EMCa
energy market consulting associates

kaihen CONSULTING

Marinus Link project – Response to the AER's Supplementary Draft Decision

ASSESSMENT OF REVISED RISK ALLOWANCE EXPENDITURE FOR STAGE 1

Public Version

Report prepared for:

AUSTRALIAN ENERGY REGULATOR

January 2026

Preface

This report has been prepared to assist the Australian Energy Regulator (AER) with its determination of a capex allowance of Marinus Link Stage 1 for the next regulatory period 2026 to 2030, consistent with the rules and guidelines that apply for consideration of actionable Integrated System Plan (ISP) projects in the National Electricity Market (NEM). The AER's determination is conducted in accordance with its responsibilities under the National Electricity Rules (NER).

This report covers a particular and limited scope as defined by the AER and should not be read as a comprehensive assessment of proposed expenditure that has been conducted making use of all available assessment methods. This report relies on information provided to EMCa by Marinus Link Pty Ltd and other parties. EMCa disclaims liability for any errors or omissions, for the validity of information provided to EMCa by other parties, for the use of any information in this report by any party other than the AER and for the use of this report for any purpose other than the intended purpose. In particular, this report is not intended to be used to support business cases or business investment decisions nor is this report intended to be read as a legal interpretation of the NER or other legal instruments.

EMCa's opinions in this report include considerations of materiality to the requirements of the AER and opinions stated or inferred in this report should be read in relation to this over-arching purpose.

Except where specifically noted, this report was prepared based on information provided by AER staff prior to 21 December 2025 and any information provided subsequent to this time may not have been taken into account. Some numbers in this report may differ from those shown in Marinus Link Pty Ltd's revised regulatory submission or other documents due to rounding.

Enquiries about this report should be directed to:

Gavin Forrest
Managing Director, Kaihen Consulting
gavin@kaihen.com.au

Prepared by
Gavin Forrest and Mark de Laeter, with input from Paul Sell

Date saved
4/02/2026 5:20 PM

Version
Final v1

Energy Market Consulting associates
ABN 75 102 418 020

Sydney Office
L25, 100 Mount Street, North Sydney NSW 2060
PO Box 592, North Sydney NSW 2059
contact@emca.com.au
www.emca.com.au

Kaihen Consulting
ABN 41 167 092 873

Perth Office
L28, 140 St Georges Terrace, Perth WA 6000
www.kaihen.com.au

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

Term	Definition
AER	Australian Energy Regulator
BoW	Balance of Works
CBS	Cable System, referring to the HVDC cable system - submarine and land cables
CDCS	Converter Design and Construct Station (also referred to as Converter Station Design, Supply & Installation)
CDSE	Converter Design and Supply of Equipment
E3 Advisory	E3 Advisory Pty Ltd
EMCa	Energy Market Consulting associates
FM	Force Majeure
HVDC	High Voltage Direct Current
IR	Information Requests (also referred to by MLPL as RFI - Request for Information)
ISP	Integrated System Plan
LCC	Land Cable Civils
MLPL	Marinus Link Pty Ltd
NEM	National Electricity Market
NER	National Electricity Rules
QCSRA	Quantitative Cost and Schedule Risk Assessment
R&C	Risk & Contingency
RCP	Regulatory Control Period
RRP	Revised Revenue Proposal
SME	Subject Matter Expert
SRA	Schedule Risk Analysis

EXECUTIVE SUMMARY

Background

1. In December 2025 Marinus Link Pty Ltd (MLPL) has submitted its response (the "*revised submission*") to the Australian Energy Regulator's (AER) Supplementary Draft Decision. The AER has requested that EMCa determine whether and if so on what grounds, any aspect of that submission results in a change to our report to the AER on the reasonableness of the proposed risk allowance (our "*Initial Review*") for the Marinus Link project - Stage 1.
2. As part of its proposed overall capex allowance of $3,498.4 million ($real 2023), MLPL has proposed a risk allowance of $364.9 million ($real 2023) following further analysis of its requirements. This is an increase relative to its previously proposed risk allowance of $361.5 million. MLPL has included attachments to its *revised submission* from its advisers, a new and updated Risk Model and new and updated supporting information for individual risk items including for those items previously proposed.
3. The revised risk allowance (the "*Revised base*") proposed by MLPL is largely based on the same risks and assumptions as the original risk allowance, but with the addition of some new risks. The new risks are in response to the AER's draft decision, in which it rejected certain pass through events that MLPL had originally proposed.
4. MLPL has also provided analysis that would include a further increase to its risk allowance that it considers would be required if further proposed pass through events are not accepted by the AER in its Final Decision (the "*Revised scenario*").
5. We have re-assessed the impact of the issues identified in our *Initial Review* to take into account the new information provided by MLPL in its submission, for the risks that it had previously proposed (with a focus on the top-30) and for the new risks that it has now proposed (our "*Updated Review*").

