



Directlink Joint Venture

Revised Revenue Proposal
2025 to 2030

December 2024



Energy
Infrastructure
Investments

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Glossary

Term	Definition
AC	Alternating Current
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
bppa	Basis points per annum
CESS	Capital Expenditure Sharing Scheme
DC	Direct Current
DNSP	Distribution Network Provider
Draft Decision	The AER's Draft Decision on Directlink's 2025–30 Revenue Proposal
EBSS	Efficiency Benefit Sharing Scheme
EII	Energy Infrastructure Investments Pty Limited – the owner of the Directlink Interconnector
FEED	Front-end Engineering Design
HVDC	High voltage direct current
IGBT	Insulated-Gate Bipolar Transistor
MAR	Maximum Allowed Revenue
NEM	National Electricity Market
NPV	Net Present Value
Proposal	Directlink's 2025–30 Revenue Proposal submitted to the AER in January 2024
Proposal Period	The length of the 2025–30 control period – 1 July 2025 to 30 June 2030
PTRM	Post Tax Revenue Model
RAB	Regulatory Asset Base
RBA	Reserve Bank of Australia
Revised Proposal	Directlink's 2025–30 Revised Revenue Proposal (this document)
RIT-T	Regulatory Investment Test – Transmission
RFM	Roll Forward Model
RRG	Regulatory Reference Group – Directlink's group of diverse stakeholders recruited to shape and challenge the 2025–30 Proposal
Rules	National Electricity Rules
STPIS	Service Target Performance Incentive Scheme
WACC	Weighted Average Cost of Capital
WPI	Wage Price Index

Acknowledgement of Country

At Directlink, we acknowledge the Traditional Owners and Custodians of **Bundjalung** country on which our asset is operated and maintained.

We acknowledge their connections to land, sea and community.

We pay our respects to their Elders past and present and commit to ensuring Directlink operates in a fair and ethical manner that respects First Nations peoples' rights and interests.



Executive Summary

This Revised Revenue Proposal (**Revised Proposal**) for the Directlink transmission interconnector (**Directlink interconnector**) is submitted by Energy Infrastructure Investments Pty Limited on behalf of the Directlink Joint Venture.

As an electricity transmission interconnector, Directlink transmits electricity between the Queensland and New South Wales regions in accordance with AEMO's dispatch instructions. Directlink is registered as a Transmission Network Service Provider in the National Electricity Market (NEM)

Given the energy transition underway, the need for interconnection capacity is increasing. This will require Directlink's maximum available capacity to be maintained with a high level of availability. We believe this Revised Proposal will maintain a safe, compliant, and reliable service delivery for the 2025–30 period.

Stakeholder engagement has guided each step of this Proposal. Directlink has approached this stakeholder engagement with the understanding that, although the Directlink interconnector is the smallest transmission network in the NEM, it plays an important role in supporting NSW and QLD customers.

A series of meetings were established where many stakeholders were invited to participate and share their views and preferences on the Directlink interconnector, and how it should operate in the future. Stakeholder input was instrumental in helping to improve Directlink's understanding of the needs and expectations of different consumer segments.

In the following pages, the outcomes of Directlink's engagement together with our responses to the AER's Draft Decision outlines how we propose to manage Directlink in an economically efficient manner that ensures safety, compliance and reliability is maintained.

Since lodging our initial Proposal (**Proposal**) to the AER in January 2024, we have made significant strides in refining our approach to spares management. We conducted a detailed review, identifying each spare component and undertaking a thorough risk assessment regarding obsolescence.

We analysed criticality, failure probabilities and consequence over the regulatory period and beyond, assessed the economic implications of purchasing spares now, versus later, and even re-engineering using similar parts – all with the aim of determining the most prudent and efficient solution to meet the long-term interests of consumers. Additionally, we've taken the most robust engineering stance possible, utilising global engineering data.

However, several risks still need to be weighed, including the risk of unexpected obsolescence from suppliers and the possibility of failure rates accelerating beyond our forecasts or manufacturer expectations.

We thank the AER for its constructive engagement throughout the development of the spares business case and other aspects of our Revised Proposal. We value the regular communication and look forward to ongoing discussions as we approach the final decision.

The proposed annual change in revenue is 7.9 percent which represents an \$0.96 increase in the annual electricity bill for a typical residential customer by 2029–30. Whilst this may seem small, Directlink recognises the revenue increases proposed for 2025 to 2030 are substantial, especially considering the cost-of-living pressures facing many customers in QLD and NSW.

Directlink invites customers and stakeholders to read this information and provide feedback to the AER via their website at www.aer.gov.au or to us directly at yoursay@apa.com.au.

Introduction

Directlink Joint Venture

2025–2030 Revised Revenue Proposal



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1.1 Purpose of this document

This Revised Proposal provides additional details to support Directlink’s revenue requirements for prescribed transmission services for the five years, from 1 July 2025 to 30 June 2030 (**Proposal Period**). It contains a:

- Revised Pricing Methodology; and
- Revised Proposal.

The Revised Proposal has been developed in accordance with Chapter 6A of the National Electricity Rules (**Rules**)¹. As such, it largely contains only revisions necessary to incorporate the substance of any changes required by, or to address matters raised, in the AER’s Draft Decision. To gain a full picture of Directlink’s proposed 2025–30 plans, this Revised Proposal should be read in conjunction with the original Proposal (**Proposal**) submitted to the AER in January 2024.

The Revised Proposal remains consistent with the most recent Integrated System Plan and is compliant with Directlink’s AER approved Cost Allocation Methodology. The accompanying AER provided models support the Revised Proposal and provide the information required by the Expenditure Forecast Assessment Guidelines as set out in the framework and approach paper.

All dollars shown in this Revised Proposal are \$2024–25, unless otherwise noted.

1.2 About Directlink

The Directlink interconnector consists of a 63 km, 180 MW High Voltage Direct Current interconnect running between Mullumbimby and Bungalora in NSW. While geographically located in NSW, Directlink allows electricity to be delivered between New South Wales and Queensland and has capacity to deliver 180 megawatts into the Alternate Current (AC) network in either state.

Directlink is one of a suite of gas and electricity infrastructure assets owned by Energy Infrastructure Investments Pty Limited (ABN 95 104 348 852).

For more detailed information about Directlink, including its corporate structure and ownership, the environment in which it operates and the key challenges facing the business, please read the Proposal document.



¹ Australian Energy Market Commission, National Electricity Rules Version 45, as of 14 July 2011.

1.3 Elements of Directlink’s Proposal accepted by the AER

Directlink’s proposal contained many different elements consistent with the National Electricity Rules and the outcomes of our stakeholder engagement. Our proposal represented a realistic expectation of the costs and projects necessary to maintain the operation of the interconnector.

The AER accepted most of Directlink’s Proposal, as shown in the table below.

Table 1-1 AER agreement with Directlink Proposal

Maximum allowable revenue
<ul style="list-style-type: none"> ✓ Annual revenue adjustment process. ✓ Directlink provides no shared asset unregulated services, so does not earn any associated revenue.
<u>Regulatory depreciation building block</u>
<ul style="list-style-type: none"> ✓ Proposed straight-line depreciation method used to calculate the regulatory depreciation amount. ✓ Proposed asset classes and standard asset lives. ✓ Proposed remaining asset lives as at 1 July 2025 for depreciating existing assets. ✓ Opening Regulatory Asset Base (RAB), subject to a minor input correction for the remaining asset life of the ‘Buildings’ asset class. ✓ Proposed method for calculating the 1 July 2025 opening RAB. ✓ Key RFM inputs such as actual inflation, rate of return, gross capital expenditure values, asset disposal values, forecast depreciation and asset lives. ✓ Actual and estimated capital expenditure considered prudent and efficient for establishing the 1 July 2025 opening RAB.
<u>Net tax allowance building block</u>
<ul style="list-style-type: none"> ✓ No immediately expensed forecast capital expenditure. ✓ Diminishing value tax depreciation method. ✓ Use of the year-by-year depreciation tracking method to calculate forecast tax depreciation. ✓ Statutory tax rate of 30% p.a. ✓ No accumulated tax losses at start of 2025–30 period.
Rate of return
<ul style="list-style-type: none"> ✓ Risk-free rate averaging period. ✓ Imputation credits (gamma) of 0.57. ✓ Zero equity raising costs. ✓ Forecast inputs for inflation and rate of return – noting updates for newly available data will continue throughout the determination process.
Capital expenditure
<ul style="list-style-type: none"> ✓ The AER accepted the bulk of our projects – slightly lowering the expenditure for two, rejecting two they considered to be operating expenditure and rejecting two on the basis further evidence and justification was required.

