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Mr Sebastian Roberts
 General Manager Network Regulation
 Australian Energy Regulator
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Email: [REDACTED]
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Dear Mr Roberts

Transgrid's 2023-2028 Revenue Proposal

We have been asked to provide further details on the implications of adding the indicative costs of major Augex projects currently undergoing a Regulatory Investment Test for Transmission (RIT-T) to the capex forecast that we included in our recently submitted Revenue Proposal for the 1 July 2023 to 30 June 2028 (2023-28) regulatory period.

Our Revenue Proposal includes four major Augex projects, replicated in Table 1 below, which are currently undergoing RIT-Ts. These projects are detailed in Chapter 8 (Capex forecasts) and Chapter 17 (Contingent Projects) of our Revenue Proposal.

Table 1: 2023-28 Major Augex Projects – undergoing RIT-T as at February 2022 (\$M, Real 2022-23, not included in 2023-28 Augex forecast)

Major Augex Projects	Description
1. Managing risk on Transmission Line 86 Driver: Economic benefits The RIT-T can be found here .	Driven by the deteriorating condition of wood poles on the transmission line, which forms part of the Queensland – New South Wales Interconnector (QNI) path (Tamworth – Armidale). There is an opportunity to address the condition issues through an Augex solution which is expected to deliver material market benefits.
2. Improving stability in south western NSW Driver: Economic benefits The RIT-T can be found here .	Driven by the significant growth in renewable generation connections to the transmission network in south western NSW. There is an opportunity to strengthen the transmission network and provide market benefits to the NEM.

Major Augex Projects	Description
3. Supply to the North West Slopes project ¹ Driver: Locational demand The RIT-T can be found here	Driven by increased spot load resulting from the connection of new industrial loads (i.e. Narrabri Gas) and underlying demand growth in Narrabri and Gunnedah. If not addressed, this load increase will lead to non-compliance with NER voltage limits ² and IPART reliability standards due to thermal limitations.
4. Supply to Bathurst Orange and Parkes (stage 1). ³ Driver: Locational demand The RIT-T can be found here .	Driven by increased spot load due to the expansion of a mine at Orange, connection of new mines in the Bathurst and Parkes areas and industrial load expansion at the Parkes special activation precinct. If not addressed, this load increase will lead to non-compliance with NER voltage stability limits ⁴ . Stage 1 investment may involve the installation of dynamic reactive power support devices at Parkes and Panorama substations.

At the time of submitting our Revenue Proposal, and at the date of this letter, it remains unclear whether these projects will be delivered through a network or non-network solution or some combination of them. Table 2 details the indicative cost ranges for network solutions for these four projects based on the relevant Project Specification Assessment Reports (PSCR) or Project Assessment Draft Reports (PADR).⁵ The indicative cost ranges reflect a number of alternative network options. The values in the column headed “Indicative Cost in Revenue Proposal” reflect what we currently consider to be the most likely network option, if a network solution is the preferred solution for each project. We noted these indicative values in our Revenue Proposal, but did not include them in our Augex forecasts. We expect the RIT-Ts for these projects to be completed by July 2022 after which time we will formally cost any network solutions, should they be the preferred options.

Table 2: Indicative cost for major Augex projects undergoing RIT-T (\$M, Real 2022-23)

Major Augex Projects	Indicative cost range		Indicative cost in Revenue Proposal
	Lower bound	Upper bound	
Managing risk on Transmission Line 86 (Tamworth – Armidale)	100.5	331.1	331.1
Improving stability in south western NSW	54.6	428.8	127.1
Supply to the North West Slopes project ⁶	63.0	509.6	166.3

¹ The Project Specification Consultation Report (PSCR) was published in April 2021. The Project Assessment Draft Report (PADR) is expected to be published in early 2022.

² [Schedule 5.1.4 of the NER requires us to plan for voltage control to maintain voltage levels within 10 per cent of normal voltage.](#)

³ The [PSCR](#) was published in March 2021. The PADR is expected to be published in early 2022.