Our revised assessment

Basis for numbers included in our assessment

6. For the purposes of our assessment, we have assumed that MLPL's proposed risk allowance of $364.9 million ($real 2023) corresponds with the probabilistic ("Monte-Carlo P50") value of $414.3 million (nominal) and the deterministic ("BetaPert expected value") value of $452.3 million (nominal) that MLPL submits as a part of its *revised submission*.[1]
7. In absence of the Monte-Carlo risk model, we have relied on the deterministic risk assessment that MLPL has undertaken in its Risk Model, and the deterministic value of risk that is produced from its Risk Model, in order to communicate findings from our assessment on a consistent basis. Such findings could then, to the extent deemed necessary, be incorporated back into MLPL's Monte-Carlo modelling.

Summary of our revised assessment

8. The AER has asked EMCa to consider if any aspect of MLPL's *revised submission* results in a change to our *Initial Review* findings on the reasonableness of the risk allowance.
9. We consider that the issues identified in our *Initial Review* have been largely addressed in MLPL's *revised submission.* Whereas in our *Initial Review* we considered that MLPL's

[1] MLPL Project Risk Model (AER Submission) - December 2025.

proposed risk allowance was considerably overstated, our updated assessment is that MLPL has now largely justified its proposed (updated) allowance.

Assessment of risks included in the original risk allowance

10. By comparison with our *Initial Review*, we are satisfied that MLPL's *revised submission*:
    - Has removed individual risks that it considers are now closed
    - Has substantially mitigated the concerns raised in our *Initial Review* regarding MLPL's application of its methodology through the provision of new and updated information, and
    - Supports that MLPL has taken reasonable steps to provide additional context and explanations for the selection of its input assumptions that has led to its selection of probabilities and consequences.
11. Notwithstanding this revised assessment, we have identified some areas that we consider duplicate risk events or other elements of MLPL's proposed capex allowance. However, we consider that, subject to review by the AER including for issues that extend beyond the scope of our review, the issues that we have identified are not likely to have a material impact to the revised risk allowance.

Assessment of new risks included in its *Revised base* case

12. We consider that MLPL has not sufficiently justified the inclusion of new risk events that it has proposed in its *Revised base* case risk allowance. Based on our review of the *revised submission* we consider that:
    - The new risk events are responding to the same or similar risk causes as existing risks, and are similarly derived, and
    - MLPL has not sufficiently demonstrated that the additional risk allowances are prudent, or that they are reasonable to include in addition to the existing provisions already contained within other parts of its capex allowance.

Assessment of new risks included in its *Revised scenario* case

13. For the reasons stated above, we similarly consider that MLPL has not sufficiently justified the inclusion of new risk events in the *Revised scenario* case risk allowance which MLPL proposes in the event that AER rejects certain cost pass through events in its final decision. We take this view having reviewed the proposed risk events independently of the AER's review of the proposed pass through events and based on the information provided by MLPL to support the risk event.

Implications to proposed expenditure for revised risk allowance

14. We conclude that the issues that we have identified in the current *Updated Review* lead to an overstatement of the proposed risk allowance. However, we consider that the new and updated information that MLPL has provided clarifies and now provides adequate justification for a significant quantum of the risk allowance that was not initially adequately justified and which, absent such justification, we found to be overstated at that time. Consequently, our finding now is that MLPL's revised risk allowance is overstated only to a relatively small degree.
15. In considering the extent to which MLPL's proposed risk allowance is overstated, we focussed on issues that materially contribute to the level of overstatement of risk allowance that we had initially identified, on the basis that a level of uncertainty exists in any estimate of risk-cost allowance.

16. We consider that the BetaPert expected value of risk for its *Revised base* case is overstated by approximately 3% to 4% of the BetaPert expected value of risk. We reach this conclusion after adjusting for a level of duplication we identify and for new risks that MLPL has not reasonably justified. Our revised assessment compares with a range of 30% to 45% that we considered that MLPL had overstated is risk allowance from our *Initial Review*.

17. If MLPL was to apply its *Revised scenario* case as the basis of its proposed risk allowance, being a further increase to the *Revised base* case, we consider that based on the issues that we identified, the *Revised scenario* case is overstated by approximately 7% to 8%.

18. Our revised assessment represents a much lower percentage of the overall project cost that MLPL has proposed for the Marinus Link project. Given the complexity of the project and contractual arrangements, taking account also of the range of comparative risk allowances provided by MLPL, and notwithstanding the factors above that could be considered to represent an overstatement, MLPL's proposed risk allowance could be considered to be within a reasonable range for a project of this nature and relative to its total estimated cost.