Operating expenditure

- ✓ 85% of the proposed operating expenditure amount.
- ✓ 2022–23 as the base year for operating expense.
- ✓ There was no evidence of material inefficiency in operating expenditure.
- ✓ Adjustment to base year operating expenditure for compliance with the Security of Critical Infrastructure Act.
- ✓ Adjustment to operating expenditure for the final year increment.
- ✓ Forecast output growth of 0.0% for operating expenditure.
- ✓ Category specific operating expenditure forecasts for insurance premium and debt raising costs.

Incentive schemes

Efficiency Benefit Sharing Scheme (EBSS)

- ✓ Scheme will apply for 2025–30 period.
- ✓ Exclusion of debt raising costs and insurance premium costs from the scheme.
- ✓ Application of version 2 of the EBSS in the 2025–30 period.
- ✓ EBSS approach and calculation – other than updates for newly available inflation data and forecasts.

Capital Expenditure Sharing Scheme (CESS)

- ✓ Scheme will apply for 2025–30 period.
- ✓ Largely accepted, though included updates for newly available inflation data and forecasts.

Service Target Performance Incentive Scheme (STPIS)

- ✓ Version 5 of the scheme to apply for now.
- ✓ Service Component and Market Impact Components will apply for 2025–30 period.

Pass through events

- ✓ Insurer’s credit risk event and natural disaster event.
- ✓ Accept proposed insurance coverage and terrorism events, but not the proposed wording amendments.

Pricing methodology

- ✓ Gives effect to, and is consistent with, the pricing principles in the Rules.

1.4 Length of regulatory control period

The AER agreed with Directlink’s proposed length and duration of the regulatory control period. The third regulatory control period will commence on 1 July 2025 and the length of this period is five years, expiring on 30 June 2030.

1.5 Structure of this document

The remaining elements of this document are structured as follows:

- Chapter 2 summarises the stakeholder engagement undertaken since the Proposal was lodged and how this has shaped the Revised Proposal
- Chapter 3 presents Directlink’s revenue needs for the 2020-25 regulatory control period, calculated using the AER’s Post Tax Revenue Model (**PTRM**) and outputs from the AER’s Roll Forward Model (**RFM**)
- Chapter 4 presents Directlink’s Revised Proposal capital expenditure forecasts
- Chapter 5 presents Directlink’s Revised Proposal operating expenditure forecast
- Chapter 6 outlines updates to the rate of return parameters
- Chapter 7 outlines updates to incentive schemes and any associated carryover amounts
- Chapter 8 confirms the cost pass throughs that will apply to Directlink for the Proposal Period
- Chapter 9 confirms the Revised Proposal Pricing Methodology and Negotiating Framework for the Proposal Period.



Stakeholder engagement

Directlink Joint Venture

2025–2030 Revised Revenue Proposal



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2.1 Our engagement process

Directlink has approached this stakeholder engagement with the understanding that, although Directlink is the smallest transmission network in the NEM, it plays an important role in supporting NSW and QLD customers.

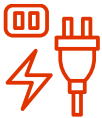
Our objectives for stakeholder engagement during the regulatory process are to deliver a revenue proposal that:



'Brings the outside in' by directly responding to the needs and preferences of our customers and other key stakeholders.



Provides sustainable returns for shareholders and investors.



Delivers a reliable supply of electricity between New South Wales and Queensland.



Supports the energy transition in New South Wales and Queensland.

2.2 Stakeholder interactions

We established a series of meetings where we invited many stakeholders to participate and share their views and preferences on Directlink and how it should operate in the future. Stakeholder input was instrumental in helping to improve our understanding of the needs and expectations of different consumer segments.

We asked our stakeholders to:

- Provide independent feedback and challenge Directlink on the degree to which its Regulatory Proposal addresses the needs and preferences of customers.
- Co-design the engagement program, including scope, timing, themes and engagement activities.
- Input into the development of the Proposal and challenge key components including operating expenditure and capital expenditure.
- Assist in improving APA's understanding of the needs and expectations of different customer segments, including vulnerable groups.
- Provide feedback on key points of difference between the AER's draft decision and the proposed Revised Revenue Proposal.

We sincerely thank our stakeholders for their commitment, active participation and thoughtful insights, feedback and challenge throughout Directlink's engagement activities. The engagement outcomes have enriched our understanding and led to meaningful outcomes.

Prior to the submission of our Revenue Proposal in January 2024, we conducted a co-creation workshop, four stakeholder meetings and seven individual stakeholder meetings. This included several meetings with representatives of AEMO to better understand the role Directlink plays in the NEM.

Following the AER’s release of its Draft Decision, we reconnected with our stakeholders to discuss the overall outcomes of the Draft Decision focussing on key issues for the Revised Revenue Proposal.

2.3 What we heard and how we responded

Directlink accepts most of the AER’s Draft Decision. As a result, we focused our engagement on the key issues arising from the AER’s Draft Decision and our proposed response and next steps.

Topic	What we heard	How we responded
<p>Overview of the Draft Decision</p>	<ul style="list-style-type: none"> Stakeholders were interested to understand the criticality of Directlink in securing reliable power for customers in QLD and NSW, especially given new projects planned as part of the energy transition. 	<ul style="list-style-type: none"> Directlink is operated by the Australian Energy Market Operator (AEMO) and plays an important role in lowering costs for customers by helping to reduce wholesale market volatility by moving energy to where it is needed. It also assists in stabilising the electricity grid when renewable energy is intermittent. A detailed market benefits test will be undertaken for any required Regulatory Investment Test – Transmission (RIT-T).
<p>Trainee program</p>	<ul style="list-style-type: none"> Stakeholders were keen to understand why the AER did not accept the step change. Most stakeholders support the inclusion of this step change, especially when it was clarified that: <ul style="list-style-type: none"> The step change is for one person. As a trainee they will immediately help reduce the reliance on contractors. The savings in contractor costs will be greater in subsequent periods than would otherwise be the case. One stakeholder did not support the step change as they consider workforce planning part of usual business and the amount doesn’t meet the materiality threshold, though they would welcome a negative step change in the future. Stakeholders were concerned that without appropriate wording in the employment contract, the person may leave once they get their qualifications. 	<ul style="list-style-type: none"> Directlink explained the AER did not see the step change meeting the requirements of the Better Resets Handbook. Directlink clarified that the previous use of the term ‘apprentice’ was misleading as the intention is to hire a qualified electrician as a trainee and teach them the relevant competencies to work on the asset. Directlink has bolstered its justification for this step change in the Revised Proposal with more information provided so the AER can better assess if the step change is prudent and efficient. Directlink will seek a trainee who already lives in the region and investigate the use of appropriate wording in the employment contract to increase the likelihood of staff retention. \$0.4 million is included in operating expenditure over the 2025–30 period.

