed by Customer Advocates in meetings #1 and #2 were conveyed to attendees of Meeting #3, and therefore have been recorded collectively.
- Section 2 details Meeting #4 discussions.
- Section 3 details Meeting #5 discussions.

Prior to Meetings #1, #2 and #3, stakeholders were provided with the proposed agenda, workshop pack and briefing notes, which provided context on the content to be presented by Transgrid. This allowed stakeholders time to prepare and help to establish a baseline of knowledge on each topic.

Detailed information on the topics discussed within the workshop, including the material presented by Transgrid, can be found in the workshop materials. A full list of attendees has been provided following each section of this report.

After preparing this report, Transgrid conducted one additional meeting with the TAC and the AER to seek alignment on the most appropriate mechanism to mitigate the risk from relying on non-network solutions for the recently completed RIT-T (either through a contingent project or a nominated cost pass-through). This meeting, held on 14 November 2022, has not been detailed in this report, however the outcome is detailed in the KPMG Stakeholder Engagement Report.

Deep Dive 5 Feedback

Feedback from Deep Dive 5

In Deep Dive 6 workshop, Transgrid presented the feedback it heard from stakeholders in the Deep Dive 5 workshop and outlined to stakeholders how it is responding to that feedback.

Stakeholder Feedback	Response by Transgrid
<p>System Security Roadmap: drivers and outcomes</p> <ul style="list-style-type: none"> Stakeholders requested a joint presentation with Transgrid and AEMO, potentially facilitated by Energy Networks Association. One Customer Advocate requested the release of the PowerRunner report to TAC members to facilitate understanding of the modelling. Stakeholders were supportive of the investment to ensure system security, however requested a clear narrative of how the investment delivers value to consumers. 	<ul style="list-style-type: none"> Transgrid committed to planning a joint session with AEMO on the commencement of the tool design phase. On 18 October 2022, Transgrid provided the TAC: <ul style="list-style-type: none"> the PowerRunner report; and a short overview outlining the value of its proposed System Security investment to customers.
<p>Critical Infrastructure Security: Security Legislation Amendment Critical Infrastructure Protection Act</p> <ul style="list-style-type: none"> One Customer Advocate noted that the numbers presented on the indicative revenue against each of the critical infrastructure security pillars did not add up due to rounding. Stakeholders advised that they were supportive of the investment in critical infrastructure security and noted that customers would likely understand the need and benefit. However, they suggested that Transgrid provide a clear narrative on the investment and its value to customers (e.g. by documenting a rise in current cyber attacks, or giving examples of risks). 	<ul style="list-style-type: none"> Transgrid revised and updated the numbers in the Deep Dive 5 slides, which were circulated to the TAC on 28 September 2022. Transgrid will provide the TAC a short overview of the value of Critical Infrastructure Security investment to customers after Deep Dive 6 workshop.
<p>Strategic benefit payments to landholders – drivers and outcomes</p> <ul style="list-style-type: none"> Transgrid stated its preference is a calculated true-up payment to landowners. One Customer Advocate noted their support for this approach. Stakeholders expressed a desire to remain updated on the approach to Strategic Benefit Payments to Landholders once further information is announced. One Customer Advocate sought further information on the strategic benefit payment. One Customer Advocate requested a separate discussion session on the HumeLink undergrounding report. 	<ul style="list-style-type: none"> Transgrid noted that it would convey stakeholder feedback on the scheme to NSW Government. Transgrid responded to the Customer Advocates' queries on strategic benefit payment on 5 October 2022 Transgrid and the Customer Advocate discussed the HumeLink undergrounding report on 17 October 2022.
<p>Engagement approach</p> <ul style="list-style-type: none"> Stakeholders advised that it is particularly important to demonstrate value for customers given price increases are expected in the short term. 	<ul style="list-style-type: none"> Transgrid noted this and will ensure this narrative is reflected in its Revised Revenue Proposal.

Key discussion items

Key Outcomes

The key topic of discussion in Deep Dive 6 was the AER's Draft Decision and Transgrid's response.

The key outcomes from discussions on these topics were:

- **In relation to the AER's Draft Decision on Opex and Transgrid's response, stakeholders either agreed that it was a consideration for the AER, or specifically noted their agreement with the AER's Draft Decision.**
 - In relation to Cyber and Critical Infrastructure, stakeholders broadly agreed that it was more appropriate for it to be considered by the AER rather than the TAC, specifically:
 - Some Customer Advocates noted that they did not have enough information to provide analysis and believed the AER would make the right assessment.
 - Some Customer Advocates noted that costs were in the ballpark of Transgrid's peers.
 - One Customer Advocate noted that affordability is a timing issue and where investments are allocated is critical. Where investments can be deferred or "back ended" they should be.
 - In relation to insurance premiums and ISP preparatory activities, stakeholders agreed with the AER's Draft Decision. Specifically stakeholders noted:
 - ISP preparatory activities should be paid for by Transgrid's equity holders and considered business development, however the thought leadership developed in this area was noted as valuable.
 - Transgrid should ensure it is comfortable that the insurance level matches the level of risk and that Transgrid can manage the risk with the lower insurance allowance.
 - Transgrid should consider the ability for third party funding, and where this has been considered, outline this in the Revised Revenue Proposal to show intent.
 - In relation to new additional opex, stakeholders noted that it was reasonable to include opex not known at the time of the initial Revenue Proposal submission, with some stakeholders supportive of the outlined investments in System Security Roadmap (SSR) and strategic benefit payments to landowners, and others deferring to the AER to ensure that costs are efficient, necessary and are not duplicated. Specifically stakeholders noted:
 - In relation to SSR, Transgrid should ensure that no double counting of costs occurs due to overlap between its investment and that being undertaken by other NSPs and AEMO.
 - One Customer Advocate noted that SSR may be considered a business development activity, and could be funded by equity holders.
 - Transgrid should consider further research on land value, and anything to help build the evidence base on what the payment amount should be for the strategic benefit payment to landholders.
- **In relation to the AER's Draft Decision on Capex (Repex) stakeholders, agreed it was a technical matter for consideration of the AER, specifically:**
 - A Customer Advocate noted that they supported the AER's view, noting that they are comfortable there is headroom in the conservatism of assumptions, and room for technical and monitoring improvements in the coming period to provide more granular asset management, including optimising asset life.
 - That these technical matters were for consideration by the AER, and the process of review by the AER gave consumers confidence.
 - A Customer Advocate requested a joint session between Transgrid and the AER for each to outline their positions and rationale and build understanding across the TAC.
- **In relation to the AER's Draft Decision on Capex (Augex), stakeholders agreed that where there is uncertainty around these projects, they should be removed from Transgrid's Augex forecast.** Specifically stakeholders noted:
 - They were happy for Transgrid to address the AER's concerns on deliverability, with one stakeholder agreeing with these concerns, noting that deliverability is an industry-wide issue.
 - Where Transgrid is seeking to respond to the AER on the project to 'maintain voltage in the Alpine area' based on updated Essential Energy forecasts, a Customer Advocate requested that Transgrid provide these updated forecasts to the TAC. Another Customer Advocate noted that they did not think the forecasts should be used, and if they are, ensure it is done symmetrically with respect to higher and lower demand forecasts across all four DNSPs.

Key discussion items

Key Outcomes (cont.)

- **In relation to the AER's Draft Decision on Capex (non-network ICT) and Transgrid's response that subject to additional analysis it is proposing to maintain its initial proposal, stakeholders agreed that this was something to be resolved between the AER and Transgrid.**
 - One Customer Advocate noted that they did not have enough information on the topic to provide a view, and that the AER should ensure ICT requests are efficient, necessary and are not duplicated over this period and previous periods.
 - One Customer Advocate supported Transgrid's overall approach to provide information in its Revised Revenue Proposal to address the AER's concerns.
 - One Customer Advocate noted it is important for any benchmarking data leveraged to support the investment should use comparable TNSPs data to ensure a meaningful like-for-like comparison.
 - One Customer Advocate also noted Transgrid should ensure that it is extracting optimal value from assets before reinvestment.
 - Another Customer Advocate reiterated their earlier request for a joint session with Transgrid and the AER to understand divergent positions.
- **In relation to the AER's Draft Decision on Capex (non-network other), stakeholders supported the AER's decision to remove these investments, specifically noting:**
 - If Transgrid proceeds with these investments, then it should fund them itself and customers should not be required to pay for them.
 - Transgrid should consider the optimal replacement timing.
 - One Customer Advocate noted that they were supportive of Transgrid having right-sized PV systems behind the meter such as at depots and LED lighting wherever cost effective (e.g. security lighting and other frequently used lights), where Transgrid can capture opex reductions.
- **Stakeholders expressed a range of views in relation to new additional capex outlined by Transgrid.**
 - In relation to unit rates, Customer Advocates noted this was challenging in the current environment and that Transgrid should be transparent on the methodology and trend.
 - In relation to system security, Customer Advocates noted it was important to explore synergies with similar DNSPs' investments and noted that it is important to ensure there is no doubling up or gaps.
 - In relation to AEMO directives, Customer Advocates expressed their support for Transgrid to use lower cost estimates than those in AEMO's cost benefit analysis.
 - In relation to the connection to McPhillamy's Mine, one Customer Advocates requested Transgrid to provide the Essential Energy load forecasts and supporting documents for this investment.
 - One Customer Advocate further noted that where these are non-urgent projects, it may be premature to include in the Revised Revenue Proposal, and should be treated as cost pass through.
 - One Customer Advocate noted the importance of the AER ensuring that investments are efficient, necessary and are not duplicated in this period, and previous periods.
- **Stakeholders were supportive of Transgrid's proposed response to reduce capex for its recently completed RIT-Ts through investment in technology and innovation and adopting the non-network solutions where possible.**
 - TAC members acknowledged the risk of relying on non-network solutions, however noted that it was the right approach.
 - One Customer Advocate sought to see the opex over the equivalent asset life for the capex investments to make a like-for-like comparison.
- **Stakeholders were supportive of Transgrid accepting the AER's Draft Decision in relation to 5 of the existing contingent projects**
 - TAC members acknowledged and supported Transgrid's reasonableness in accepting AER's decisions on those contingent projects.
 - One Customer Advocate requested additional information in relation to these projects, as they were seeking to understand impacts on regional areas.

Key discussion items

Key Outcomes (cont.)

- **Although stakeholders supported Transgrid relying on the non-network solutions where possible for the recently completed RIT-T projects, stakeholders were not able to reach a conclusion on Transgrid's proposed response to include the network solution as a contingent projects, and sought further guidance from Transgrid and the AER on the permissibility of the approach under the rules.**
 - Through discussion TAC members expressed diverse feedback on the best approach to managing the risks associated with BESS solutions based on the information presented by Transgrid. Stakeholders sought further context from Transgrid and the AER throughout the course of the Deep Dive 6 meetings to understand which approach was best, and allowable by the AER.
 - TAC members raised concerns in relation to managing this risk through contingent projects, including:
 - If a contingent project is needed this will rely on reverting to the second-best solution identified in the RIT-T. Noting, this solution hasn't had the same level of rigour applied to confirm it is still the best solution, and;
 - It may not be allowable under the AER guidelines.
 - Initially, some Customer Advocates outlined their support of the approach to managing risk through contingent project, as long as the below was considered (however, cost pass throughs were not considered as an option at the time of discussion). Customer Advocates sought to ensure:
 - The approach was considered appropriate and approved by the AER.
 - The appropriate triggers were in place to ensure that the non-network solutions were exhausted before progressing with the network solution.
 - That there should be a continued "watching brief" to the TAC, to ensure that they are regularly updated on BESS solutions.
 - Other Customer Advocates supported a nominated cost pass through mechanism to address these potential risks, and not include the network solutions as contingent projects.
 - Stakeholders sought a view from the AER on whether this would be a viable option.
- **In relation to the AER's Draft Decision on STPIS, stakeholders either agreed that it was a consideration for the AER, or supported the AER's Draft Decision, noting that consumers were not willing to pay more for increased reliability. Specifically, stakeholders noted:**
 - As Transgrid already offers a high level of reliability, consumers are not willing to pay more for the network to be more reliable.
 - They believe the AER's Draft Decision reflects what consumers are willing to pay, in the absence of seeking the VCR or an exploration with consumers on what they are willing to pay.
 - One Customer Advocate noted that as they believe Transgrid offers a high level of reliability, it may be appropriate to reduce the penalty for outages.
 - There are a diverse set of opinions around reliability, costs and what businesses are willing to pay, however the VCR work that has been done is the best consolidated statement available.