Our response to criticisms by MLPL and its advisers included in its revised submission

19. A key finding of our *Initial Review* was that individual risks were not sufficiently supported by evidence to demonstrate the reasonableness of the assumed risk parameters. This related to the application of MLPL's risk assessment methodology, and not the selection of the methodology itself.

20. In its *revised submission* MLPL has provided new and additional supporting contextual and other information, which we consider is, in general, the type of information that we had expected MLPL to have relied upon in the development of its original risk allowance estimate, and which we had requested as part of our *Initial Review* but did not receive. We observe that a proportion of the additional supporting information provided in MLPL's *revised submission* has been developed from more recent investigation and analysis by MLPL and its advisers and which is pertinent to our *Updated Review*.

21. Our *Initial Review* and the current *Updated Review* is based on the information provided, including the assumptions that MLPL has made and the methodologies that it has employed. This approach relies on MLPL's ability to provide sufficient information and evidence to credibly demonstrate that its proposal meets the NER expenditure criteria. We are firmly of the view that the onus is on MLPL and not the AER and/or its technical consultant(s) to provide sufficient information and evidence to support its proposed allowance for the purpose of the regulatory review process.

22. We reject claims by MLPL and its advisers that we should have undertaken a different body of work involving detailed risk engineering reviews, and bespoke risk modelling. We similarly reject claims by MLPL and its advisers that, to the extent that MLPL did not provide sufficient evidence to support aspects of its proposed expenditure, EMCa should have attempted to develop such evidence or, in its absence, should not have formed any conclusion(s).

23. We consider that the methodology we have applied to both our *Initial Review* and the current *Updated Review* is consistent with the scope as requested by the AER; and is fit-for-purpose in providing technical advice as to whether MLPL has proposed an efficient and prudent expenditure forecast that is consistent with the requirements of the National Electricity Rules (NER) and aligned with the AER guidance materials.

24. In addition, several statements made by MLPL and its advisers in its *revised submission* are based on an incorrect interpretation of statements made in our October 2025 report. We have not sought to respond to these individual statements in this report other than to the extent that it is necessary to clarify our findings consistent with the overarching purpose of this report.

1 INTRODUCTION

The AER has engaged EMCa (in association with Kaihen Consulting) to advise on the revised risk allowance included by MLPL in its Response to the AER's Supplementary Draft Decision – Stage 1 – Part B (Construction costs)[2] for the regulatory period 2025 to 2030.

We have undertaken a high-level review of the new information provided by MLPL to support its revised risk allowance, with a particular focus on the top-30 risks, to determine whether any aspect of that submission results in a change to our original advice to the AER on that matter, and if so on what grounds.

1.1 Purpose of this report

25. The purpose of this report is to provide the AER with advice to assist it with assessing MLPL's response to the AER's Supplementary Draft Decision for Part B construction costs of Marinus Link stage 1, submitted by MLPL. Specifically, we assessed whether and if so on what grounds, any aspect of that submission results in a change to our original advice to the AER on the reasonableness of the proposed risk allowance.

1.2 Scope of requested work

26. The AER's definition of the scope of the required work is reproduced in Figure 1.1.

2 The scope of our review comprises all proposed risk costs included in the proposed risk allowance.

Figure 1.1: AER's definition of the scope of required work

AER's detailed statement of work

The consultant is required to provide advice and a report on the reasonableness of MLPL's submission on the AER's Supplementary Draft Decision for the proposed risk allowance, specifically to advise whether, and if so on what grounds, any aspect of that submission results in a change to our original advice to the AER on that matter.

The AER has a requirement for a consultant with direct experience is assessing risk costs for high profile and large cost electricity transmission projects to provide expert technical analysis and advice to assist in assessing MLPL's submission on the AER's Supplementary Draft Decision on risk allowance. Particularly within a tight timeframe. These services are required to enable AER staff to critically review the proposed forecast expenditure and make a final decision on whether it is prudent and efficient.

- *The consultant will be provided with all relevant material MLPL provides to the AER in its submission on the AER's Supplementary Draft Decision. The consultant is to have regard to this information and any other information it has available to it in coming to its advice.*
- *The consultant will set out its advice and findings in a report that will be published with the AER's Final Decision.*
- *The consultant is to engage with MLPL as necessary including any information requests, through the AER.*

27. Consistent with our *Initial Review* on the reasonableness of the proposed risk allowance expenditure, we undertook a limited scope review of the risk allowance and which did not extend to an independent review of the proposed expenditure for other parts of the proposed capex for the Marinus Link project. We acknowledged in our *Initial Review* that there was an interaction or dependency between these elements of the proposed capex allowance and the risk allowance, and based on a reasonable interpretation of information provided to us, made conclusions concerning the reasonableness of the proposed risk allowance.