Topic	What we heard	How we responded
<p>Spares management</p>	<ul style="list-style-type: none"> ▪ Stakeholders wanted clarity as to the difference between the two types – obsolescence spares and long lead time spares. ▪ Stakeholders were interested to understand how operating equipment manufacturers share information about production cessation and why spares can't be sourced from elsewhere in the industry. ▪ One stakeholder was keen to highlight that: <ul style="list-style-type: none"> – Spares are not a one-off cost and are critical to assets with electronics. – Some operators buy all the associated spares at the beginning of an asset's life to avoid obsolescence risk. – Accelerated depreciation is appropriate where assets do become obsolete. – Directlink should be commended for its efficient approach of replacing power electronics on just one of three HVDC systems with the released components becoming spares for the other two. ▪ Stakeholders wanted to know why the spend was not accepted by the AER. <ul style="list-style-type: none"> – One stakeholder was relieved when the situation was explained as they considered it likely the AER would accept the spend in their Final Determination. – Stakeholders appreciated the honest response to this query as “transparency builds trust with consumers”. ▪ Stakeholders were keen to understand how resilient Directlink is to severe weather events and whether there was a risk spares would be wasted by a large-scale event. ▪ Stakeholders were interested to know what would happen if the spares were miscalculated and ran out earlier than expected. 	<ul style="list-style-type: none"> ▪ Directlink explained that: <ul style="list-style-type: none"> – Obsolescence spares are items we will be unable to buy in the future. – Long lead time spares are about ensuring sufficient inventory is on hand to cover expected failures over the lead time to deliver this inventory. ▪ Directlink explained that not a lot of notice is necessarily given when production ceases, nor is there much opportunity to negotiate on the quantity of spares. In a past example, Directlink was given a matter of months' notice with existing stock to be split 50:50 with another network. ▪ As an early high-voltage direct current asset, Directlink's equipment is bespoke and quite different to the modular nature of modern equivalent networks. Much of the equipment has become obsolete and whilst some common equipment remains, the associated technology has changed so much that replacements are not necessarily simple. The use of similar items that require re-engineering is considered as an option and adopted where this provides a more beneficial outcome. ▪ Directlink acknowledged that the analysis took a lot longer than expected and we were unable to complete it in time for the AER to consider for the Draft Decision. The completed model will support our Revised Proposal and will be shared early with the AER. ▪ Directlink is more resilient to severe weather events than alternating current transmission networks and, whilst severe weather remains a risk, it is well-managed. ▪ Directlink explained that if spares run out earlier than planned, it will likely require a RIT-T. If this demonstrates negative market benefits, then the future of Directlink will require a bigger conversation. ▪ There is potential some spares will remain at the end of the asset's life. To balance the risks of over-buying versus running out, conservative failure rates were used. ▪ \$12.8 million is included for the program.

Meeting focus	What we heard	How we responded
<p>End-of-life costs</p>	<ul style="list-style-type: none"> Given Directlink will cease to operate at some point in the future, stakeholders understood the stranding risk differs to other networks who are facing declining customer numbers over time. Whilst it was generally agreed that benefiting consumers should pay for the costs, a mechanism that appropriately balances the interests and cost impositions of current and future customers should be considered and likely developed. Stakeholders agreed there was a need for a deeper discussion on the issues and options. It was suggested that early and wide discussions work best so that all stakeholders are brought along on the journey and the discussions are well established and understood before any Rule change is submitted. 	<ul style="list-style-type: none"> Directlink will take the suggestions on board and look to arrange a series of dedicated forums with a wide range of stakeholders. Directlink agrees sufficient deep engagement is required. No spend is included for these costs in the 2025–30 regulatory period.
<p>Other matters</p>	<ul style="list-style-type: none"> One stakeholder pointed out that the risks of asset stranding and stranded spares ahead of Directlink’s planned cessation date sits with customers. Some stakeholders are keen to see more information about the necessity for Directlink’s capacity in the market through to 2042. It was queried what would happen if the market benefit test required for the Spares Management program is negative. 	<ul style="list-style-type: none"> Directlink highlighted that the assets, including spares, are depreciated over the remaining economic life. The spares are to ensure, as best we can, that the asset lasts to 2042 at the lowest efficient cost. Directlink outlined that market benefit analyses are costly, but one is required for major expenditure as part of a RIT-T. This will provide an opportunity to determine the relative market benefits of the asset. Directlink indicated a broader stakeholder conversation would be needed to determine an end-of-life decision for the asset.

2.4 Stakeholder feedback on APA’s engagement












Overall, all stakeholders rated the following attributes of the session as either good or excellent:

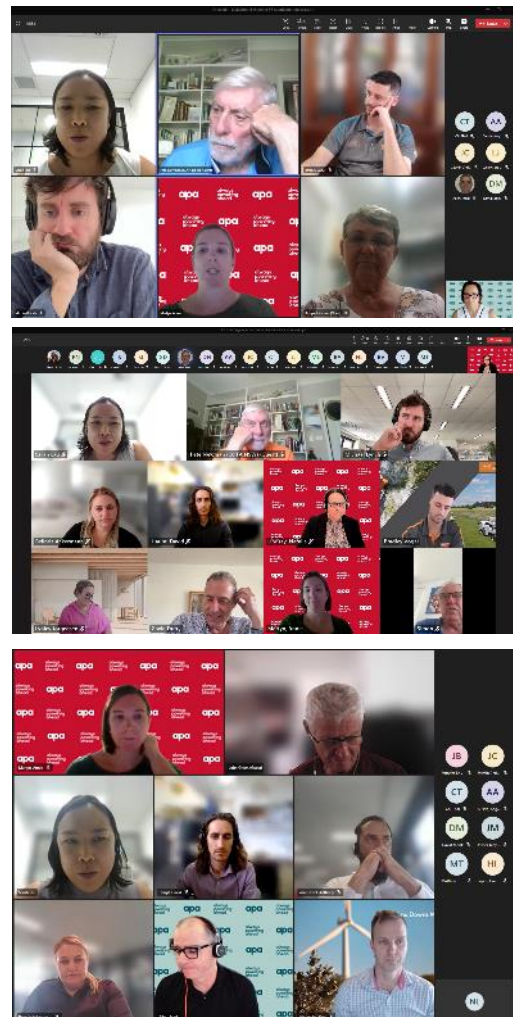
- Quality of the engagement session.
- Clarity on the purpose of the session and how feedback would be used.
- Quality of facilitation.
- Everyone having an opportunity to participate.
- APA being genuinely interested in stakeholder opinions.

Stakeholders appreciated the materials being distributed in advance and information clearly presented and explained.

Overall, the engagement process was considered convenient and the unique regulatory issues facing Directlink were seen as interesting. Suggested improvements including avoiding the use of acronyms, showing estimated bill impacts of options and providing clearer information on the criticality of Directlink to customers and the costs of potential early failure. Directlink will attempt to deliver on these aspects in its next regulatory proposal.

Attendees at our stakeholder meetings and individual meetings included:

	<ul style="list-style-type: none"> • David Haupt
	<ul style="list-style-type: none"> • Jennifer Brown
	<ul style="list-style-type: none"> • Marika Kontellis • Pete Newman • Maxi Victoria
	<ul style="list-style-type: none"> • John Green • Robyn Robinson
	<ul style="list-style-type: none"> • Bradley Vogel
	<ul style="list-style-type: none"> • Mark Grenning
Independent expert	<ul style="list-style-type: none"> • Simon Bartlett
	<ul style="list-style-type: none"> • Craig Memery • Michael Lynch
	<ul style="list-style-type: none"> • Jennifer Brownie
	<ul style="list-style-type: none"> • Gavin Duffy
	<ul style="list-style-type: none"> • Belinda Ackermann
	
	



Maximum allowable revenue

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2025–2030 Revised Revenue Proposal



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3.1 Revised maximum allowable revenue

Whilst the AER's Draft Decision accepted many aspects of Directlink's Proposal, they were unable to accept Directlink's proposed maximum allowable revenue (**MAR**) given the impact of their changes on the various building block costs. The major items that the AER accepted in relation to the MAR building blocks are shown [Table 1-1](#).