Deep Dive 6 and Pre-Workshop Meetings- Key Discussion Items

Meeting	Date	Time (AEST)	Purpose
Meeting #1	18 October 2022	2:00 – 3:00pm	Transgrid met with Gavin Dufty (St Vincent de Paul Society Victoria) due to unavailability to attend the scheduled Deep Dive 6 workshop on 20 October 2022
Meeting #2	19 October 2022	10:30 – 11:30am	Transgrid met with Andrew Richards (Energy Users Association of Australia, EUAA) due to unavailability to attend the scheduled Deep Dive 6 workshop on 20 October 2022
Deep Dive 6 (Meeting #3)	20 October 2022	9:30 – 12:30pm	Transgrid held the Deep Dive 6 workshop with the TAC. At this meeting, stakeholders requested an additional meeting to discuss contingent projects and STPIS on the basis that time ran out to discuss these topics in detail at the meeting. A follow-up meeting was scheduled for 25 October 2022.

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
Welcome and introductions <ul style="list-style-type: none"> KPMG and Transgrid welcomed all participants and attendees. 	There were no comments shared by stakeholders in relation to this item.	
Recap engagement approach and purpose <ul style="list-style-type: none"> KPMG outlined the agenda for the workshop. <ul style="list-style-type: none"> To share feedback from all Deep Dives and outline how Transgrid is responding. To share information with stakeholders on AER's Draft Decision and involve and collaborate with TAC to incorporate their positions in Transgrid's Revised Revenue Proposal. KPMG recapped on the Revenue Proposal engagement principles. KPMG outlined the engagement process to date as part of the post-lodgement period. 	There were no comments shared by stakeholders in relation to this item.	
Deep Dive feedback and outcomes <ul style="list-style-type: none"> Transgrid outlined that it had co-designed 6 Revenue Reset Deep Dive workshops, on 8 topics as determined by the TAC. Transgrid provided a re-cap on the feedback heard in Deep Dives 1-4 and how Transgrid is responding, including in relation to: <ul style="list-style-type: none"> Engagement approach RIT-T assumptions and inputs Unit rates AEMO Directives Repex Transgrid outlined the feedback heard in Deep Dive 5 and how it is responding, including in relation to: <ul style="list-style-type: none"> System Security Roadmap: drivers and outcomes. Critical Infrastructure Security: Security Legislation Amendment Critical Infrastructure Protection Act. Strategic benefit payments to landholders – drivers and outcomes. Engagement approach. 	<p>One Customer Advocate noted the positive efforts of earnest engagement undertaken by Transgrid since the lodgement of its initial Revenue Proposal. However, the Customer Advocate expressed feedback in relation to Transgrid's engagement approach to-date, noting:</p> <ul style="list-style-type: none"> Transgrid's engagement commenced late, presenting challenges. That they are looking for genuine acknowledgement from Transgrid of limitations around its stakeholder engagement and for Transgrid to outline how they are going to address this. That they did not attend the AER's presentation on the Draft Determination for Transgrid. However, when reviewing the slides they noted they did not agree that Transgrid had conducted 'extensive engagement with stakeholders' when the Draft Determination had outlined that there had been limitations in Transgrid's engagement with stakeholders. <p>The Customer Advocate also provided feedback in relation to the recap of feedback presented, including:</p> <ul style="list-style-type: none"> Clarified that TAC members asked if they could co-design the outcomes for consultation topics including the RIT-T outcomes, not just the agendas of the workshops, however noted that Transgrid had undertaken efforts to do this. Explaining that while the preference not to use live polling platforms such as Menti was articulated by only one Customer Advocate, it was likely reflective of a broader view held by consumer advocates. Stated that they believed that the majority of the TAC were concerned about Transgrid's End Consumer Survey. 	

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
Deep Dive feedback and outcomes (cont.)	<p>The Customer Advocate noted that they wanted Transgrid to acknowledge the challenges it has faced and the shortcomings of its approach, where they have not been able to meet the expectations of some of the stakeholders.</p> <p>Transgrid's response was acknowledged by the Customer Advocate, and they noted the efforts of individuals. However, explained that they did not believe it was a journey, and said that it was considered a regulatory obligation. The Customer Advocate noted the limitations are the product of the engagement starting late, however explained that stakeholders are committed to continuing to work with Transgrid.</p>	<p>Transgrid acknowledged the feedback from the Customer Advocate, explaining that it was on a journey, and it has made a lot of internal change, and is committed to improvement. Transgrid explained it was doing its best to put the foundations in place, and that it understood and hears the views of the Customer Advocate and of other stakeholders, and will take this on board.</p> <p>Transgrid explained that in the workshop it will be transparent around the elements that it can change and is seeking stakeholder feedback to be able to deliver a consolidated view.</p>
	<p>One Industry Advocate thanked Transgrid for facilitating these Deep Dive workshops. The Industry Advocate noted that they appreciated and understood the points raised by the Consumer Advocate about Transgrid's stakeholder engagement process, however said it was worth acknowledging the ongoing efforts by Transgrid to engage with stakeholders.</p>	
	<p>One Customer Advocate noted they have had discussions with the NSW Government on the strategic benefit payments to landholder to get further details, and commented that it was useful to have heard it from Transgrid first and they are looking forward to seeing how it works in practice.</p>	
	<p>One Customer Advocate explained that in relation to Critical Infrastructure Security and AEMO directives, they are seeking further information around what elements are directed by others and what are the different options for meeting those directives.</p>	
	<p>In relation to strategic benefit payments for landholders and cost pass throughs, the Customer Advocate noted their position was that cost pass throughs are for unforeseen and unforeseeable expenses, noting that landholder positions should be understood through engagement, and wasn't sure if it fit the criteria.</p>	<p>Transgrid clarified that it is a new regulatory obligation above the Just Terms Act and that it has not yet been formally introduced.</p>
	<p>The Customer Advocate clarified if this was for NSW Electricity Infrastructure Roadmap Projects or if it was for ISP projects.</p>	<p>Transgrid confirmed that the payments would be for landholder hosting ISP projects, and that this only relates to the NER framework. Transgrid clarified that because a determination has already been made for Project EnergyConnect, the Revised Revenue Proposal only includes the strategic benefit payment costs for Project EnergyConnect to recover those costs.</p>
<p>The Customer Advocate thanked Transgrid and noted that this made sense.</p>		

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>AER Draft Decision Overview</p> <ul style="list-style-type: none"> Transgrid explained that on 12 October 2022, the AER held a public forum on its Draft Decision. Transgrid explained that to address the AER's and the CCP's feedback from the public forum, it has identified elements of the AER's Draft Decision that: <ul style="list-style-type: none"> It cannot accept because they would raise unacceptable compliance or other risks, including Transgrid's obligations. It is proposing to adopt TAC's position in its Revised Revenue Proposal. Transgrid outlined the key differences between AER's Draft Decision and its initial Revenue Proposal: <ul style="list-style-type: none"> Higher return on capital due to higher rate of return and opening regulated asset base (RAB). Lower return of capital (depreciation) due to higher inflation estimates. Higher estimated corporate income tax due to higher rate of return on equity. Higher Opex forecast. Lower Capex forecast KPMG sought views from the TAC on their preferred approach to capturing their feedback on the AER's Draft Determination, including: <ul style="list-style-type: none"> What are the TAC's views on Transgrid's proposed approach to this further engagement, including its approach to identifying issues for the TAC's input? How should the TAC's considered position be recorded? 	<p>One Customer Advocate thanked Transgrid for providing the briefing notes before the meeting, noting that they provided a clear overview.</p> <p>The Customer Advocate noted that the approach seemed sound, however noted that sometimes there appears to be an expectation that the TAC is able to provide deep analysis to form a view on topics. The Customer Advocate explained that they rely on the analysis of the AER to ensure that investments are prudent and efficient. The Customer Advocate explained that the TAC is able to provide insights into elements including what are reasonable costs to be passed through to consumers; what should be paid for by equity owners; and where should costs be allocated.</p> <p>The Customer Advocate noted an improvement in Transgrid's stakeholder engagement over the past few months, however noted that Transgrid is still lagging behind its peers in terms of price resets.</p> <p>One Customer Advocate noted that the approach to the workshop and seeking TAC feedback on the AER's Draft Determination was a sound approach.</p> <p>One Customer Advocate noted that it was their preference not to use a live polling tool (e.g. Menti) with a small sample of people. The Customer Advocate outlined that their preferred approach was to record the overarching position of the TAC, clearly noting consumer advocate views are, and the views of other stakeholder types if there was divergence. The stakeholder also noted that a live poll would not be a viable option with two Customer Advocates unable to attend the workshop.</p> <p>One Customer Advocate explained that there were two approaches that could be adopted:</p> <ul style="list-style-type: none"> To try and arrive at a set of statements that can be agreed, however they noted this may end up being too narrow or vague. Record the views discussed in one place, including what might be diverse positions across different members. <p>Another Customer Advocate noted that their goal was to try to land with an outcome that everyone agrees with. However, when this isn't possible, the best way to capture it is to clearly capture individual consumer perspectives, meaning that information is truthful and Transgrid is doing an effective job of outlining the discussions that took place.</p>	<p>Transgrid acknowledged the Customer Advocate and explained there is no expectation for the TAC to be aware of all the details, but that Transgrid is seeking their opinion and views based on the principles outlined.</p> <p>Based on the views expressed by stakeholders, KPMG confirmed that the approach for capturing the workshop outputs would be to accurately report on the discussion, including where there is consensus and where there is divergence.</p> <p>Transgrid confirmed that it supported this approach to capture all of the nuanced views that may be shared.</p>

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Forecast Opex <u>Cyber and Critical Infrastructure Security</u></p> <ul style="list-style-type: none"> Transgrid advised that it does not accept the AER's Draft Decision to reduce its step change for cyber and critical infrastructure, because: <ul style="list-style-type: none"> Its forecast opex is essential to deliver the new requirements under the SOCI Act, and The timing of its proposed investment is reasonable, and its costs are prudent and efficient as supported by independent benchmarking. Transgrid explained that at this stage it proposes to maintain its initial position on cyber and critical infrastructure because this investment is needed to meet compliance requirements, and it can address the AER's concerns. 	<p>The Customer Advocate explained that in relation to step changes for Cyber and Critical Infrastructure, the AER would do its job to review Transgrid's response on cyber and critical infrastructure security. However, the Customer Advocate noted that affordability is a timing issue and where the investments are allocated (fixed vs variables) is critical. Where investments can be pushed out and be "back ended" they should be.</p>	<p>Transgrid responded that it will consider timing and ensuring that costs in relation to cyber and critical security are efficient.</p>
	<p>The Customer Advocate outlined that the need for investment in cyber security was unquestionable, however it comes down to if the investment is prudent and efficient. The Customer Advocate noted:</p> <ul style="list-style-type: none"> Transgrid's forecast costs are in the ballpark of its peers, however, costs should reflect data points, and They support the forecast costs provided they match the scale of risk. 	<p>Transgrid noted that it had commissioned Deloitte to do an independent review to determine if the activities and costs are reasonable.</p>
	<p>One Customer Advocate asked what the higher insurance premiums figures were based on, and if it is actual quotes from insurance providers.</p>	<p>Transgrid noted it would discuss this when it provided further information on insurance premiums following seeking views from the TAC on cyber and critical infrastructure security.</p>
	<p>One Customer Advocate noted the importance of understanding what is within Transgrid's discretion and what is prescribed in order to understand what the best solutions are. The Customer Advocate noted that in the absence of understanding these elements, they are unable to support or not support Transgrid's position, and would err on the side of the AER's decision.</p>	<p>Transgrid explained that the AER took the view that Transgrid should have been more advanced in this revenue period in terms of cyber security, and therefore needed less for the coming revenue period. However, Transgrid noted that it has conducted significant benchmarking which suggests good alignment with other TNSPs and DNSPs. Transgrid explained that regardless of this, there is still a need for it to meet the requirements of the SOCI act, noting this is the basis on which it would be responding to the AER. Transgrid further explained that there are no discretionary items included.</p>
	<p>The Customer Advocate noted the response from Transgrid and explained that using a coming revenue period as a proxy for ex-post assessment of a prior period is fraught.</p>	
	<p>The Customer Advocate further noted that it did not have the depth of information to say what the 'right' number is, and that they trust the AER to make the right decision.</p>	
	<p>The Customer Advocate clarified if for all of the areas discussed in the workshop, the TAC position would be relayed to the AER.</p>	<p>Transgrid confirmed this was correct.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
Forecast Opex <u>Cyber and Critical Infrastructure Security (cont.)</u>	<p>One Customer Advocate clarified if there was a part of the presentation that would outline the revenue impacts should the AER accept Transgrid's proposed response. The Customer Advocate noted that the changes of inflation inputs between stages, makes it difficult to compare like with like. The Customer Advocate therefore explained that while it is reasonable to 'narrow in' on the points that Transgrid may contest, it is difficult for TAC members to make a final endorsement without visibility of the full cost impacts. The Customer Advocate explained that they can provide an initial view, but may not reach total 'sign off' without that visibility.</p>	<p>Transgrid agreed that drawing a comparison is made more difficult due to inflation. Transgrid clarified that the purpose of the workshop is to seek a shared view of which AER's Draft Decisions it can accept and which it cannot, and that in the next TAC meeting, Transgrid will outline the revenue and price impacts of that expenditure, as Transgrid will need to update its models and see what the outcomes are. Transgrid noted this and agreed with this approach. Transgrid explained that this process was to understand views from the TAC on the AER's Draft Decision and the work that it has been conducted so far, noting that Transgrid is still early in the process of responding to the Draft Decision.</p>
	<p>In relation to cyber, one Customer Advocate provided the context of the war in Ukraine, explaining that from their understanding cyberwarfare had not been a large tactic used, and that physical weaponry had been leveraged instead to impact transmission networks. However, the Customer Advocate did agree with the view that the proposal does not appear to be different in terms of scale with other networks.</p>	<p>Transgrid explained that there have been previous Russian cyber-attacks on Ukraine assets, which have enabled Ukraine to mitigate the impact of cyber-attacks in the current context.</p>
	<p>One Customer Advocate noted that their remit in terms of representing stakeholder views was narrower compared to others on the call, and that they would provide input as needed.</p>	