⁴ Schedule 5.1.4 of the NER requires us to plan for voltage control to maintain voltage levels within 10 per cent of normal voltage.

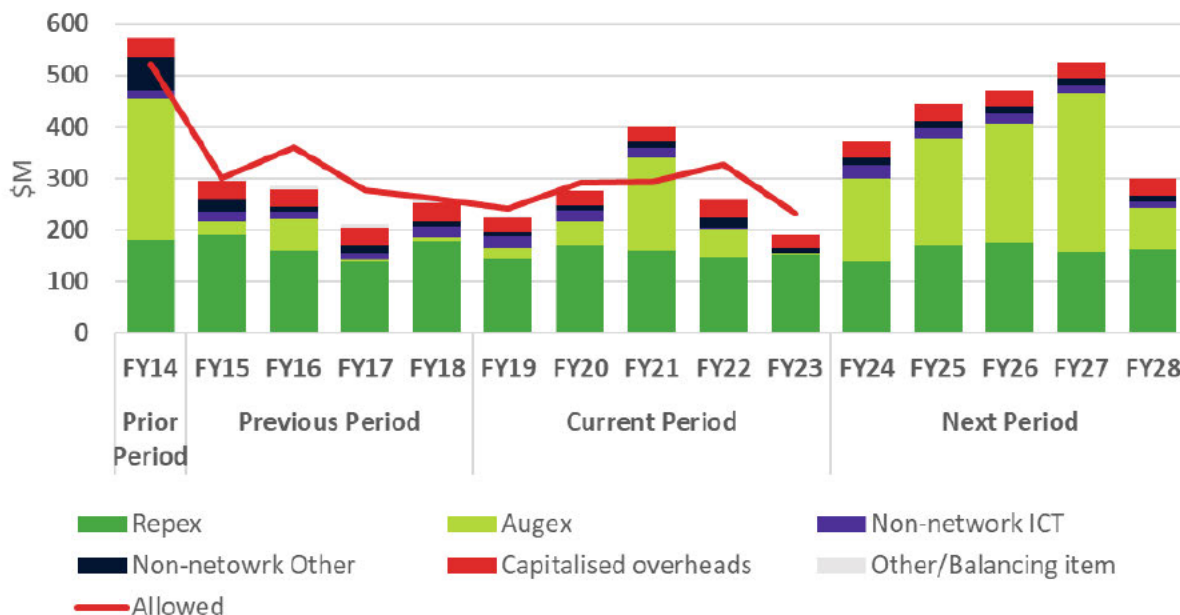
⁵ The indicative cost ranges for all projects are based on the PSCR expect ‘improving stability in south Western NSW’, which is based on the PADR.

⁶ The Project Specification Consultation Report (PSCR) was published in April 2021. The Project Assessment Draft Report (PADR) is expected to be published in early 2022.

Major Augex Projects	Indicative cost range		Indicative cost in Revenue Proposal
	Lower bound	Upper bound	
Supply to Bathurst Orange and Parkes (stage 1). ⁷	346.7	805.8	117.4
Total	564.8	2,075.2	741.9

The capex forecast in our Revenue Proposal is \$1,368.5 million excluding pre-approved forecast capex for Project EnergyConnect and major Augex projects undergoing RIT-T, which is \$23.0 million or 1.7 per cent higher than our estimated capex of \$1,345.6 million (excluding expenditure on ISP Projects)⁸ for the 2018-23 regulatory period. Including the indicative network costs detailed in Table 2 for major Augex projects undergoing RIT-T, would increase our capex forecast by \$741.9 million to \$2,110.4 million, which is \$764.8 million or 56.8 per cent higher than our estimated capex for the 2018-23 regulatory period. Figure 1 details the breakdown of our 2023-28 forecast capex by sub-category including these projects and excluding pre-approved capex⁹ and compares this with our capex over the 2018-23 period.

Figure 1: Capex trends 2018-23 and 2023-28 period including major Augex projects undergoing RIT-T and excluding pre-approved capex and ISP Projects (\$M, Real 2022-23)



⁷ The PSCR was published in March 2021. The PADR is expected to be published in early 2022.