Whilst Directlink agrees with most of the underlying changes that impact the MAR in the AER's Draft Decision, further updates are necessary to reflect more recent data, forecasts and supporting information. A summary of the Draft Decision elements that have been updated in the Revised Proposal are shown in the following table.

Table 3-1 Updates to elements that impact maximum allowable revenue

AER Draft Decision	Acceptance and/or updates contained in the Revised Proposal
Forecast capital expenditure	Directlink accepts some elements of the AER's Draft Decision, but not all. As a result, the Revised Proposal contains higher forecasts for capital expenditure than that in the AER's Draft Decision – see chapter 4 Forecast capital expenditure
Opening RAB	Accept, though the 1 July 2025 opening RAB has been updated for 2023–24 actual capital expenditure
Forecast operating expenditure	Directlink accepts some elements of the AER's Draft Decision, but not all. As a result, the Revised Proposal contains higher operating expenditure than the amount proposed amount in the AER's Draft Decision – see chapter 5 Forecast Operating Expenditure
2025–30 placeholder inflation forecasts aligned with Reserve Bank of Australia (RBA) August 2024 <i>Statement on Monetary Policy</i>	Accept but provide further updated 2025–30 placeholder inflation rates to align with the RBA's November 2024 <i>Statement on Monetary Policy</i> , noting these will change again for the Final Decision – see chapter 6 Rate of return
Updates to placeholder values for other rate of return components	Accept as aligns with more recent data, noting some components will again be updated for the Final Decision
Forecast CESS carryover amount	Accept, but forecast carryover amounts have been updated for 2023–24 actual expenditures and the alignment of the 2024–25 inflation forecast with the latest RBA <i>Statement on Monetary Policy</i> – see chapter 7 Incentive schemes
Forecast EBSS carryover amount	

Directlink’s Revised Proposal building blocks, smoothed revenue requirement and the rate of change required each year to achieve these outcomes (the ‘X-factors’) are presented below. The AER’s PTRM model (that accompanies this Revised Proposal) has been used to calculate the building blocks and to ‘smooth’ the price path across the Proposal Period in line with the Rules.

An explanation for the changes to each building block compared to the Draft Decision follows.

Table 3-2 Revised building blocks, revenue requirement and X-factor

Millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Return on capital	9.4	9.7	9.4	9.2	8.9	46.6
Regulatory depreciation	5.4	6.0	6.5	7.1	7.5	32.5
Operating expenditure	6.6	6.8	6.8	7.0	7.0	34.2
Revenue adjustments	0.3	(0.1)	(0.3)	0.2	1.4	1.5
Net tax allowance	0.5	0.5	0.5	0.6	0.6	2.6
Unsmoothed revenue requirement	22.3	22.8	23.0	23.9	25.4	117.4
Smoothed revenue requirement	22.3	22.8	23.5	24.1	24.7	117.4
X-factor	-31.8%	-2.7%	-2.7%	-2.7%	-2.7%	n/a

Numbers may not add due to rounding

3.2 Initial Regulatory Asset Base

Directlink proposes an updated RAB of \$160.8 million in the Revised Proposal reflecting the inclusion of actual (rather than forecast) expenditure for 2023–24 and the latest CPI forecasts. The breakdown of the opening RAB by asset class can be found in the PTRM.

The change in the value of the opening RAB will impact both the return on capital and the regulatory depreciation building blocks. More detail on these building blocks can be found in the following section.

3.3 Mechanical building blocks from AER’s models

The return on capital, regulatory depreciation and tax allowance building blocks, shown in [Table 3-2](#) above, are all calculated from the regulatory asset base. The calculations can be found in the accompanying AER provided RFM, Depreciation Model and PTRM, which align with the Rules.

Changes to the outputs of these models (and the associated building blocks) reflect changes to the inputs for forecast capital expenditure, forecast operating expenditure and updates for actual and forecast CPI that are outlined in the subsequent chapters of this Revised Proposal.

The return on capital has been calculated in line with the Rules and can be found in the accompanying PTRM.

The regulatory depreciation for each year is calculated on the value of the assets included in the regulatory asset base at the beginning of each year. Assets are depreciated over the remaining technical life of Directlink, and this approach is consistent with the approach for the 2020–25 regulatory period.

Directlink has no projects that are eligible for financeability.

To avoid double counting, regulatory depreciation includes an adjustment for the annual indexation gain on the RAB. The composition of the regulatory depreciation building block is shown below.

The depreciation schedules for each category of assets and their contribution to the regulatory asset base for each year can be found in the PTRM.

Table 3-3 Forecast regulatory depreciation

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Straight-line depreciation	9.8	10.5	10.9	11.2	11.5	53.9
Less inflation indexation on opening RAB	4.4	4.5	4.4	4.2	4.0	21.4
Regulatory depreciation	5.4	6.0	6.5	7.1	7.5	32.5

Numbers may not add due to rounding

3.4 Operating expenditure building block

Full details on the elements of revised operating expenditure that differ from the AER’s draft decision can be found in chapter [5 Forecast Operating Expenditure](#). The difference relates to the net costs for hiring a Trainee and the inclusion of Transmission Determination costs that were previously put forward as capital expenditure.

The breakdown of the forecast operating expenditure building block in the revised proposal is set out below. Debt raising costs are calculated in the AER’s PTRM model and more detail on these costs can be found in section [6.3 Debt raising costs](#).

Table 3-4 Forecast operating expenditure including debt raising costs

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Operating expenditure	6.5	6.7	6.7	6.9	6.9	33.7
Debt raising costs	0.1	0.1	0.1	0.1	0.1	0.5
Total operating expenditure	6.6	6.8	6.8	7.0	7.0	34.2

Numbers may not add due to rounding

3.5 Revenue adjustments building block

The revenue adjustments building block comprises the EBSS and CESS carryover increments or decrements.

The forecast carryover amounts have been updated for 2023–24 actual expenditure – see chapters 6 Rate of return and 7 Incentive schemes for more detail. This has reduced the \$0.2 million decrement in the AER’s Draft Decision to a \$1.5 million increment in Directlink’s Revised Proposal.

Forecast capital expenditure

Directlink Joint Venture

2025–2030 Revised Revenue Proposal



Energy
Infrastructure
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4.1 Revised forecast capital expenditure

Whilst the AER's Draft Decision accepted many aspects of Directlink's proposed \$33.8 million capital expenditure – see [Table 1-1](#), they were unable to accept the proposed costs for six capital projects and instead proposed an alternative estimate of \$18.8 million.

Directlink accepts some of these changes and provides updated data and supporting information for others, as part of this Revised Proposal. A summary of the Draft Decision elements and how these are reflected in the Revised Proposal are shown below.

Table 4-1 Support for, and updates to, elements that impact capital expenditure

AER Draft Decision	Acceptance or updates contained in the Revised Proposal
Unable to accept the value for the Spares Management project as there was not enough information available.	Forecasts for this project have now been calculated and revised costs included in the Revised Proposal – further supporting information is provided in section 4.2 Spares Management .
Unable to accept the reactor cooling enhancements without further supporting evidence for the business case.	Accept – because of their size, Directlink is unable to provide direct test results for the reactors, so is unable to provide the evidence the AER desires. The business will instead consider an alternative project for the 2030–35 regulatory period to upgrade the local controller for the cooling fans as it will be at end-of-life at that time. It is important to note in the absence of the enhancements, the consequences of a reactor failure remain high both in terms of replacement cost and the impacts of a long-term outage.
Unable to accept the master controller – FEED project as require further information as to why this cost should be capital rather than operating and why the proposed cost is efficient.	Accept – the proposed cost was based on Directlink's experience undertaking Front-End Engineering and Design (FEED) projects. Whilst Directlink's stakeholder group supported the undertaking of a FEED study in the 2025–30 period, with any subsequent asset purchase/construction costs to be put forward in the 2030–35 regulatory proposal, Directlink can offer no further justification for the costs at this stage.
Removal of extra spare installation for both the AC isolators/earth switches and DC disconnectors projects.	Accept – this was an error. Directlink agrees these costs should not be included as the spares are unlikely to be installed in the 2025–30 period.
Unable to accept Transmission Determination costs as see these costs as being operating, rather than capital, in nature.	In line with the AER's Draft Decision these costs have been moved to forecast operating expenditure – see chapter 5 Forecast Operating Expenditure .
Updated 2024–25 placeholder inflation forecast to align with Reserve Bank of Australia (RBA) August 2024 <i>Statement on Monetary Policy</i> .	Accept but provide a further update to the 2024–25 inflation forecast aligned with the RBA's November 2024 <i>Statement on Monetary Policy</i> – see chapter 6 Rate of return .