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Opex <u>Insurance Premiums and ISP Preparatory Activities</u></p> <ul style="list-style-type: none"> Transgrid explained that in relation to its insurance premiums and ISP preparatory activities, the AER has: <ul style="list-style-type: none"> Reduced its insurance premium step change of \$30 million by \$16.1 million or 53.4 per cent to \$13.8 million. While the AER accepted AON's forecast for the 2023-28 period, it: <ul style="list-style-type: none"> removed costs associated with network growth or scale to avoid double counting, and used 2022-23 as the base year, rather than Transgrid's proposed 2021-22 base. Given that Transgrid's 2022-23 insurance costs are higher than its 2021-22 costs, this reduces the step change amount. Rejected its ISP preparatory activity step change of \$2.9 million, because it considers that they should be managed within Transgrid's base opex and that it had not adequately demonstrated that they are prudent and efficient. Transgrid sought views from the TAC on: <ul style="list-style-type: none"> What are the TAC's views on the insurance step change? How should Transgrid respond in the Revised Revenue Proposal? What are the TAC's views on ISP preparatory activity step change? How should Transgrid respond in the Revised Revenue Proposal? 	<p>One Customer Advocate outlined that the proposed insurance premiums and ISP preparatory activities should be removed and Transgrid should consider third party funding, and where this has been considered, outline this in the Revised Revenue Proposal to show intent.</p>	<p>This was acknowledged by Transgrid.</p>
	<p>In relation to Insurance premiums, one Customer Advocate noted they did not have enough information to understand the details around risks and premiums in full.</p>	<p>Transgrid explained that the AER had accepted AON's forecast however has removed an amount for rate of change and also taken a different base year for analysis. Transgrid noted that overall it believed the adjustments were sensible and reasonable.</p>
	<p>Based on this, the Customer Advocate noted their agreement with the AER's Draft Decision, provided Transgrid is comfortable that the insurance level matches the level of risk and that Transgrid can manage the risk with the lower allowance.</p>	<p>Transgrid noted this feedback and stated that it would consider this.</p>
	<p>In relation to ISP preparatory activities, the Customer Advocate agreed with the AER's Draft Decision to remove ISP preparatory activities, noting that they should be paid for by Transgrid's equity holders rather than by consumers.</p>	
	<p>One Customer Advocate noted that they did not have the depth of knowledge to say what the right investment amount is, and agree with the AER's rationale for its decision.</p>	
	<p>Another Customer Advocate agreed that it is also appropriate to remove the spend, but clarified whether there is any indication of specific changes to insurance premiums in the current context (including natural disasters), and whether it's possible that premiums will increase further.</p>	<p>Transgrid explained that from a regulatory perspective, it has provided a set of forecasts which have been accepted, and given this, if it accepts the AER's draft decision, then this would be the amount. Transgrid explained that there will always be changes to those forecasts over the period, however Transgrid is not compensated for any changes.</p>
		<p>Transgrid further clarified that AON's estimate was included in its Revised Revenue Proposal, and that they also do try to diversify their insurance, and has conducted presentations in Sydney, London and Singapore to have a broad group of providers to get the best price.</p>
	<p>One Customer Advocate noted that ISP (along with the NSW Roadmap and Snowy 2) is a "goldmine" for NSPs, and recovering revenue for early works covers risk and development costs that a competitive business would pay for themselves. The Customer Advocate noted that they agreed with the AER decision, and believes that Transgrid should consider it business development.</p>	

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Opex <u>Insurance Premiums and ISP Preparatory Activities (cont.)</u></p>	<p>Another Customer Advocate noted that they agreed with the AER. However, noted that Transgrid has previously developed thought leadership in relation to previous iterations of the ISP, and while they did not believe that the additional cost element should remain in the proposal, they did note that Transgrid should continue with the development of that thought leadership and noted that it has been very valuable to the wider debate.</p>	<p>This was acknowledged by Transgrid.</p>
<p>Opex <u>New additional opex</u></p> <ul style="list-style-type: none"> Transgrid explained new opex was required as previously discussed with the TAC on: <ul style="list-style-type: none"> Cyber and Physical security System Security Roadmap Strategic benefits payments Transgrid outlined that the new additional expenditure is required to respond to new information and recent developments outside its control that occurred since its initial Revenue Proposal. Transgrid sought views from the TAC on: <ul style="list-style-type: none"> What are the TAC's views on the new additional opex that Transgrid intend to include in its Revised Revenue Proposal? Is there any specific evidence that the TAC would expect Transgrid to provide to justify its revised expenditure forecast? 	<p>In relation to new additional opex stemming from strategic benefit payments, one Customer Advocate noted their support for paying landowners for hosting ISP projects on their land. However, they indicated that Transgrid should clearly identify this is a pass through cost and clarify who pays for this cost.</p> <p>For System Security Roadmap (SSR), a Customer Advocate noted:</p> <ul style="list-style-type: none"> Support for this initiative and requested that Transgrid demonstrates no double counting of costs arising from overlap between its investment and that being undertaken by other NSPs and AEMO, and Considers consumers should not pay for the SSR because it is a Transgrid business development activity. <p>One Customer Advocate noted that it was reasonable to add new material costs not known when the previous proposal was lodged. However, as these have not been consulted as part of the initial Revenue Proposal, the Customer Advocate explained it is critical the AER ensures all the new opex requests:</p> <ul style="list-style-type: none"> Are efficient and/or as low as possible, Are necessary, and Do not duplicate other opex or capex. <p>The Customer Advocate further noted that where the expense was foreseeable at the time of the initial Revenue Proposal, Transgrid has missed the opportunity to seek this revenue, which they noted was not the consumer's responsibility.</p> <p>The Customer Advocate clarified in relation to strategic benefits payment to landholders, if Transgrid has visibility of the payments under the NSW Roadmap that looks at access fees for Renewable Energy Zones (REZs), including social licence costs to communities, or if they are functionally separate.</p>	<p>Transgrid acknowledged this and said it would reflect that feedback, stating that it was also its preference to have a 'true up' approach.</p> <p>This was acknowledged by Transgrid.</p> <p>Transgrid acknowledged concerns around duplication of costs and noted that the amount proposed is solely in relation to Project EnergyConnect (PEC), and is based on a mathematical equation supplied by the NSW Government. In future CPAs they will include an opex component for these costs. Transgrid further noted that the payment here is distinct from any other payments that might take place for REZs.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Opex <u>New additional opex (cont.)</u></p>	<p>The Customer Advocate clarified if landowners are automatically paid and why Transgrid does not yet know the number of landowners.</p> <hr/> <p>Another Customer Advocate noted that it would be helpful if there was more research done on land value, and anything to help build the evidence base on what the payment amount should be.</p>	<p>Transgrid confirmed the only variable is the number of landholders, all other elements are prescribed by government.</p> <p>Transgrid explained that it is automatically paid and that they do not know the number of landowners yet as the line routes and negotiations have not yet been finalised. Transgrid further noted that it has an estimation, but cannot yet confirm the exact number due to those variables around line routes and the ongoing negotiations.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Capex Repex</p> <ul style="list-style-type: none"> Transgrid explained that the AER did not accept its 2023-28 forecast capex of \$1,368.5 million (excluding pre-approved forecast capex) as it was not satisfied that it reasonably reflects the capex criteria. Transgrid explained that the AER reduced its 2023-28 forecast Repex of \$797.6m by \$121.6m (15.3%) to \$675.9m, explaining that: <ul style="list-style-type: none"> Several of its risk assumptions are overstated, and When adjusted, lower-cost options are likely to be more efficient. Transgrid outlined its proposed approach was to: <ul style="list-style-type: none"> Update its business case assessments to reflect AER's feedback, including risk assumptions. Its preliminary view is that this updated analysis is likely to confirm its initial Repex forecast is justified, with the possible exception of palisade gate remediation. Transgrid sought views from the TAC on: <ul style="list-style-type: none"> What are the TAC's views on how Transgrid should respond to the AER's Draft Decision in relation to Repex? Is it reasonable to update the modelling analysis to address the AER's Draft Decision or should an alternative approach be adopted? Is there any specific evidence that the TAC would expect Transgrid to provide to justify its revised expenditure forecast? 	<p>One Customer Advocate noted that it was good to see the process of review by the AER which gives consumers confidence, and ultimately that they believe the AER will do its job of robust economic analysis.</p> <p>One Customer Advocate:</p> <ul style="list-style-type: none"> Explained they consider this a technical matter that should be resolved between Transgrid and the AER Requested a joint session between Transgrid and the AER to assist the TAC to: <ul style="list-style-type: none"> Understand the reasons for the AER reductions. Understand the reasons for Transgrid's positions. Understand the differences between the AER and Transgrid's positions. Build the TAC's understanding of this matter. <p>The Customer Advocate agreed they would be happy to have this session after Transgrid submits its Revised Revenue Proposal.</p> <p>One Customer Advocate expressed support for the AER's view, and noted that they were comfortable there is headroom in the conservatism of assumptions and room for technical and monitoring improvements in the coming period to provide more granular asset management, including optimising asset life. The Customer Advocate further explained that any material errors in AER assessment do need to be addressed.</p> <p>The Customer Advocate further clarified the extent to which Transgrid's previous proposal relies on benchmarking, and to what extent does the AER's assessment rely on different benchmarking.</p> <p>The Customer Advocate clarified to what extent Transgrid and the AER's repex values are dependent on transmission in other regions and historical observed data in the Transgrid network in relation to benchmarking.</p>	<p>Transgrid confirmed that it would be open to providing this forum with the AER, and suggested the best time for this could be after Transgrid has submitted its Revised Revenue Proposal.</p> <p>Transgrid clarified that the AER has used top-down benchmarking (PPI metrics) to assess overall capex, however, explained that ultimately the AER's Draft Determination reflects its bottom-up assessment. Transgrid noted that its repex forecast also primarily relies on bottom-up and top-down assessments. While Transgrid does not rely on benchmarking, it is a useful test to 1) assess how Transgrid improved over time, and 2) understand how Transgrid compares with other TNSPs on certain things at a holistic level (asset age, circuit length, maximum demand etc). Transgrid focuses on a bottom-up assessment and has received some feedback from the AER on the assumptions used for business cases, however, actioning of this feedback is still in the early stages. Transgrid noted that even when it adopts alternative inputs and assumptions, the preferred outcome and timing remain. Given this, Transgrid believes the AER concerns regarding repex estimation could be easily addressed in the Revised Revenue Proposal.</p> <p>Transgrid explained that age is the largest driver of repex. Based on independent assessments, Transgrid believes there is a discrepancy in views around the age of the assets, with the AER assuming a younger age profile of assets and therefore less repex is required for maintenance. Transgrid considers it is in a position to show the AER that its assets are much older than what the AER has assumed in their analysis.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Capex <u>Repex (cont.)</u></p>	<p>The Customer Advocate clarified whether Transgrid is in the early days of using condition based asset management, instead of aged based.</p> <p>The Customer Advocate asked if there are technology solutions in use which may support further efficiencies in the repex space over the next five years.</p> <p>The Customer Advocate therefore concluded that they have confidence future technology developments and the further maturation of Transgrid's condition-based monitoring, along with flexibility of the balance of Opex and Repex spend, mean AER's assessment (sans any material errors) is appropriate</p> <p>A representative from the CCP asked if (workforce) resourcing is a concern to meet the repex program and the construction of other planned capital programs.</p>	<p>Transgrid further noted that while age is a proxy for investment, Transgrid also uses condition information collected from the network to assess the risk associated with an asset failure. Age is a component for consideration, but does not drive all of the investments covered in the Revenue Proposal.</p> <p>Regarding condition-based asset management vs age-based asset management, Transgrid noted that it has matured significantly over the last 7 years after ISO 255101 accreditation. Programs for opex are now tailored to collect conditional data and use those as input into calculations of the probability of failure for all assets.</p> <p>Transgrid explained that asset condition information is collected using drones, online condition monitoring and higher resolution cameras. All this information is collected and derives the probability of failure. Transgrid noted that over time there would be efficiencies in data collection from an opex perspective, however, this just fine-tunes the replacement strategies for the capital program, in particular for repex.</p> <p>Transgrid further noted that it does utilise asset condition information for its replacement strategies. It explained that it is continually improving how it collects data and the amount of data collects (i.e. big data) to better predict failures. Transgrid will continually drive for efficiencies to deliver benefits to consumers.</p> <p>Transgrid confirmed that one of the key considerations in terms of augex is deliverability. Transgrid also noted that the augex and repex program provide the base to build out the resources required. Transgrid outlined that one of Transgrid's strategies is to take the Tier 2 contractors on its repex and augex panel, and consolidate these contractors to become new Tier 1 providers, which enables Tier 3 providers to come into NSW, establish themselves and build their resources. Transgrid further noted that it is also considering timing and sequencing of business-as-usual augex programs, to keep those resources employed over across the entire capex program.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Capex <u>Repex (cont.)</u></p>	<p>The representative said that this made sense, and they were taking a national perspective. The representative asked if Transgrid had considered a 'plan B' should this approach not be effective.</p> <p>The representative asked if Transgrid has considered working with other states to look at resource balancing and optimisation across the NEM, not just by state by state.</p>	<p>Transgrid explained that, from a resources perspective, it is not concerned about Marinus Link project as it requires a very different skillset to execute it. In the context of other projects, NSW has a first-mover advantage. Transgrid intends to lock in required resources now and start growing required resources locally. Transgrid considers it is in a good position compared to other jurisdictions where transmission investment processes are at the early stages. Transgrid intends to further consider how it executes work, specifically around standardisation and modularisation. A lot of resourcing estimates are based on the historical execution of work. However, based on lessons learned from the oil and gas industry, there is a potential to do less on-site work to reduce labour requirements in remote areas through 1) building more assets in a factory environment and bringing to the site in modules, and 2) through having automation in factory environments to build some of the infrastructure.</p> <p>Transgrid agreed, and noted that its CEO has started to discuss 'team Australia'. Transgrid also explained that it is looking globally at what different countries are seeking to do, particularly around equipment supply, and noted there was also a role for AEMO in terms of prioritisation of projects from a national perspective.</p>