⁸ Excluding our expenditure of \$1,769.2 million on actionable ISP Projects approved by the AER as contingent projects for the 2018-23 regulatory period (i.e. Project EnergyConnect, QNI minor and VNI minor).

⁹ In May 2021, the AER published its Determination for Project EnergyConnect, which approved total capex of \$2,008.0 million⁹ for the 2018-23 regulatory period. Project delays mean that the delivery date is now anticipated to be 2024-25. As a result, we expect to spend \$532.8 million of the approved capex for this Project (pre-approved forecast capex) in the 2023-28 period. We will add this pre-approved capex to our forecast for the first two years of the 2023-28 period.

Based on our Revenue Proposal (i.e. excluding the indicative network cost for the four major Augex projects undergoing RIT-Ts), we expect transmission costs to reduce over the period 30 June 2023 to 30 June 2028 by \$19.55 per annum for residential customers and \$73.05 per annum for small business customers, which in both cases is a 13.4 per cent reduction over this period. Figure 2 and Figure 3 below show the impact on these cost savings if we were to include in our capex forecast the indicative network costs for the four projects undergoing RIT-Ts:

- Figure 2 shows that the expected cost savings for residential customers would reduce by \$1.99 to \$17.56 per annum, and
- Figure 3 shows that expected cost savings for small business customers would reduce by \$7.44 to \$65.61 per annum.

Figure 2 and Figure 3 show that the transmission cost savings from our Revenue Proposal will essentially be fully offset if all of the following projects, which are not reflected in our in our capex forecasts in our Revenue Proposal, proceed in the 2023-28 period:

- Projects in Australian Energy Market Operator’s (AEMO’s) Integrated System Plan (ISP)
- the NSW Government’s Electricity Infrastructure Roadmap (NSW Electricity Infrastructure Roadmap), and
- the contingent projects discussed in Chapter 17 of our Revenue Proposal.

Our intention, as set out in our Revenue Proposal, is that customers will only pay for these projects if they are approved by the relevant regulators and their costs are reflected into our transmission prices as approved by the AER. In accordance with the regulatory framework, ISP projects and NSW REZs will only proceed if they deliver net benefits to customers such that the expected savings in wholesale costs outweigh the increase in the transmission costs.

Figure 2: Residential customers bill impact - transmission component (\$Real 2022-23)