Current regulatory period actual and estimated capital expenditure

Directlink's updated actual and expected capital expenditure for the 2020–25 regulatory period is shown below. This includes updates for 2023–24 actual expenditure and an update to the 2024–25 inflation rate to align with the RBA's November 2024 *Statement on Monetary Policy* – see chapter [6 Rate of return](#) (noting inflation forecasts will change again for the Final Decision).

All capital expenditure relates to condition-based asset replacement/refurbishment driven by Directlink's age.

Table 4-2 2020–25 capital expenditure by asset class and comparison to the AER allowance

Millions \$2024–25	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Transmission Assets	2.4	3.0	8.0	10.6	3.0	26.9
Easements	0.0	0.0	0.0	0.2	0.3	0.5
Land	0.0	0.0	0.0	0.0	0.0	0.0
Buildings	0.0	0.0	0.1	0.0	1.5	1.6
Total	2.4	3.0	8.1	10.8	4.8	29.0
AER allowance	6.0	7.8	6.5	5.9	4.6	30.8
Actual spend higher/(lower)	(3.5)	(4.9)	1.6	4.9	0.1	(1.8)

Numbers may not add due to rounding

The delay in capital expenditure in the earlier years of the current period relates to the project to replace the insulated-gate bipolar transistors. The project was unable to be implemented as planned which delayed the start date. The revised project is now due to be completed in 2025–26 – for more details, see attachment 04 in Directlink's original Proposal.

Forecast 2025–30 capital expenditure

Directlink's revised forecast capital expenditure is shown below. This includes an update to the 2024–25 inflation rate to align with the RBA's November 2024 *Statement on Monetary Policy* – see chapter [6 Rate of return](#) (noting inflation forecasts will change again for the Final Decision).

Table 4-3 Forecast 2025–30 capital expenditure by asset class

Millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Transmission Assets	11.3	3.9	4.1	3.8	3.4	26.5
Easements	0.2	0.0	0.0	0.0	0.0	0.2
Land	0.0	0.0	0.0	0.0	0.0	0.0
Buildings	2.6	1.1	0.1	1.0	0.0	4.9
Total	14.0	5.0	4.2	4.8	3.4	31.5

Numbers may not add due to rounding

Directlink capitalises projects consistent with APA's 'Accounting policy: Property, Plant and Equipment' and the forecasts align with the AER approved Cost Allocation Methodology.

All proposed capital expenditure relates to condition-based asset replacement/refurbishment driven by Directlink's age. There is no forecast change in the maximum capacity of the interconnector or the output it delivers and no non-network alternatives have been identified for inclusion.

Directlink is not proposing any contingent projects.

See Directlink's original Proposal for a complete list of the projects for both periods along with:

- Details regarding project locations, anticipated costs and the categories of transmission services provided
- The methodology used for developing the capital expenditure forecast, the key assumptions underlying the forecast and the Directors Statement certifying the reasonableness of those assumptions
- The explanation of any significant variations in the forecast capital expenditure from historical capital expenditure²
- The explanation of any significant interactions between forecast capital expenditure and forecast operating expenditure programs.

Comparison of forecast to historical capital expenditure

The chart below compares the forecast capital expenditure for the Proposal Period with historic capital expenditure.

Table 4-4 Forecast and historic capital expenditure (millions \$2024-25)

Millions \$2024–25	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Forecast capital expenditure 2025–30	14.0	5.0	4.2	4.8	3.4	31.5
Historic capital expenditure 2020–25	2.4	3.0	8.1	10.8	4.8	29.0
Total – forecast higher/(lower)	11.6	2.0	(3.9)	(6.0)	(1.4)	2.5

Directlink is a single asset with stochastic capital expenditure requirements, so significant variations in year-on-year spend is expected. Each regulatory period comprises a unique list of projects, rather than repetitive activities, all of which relates to replacement/refurbishment of Transmission Assets driven by Directlink's age.³

The following section outlines the change to Spares Management put forward in the Revised Proposal.

² As per RIN requirement 4.4.4.

³ AS per RIN requirement 4.4.5

4.2 Spares Management

The acquisition and use of spares remains the lowest cost solution to maintain the Directlink Interconnector until the end of its expected life. The AER was unable to accept Directlink’s proposed placeholder expenditure of \$12.5 million for the Spares Management program as detailed modelling was unable to be completed in time.

Detailed modelling has now been completed to determine the criticality of components and consider their lead times, costs, failure rates and meantime between failure. 247 components were considered of which 68 were identified as critical and grouped into one of three types:

1. **Obsolescence risk Mitigation** – components with a high risk of obsolescence where it is cheaper to buy spares than to have the main asset fail.

Most stakeholders supported Directlink buying enough spares to reach the the end of the main asset’s life. 29 components fell into this category with a forecast cost of \$5.5 million over the 2025–30 regulatory period. These are shown as ‘strategic spares in Table 4-5. All these spares relate to the Transmission Assets class and more detail can be found in the revised business case – see Attachment 01.

2. **Business as usual** – components with long lead times where current inventory levels are not adequate given the estimated lead time and failure rate.

Stakeholders supported Directlink’s current approach of buying enough spares for such assets to cover expected lead times through to the end of the regulatory period (30 June 2030). 30 components fell into this category and comprise most of the Spares Management program with a forecast cost of \$7.3 million over the 2025–30 regulatory period. These are included in ‘business as usual’ spares in Table 4-6.

3. **No additional spares necessary** – components with no identified material obsolescence or lead time risk. 9 of the critical components fell into this category and require no change in sourcing. There is no forecast capital expenditure associated with these assets.

Spares are only included in the forecast where analysis demonstrates that the expenditure minimises the long-term cost of operating Directlink for the benefit of customers. Where a future alternative represents better value for customers, no forecast capital expenditure has been included.

Table 4-5 Forecast capital expenditure strategic spares

Millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Obsolescence Risk Mitigation	1.0	1.0	1.0	1.0	1.0	5.1

Numbers may not add due to rounding

Table 4-6 Forecast capital expenditure business as usual spares

Millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Business as usual spares	1.5	1.5	1.5	1.5	1.5	7.7

Numbers may not add due to rounding

Forecast operating expenditure

Directlink Joint Venture

2025–2030 Revised Revenue Proposal



Energy
Infrastructure
Investments

5.1 Revised forecast operating expenditure

Whilst the AER's Draft Decision accepted many aspects of Directlink's proposed operating expenditure – see [Table 1-1](#), they did not agree with the proposed forecast of \$39.1 million and instead proposed an alternative estimate of \$33.1 million.

Directlink accepts some of these changes and provides updated data and supporting information for others, as part of this Revised Proposal. A summary of the Draft Decision elements and how these are reflected in the Revised Proposal are shown below.