Key discussion items

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Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Capex Augex</p> <ul style="list-style-type: none"> Transgrid outlined that the AER has reduced its 2023-28 forecast Augex of \$253.6m (excluding pre-approved capex) by \$13.3m (5%) to \$240.3m, noting that Transgrid: <ul style="list-style-type: none"> Did not demonstrate its ability to deliver these Augex projects, given its large capex program to deliver ISP projects and the NSW Government's priority transmission infrastructure projects (PTIP). Did not adequately consider non-network solutions. Did not adequately demonstrate that loads that drive the projects will eventuate, which could lead to project deferrals. Transgrid outlined its proposed approach to: <ul style="list-style-type: none"> Update its business case assessments to address AER's feedback. Maintain Voltage in Alpine area where updated Essential Energy load forecast has brought forward the project to 2027-28, which is earlier than the 2029-30 timing in its initial Revenue Proposal. Transgrid explained it intends to include the full \$22.4m project cost in Transgrid's Revised Revenue Proposal. Transgrid sought stakeholder views on: <ul style="list-style-type: none"> What are the TAC's views on how Transgrid should respond to the AER's Draft Decision on Augex? If Augex projects are uncertain to proceed in the 2023-28 regulatory period, is it reasonable to include an allowance for some or all of these projects, or should they be removed from Transgrid's Augex forecast? 	<p>A Customer Advocate agreed that where there is uncertainty around these projects, they should be removed from Transgrid's Augex forecast. As a result, the Customer Advocate noted:</p> <ul style="list-style-type: none"> Delaying projects may enable more certainty and clearer value proposition, resulting in the project being more readily accepted. New technologies may become available in the future, and hence it could be more prudent to remove the project now. <p>Another Customer Advocate noted that they agreed with the AER's concerns about Transgrid's ability to deliver Augex projects due to its focus on ISP projects. The Customer Advocate further noted that:</p> <ul style="list-style-type: none"> Deliverability is an industry wide issue given the shortage of people and/or materials required to deliver the major infrastructure projects underway across the country. They agreed that projects should be removed if load is a key driver and remains uncertain. Requested that Transgrid make available the updated demand forecasts from Essential Energy for 'Maintain Voltage in Alpine Area'. <p>One Customer Advocate noted that they are comfortable with Transgrid seeking to address the AER's views on resourcing, and that they are happy to review Transgrid's updated assessment of this. The Customer Advocate noted that otherwise, they support the AER decision, and do not think the recently updated Essential Energy forecasts should be used, noting that if updated demand forecasts are to be used, this should be done symmetrically with respect to higher and lower demand forecasts across all four DNSPs.</p> <p>The Customer Advocate clarified whether, if Transgrid was seeking to use updated forecasts from one DNSP, it would update forecasts across all four DNSPs not just Essential Energy.</p> <p>The Customer Advocate then asked what non-network solutions Transgrid will consider.</p>	<p>This was acknowledged by Transgrid.</p> <p>Transgrid confirmed it would provide the advice from Essential Energy to the stakeholder.</p> <p>Through joint planning, Transgrid has discussed with Essential Energy new loads that have come on in the Williamsdale area. While the underlying forecast that was previously included has been reduced and delayed slightly, the new loads will affect Alpine area. These new loads will drive an increase in the overall load in the area, therefore bringing the Alpine project forward. However, Transgrid noted that for the Alpine project load is not the only driver. Voltage control issues are also key drivers for the project.</p> <p>Transgrid explained that the project will go through a RIT-T to identify non-network solutions, and noted that Transgrid does believe there may be some viable non-network solutions identified through the RIT-T.</p>

Key discussion items

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Topic presented by Transgrid`	Stakeholder input	How Transgrid responded
Capex <u>Augex (cont.)</u>	<p>The Customer Advocate further stated that they acknowledge the challenges of a steep and continuous learning curve for NSPs around non-network solutions in relation to the discussion on Augex and also more generally. However, the Customer Advocate expressed support for the AER's views that more work needs to be undertaken. The Customer Advocate expressed the view that Transgrid should establish a pool of distributed energy resources across their system rather than wait until individual projects are being assessed. The Customer Advocate further noted that although not currently allowed, there could be an opportunity in future for Transgrid to provide this service into the wholesale market.</p>	

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Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid`	Stakeholder input	How Transgrid responded
<p>Capex <u>Non-network ICT</u></p> <ul style="list-style-type: none"> Transgrid outlined that the AER reduced its 2023-28 forecast ICT capex of \$86.9m by \$9.5m (11.0%) to \$77.4m, noting: <ul style="list-style-type: none"> Transgrid provided limited evidence of portfolio prioritisation and deliverability. Uplift in totex is not consistent with efficiencies that should arise from the transition to cloud computing services. Transgrid has not reflected cost savings from 2018-23 investments in its 2023-28 ICT forecast or elsewhere in its proposal. That Transgrid is spending to its 2018-23 allowance, rather than investing based on identified need. Transgrid outlined that its proposed approach was to: <ul style="list-style-type: none"> Address the matters raised by the AER and its initial forecast is likely to be justified. Provide independent benchmarking analysis by HoustonKemp which supports the efficiency of its ICT capex, because its costs are lower than those incurred by ElectraNet and AusNet and broadly comparable with TasNetworks but slightly higher than Powerlink. Transgrid sought stakeholder feedback, asking: <ul style="list-style-type: none"> What are the TAC's views on how Transgrid should respond to the AER's Draft Decision in relation to non-network ICT capex? Is it reasonable to respond to each of the matters raised by the AER and update Transgrid's forecasts accordingly? Is there any specific evidence that the TAC would expect Transgrid to provide to justify its non-network ICT capex forecast? 	<p>A Customer Advocate noted this is a decision for Transgrid and the AER to resolve, however explained that Transgrid should consider how it extracts optimal value from assets before reinvestment, noting that every additional 6 months or year that Transgrid can extract is important to consumers at the moment.</p> <p>A Customer Advocate noted that this matter should be resolved between Transgrid, and the AER given its highly technical nature. The Customer Advocate further:</p> <ul style="list-style-type: none"> Reiterated their earlier comments in relation to Repex that a joint session with the AER would be helpful so that the TAC can understand from the AER the reasons for its Draft Decision and the reasons for the differences between Transgrid and the AER. Noted that it is important for independent benchmarking analysis to use comparable TNSPs data to ensure a meaningful like-for-like comparison. <p>One Customer Advocate noted that they do not have the knowledge or information to provide a view on this. The Customer Advocate noted that it is critical the AER ensures ICT requests are:</p> <ul style="list-style-type: none"> Are efficient and/or as low as possible, Are necessary, and Do not duplicate other opex and/or capex spend in this period, or ICT expenses recovered in previous periods. 	<p>Transgrid noted this feedback and said it would look into this to show if it is optimally timing asset replacements.</p> <p>This was acknowledged by Transgrid.</p>

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid`	Stakeholder input	How Transgrid responded
<p>Capex <u>Non-network other</u></p> <ul style="list-style-type: none"> Transgrid outlined that the AER disallowed two programs for its non-network other capex, noting: <ul style="list-style-type: none"> It had disallowed LED lighting and electric vehicles programs as they 'go beyond the requirements of the capex objectives'. Transgrid did not provide evidence of consumer support and willingness to pay for these programs. Transgrid outlined its proposed approach is to get the TAC's views on these proposed projects and customers' willingness to pay Transgrid sought stakeholder views on: <ul style="list-style-type: none"> Does the TAC support the non-network projects that have been removed by the AER's Draft Decision? Specifically, does the TAC consider that customers would be willing to pay for these projects? 	<p>One Customer Advocate reiterated the importance of optimal replacement timing.</p> <p>One Customer Advocate expressed support for the AER's Draft Decision to remove these investments, and noted that if Transgrid proceeds with these investments, then it should fund them itself and customers should not be required to pay for them.</p> <p>The Customer Advocate noted that if Transgrid is going to undertake these programs regardless, it is in the consumers' interest not to fund them.</p> <p>The Customer Advocate clarified whether, if Transgrid undertakes these investments, it will reduce its opex proposal.</p> <p>The Customer Advocate sought to further clarify why Transgrid believes it is too early to tell, noting that it was a straightforward process to estimate the cost benefits within 10-20% accuracy.</p> <p>The Customer Advocate further noted that they were supportive of Transgrid having right-sized PV systems behind the meter and LED lighting wherever cost effective (for example, security lighting and other frequently used lights). The Customer Advocate further noted that opex improvements should be captured, otherwise the Customer Advocate outlined their support for the AER on its Draft Determination.</p>	<p>This was acknowledged by Transgrid.</p> <p>This was acknowledged by Transgrid.</p> <p>Transgrid noted that at this stage it was too early to determine, however noted that when it does know, it will be reflected, and if there are opex savings then they will be flowed through to consumers.</p> <p>Transgrid noted it will ensure that if there are cost savings in opex as a result of the installation of more efficient systems, these will be reflected in the opex request. However, Transgrid also noted that under certain circumstances solar PV systems would not have an impact on opex, but rather on system losses. For example, solar PV installations on depots will impact opex while installations on remote substations will impact system losses, not opex. This is because substations are powered from the system and a solar PV system will reduce the system's ancillary load and thus, reduce losses.</p>
<p>Capex <u>New additional capex</u></p> <ul style="list-style-type: none"> Transgrid outlined that its proposed new additional capex relates to: <ul style="list-style-type: none"> Expenditure needed to respond to changes in its external obligation or operating environment since its initial Revenue Proposal. Network expenditure to address the outcomes of recently completed RIT-T that were underway at the time of its initial Revenue Proposal. Transgrid sought stakeholder views on: <ul style="list-style-type: none"> The new additional capex that it intends to include in its Revised Revenue Proposal. Is it reasonable to include capex in response to new obligations or information? What sort of information would the TAC expect Transgrid to provide in its Revised Revenue Proposal to justify the inclusion of this additional expenditure? 	<p>In relation to new additional capex stemming from unit rates, one Customer Advocate outlined, 'it is what it is', however clarified whether these costs will be upfront or back ended.</p> <p>In relation to System Security Roadmap, the Customer Advocate outlined that it is important to explore synergies with similar DNSPs' investments and noted that it is important to ensure there is no duplication or gaps. The Customer Advocate noted that given this will be a continual issue, Transgrid should ensure it has ongoing discussions on this topic.</p> <p>In relation to AEMO directives, the Customer Advocate was supportive of Transgrid's estimates being lower than AEMO's estimates.</p> <p>In relation to the connection to McPhillamy's Mine, the Customer Advocate noted that the additional costs are costs to connect to the network, however the revenue will include this additional load and that the new load will be 'paying its way'.</p>	<p>Transgrid confirmed that these costs would be back-ended.</p>