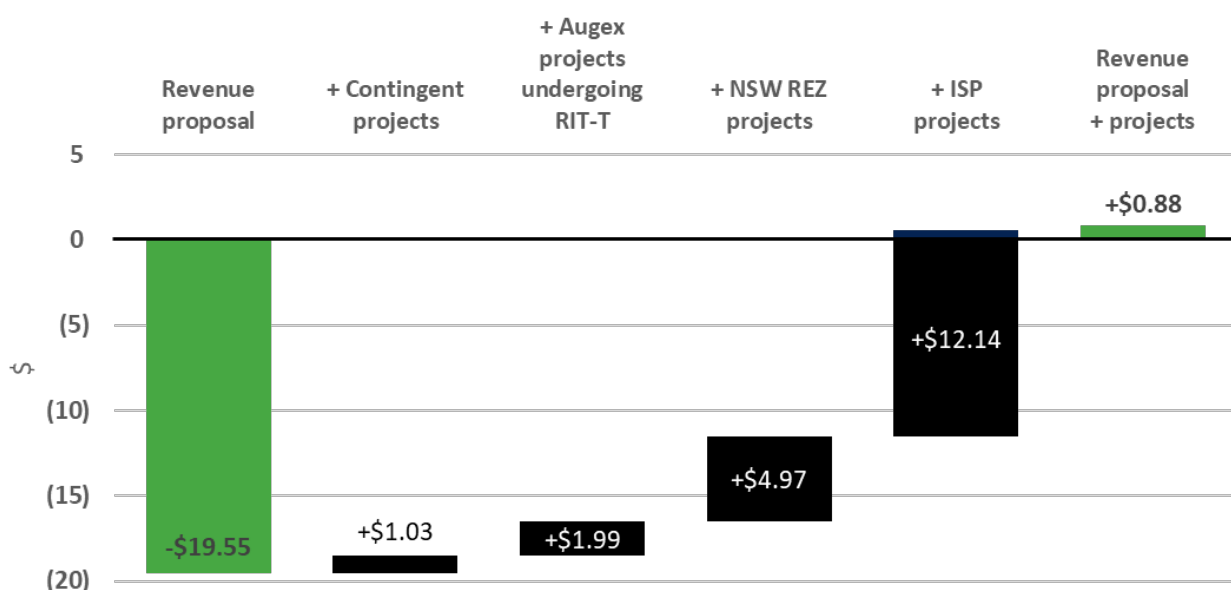
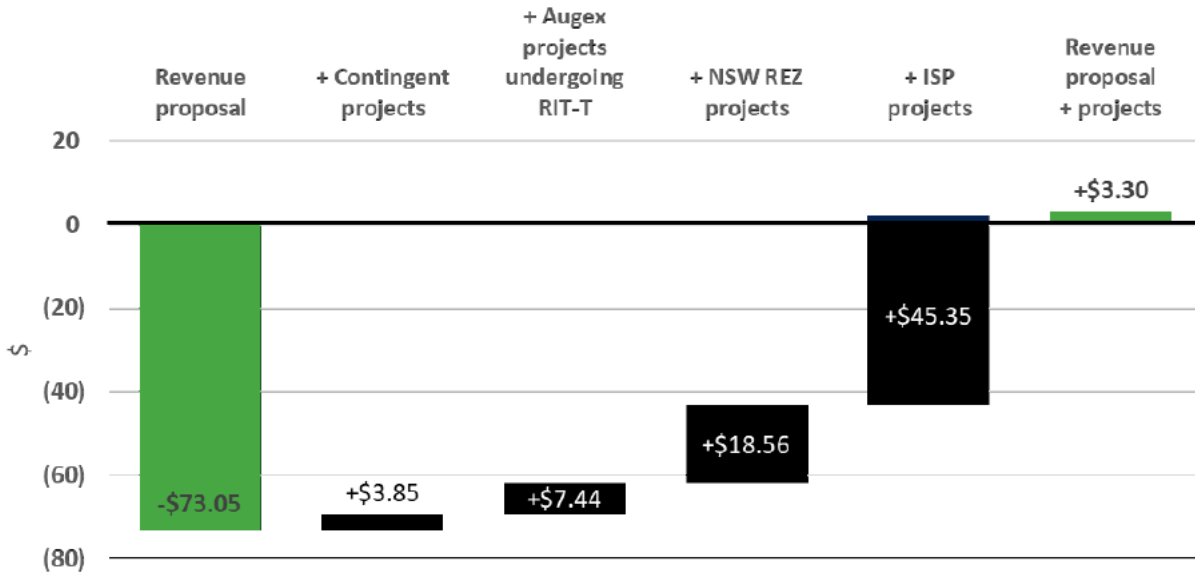


Figure 3: Small business bill impact – transmission component (\$Real 2022-23)

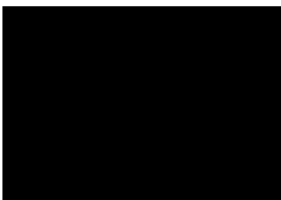


As noted in our Revenue Proposal, we did not include the indicative costs of major Augex projects undergoing RIT-Ts in our capex forecast in our Revenue Proposal given the current uncertainty and the potential size of these projects. We propose to include the costs of any network solutions arising from the RIT-T process in our Revised Revenue Proposal, which is due to the AER in November 2022.

We will keep the AER fully informed of each step in the process and consult with our customers and other stakeholder on the development and outcomes of the RIT-Ts.

I would be pleased to discuss any aspect of this letter further or to provide any other information to support our proposal. We look forward to continuing to work with the AER, our customers and other stakeholders in the review of our Revenue Proposal.

Yours sincerely



Brian Salter
Executive Manager, Legal Governance and Risk