Table 5-1 Support for, and updates to, elements that impact operating expenditure

AER Draft Decision	Acceptance or updates contained in the Revised Proposal
Use of average of two NSW specific WPI labour forecasts in the forecast price growth	Accept as this is not a material change
Use of standard transmission weights for labour and non-labour in the forecast price growth	Accept as this is not a material change
Inclusion of productivity growth of 0.6% per annum	Accept as this is not a material change
Did not accept the step change for the Apprenticeship Program as: <ul style="list-style-type: none"> Consider it part of usual business It is likely such costs are already included in the base operating expenditure, and Do not believe it meets the criteria for a step change 	Further support for the step change can be found in section 5.2 Trainee
Unable to accept end-of-life costs as the benefit of recovering costs from customers now is outweighed by the uncertainty of the quantum, timing and likelihood of such costs and the risk of potential over-recovery	Accept – Directlink will discuss who should pay and how best to recover these costs with its stakeholders. Their views will determine the next steps and any future proposed recover of such costs – see section 5.3 End-of-life costs for more detail
Use of updated CPI rate for 2023–24	Accept given data is now available
Updated 2024–25 placeholder inflation forecast to align with Reserve Bank of Australia (RBA) August 2024 <i>Statement on Monetary Policy</i>	Accept but provide a further updated 2024–25 inflation forecast aligned with the RBA's November 2024 <i>Statement on Monetary Policy</i> – see chapter 6 Rate of return
Did not accept the recovery of Transmission Determination costs within capital expenditure on the basis they are an operating expense	To align with AER expectations, the Transmission Determination costs have instead been included as an operating expense step change – see section 5.4 Transmission Determination costs

Current regulatory period actual and estimated operating expenditure

Directlink’s updated actual and expected operating expenditure for the 2020–25 regulatory period is shown below. This includes updates for 2023–24 actual expenditure and an update to the 2024–25 inflation rate to align with the RBA’s November 2024 *Statement on Monetary Policy* – see chapter [6 Rate of return](#) (noting inflation forecasts will change again for the Final Decision).

Table 5-2 2020–25 operating expenditure

Millions \$2024–25	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Operating expenditure	5.6	5.7	6.2	7.5	6.4	31.3

Numbers may not add due to rounding

Forecast 2025–30 operating expenditure

Directlink’s revised operating expenditure forecast is shown below. The forecasts align with:

- The operating expenditure objectives
- The 2010 AER approved Cost Allocation Methodology for Directlink and Murraylink, and
- The AER’s Base Trend Step forecast method – see Attachment 09 Forecast Operating Expenditure Model.

Table 5-3 Forecast 2025–30 operating expenditure

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Operating and maintenance	4.7	4.8	4.8	4.9	4.9	24.1
Management fees and expenses	0.7	0.8	0.8	0.8	0.8	3.8
Insurance	0.9	1.0	1.0	1.0	1.0	4.8
Other	0.2	0.2	0.2	0.2	0.2	1.0
Operating expenditure	6.5	6.7	6.7	6.9	6.9	33.7

Numbers may not add due to rounding

See Directlink’s original Proposal for:

- Details on the extent to which forecast expenditure relates to fixed and variable costs and the categories of transmission services for the expenditure
- Forecasts of other key variables relied upon to derive the forecast and the methodology used for developing those forecasts
- The key assumptions that underlie the forecast and the Directors Statement certifying the reasonableness of those assumptions
- An explanation of any significant variations in forecast operating expenditure from historical operating expenditure
- Any non-network options considered, and

- The explanation of any significant interactions between forecast capital expenditure and forecast operating expenditure programs.

The remainder of this chapter provides supporting information for the changes put forward in the Revised Proposal and the proposed next steps for end-of-life costs.

5.2 Trainee step change



The Proposal put forward a step change for a new staff member over the 2025–30 period. The Proposal used the word ‘apprentice’, but the intention was to hire a qualified electrician and train them in HVDC competencies over a four-year period – as such, the term ‘trainee’ is now used to describe this step change more accurately.

The AER rejected the step change on the basis that:

- They consider workforce planning issues a part of usual business
- It was likely that some of the APA Group apprenticeship costs are already included in base operating expenditure, either through direct charges or overheads, and
- They did not see an Apprentice Program meeting the step change criteria outlined in the Better Resets Handbook.

The factors that differentiate Directlink from other larger transmission network providers and justify a step change for a new staff member under the Rules are outlined in the following table.

Table 5-4 Factors that justify a step change for a new staff member for Directlink

<p>Rare skillset</p> 	<ul style="list-style-type: none"> • Directlink is one of only three high voltage direct current (HVDC) interconnectors in the NEM (and the only one in NSW). • It takes at least four years’ work experience to gain the full set of HVDC specific competencies as part of a four-year traineeship.
<p>Resource constraints</p> 	<ul style="list-style-type: none"> • There are currently only three HVDC trained staff employed by Directlink. • Directlink has consistently relied on contractors and staff overtime to cover periods of high workload and staff absences. • Staff cannot be expected to continuously work overtime, especially given recent <i>Right to disconnect</i>⁴ changes. • The energy transition is increasing competition for limited resources:^{5,6,7} <ul style="list-style-type: none"> ○ It is becoming increasingly difficult to secure competent contractor resources given the niche skillset required both within the region and Australia as a whole. ○ To ensure adequate contractor resources are available to work on the asset, Directlink has been training contractors in HVDC converter station maintenance.

⁴ [Right to disconnect - Fair Work Ombudsman](#)

⁵ [Australia’s workforce shortage: A potential obstacle on the road to net zero](#), Australian Energy Council, 25 July 2024

⁶ [Electricity sector workforce projections for the 2024 Integrated System Plan and for Australia](#), Institute for Sustainable Futures (ISF) at the University of Technology Sydney, Australian Energy Market Operator (AEMO), Race for 2030, September 2024

⁷ [Skilling the workforce for energy transition](#), KPMG, 12 March 2024

Growing works and cost



- Maintenance tasks (preventative, replacement and inspection/condition monitoring) are expected to grow as Directlink gets closer to the end of its economic life. For example, the monitoring of transformer condition will increase in frequency, replacement rates for protection relays, circuit breakers, instrumentation, reactors, transformer sub-components will increase, pumps/fans will require more lubrication/alignment checks.
- Contractor rates are expected to grow given the competition for scarce resources arising from the energy transition.

Short-term uplift for long-term savings



- The cost of an additional staff member will increase operating expenditure for the 2025–30 period but, compared to the alternative, will deliver savings in real terms in future periods.
- Directlink expects to deliver a negative step change for contractor costs in the 2030–35 period – the size of this change will depend on labour rates and the forecast amount of maintenance work at that time, and this will be an engagement topic in Directlink’s 2030–35 revenue proposal.

Costs not included in base year



- In line with the AER approved Cost Allocation Methodology, field staff, including trainees and apprentices, are directly attributed to the asset on which they are undertaking work. There is no allocation of APA corporate costs to EII only the cost of the provision of those services directly undertaken for EII.
- With only three staff members and very low staff attrition, an Apprentice Program is not a part of business-as-usual for Directlink and so the costs are not reflected in the base year – **this is a significant point of difference compared to other, larger transmission networks** for whom apprentices should comprise part of the workforce each year and for which the associated costs would be included in the base year.

Price growth insufficient to cover uplift



- The quantum of base costs in the Operating Expenditure Model directly correlates with the sufficiency of ‘price growth’ to accommodate workforce planning issues. As a small network provider with low base operating expenditure, Directlink is disadvantaged. A demonstration of how scale works against small networks in the Operating Expenditure Model is shown below:

Directlink

- Over the last five years, average annual operating expenditure for internal labour and maintenance contractors was \$1.7 million. Using labour price growth of ~1.1% per annum in the Operating Expenditure Model, this equates to \$18,700, which is insufficient to cover any significant uplift in labour.
- Even if operating expenditure of \$5.52 million (\$June 2025) and the 70.4% labour weighting from the Operating Expenditure Model is used, labour price growth equates to about \$42,700, which remains insufficient to cover any step-up in labour.