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid`	Stakeholder input	How Transgrid responded
<p>Capex <u>Non-network other (cont.)</u></p>	<p>In relation to new additional capex stemming from unit rates, one Customer Advocate noted that this is challenging in the current environment and Transgrid should be transparent on the trend.</p> <p>In relation to the connection to McPhillamy's Mine, the Customer Advocate outlined that they support Transgrid's proposed approach to the supply for Panorama and has requested that Transgrid provide the Essential Energy load forecasts and supporting documents for this investment.</p> <p>In relation to AEMO directives, the Customer Advocate outlined that they support Transgrid's approach to deliver the AEMO directives at a lower cost than those in AEMO's cost benefit analysis.</p> <p>One Customer Advocate noted that they agreed with points made by other customer advocates. However, they needed more time on this topic as it related to large figures which may require more detailed analysis and consideration. The Customer Advocate further noted, where these are non-urgent projects, it may be premature to include them in this revenue proposal, and should be treated as cost pass through, and sought Transgrid's view.</p> <p>The Customer Advocate asked if the urgency of these projects has limited Transgrid's ability to identify non-network solutions.</p> <p>The Customer Advocate further noted that it is critical the AER ensures new capex requests:</p> <ul style="list-style-type: none"> • Are efficient and/or as low as possible, • Are necessary, and • Do not duplicate other opex and/or capex spend in this period, or expenses recovered in previous periods 	<p>This was acknowledged by Transgrid. Subsequently following the meeting Transgrid provided the Essential Energy demand forecasts to the TAC.</p> <p>In relation to the urgency of the projects, Transgrid explained:</p> <ul style="list-style-type: none"> • The investments for the NCAS gap and the PMUs are required directives. • On McPhillamy's Mine, Transgrid is urgently seeking to deliver the upgrade and is seeking to be ready for service in September 2023, and it is urgent for customers and the region (noting that there is other load growth in that region). <p>Transgrid explained this was not the case in this instance, noting that it has explored other alternatives and that it will still go through the RIT-T process. Transgrid further explained that it will outline a number of non-network solutions Transgrid has identified across other RIT-Ts in the workshop.</p>

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Capex Recently completed RIT-Ts</p> <ul style="list-style-type: none"> Transgrid explained that at the time of submitting its initial Revenue Proposal there was uncertainty regarding four Augex projects, as the RIT-Ts had not been completed. Transgrid noted its initial Revenue Proposal included the indicative costs of the most likely network option for each project to provide transparency on the potential cost impact of these projects. The total indicative costs of these projects were \$741.9m. Transgrid explained it has now completed these RIT-Ts which have identified the preferred option, which include non-network options and employing technological innovations for 3 of the 4 RIT-Ts. Transgrid explained that it is focused on keeping its costs as low as possible and driving innovation in the provision of its services. Transgrid explained that since the publication of its RIT-T it has left no stone unturned to identify ways to drive the customers' dollar further by exploring opportunities to avoid or defer network investment. Transgrid sought stakeholder views on: <ul style="list-style-type: none"> If the TAC supports the adoption of the innovative delivery options for the RIT-T projects for inclusion in the Revised Revenue Proposal? If so, how should the increased delivery risks be managed? 	<p>One Customer Advocate outlined their support for the use of technology and innovation to reduce network capex, against each of the areas outlined, noting that the time value of money for customers is very important, and if projects can be pushed out a few years this is of value to consumers now. The Customer Advocate confirmed that overall this reduces costs to consumers and that they were supportive.</p>	<p>This was acknowledged by Transgrid.</p>
	<p>Another Customer Advocate expressed support for Transgrid's approach to use technology and innovation to reduce network capex by increasing the term of BESS and relying on non-network solutions. The Customer Advocate:</p> <ul style="list-style-type: none"> Acknowledged the risk of relying on non-network solutions, however noted that it was the right approach. Noted that Transgrid should also consider the outcomes of the NSW Government's Long Term Energy Service Agreements (LTESA), which may help reduce this risk in the future. 	<p>This was acknowledged by Transgrid.</p>
	<p>One Customer Advocate noted their support for the efficiencies in principle but do not have enough information to support the proposed response and is seeking further engagement as it is new subject matter for the TAC in the Deep Dives. The Customer Advocate noted that there is an opportunity to work together with Transgrid to find some potential efficiencies in the proposal.</p>	<p>Transgrid clarified if the Customer Advocate would be happy to include the lower amount and then have a Deep Dive meeting after submission of the Revised Revenue Proposal to see how Transgrid can continue to manage these options into the future.</p>
	<p>The Customer Advocate clarified what Transgrid was proposing in terms of costs against each of the RIT-Ts. The Customer Advocate clarified if the money for the BESS solution would instead come from opex.</p>	<p>Transgrid clarified that for 'Managing Line 86' it had conducted the RIT-T and there are no non-network alternatives that have been identified, so it would need to proceed. However, for the other three RIT-Ts listed ('improving stability in South West NSW', 'maintain reliable supply to North West Slopes' and 'maintain reliable supply to BOP Stage 1') it would reduce the capex down by extending the BESS solution further to defer network capex.</p>
	<p>The Customer Advocate further noted that they need to see the opex over the equivalent asset life for the capex investments in order to specifically support that proposal.</p>	<p>Transgrid confirmed this was correct and noted that one of the key reasons for including it as contingent projects, is to ensure discipline on the BESS providers, noting that if there were no contingent projects, there is little discipline on them to come up with their most competitive cost.</p> <p>Transgrid noted that before finalisation, it negotiates the contracts. The AER also reviews this to ensure it's a cost-effective solution.</p>

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects</p> <p><u>Existing contingent projects</u></p> <ul style="list-style-type: none"> Transgrid explained that its initial Revenue Proposal had 8 standard contingent projects with an estimated cost of \$1,175.9m in the 2023-28 period. Transgrid outlined that the AER's Draft Decision accepted only 1 contingent project – 'manage increased fault levels in southern NSW' Transgrid outlined that its preliminary position, subject to the TAC's feedback, is to accept the AER's draft decision to reject the contingent projects outlined, except for those required to meet reliability requirements. Transgrid sought stakeholder views on: <ul style="list-style-type: none"> The TAC's views on Transgrid's preliminary response to the AER's Draft Decision on contingent projects? 	<p>One Customer Advocate agreed that the approach outlined by Transgrid to remove some contingent projects was reasonable. Specifically, the Customer Advocate supported removing the project to improve capacity of Southern NSW lines for renewables, on the basis that generators rather than consumers should fund the costs.</p> <p>Another Customer Advocate agreed that the approach outlined by Transgrid to remove some contingent projects was reasonable.</p>	<p>Transgrid acknowledged this feedback.</p>
	<p>One Customer Advocate sought to clarify if the contingent project for Bathurst, Orange and Parkes Stage 2 was the project currently under dispute, or if it was different.</p>	<p>Transgrid clarified that BOP has two stages, and confirmed Stage 2 is a separate RIT-T process to the one that is currently under dispute.</p>
	<p>The Customer Advocate expressed support for Transgrid's proposal to accept 5 of the AER's decisions on the contingent projects and make a case for 3 of the rejected projects for the AER to reconsider. The Customer Advocate further acknowledged the reasonableness of Transgrid in accepting the AER draft decisions as outlined.</p>	
	<p>One Customer Advocate noted that there were some regional contingent projects that had been rejected by the AER and they would like further details, in order to understand any impacts on regional communities.</p>	

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects <u>Additional contingent projects</u></p> <ul style="list-style-type: none"> Transgrid outlined that it would include additional contingent projects to address the risk posed by non-network solution and also for SSR. 	<p>One Customer Advocate agreed that including contingent projects is essential to mitigate the risk of:</p> <ul style="list-style-type: none"> Not achieving reasonable contract costs with the BESS provider. Mitigating failure of BESS technology <p>The Customer Advocate noted that there should be a continued “watching brief” to the TAC to ensure that they are regularly updated on RIT-Ts</p> <p>The Customer Advocate further noted that relying on the BESS (i.e. no network capex) but including a contingent project for the network solution (to mitigate risk), would enable Transgrid to revisit its approach if needed to review other technologies and innovative solutions (particularly in relation to the LTESAs).</p> <p>One Customer Advocate clarified:</p> <ul style="list-style-type: none"> If the contingent project was required as the BESS solution had failed or not been a viable option, would this be more expensive to consumers than an alternative option, asking if consumers would be “worse off”. If the costs were fixed for these contingent projects. If the BESS providers have to put a deposit down, and asked how Transgrid would ensure that they can extract as much as possible from the solution. <p>The Customer Advocate agreed that the approach outlined by Transgrid to remove some contingent projects was reasonable. Specifically the Customer Advocate:</p> <ul style="list-style-type: none"> Noted the importance of ensuring that the BESS providers are managed carefully. Suggested that the BESS provider could provide performance reports to the TAC, which would ensure that the provider was conscious of performance and driving value or risk impacts to social licence, noting that this could help Transgrid with contract management. <p>One Customer Advocate noted that they would like to find additional time with Transgrid to further discuss the context around new contingent projects, which was not covered in full during the workshop.</p>	<p>Transgrid acknowledged this feedback.</p> <p>Transgrid explained that:</p> <ul style="list-style-type: none"> Consumers would not be worse off if a contingent project was required. Costs were fixed and that in most cases the project would happen later if required. By including the contingent project it imposes discipline where the providers are conscious of costs and ensuring that costs are efficient, knowing that they will be scrutinised.

Key discussion items

Outlined below are the key discussions from Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
STPIS <ul style="list-style-type: none"> An overview of STPIS was provided in the two out of session meetings prior to Deep Dive 6, however Transgrid did not present on STPIS in the Deep Dive 6 workshop (this was captured in the additional meeting on 25 October). In the out of session meetings, Transgrid outlined two areas of differences between Transgrid's initial Revenue Proposal and AER's Draft Decision for consideration by stakeholders. 	One Customer Advocate noted that this was a consideration for the AER, and that generator behaviour may be resolved outside the network framework.	This was acknowledge by Transgrid.
	One Customer Advocate noted "it is what it is".	This was acknowledge by Transgrid.
	One Customer Advocate noted that they would like to find additional time with Transgrid to further discuss the context around STPIS, which was not covered in full during the workshop.	This was acknowledge by Transgrid.
Closing comments	<p>One Customer Advocate thanked Transgrid for its efforts and noted that Transgrid should also ensure that it makes commitments to the TAC going forward so that it can ensure it continues to make progress going forward and mitigate any risks.</p> <p>The Customer Advocate thanked Transgrid for reviewing the different elements in light of the AER's Draft Decision.</p>	Transgrid noted that it has a new executive responsible for stakeholder engagement and that they would be ensuring a defined process for TAC engagement.

Appendix: Attendance

Participants

Stakeholder Name	Organisation	Stakeholder Type	Attendance
Gavin Dufty	St Vincent de Paul	Customer Advocate	Attended*
Andrew Richards	Energy Users Association Australia	Customer Advocate	Attended*
Craig Memery	Public Interest Advocacy Centre	Customer Advocate	Attended
Tennant Reed	Australian Industry Group	Customer Advocate	Attended
Brendan O'Keeffe	NSW Farmers	Customer Advocate	Attended
Christiaan Zuur	Clean Energy Council	Industry Advocate	Attended
Sam Fyfield	Goldwind	Direct connect customer	Attended
Slavko Jovanoski	AER	Observer	Attended
Riya Goyal	AER	Observer	Attended
David Chan	AER	Observer	Attended
David Monk	AER	Observer	Attended
Albert Tong	AER	Observer	Attended
Esther Tsafack	AER	Observer	Attended
Richard McGill	AER	Observer	Attended
Scott Hall	AER	Observer	Attended
Michelle Shi	AER	Observer	Attended
Mike Swanston	CCP	Observer	Attended
Elissa Freeman	CCP	Observer	Attended
Alen Talic	AER/ ACCC	Observer	Attended
Scott Young	Commonwealth Bank Australia	Financial investor	Apology
Kim Woodbury	City of Sydney	Direct connect customer	Apology
Nick Savage	NSW Farmers	Customer Advocate	Apology
Panos Priftakis	Snowy Hydro	Direct connect customer	Apology
Brian Spak	Energy Consumers Australia	Customer Advocate	Apology
Iain Maitland	Ethnic Communities Council NSW	Customer Advocate	Apology
Maria Cahir	Tesla	Direct connect customer	Apology
Dev Tayal	Tesla	Direct connect customer	Apology
Luke Rankovich	Tomago Aluminium	Direct connect customer	Apology
Nicola Falcon	AEMO	Market Body	Apology
Michael Ottaviano	ERM Advisory	Expert advisor	Apology
Chloe Bennett	Aboriginal Affairs NSW	Customer Advocate	Apology
Daniel Feng	AER	Observer	Apology
Christine Xue	AER	Observer	Apology

* Out of session meetings with held with Gavin Dufty (St Vincent's de Paul) and Andrew Richards (EUAA) as outlined on page 6.

Appendix: Attendance

Facilitators and Observers

Stakeholder Name	Organisation	Stakeholder Type
Craig Stallan	Transgrid ELT	Attended
Brian Salter	Transgrid ELT	Attended
Marie Jordan	Transgrid ELT	Attended
Stephanie McDougall	Transgrid	Attended
Andrew McAlpine	Transgrid	Attended
Kevin Hinkley	Transgrid	Attended
Fiona Orton	Transgrid	Attended
Kasia Kulbacka	Transgrid	Attended
Stephen Antoon	Transgrid	Attended
Robert Alcaro	Transgrid	Attended
Lance Wee	Transgrid	Attended
Sarah Lim	Transgrid	Attended
Deyi Wu	Transgrid	Attended
Cassie Farrell	Transgrid	Attended
Julie Stanley	Transgrid Board	Attended
Gerard Reiter	Transgrid Board	Attended
Matt Pearce	KPMG	Attended
Louise Pogmore	KPMG	Attended
Hannah Lock	KPMG	Attended
Grace Smith	KPMG	Attended

Deep Dive 6: Additional Meeting - Key Discussion Items

25 October 2022

Meeting	Date	Time (AEST)	Purpose
Meeting #4	25 October 2022	1:00 – 2:00pm	Transgrid met with the TAC to discuss contingent projects and STPIS. At this meeting, the TAC requested a further meeting to discuss the new additional contingent projects. The TAC also requested the AER to present its view on this matter at the meeting. A follow-up meeting was scheduled for 31 October 2022.

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects <u>Existing contingent projects</u></p> <ul style="list-style-type: none"> Transgrid provided a re-cap of its proposed approach to accept the AER's Draft Decision to reject the contingent projects, except for those required to meet reliability requirements. 	<p>One Financial Investor commented that it looked 'fine' from their perspective.</p>	
<p>Contingent projects <u>Additional contingent projects</u></p> <ul style="list-style-type: none"> Transgrid explained that in addition to the contingent projects in its initial Revenue Proposal, it has identified a number of new contingent projects that could be included in its Revised Revenue Proposal. Transgrid explained that in order to rely on non-network solutions, for the recently completed RIT-Ts as outlined, there is some risk associated. This includes that the technology fails in service or that Transgrid is unable to get an acceptable contract with the provider. Transgrid explained that one way to mitigate these risks is to include the network options as contingent projects. Transgrid sought views from the TAC on the possible inclusion of new contingent projects in the Revised Revenue Proposal and if the TAC had any guidance on the information that should be provided to support the inclusion of new contingent projects. 	<p>One Customer Advocate commented that they supported Transgrid's preliminary position outlined to include the contingent projects and that it was a "reasonable approach".</p> <p>One Customer Advocate sought to clarify what they were being asked to provide their opinion on, noting that they could give an opinion on the triggers for the contingent project to proceed, however noted that they are unable to give an opinion on whether the costs outlined are efficient or the best option.</p> <p>Another Customer Advocate agreed.</p>	<p>Transgrid clarified that there were four contingent projects underway at the time it submitted its initial Revenue Proposal, which have all now concluded. Transgrid explained that where the RIT-T identified a network and non-network solution, Transgrid is proposing to rely on the non-network solution. Transgrid further explained that this presented two potential risks:</p> <ul style="list-style-type: none"> That it cannot conclude a contract with the network service provider on reasonable terms. The technology, being new, fails and is unable to relieve the constraints. <p>Therefore, Transgrid explained that the nature of the contingent projects provides pressure on the non-network provider to deliver a reasonable service and mitigates failure in service. Transgrid noted that it wants these solutions to work, however requires 'insurance' in the form of non-contingent projects in case it doesn't work.</p>
	<p>The Customer Advocate clarified if Transgrid was seeking the TAC's opinion whether they should include the contingent projects in case the non-network solutions fail.</p> <p>The Customer Advocate confirmed if this meant that any project where there has already been a RIT-T, that the AER does not require Transgrid to do a new RIT-T.</p> <p>The Customer Advocate raised the concern that if they rely on going back to the second-best solution in a RIT-T, this solution has not had the same level of rigour applied to confirm its necessarily still the best solution. The Customer Advocate explained that the risk (that the second-best solution remains the next best option) increases as more time passes since the RIT-T was concluded.</p>	<p>Transgrid confirmed this was correct.</p> <p>Transgrid confirmed this is correct, and that it would be falling back to the second-best solution in the RIT-T, which is the network solution, unless there is a material change.</p> <p>Transgrid noted that it is only discussing projects where the RIT-T has just concluded. Transgrid explained that it is seeking to adopt this approach to drive customers' dollars as hard as it can, using innovation, however it acknowledges the risk and is therefore seeking the new additional contingent projects as 'insurance'.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
Contingent projects <u>Additional contingent projects (cont.)</u>	<p>The Customer Advocate sought to understand the counterfactual, and what the implications are of the contingent projects not being included in the Revised Revenue Proposal if they are then still required in future.</p>	<p>Transgrid explained that if there are no contingent projects for these solutions included in the Revised Revenue Proposal, and the non-network solution fails, there is no ability for Transgrid to recover the costs.</p>
	<p>The Customer Advocate outlined that they agreed with the intention and support the idea of contingent projects being used as backstops. However, believes that there needs to be opportunity for scrutiny around the need for projects, ensuring that all reasonable efforts are undertaken to make sure that non-networks solution work. The Customer Advocate outlined a number of different instances where reassessment of the best solution would be required.</p>	
	<p>The Customer Advocate noted that they would like Transgrid to provide a structure and process in the Revised Revenue Proposal around the steps Transgrid would take to ensure that all measures have been exhausted to make the non-network solution work first, before progressing with the contingent project. The Customer Advocate noted that they believed it was unprecedented for Transgrid to have this many contingent projects at this stage in the process that were contingent on a common idea of non-network solutions falling over. The Customer Advocate noted that Transgrid should document this and commit to working with the TAC on the steps taken.</p>	<p>Transgrid responded that it supported this approach. Transgrid explained that the steps may be completely different for each individual project. However, noted that Transgrid could have the discussion with the TAC and establish a framework upfront so that the AER and the TAC feel like they have exhausted all other options before a contingent project is progressed.</p>
	<p>The Customer Advocate sought input from the AER to give an initial view whether the proposed additional contingent projects are consistent with standard practice or if the AER is aware of the process being taken in the past, noting that they are unsure if their proposed solution is viable as they haven't tested it with the AER or colleagues.</p> <p>The AER responded that they had only just learnt of Transgrid's proposed position to include these contingent projects in the last TAC meeting and that there were some concerns.</p> <p>The AER noted that it still needs to understand the detail of what is being proposed, and asked Transgrid if there had been any engagement with the AER on these projects.</p>	<p>Transgrid responded that there had been engagement with the AER on these projects, with the AER commenting on these projects in its Draft Decision.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects <u>Additional contingent projects (cont.)</u></p>	<p>The AER clarified that it was aware there were contingent projects in the Draft, but specified their question was in relation to the practice of using contingent projects as ‘insurance’.</p> <p>The AER explained that they were not sure this aligned with its view, and that there was some concern with the proposed approach. The AER outlined that it would be good to hear from Transgrid and have a discussion on the approach.</p> <p>The Customer Advocate clarified whether the additional projects presented by Transgrid, were not included in the initial Revenue Proposal, and Transgrid is noting that they had been flagged with the AER since.</p> <p>The Customer Advocate noted that the AER had outlined in the Executive Summary of its Draft Determination that it was unclear as to what was part of Transgrid’s proposal and what was not.</p> <p>The Customer Advocate suggested that another discussion between Transgrid, the AER and the TAC was required to enable the TAC to arrive at a TAC view on the best approach.</p> <p>The Customer Advocate further explained that based on the information provided to date, they would be more comfortable with the approach they previously outlined, however stated that they were not currently comfortable with the lack of alignment between Customer Advocates, the AER and Transgrid.</p>	<p>Transgrid outlined that it is consistent with the Draft Decision, noting that they believed the AER’s preference for these projects was that Transgrid did not include them as Augex projects, but rather relied on the non-network solutions, and included either the stage 2 or network component projects as contingent.</p> <p>Transgrid outlined it would be good to hear from the AER. Transgrid noted that it would be happy to have discussions on this with the AER.</p> <p>Transgrid outlined that the projects were all included as contingent projects in the initial Revenue Proposal, as the RIT-Ts were still underway and Transgrid did not know at that point what the outcome would be. Transgrid noted that the AER reviewed all the projects, with the exclusion of the BOP, however noted that it was a useful discussion and that if it has misunderstood the AER’s Draft Decision, it would be good to clarify.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects <u>Additional contingent projects (cont.)</u></p>	<p>Another Customer Advocate noted that on face-value they are supportive of exploring non-network options as they are not often available, however they agreed some clarity would be good with the AER and also on how the process would work.</p> <p>One Financial Investor noted that it would be a sensible approach to have a further discussion with the AER.</p> <p>Another Customer Advocate agreed on seeking more clarity with the AER, and noted that the discussion was framed in terms of costs and that it would be good to understand the benefits of each approach, particularly to regional consumers.</p> <p>In response to Transgrid's recap, one Customer Advocate noted that there was general support removing the capex as outlined for the recently completed RIT-Ts and relying on the non-network solution where they can be done. The Customer Advocate further noted that a further discussion is still required on:</p> <ul style="list-style-type: none"> • What are the next steps if this solution is not viable and fails. • What are the triggers for going to these next steps. • What is the AER's perspective on this. 	<p>Transgrid recapped the discussion, and confirmed with the TAC that its key takeaways were:</p> <ul style="list-style-type: none"> • Line 86 will be a repex solution as there is no non-network solution for this. • The TAC was supportive of relying on the non-network solutions for the other three projects. • The TAC was supportive of Transgrid pushing a non-network solution as hard as it can.

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent projects <u>Additional contingent projects (cont.)</u></p>	<p>The AER agreed that there should be future discussions on this. The AER explained:</p> <ul style="list-style-type: none"> • Although EMCa reviewed the original sets of RIT-T projects, it is clear in the Draft Decision that it did not include any revenue associated with the RIT-T projects as they were not submitted as revenue items. • It did not state that the projects should be split into two components; a revenue component and a contingent plan/ insurance project. • The AER needed to look at the rules to confirm if it meets the rule requirements for a contingent project and to see if something like this has been done before, or if there is a better way to do it. <p>The AER explained that based on this new information it needs to explore the points explained and have a discussion with Transgrid and the TAC to explain its position.</p>	<p>Transgrid outlined that it was comfortable with the approach outlined by the AER, however noted that there were time constraints, and that the discussion would need to take place within the next week.</p>
	<p>In response to the concerns around timing, one Customer Advocate noted that this related to their previously-stated concerns around the Transgrid's delayed start to Revenue Proposal engagement.</p>	<p>This was acknowledged by Transgrid.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>STPIS</p> <ul style="list-style-type: none"> Transgrid outlined two areas of differences between Transgrid initial Revenue Proposal and AER's Draft Decision. 	<p>One Customer Advocate outlined that their initial view was to accept the AER's Draft Decision. However the Customer Advocate sought to clarify what the current target is.</p> <hr/> <p>The AER responded that Transgrid needs to justify what changes it makes and how it benefits consumers. The AER explained that its key considerations were:</p> <ul style="list-style-type: none"> Are consumers happy with the reliability that they are currently receiving, or are they happy to pay more and what would that cost. It is the view of the AER that consumers are not likely to pay more for small improvements in reliability. The AER wanted Transgrid to consult with consumers to determine if they are willing to pay more. 	<p>Transgrid explained that currently:</p> <ul style="list-style-type: none"> The current target is 1, with a cap of 0 and collar of 3. This means that at the moment it is operating symmetrically. This means: <ul style="list-style-type: none"> If there are 0 events, it receives the full positive incentive. If there is 1 event, it is on target and receives 0. If there are 3 events it receives the full penalty. 2 events is the midpoint, and it receives half of a maximum penalty. <p>Transgrid further explained that for every regulatory period these targets are recalculated based on the previous 5-year historical average. Transgrid outlined that for the next regulatory period, based on Transgrid's performance, the target would be 0. Transgrid explained:</p> <ul style="list-style-type: none"> This means there is no positive incentive for Transgrid to keep it at 0 and if it has 1 event then it receives the full penalty. This means that it is a penalty only scheme under the current Determination, and is blunting the incentive for the TNSP to take proactive measures to address this particular measure. <p>Transgrid further outlined that it is proposing that the threshold reduces to 0.15 system minutes which means that it measures 3 historical events over the regulatory period, and this yields a target of one, and restores symmetry to the scheme.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
STPIS (cont.)	<p>The AER further explained that it disagreed that the scheme is not symmetrical. The AER explained that it has not seen any evidence that the scheme is not symmetrical, and is apprehensive when a Revenue Proposal is submitted without evidence justifying the change.</p>	
	<p>One Customer Advocate asked how Transgrid has considered consumer views in setting the STPIS, including:</p> <ul style="list-style-type: none"> • What was the feedback from either the surveys or engagement with the TAC that informed the level Transgrid set it at. • How has the VCR been used in setting Transgrid's proposed STPIS. 	<p>Transgrid responded that with the STPIS loss of supply measures there is a fixed threshold rather than using the VCR. Once it increases over a certain threshold of unsupplied system minutes, a penalty is applied.</p>
	<p>The Customer Advocate clarified that they were referring to the process for setting the level, noting that setting the level must reflect the value that consumers place on reliability in the system.</p>	<p>Transgrid noted that it is calculated based on historical data, noting that the thresholds are what is published in the STPIS definition by the AER. Transgrid further clarified that there is concern that bringing the threshold down (as is proposed by Transgrid) will mean that there is too much value on reliability, Transgrid is able to adjust the weighting of that penalty, and would be happy for that to be adjusted to reflect the value that consumers place on reliability. Transgrid reiterated that it is prudent to have a symmetrical scheme that doesn't blunt the incentives to maintain the level of reliability that Transgrid is able to provide as a result of the scheme.</p>
	<p>The Customer Advocate outlined that Transgrid has reached an inevitable crossroad where consumers aren't willing to pay more for the incentive to be more reliable. The Customer Advocate explained that Transgrid operates a very reliable system currently and that they are comfortable the level of outages is well below what consumers are willing to accept.</p> <p>The Customer Advocate therefore outlined that they believe the AER's Draft Decision reflects what consumers are willing to pay, particularly in the absence of seeing an analysis of the VCR or an exploration with consumers on what they are willing to pay.</p>	