Transgrid

- With base operating expenditure of \$194 million (\$June 2023), Transgrid’s average labour price growth of 0.72% per annum and 70.4% labour weighting in the 2023–38 decision, equates to an annual uplift of \$983,000. This more than allows for the ups and downs of business-as-usual planning.

Directlink has considered four options for sourcing labour to address growing maintenance works, however two have been ruled out as being unviable or unrealistic. The relative pros, cons and Net Present Values (NPVs) are outlined in the following table.

It is important to note that whilst the initial Proposal included the costs of a trainee from 2025–26, the uncertainty over funding has led to a deferral of the costs by a year, to allow adequate time for recruitment.

Table 5-5 Options to address growing maintenance work and limited contract resources

Option	Pros	Cons	Operating expenditure NPV to 2042 \$M
1. Continue to rely on contractors (base case)	<ul style="list-style-type: none"> • Flexible approach to managing labour, especially when there is insufficient workload to justify another full-time staff member. 	<ul style="list-style-type: none"> • Resources are becoming harder to find and rates are increasing. • Contractor rates are more expensive than an employee. • Growing maintenance work as the asset ages means there is now sufficient workload for another full-time staff member. 	\$0
2. Hire an apprentice in 2026–27	<ul style="list-style-type: none"> • Cheapest cost over the 2025–30 period. • Hiring a local/someone who wants to live in the region helps reduce the risk of staff turnover. • Will help reduce reliance on contractors in future years. • Improved workforce resilience. 	<ul style="list-style-type: none"> • Unable to complete any field tasks without supervision for four years – this defers any contractor cost savings. • This is not a realistic option for Directlink as technical staff do not have the capacity to train an unqualified person. 	Not modelled as not a viable option
3. Hire a trainee in 2026–27	<ul style="list-style-type: none"> • Able to undertake some maintenance tasks without supervision, so an immediate, small reduction in contract labour. • Hiring a local/someone who wants to live in the region helps reduce the risk of staff turnover. • Will help reduce reliance on contractors in future years. • Improved workforce resilience. 	<ul style="list-style-type: none"> • Unable to complete HVDC tasks without supervision for four years – some deferral of cost savings and improved timeliness of maintenance works to the next regulatory period. 	-\$1,172.8
4. Hire a qualified HVDC staff member in 2026–27	<ul style="list-style-type: none"> • Immediate savings in contract labour. • More maintenance tasks completed in timely manner as not held up by contractor availability. • Improved workforce resilience. 	<ul style="list-style-type: none"> • More expensive cost over 2025–30, as fully trained and recruiting in a competitive market. • Experience has demonstrated that successful recruitment of a skilled HVDC worker is unlikely. 	Not modelled as this is not a realistic option

Consistent with the Rules, this demonstrates it is both prudent and efficient for Directlink to increase in-house labour, than to increase reliance on increasingly hard-to-find skilled contractors.

The hiring of a trainee appropriately balances the costs, risks and benefits as:

- Unlike an apprentice, a trainee can immediately undertake some tasks, whilst they build up their HVDC competencies over the remainder of the period. This will allow for an immediate, albeit small, reduction in contract labour costs.
- A trainee also avoids the cost and recruitment challenge of trying to find a fully qualified HVDC candidate.

The relative competencies of an apprentice, trainee and HVDC qualified staff member working on Directlink are shown below.

Table 5-6 Tasks by qualification

Apprentice	Trainee	HVDC qualified
<ul style="list-style-type: none"> • None – supervision required all the time 	<ul style="list-style-type: none"> • Assistance in managing 'Before you dig Australia' (BYDA) requests for locating assets. • Assist site team with inspections such as cleaning of high voltage equipment, general equipment inspection (two person tasks). • General housekeeping of site, emergency lighting testing. 	<ul style="list-style-type: none"> • Extra low voltage and low voltage activities. • Maintenance of high voltage equipment. • HV switching and isolation of plant. • Equipment inspections. • Managing BYDA requests / third party work activities. • Permit Issuing officers, permit planning. • General preventative maintenance activities.

Directlink revisited the need for this step change with stakeholders in the most recent RRG meeting. When it was made clear that the step-up in costs will deliver savings in future periods, compared to the alternative of just a continued reliance on contractors, the consensus was supportive of the inclusion.

To minimise the risk of the newly trained staff member leaving the business after attaining their HVDC competencies, stakeholders suggested that Directlink look to include an appropriate clause in the employment contract.

The calculation of the proposed trainee step change for the Revised Proposal is shown below.

Table 5-7 Forecast net Trainee costs 2025–30

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Trainee cost	-	0.17	0.18	0.18	0.18	0.70
Less immediate savings in contractor costs	-	0.07	0.07	0.07	0.07	0.27
Net step change	-	0.11	0.11	0.11	0.11	0.44

Numbers may not add due to rounding

5.2.1 Compliance with National Electricity Rules

The proposal is consistent with the requirements of the National Electricity Rules.

The total operating expenditure proposed by Directlink is required to maintain the quality, reliability security of supply of prescribed transmission services⁸. The forecast operating expenditure is the lowest long term cost for undertaking the activities necessary to maintain the ongoing operating of Directlink to the expected end of its economic life⁹.

The Trainee step change represents the identification of a means to lower future operating costs below what would be otherwise incurred if no action is undertaken and therefore is consistent with National Electricity Rules operating expenditure criteria.

⁸ cl 6A.6.6(a)(3)(iii)

⁹ cl 6A.6.6(c)(1),(2) and (3)

5.3 End-of-life costs

The costs to remove the Directlink Interconnector and restore the site in the future will need to be recovered. Directlink had proposed to recover \$4.7 million from customers over the 2025–30 Proposal Period but the AER did not accept this approach given the:

- Uncertainty around the quantum of costs
- Uncertainty around the timing of when such costs will be incurred, and
- The relatively small impact on customers electricity bills from collecting the costs in a future period when they can be more reliably estimated.

They also questioned whether customers who are using the interconnector today should fund all the costs, when future customers may also benefit through improved safety, visual and community amenity and environmental benefits. This view is contrary to that of Directlink’s RRG, who believe that the customers who benefit from the Directlink asset should be the ones who pay for these costs.

Directlink accepts the AER’s decision and will instead determine an appropriate solution for recovering these costs with stakeholders outside of the regulatory reset process. This concept was raised with the RRG in the recent meeting and stakeholders supported such an approach. The outcomes of these future discussions will inform the next steps and any proposed recovery of the costs in subsequent regulatory control periods.

5.4 Transmission Determination costs

Forecast Transmission Determination costs represent external resource costs (consultants and external experts) specific to the compilation of Directlink’s Proposal. Examples of such costs include obtaining legal advice or contracting independent engineers for an assurance report on the costs of a major capital expenditure project. These costs do not include recovery of any APA group expenditure or any stakeholder engagement costs.

Directlink’s Proposal included \$0.3 million for these costs within capital expenditure, consistent with accounting advice that had been received. The AER did not approve the costs on the basis they are not related to asset replacement and are more akin to operating costs.

As a result, these costs have been included as an operating expenditure step change in the Revised Proposal. In terms of meeting the AER’s expectations for a step change:

- The associated costs are not included in the 2022–23 base year, so, as a result, are not capable of being managed through the forecast operating expenditure or the inbuilt provision for labour price growth
- The forecast is based on historical data of the actual costs incurred in compiling previous determinations, and
- The costs are not currently counted elsewhere – they have been moved from forecast capital expenditure to forecast operating expenditure.

Rate of return

Directlink Joint Venture

2025–2030 Revised Revenue Proposal



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6.1 Revised rate of return

The AER Draft Decision updated numerous rate of return aspects to align with their recent decisions and the latest data and forecasts.