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>STPIS (cont.)</p>	<p>One Customer Advocate noted that their members, including businesses of different sizes, do have a diverse set of opinions around reliability, and costs and what they're willing to pay. However the Customer Advocate noted that the VCR work that has been done is the best consolidated statement available. The Customer Advocate therefore concluded that they agreed with the other Customer Advocate and that they would defer to the AER's Draft Decision.</p> <hr/> <p>The AER explained that in terms of the scheme Transgrid must maintain the current levels of reliability, and will be penalised if it does not, outlining that it does not want consumers to pay for a higher level of reliability, unless Transgrid can justify how it would benefit the consumer as outlined in its Draft Decision.</p> <p>The AER noted that it is happy to discuss suggestions in relation to the scheme, noting that the scheme will be reviewed soon.</p> <p>One Customer Advocate noted that given Transgrid does have a high level of reliability, it may be appropriate to lessen the penalty for outages. The Customer Advocate reiterated that they do not think consumers are willing to pay more for higher levels of reliability, however, do think that people would be willing to accept slightly less, and perhaps that used as consideration to reduce the penalty.</p> <p>The AER responded that currently it is unable to make decisions around particular components of the scheme, however the scheme review will be done in the next few years, and it encouraged Transgrid to submit its feedback then, noting that it is aligned to feedback heard from other TSNPs.</p>	<p>Transgrid outlined that it would support a reduction of the penalty for this measure, noting that it does seem overly punitive that it should bear the full downside should one event occur.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Recap and next steps</p> <ul style="list-style-type: none"> For existing contingent projects, Transgrid recapped that at the last meeting it proposed to accept the AER's decision to reject all market benefit driven projects and retain the reliability driven contingent projects and address the AER's feedback where it is reliability driven, meaning that Transgrid would remove 4 of the 8 contingent projects. Transgrid sought to retest this with the TAC in light of the discussion. Transgrid explained that it would circle back to discuss the contingent projects that relate to the insurance policy for RIT-Ts that are completed, where it is relying on the BESS rather than including capex in its Augex forecast, with the TAC and the AER. 	<p>One Customer Advocate confirmed that overall they were still supportive of Transgrid's proposed response to remove 4 of the 8 contingent projects. The Customer Advocate agreed that further discussion was still required on the additional contingent projects with the TAC and AER.</p>	

Appendix: Attendance

Participants

Stakeholder Name	Organisation	Stakeholder Type	Attendance
Gavin Dufty	St Vincent de Paul	Customer Advocate	Attended
Tennant Reed	Australian Industry Group	Customer Advocate	Attended
Scott Young	Commonwealth Bank Australia	Financial investor	Attended
Brendan O'Keeffe	NSW Farmers	Customer Advocate	Attended
Slavko Jovanoski	AER	Observer	Attended
Richard McGill	AER	Observer	Attended
Vu Lam	AER	Observer	Attended
Albert Tong	AER	Observer	Attended
Elissa Freeman	CCP	Observer	Attended
Craig Memery	Public Interest Advocacy Centre	Customer Advocate	Attended
Panos Priftakis	Snowy Hydro	Direct connect customer	Apology
Brian Spak	Energy Consumers Australia	Customer Advocate	Apology
Sam Fyfield	Goldwind	Direct connect customer	Apology
Iain Maitland	Ethnic Communities Council NSW	Customer Advocate	Apology
Maria Cahir	Tesla	Direct connect customer	Apology
Dev Tayal	Tesla	Direct connect customer	Apology
Luke Rankovich	Tomago Aluminium	Direct connect customer	Apology
Nicola Falcon	AEMO	Market Body	Apology
Michael Ottaviano	ERM Advisory	Expert advisor	Apology
Christiaan Zuur	Clean Energy Council	Industry Advocate	Apology
Chloe Bennett	Aboriginal Affairs NSW	Customer Advocate	Apology
Nick Savage	NSW Farmers	Customer Advocate	Apology
Andrew Richards	Energy Users Association Australia	Customer Advocate	Apology
Kim Woodbury	City of Sydney	Direct connect customer	Apology

Appendix: Attendance

Facilitators and Observers

Stakeholder Name	Organisation	Stakeholder Type
Stephanie McDougall	Transgrid	Attended
Sarah Lim	Transgrid	Attended
Stephen Antoon	Transgrid	Attended
Deyi Wu	Transgrid	Attended
Cassie Farrell	Transgrid	Attended
Hannah Lock	KPMG	Attended
Grace Smith	KPMG	Attended

Deep Dive 6: Additional Meeting - Key Discussion Items

31 October 2022

Meeting	Date	Time (AEST)	Purpose
Meeting #5	31 October 2022	1:30 – 2:30pm	Transgrid met with the TAC and the AER, to discuss the new additional contingent projects that were intended to manage the risks that could arise for customers in the event that Transgrid is not able to secure a non-network solution.

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Contingent Projects</p> <p><u>Existing contingent projects</u></p> <ul style="list-style-type: none"> Transgrid recapped on its existing contingent projects, noting that based on TAC feedback it has removed four standard contingent projects. Transgrid explained that it is committed to leaving 'no stone unturned' to minimise its overall capex and opex to support affordability, which is its customers' highest priority. <p><u>Additional contingent projects</u></p> <ul style="list-style-type: none"> Transgrid explained that for recently completed RIT-Ts, to the greatest extent possible, it is proposing to rely on the non-network component of the preferred solutions by: <ul style="list-style-type: none"> Adopting technical innovation in the provisions of services (i.e. non-network solutions). Deferring later stages of solutions until it is clear they are needed. Transgrid explained that this will: <ul style="list-style-type: none"> Significantly reduce its network capex, but Potentially materially, increase its opex in order to pay the network service provider. Transgrid noted that it does not yet know the opex costs for the non-network components of the solutions. Transgrid explained that there is a risk with new technology that: <ul style="list-style-type: none"> The cost of the BESS (or other technology) would not be accepted as prudent and efficient by the AER and Transgrid's customers. None of the non-network proponents will commit to provide the BESS (or other technology). Transgrid outlined that if either of these risks were to occur, it is proposing to undertake the next ranked option in the RIT-T and seek to progress the network option via the contingent project process. Transgrid explained that it is seeking to discuss with the AER and its TAC if it's reasonable to include contingent projects to address the risk if the non-network solution fails, or Transgrid is unable to procure an acceptable contract with the provider. Transgrid recapped the concerns raised by the TAC in relation to including the network solutions as contingent projects. Transgrid explained that if it were to include the contingent projects to manage the risk, it proposed a process of including triggers agreed with the TAC and the AER. Transgrid outlined these triggers for discussion. 	<p>One Customer Advocate noted that it was more a discussion for the AER and if they were comfortable with the approach.</p> <p>One Customer Advocate asked about the project 'maintaining reliable supply to the North West Slopes area Stage 2', and sought to clarify if what Transgrid had outlined is that should the Narrabri Gas Project goes ahead, then electricity demand in the region will grow faster and the network solution will be needed earlier and the non-network solution will not be able to scale to meet that demand.</p> <p>The Customer Advocate explained that in relation to the approach outlined, they are tentatively comfortable to have the network solution as contingent projects should the non-network solution fail or no longer be appropriate.</p> <p>One Customer Advocate sought clarification in relation to the NW Slopes project, asking if the low demand forecast Transgrid has used is based on both Narrabri Gas Project going ahead and on the Special Activation Precinct.</p> <p>Another Customer Advocate asked to what extent the demand growth and the contribution that growth makes to pay for network costs, will offset the additional cost of the NW Slopes Stage 2 project for an existing energy user.</p> <p>The Customer Advocate explained that they believed the question will come up more in relation to developments around hydrogen production.</p> <p>Another Customer Advocate noted that the amount of actual demand increase relative to the actual revenue Transgrid recovers across all of NSW would be low, and that the question would be how nodal cost recovery is at a terminal station (that is, if more of the costs are recovered at a local nodal basis, then more of it will be recovered from beneficiaries in that area).</p>	<p>Transgrid clarified that what the Customer Advocate outlined is correct. Transgrid further explained:</p> <ul style="list-style-type: none"> The project will be triggered based on the Narrabri Gas Project occurring and the load increasing in the Narrabri/ Gunnedah area. There are two limitations in that area: there is a voltage limitation and a thermal limitation, noting that the battery solution will deal the voltage limitation up front (and be provided regardless), and then the thermal capacity limitation is triggered by the gas project coming online and the network part of the solution will deal with that capacity constraint (dependant on the project). <p>Transgrid clarified that the Narrabri Special Activation Precinct is not included in the NW Slopes Project, as the load was not seen as 'anticipated' under the rules and therefore was not included.</p> <p>Transgrid responded that it would take the question on notice.</p> <p>Transgrid explained that at a high level, it does divide the revenue by demand to determine prices. This means that if this demand grows then each person is paying less, however noted that this is purely at a macro level.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
Contingent Projects <u>Additional contingent projects (cont.)</u>	<p>The Customer Advocate agreed that the question asked by the other Customer Advocate was one of the most important ones that needs to be answered for all transmission projects.</p> <p>One Customer Advocate noted that in relation to the triggers outlined by Transgrid for the contingent projects, they agreed with another Customer Advocate that it was a question for the AER around how operationalisable it is, noting that it looks like a step in the right direction.</p>	<p>Transgrid agreed and explained that the reason it has not focused on it is because the rules are very prescriptive, and it is not looking to amend the rules, and they are simply applied for pricing. Transgrid committed to coming back to the TAC with further information on this.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid's proposed additional contingent projects – AER preliminary thinking</p> <ul style="list-style-type: none"> The AER recapped on its Draft Decision in relation to the 4 projects that recently completed its RIT-Ts, explaining <ul style="list-style-type: none"> It did not provide an allowance for the 4 projects as Transgrid did not include these projects in its initial Revenue Proposal. Transgrid stated in its initial Revenue Proposal that these projects would be included in its Revised Revenue Proposal. In the Draft Decision the AER noted concerns raised by its consultant EMCa, and requested that Transgrid respond to these in its Revised Revenue Proposal, if these projects were included, to ensure all stakeholders were better informed when providing submissions/ feedback to Transgrid. The AER outlined its understanding of Transgrid's proposal from meeting collateral from the 20 and 22 October meetings. <ul style="list-style-type: none"> The RIT-Ts have now been finalised for all 4 projects Transgrid are proposing to include the 4 projects in its Revised Proposal. Transgrid is proposing 4 new contingent projects, to address scope and therefore cost changes to most of these projects. Transgrid clarified that the contingent projects are one solution that it is discussing with the TAC. The AER explained that its capex team has not had any discussion with Transgrid on its proposal for the new contingent projects. The AER noted it is currently considering its position on Transgrid's approach, however outlined some of the preliminary issues and concerns, including: <ul style="list-style-type: none"> Brings into question the confidence Transgrid has in its forecasts. Proposal appears to insure Transgrid against the risk of cost blow outs, placing the risk on consumers. Inconsistent with the regulatory framework. May set a bad precedent. Transgrid clarified that it is currently consulting with the AER and the TAC through these forums in light of the feedback it is hearing around affordability. Transgrid noted that once it has consulted, it will then reflect the position in the Revised Revenue Proposal. 	<p>One Customer Advocate sought to understand what the alternative is if the approach to contingent projects is not adopted – whether Transgrid will review the projects and where it is willing to take on the risk it will progress with the non-network solutions, or if it is not comfortable with the risk, it will include the network solution.</p> <p>Another Customer Advocate noted that:</p> <ul style="list-style-type: none"> In the last meeting, Transgrid proposed a number of reduced capex projects and the TAC asked what the opex implications were of that, and Transgrid was unable to say. In the same meeting, as part of a discussion around other capital projects (solar and LEDs), Transgrid was asked a question around opex trade-offs and was unable to substantiate this. In the meeting today, Transgrid has asked the TAC to consider opex numbers as a trade-off however has not provided information on what the numbers are. <p>The Customer Advocate explained that it sounds like there has not been sufficient analysis by Transgrid on what the different capex and opex options are, which makes it hard for the TAC to provide feedback.</p>	<p>Transgrid responded that it could include the RIT-T network solution in its capex, however it is trying to achieve affordability for customers through innovation. Transgrid noted that one of the risks with driving innovation is that the opex costs are much higher than what customers would want. Transgrid outlined that if it does not have these additional contingent projects, and the costs of the opex solution are high, customers will be paying for this. Transgrid questioned whether it was in consumers' interest to have high opex in order to avoid capex.</p> <p>Transgrid agreed that it has not progressed the negotiations as there is a dispute underway, and the AER is currently reviewing that dispute and Transgrid is unable to progress the negotiations until the dispute is resolved, noting that the AER has extended its timeframes until 29 November. Transgrid further explained that if it were to propose the contingent project option being discussed and this option was not viable, there would still need to be a mechanism to mitigate the associated risk. Transgrid explained that if it did progress this option, it would have triggers for the contingent projects and that the AER would independently review if the spend was prudent and efficient. Transgrid explained that it is seeking to determine a solution with the group on the best approach.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid's proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>The AER explained that the question asked by the Customer Advocate in relation to the alternative approach to contingent projects, seeks to understand how to deal with changes that a business might go through during a regulatory period. The AER has observed that businesses do not always spend their allowance, often underspending, and it's expected that when the AER approves the total forecast, businesses work within that and reprioritise. The AER explained that the risks should be managed by the business and that the AER should not be providing an allowance for risks that a business should be bearing in the course of doing business. The AER explained that Transgrid needs to be clear on who will be bearing the risk, whether consumers or Transgrid shareholders.</p> <hr/> <p>One Customer Advocate agreed with the points outlined by the AER, however explained that it is new territory, due to:</p> <ul style="list-style-type: none"> • The magnitude of price difference between the first best and second-best options, and if the first option does fall over, then the second option is a lot more expensive. • The push towards non-network solutions as they become more viable, noting it will continue to be a challenge for transmission businesses to negotiate. <p>The Customer Advocate asked whether, if the contingent project option is not put forward and one of the non-network options 'falls over' and Transgrid needs to resort to a network-based solution, this could be a trigger for a cost pass through application, given this would count as an unforeseen event.</p> <p>The AER explained that in order to be considered as a cost pass through, it has to be a nominated event and therefore it's something that Transgrid would need to include in the proposal, however it was unsure if it would meet the criteria to be able to be included.</p>	<p>Transgrid outlined that if the opex is high, it is consumers who will bear the increased risk.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid's proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>The AER also provided a conceptual example, assuming the total capital cost of a network solution is \$130m. When factored into the revenue stream, consumers would pay around \$13m per annum for the network solution. Another solution would be a BESS, that costs consumers \$10m per annum. Over 5 years, the difference between these two options would be \$15m. The AER explained that if the battery solution fell over in the 5-year period, Transgrid would go to a \$13m network solution. That would mean an additional \$15m of costs on the total portfolio. If the BESS supplier in fact negotiates at \$15m per annum, not \$10m, that would mean that this alternative is more expensive than the network solution.</p> <p>The AER outlined that this demonstrated that the relative impact is minor and has cashflow implications as the difference is only \$3m, not \$130m.</p> <p>The AER explained that, under the NER, pass through events are subject to specific requirements:</p> <ul style="list-style-type: none"> • If an event eventuates, the cost associated must be above a materiality threshold for it to be passed to customers. • The types of cost pass through events are outlined under the NER; however, there is also an opportunity for Transgrid to nominate pass through events for the AER assessment. <p>The AER emphasised that when comparing network and non-network solutions, opex for a non-network solution should be compared with the return on capex, not the capex for a network solution itself.</p> <p>In the AER's view, an annualised opex across 5 years needs to be estimated for BESS solutions. For BESS to be a preferred solution, this annualised opex needs to be lower than annualised capex for a network solution. The key question is materiality - how much lower should annualised opex be.</p>	<p>Transgrid confirmed that this made sense, and asked how the AER suggests those costs are treated, if Transgrid is unable to secure the non-network contract or the contract starts but falls over later.</p>