Directlink agrees with all the AER's Draft Decision and has updated for more recent data unavailable to the AER at the time of their draft determination. The changes that Directlink agrees with and the elements for which additional information has been provided in the Revised Proposal are shown in the table below.

Table 6-1 Support for, and updates to, elements that impact rate of return

AER Draft Decision	Acceptance or updates contained in the Revised Proposal
Use of updated CPI rate for 2023–24	Accept as aligns with more recent data
Updated 2025–30 inflation forecasts	Accept but provide further updates aligned with the RBA's November 2024 <i>Statement on Monetary Policy</i> , noting these will change again for the Final Decision – see section 6.2 The calculation of the allowed rate of return and imputation credits for each regulatory year of the 2025–30 regulatory period can be found in the PTRM accompanying this Revised Proposal. Expected inflation
Change in debt raising costs from 8.29 basis points per annum (bppa) to 10.02bppa	Accept, but note that the higher capital expenditure put forward in the Revised Proposal (see chapter 4 Forecast capital expenditure) has increased forecast debt raising costs consistent with the operation of the AER's PTRM – see section 6.3 Debt raising costs
Updates to other rate of return components	Accept as aligns with more recent data, noting some components will again be updated for the Final Decision

The calculation of the allowed rate of return and imputation credits for each regulatory year of the 2025–30 regulatory period can be found in the PTRM accompanying this Revised Proposal.

6.2 Expected inflation

Directlink has forecast inflation using the method adopted in the AER's June 2020 final decision on the regulatory treatment of inflation.

The AER's Draft Decision was based on the RBA's August 2024 *Statement on Monetary Policy*. The Revised Proposal is based on the RBA's inflation rates from the November 2024 *Statement on Monetary Policy*. Directlink notes that the AER will update inflation forecasts again in its final decision.

Table 6-2 Forecast inflation

	2025–26	2026–27	2027–28	2028–29	2029–30	Geometric average
Expected inflation	3.10%	2.95%	2.80%	2.65%	2.50%	2.80%

6.3 Debt raising costs

The Revised Proposal forecasts higher capital expenditure than what the AER included in the Draft Decision – see chapter 4 [Forecast capital](#) expenditure. This higher expenditure increases forecast debt raising costs consistent with the operation of the AER’s PTRM as shown below.

Table 6-3 Forecast debt raising costs

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
Forecast debt raising costs	0.1	0.1	0.1	0.1	0.1	0.5



Incentive schemes

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7.1 Revised incentive schemes

The AER's Draft Decision accepted many aspects of Directlink's proposed incentive schemes – see [Table 1-1](#).

Directlink agrees with the AER's Draft Decision, but the inclusion of updated data has altered the EBSS and CESS scheme carryover. A summary of the Draft Decision elements and how data updates are reflected in the Revised Proposal are shown below.

Table 7-1 Support for, and updates to, elements that impact incentive schemes

Incentive scheme	AER Draft Decision	Acceptance or updates contained in the Revised Proposal
EBSS CESS	Use of updated CPI rate for 2023–24	Accept as aligns with more recent data
EBSS CESS	Updated 2024–25 inflation forecast	Accept but provide a further update aligned with the RBA's November 2024 <i>Statement on Monetary Policy</i> , noting this will change again for the Final Decision – see section 6.2 The calculation of the allowed rate of return and imputation credits for each regulatory year of the 2025–30 regulatory period can be found in the PTRM accompanying this Revised Proposal. Expected inflation
CESS	Did not accept exclusion of the Insulated-Gate Bipolar Transistor (IGBT) project	Accept noting risk associated with future large projects.
CESS	True-up for updated 2019–20 actual capital expenditure	Accept
STPIS	<ul style="list-style-type: none"> Service Component floors, targets and caps based on five years historical performance data up to and including calendar year 2022 Targets based on mean of the previous five years of performance actuals Use of @risk model 	Accept – complies with previous transmission determinations
STPIS	Market Impact Component based on historical performance data for the 7 years up to and including calendar year 2022	Accept – complies with the requirements of the STPIS

The remainder of this chapter provides supporting information for any changes put forward in the Revised Proposal and confirms the STPIS targets.

7.2 EBSS

The AER supported Directlink’s proposed EBSS carryover amounts but adjusted for the latest available inflation data.

The only changes put forward in the Revised Proposal relate to updates for 2023–24 actual operating expenditure and a more recent 2024–25 forecast inflation rate. The revised EBSS carryover amounts are shown below.

Table 7-2 Forecast EBSS carryover amounts

millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
EBSS carryover amount	0.2	(0.3)	(0.5)	-	1.2	0.6

7.3 CESS

The AER’s Draft Decision applies a CESS revenue increment amount of \$0.35 million (\$2024–25) across the Proposed Period, which was more than Directlink’s proposed decrement of \$0.04 million.

Directlink accepts the underlying changes in the AER Draft Decision in relation to including the IGBT obsolescence project and adjusting for the true-up for actual 2019–20 capital expenditure. The only changes put forward in the Revised Proposal relate to updates for 2023–24 actual capital expenditure and a more recent 2024–25 forecast inflation rate. The revised CESS revenue increments are shown below.

For a full description, including relevant explanatory material, of how the CESS will apply to Directlink in the 2025–30 period, see Directlink’s original Proposal and the AER Draft Decision.

Table 7-3 Forecast CESS revenue increments

Millions \$2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total
CESS revenue increments per NER 6.4.3(a)(5)	0.02	0.02	0.02	0.02	0.02	0.12
CESS carryover true-up for 2019–20	0.15	0.15	0.15	0.15	0.15	0.77
Total CESS	0.18	0.18	0.18	0.18	0.18	0.89

Numbers may not add due to rounding

7.4 STPIS

Directlink agrees with the AER's calculations for the Service Component and Market Impact Component included in the Draft Decision for STPIS.

- The Service Component provides a reward/penalty of +/- 1.25 per cent of MAR
- The Market Impact Component provides a reward or penalty of up to +/- 1 per cent of the MAR

Directlink appreciates that the AER will consider the outcomes of the current STPIS review in its final decision, but requests that the AER appropriately consider the organisation's ability to effectively incorporate a transition to any revised requirements by 1 July 2025.

There is no small scale incentive scheme or Demand Management Innovation Allowance Mechanism applicable to Directlink.

The STPIS floors, target and caps for 2025–30 are shown below. The calculations and input data are shown in the 2025–30 STPIS Model worksheet published as part of the AER's Draft Decision.

Table 7-4 Service Component floors, targets and caps for 2025–30

Parameter	Floor	Target	Cap
Unplanned outage circuit even rate:			
Circuit event rate – fault	1336%	673%	168%
Circuit event rate – forced	101%	47%	3%
Proper operation of equipment (number of events)			
Failure of protection system	4	1	0

Table 7-5 Market Impact Component parameter values for 2025–30

	Cap
Target	1,572
Unplanned outage event limit	267
Dollar per dispatch interval	14,162

Cost pass throughs

Directlink Joint Venture

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8.1 AER's draft decision on cost pass throughs

Directlink accepts the AER's Draft Decision in relation to cost pass throughs and the proposed definitions.

There are four types of pass through events that will apply to Directlink for the 2025–30 period:

- Insurance coverage event
- Insurer credit risk event
- Natural disaster event
- Terrorism event

The definitions for these events can be found in the AER's Draft Decision.



Pricing methodology and negotiating framework

Directlink Joint Venture

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9.1 Revised Proposal pricing methodology

Whilst the AER consider that Directlink's proposed pricing methodology for the 2025–30 period gave effect to, and was consistent with, the pricing principles in the Rules, they were not able to accept the proposed pricing methodology as it was not considered to be fully compliant with the information requirements of the latest pricing methodology guidelines.

Directlink has updated the proposed *Pricing Methodology* to address all the requirements of the August 2022 *Electricity transmission service providers pricing methodology guidelines*. The revised Pricing Methodology can be found in Attachment 04.