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid’s proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>The AER summarised that Transgrid is in the best position to negotiate with a BESS supplier. The AER would expect Transgrid to take that risk as it is compensated for it through WACC. The question is if there are other risks a business would not be normally expected to manage. In that case, the AER expects Transgrid to describe these risks that Transgrid cannot control for the AER to consider if compensation is appropriate. The AER considered this approach has many precedents, for example, HumeLink.</p> <hr/> <p>One Customer Advocate stated that they believed the points outlined by the AER were persuasive.</p> <p>Another Customer Advocate agreed. The Customer Advocate further explained that they had been struggling to compare capex and opex given the timeframe considerations and that they found the explanation by the AER helpful.</p> <p>The Customer Advocate further noted that there is still a problem that needs to be addressed, and that Transgrid has outlined its solution, which is to have ‘pre-approval’ for network-based solutions in case non-network solutions fall over, and noted that based on what the AER is saying, this may not be the best solution. The Customer Advocate outlined that one alternative solution is that Transgrid takes on the risk, and another is around being able to make a cost pass through application for a non-foreseeable event, and sought to understand if this could be an option. The AER responded that subject to the specific provisions of the rules, in theory it could be an option proposed to address this risk. The AER outlined some concerns:</p> <ul style="list-style-type: none"> • Is the intention of the cost pass through mechanism being distorted or used in a way not intended. • Is risk being shifted from Transgrid to the customer. 	

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid's proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>One Financial Investor sought to confirm if, through the cost pass through mechanism, Transgrid decides to implement a network solution, that would allow Transgrid to earn a return on and of capital as under the normal arrangements where the cost pass through mechanism has not been used.</p> <p>The AER responded that it would not approve a cost pass through event if the event was under Transgrid's control or was not material enough to meet NER requirements. If an external event is imposed on Transgrid and if it is material, cost pass through will be approved. Pass throughs are last-resort insurance.</p> <hr/> <p>One Customer Advocate noted that there is an expectation of Transgrid that they would examine non-network solutions, which it has done in this case. The Customer Advocate noted that they would be comfortable that as long as Transgrid conducts its due diligence on its non-network solutions, if something happens beyond its control that it could not foresee, then this becomes the trigger for the cost pass through, rather than the inclusion of contingent projects.</p> <p>One Financial Investor agreed.</p> <p>The AER agreed that it is seeking to balance concerns that non-network solutions are not seen as a favourable option by network service providers because they can be less certain, with situations where the upside is all Transgrid's, and the downside risk falls on consumers.</p> <p>The Customer Advocate explained that it starts to have a negative impact on consumers when service providers no longer want to invest in non-network solutions due to the associated risk. The Customer Advocate explained they would expect Transgrid to take on the risk of minor unders and overs, however as Transgrid is asked to take on more risk for a non-network solution, they are supportive of Transgrid having the cost pass through option as a failsafe, and puts more pressure on Transgrid to make the non-network solutions work.</p>	

Key discussion items

Outlined below are the key discussions from an additional meeting held following the Deep Dive workshop 6, detailing the topics presented, the questions and inputs from stakeholders and the response from Transgrid.

Topic presented by Transgrid	Stakeholder input	How Transgrid responded
<p>Transgrid’s proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>One Financial Investor further agreed. However, the Financial Investor raised a concern about how the regulatory regime incentivises non-network solutions and innovation if all the risk is with shareholders, and not necessarily provide the up-side typically seen with property equity investments.</p> <p>The AER reiterated that NSPs are compensated for risk through guaranteed WACC. In addition, an incentive regime is in place to incentivise efficiency.</p> <p>The Financial Investor further asked how the regulatory framework allows bringing forward or expediting innovative solutions such as BESS.</p> <p>The AER responded that in this industry projects should not be dealt with in an expedient manner unless there are operational urgencies. It is assumed that this industry has a 10-15 year planning horizon. The framework provides for periodic reviews during this planning phase.</p>	
<p>Transgrid’s proposed additional contingent projects – AER preliminary thinking (cont.)</p>	<p>One Customer Advocated thanked Transgrid and the AER for a really helpful discussion. The Customer Advocate outlined their view that Transgrid should initiate a cost pass through if it faces material costs as a result of the unforeseeable failure of a BESS or other non-network alternative, rather than have these contingent projects, if AER supports this.</p>	
<p>Closing comments</p> <p>Transgrid noted that the example provided by the AER (see p.52 of this report) on the annual difference between \$10m opex and \$13m capex is incorrect. If there is no \$10m in opex and \$13m in capex, the difference is between \$0 and \$13m and not \$10m and \$13m.</p> <p>Transgrid further explained it would be reliant on network support cost pass through for the non-network solution costs, but if Transgrid cannot secure a non-network solution contract and has no allowance in capex, this would mean the difference is between \$0 and \$130m.</p>	<p>The AER responded that the scenario described by Transgrid means that Transgrid identifies the network need but decides not to address it. The AER considered that this would not make sense and Transgrid needs to provide options to address the need and have an appropriate allowance in the revenue proposal (capex or opex).</p> <p>The AER considered that Transgrid’s concerns could be further considered and addressed through the recovery process mechanisms. The AER was not sure if this would result in a materially different position for Transgrid anyway. The AER expressed their interest in understanding Transgrid’s thinking in regard to this point in more detail.</p>	

Appendix: Attendance

Participants

Stakeholder Name	Organisation	Stakeholder Type	Attendance
Craig Memery	Public Interest Advocacy Centre	Customer Advocate	Attended
Gavin Dufty	St Vincent de Paul	Customer Advocate	Attended
Tennant Reed	Australian Industry Group	Customer Advocate	Attended
Scott Young	Commonwealth Bank Australia	Financial investor	Attended
Slavko Jovanoski	AER	Observer	Attended
John Thompson	AER	Observer	Attended
Daniel Wotherspoon	AER	Observer	Attended
Kim Huynh	AER	Observer	Attended
Albert Tong	AER	Observer	Attended
Paul Harrigan	AER	Observer	Attended
Elissa Freeman	CCP	Observer	Attended
Panos Priftakis	Snowy Hydro	Direct connect customer	Apology
Brian Spak	Energy Consumers Australia	Customer Advocate	Apology
Sam Fyfield	Goldwind	Direct connect customer	Apology
Iain Maitland	Ethnic Communities Council NSW	Customer Advocate	Apology
Maria Cahir	Tesla	Direct connect customer	Apology
Dev Tayal	Tesla	Direct connect customer	Apology
Luke Rankovich	Tomago Aluminium	Direct connect customer	Apology
Nicola Falcon	AEMO	Market Body	Apology
Michael Ottaviano	ERM Advisory	Expert advisor	Apology
Christiaan Zuur	Clean Energy Council	Industry Advocate	Apology
Chloe Bennett	Aboriginal Affairs NSW	Customer Advocate	Apology
Kim Woodbury	City of Sydney	Direct connect customer	Apology
Brendan O'Keeffe	NSW Farmers	Customer Advocate	Apology
Nick Savage	NSW Farmers	Customer Advocate	Apology
Andrew Richards	Energy Users Association Australia	Customer Advocate	Apology

Appendix: Attendance

Facilitators and Observers

Stakeholder Name	Organisation	Stakeholder Type
Stephanie McDougall	Transgrid	Attended
Kasia Kulbacka	Transgrid	Attended
Fiona Orton	Transgrid	Attended
Kevin Hinkley	Transgrid	Attended
Doug Thomson	Transgrid	Attended
Robert Alcaro	Transgrid	Attended
Sarah Lim	Transgrid	Attended
Deyi Wu	Transgrid	Attended
Cassie Farrell	Transgrid	Attended
Hannah Lock	KPMG	Attended
Grace Smith	KPMG	Attended



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