28. Our review of the new information provided comprised:

- Undertaking a desktop review of the claims and new information included in MLPL's submission
- Identifying any new information or reasoning that might be relevant to our report
- Expanding and/or clarifying the reasoning and evidence to support our original findings or, where applicable, amend our original findings, and
- Summarise our findings and the resultant implications of these issues.

29. At the request of AER, we engaged with MLPL and its advisers to clarify the expectations in supporting its risk allowance for its *revised submission*, prior to submission to the AER.

30. The assessment in this report is based on the information provided to us through this process. After receiving the submission material on 21 December 2025, a draft version of this report was provided to the AER in mid-January 2026, followed by a final report at the end of January 2026.

1.3 This report

1.3.1 Report content

31. Our main findings are summarised in the Executive Summary at the beginning of this report.

32. In subsequent sections, we describe our assessment and conclusions regarding the new information provided by MLPL:

- In section 2, we provide a summary of the revised risk allowance proposed by MLPL
- In section 3, we provide our assessment of new information provided by MLPL on the methodology applied by MLPL in developing its proposed risk allowance, and
- In section 4, we provide our consideration of specific risk-cost allowances, focussing on the top-30 risks, and the aggregate risk allowance proposed by MLPL.

1.3.2 Basis for numbers

33. MLPL has presented its submission in real FY 2023 terms and also in Nominal terms. We have adopted the denominations as presented in the various sources of information from MLPL, clearly annotating the cost basis in our report.

2 EXPENDITURE SUMMARY OF MLPL'S REVISED RISK ALLOWANCE

As outlined in section 1, the scope of our review is limited to consideration of new information to support the revised risk allowance that MLPL has proposed for the Marinus Link project.

In its Supplementary Draft Decision, the AER reduced the risk allowance that MLPL proposed by 45% from $361.5 million[3] to $198.7 million ($real 2023).

In its response to the AER's Supplementary Draft Decision, MLPL has proposed an increase to its risk allowance to $364.9 million ($real 2023) following further analysis of its requirements. The revised risk allowance is largely based on the same risks and assumptions as the original risk allowance, but does include the addition of some new risks.

2.1 What MLPL has proposed

In its latest submission, MLPL has increased its proposed risk allowance

34. In its response to the AER's Supplementary Draft Decision, MLPL has proposed an overall capex allowance of $3,498.4 million ($real 2023). Its *revised submission* proposes an increase to its risk allowance from $361.5 million to $364.9 million ($real 2023), and provided the following summary explanation:[4]

> *'In light of the further analysis conducted by our independent experts, we have updated the risk allowance to $364.9 million ($real 2023), which is closely aligned to our previous proposal. The slight increase in the risk allowance reflects the impact of the AER's decision to remove pass through events relating to biodiversity costs and contractor insolvency, which MLPL has accepted in this response. The updated risk allowance continues to benchmark favourably and is closely aligned with the AER's risk allowance decision for HumeLink, which we consider to be the most appropriate comparator project.'*

Information provided by MLPL to support its proposal

35. MLPL has provided the following information, that is of most relevance for our review:

- MLPL response to the AER's Supplementary Draft Decision ("*revised submission*")
- Attachment 2 - E3 Advisory Report - Response to AER on Risk Allowance
- Attachment 3 - Aurecon Response to the AER's Supplementary Draft Decision, and
- MLPL Project Risk Model (AER Submission) - December 2025 ("*Revised Risk Model*").

36. In addition, MLPL has provided supporting information for a number of risks, and a copy of its SRA Report.[5]

---

3 On 17 October 2025, MLPL proposed a reduction of $1.5 million ($real 2023) to its risk allowance from $363 million ($real 2023) included in its RRP to $361.5 million ($real 2023), which it described as being in response to its review of the latest information.

4 MLPL response to AER Supplementary Draft Decision. Page 6.

5 E3 Advisory, SRA Report – Marinus Link Stage 1. August 2025.

MLPL has included an additional risk scenario in its *revised submission*

37. In addition to updating of the proposed risk allowance in its *revised submission*, MLPL has included a further risk scenario. Whilst MLPL has not included an alternate risk allowance for this scenario, MLPL refers to analysis by its advisor E3 Advisory:[6]

> *'The E3 Advisory report also sets out the risk allowance that would be required for the contractor force majeure event and the unavoidable contractor variations event if the AER does not accept these pass through events in its Final Decision.'*

38. For the purpose of our assessment, we have adopted the following terminology to represent the risk values that we have reviewed:

- *'Original'* – this was the version we relied upon in our *Initial Review*, presented as part of MLPL's Revised Revenue Proposal (RRP) submission provided in September 2025
- '*Revised base*' – this is the version updated by MLPL, and which is the basis for our assessment of the proposed risk allowance provided in December 2025. In the *Revised Risk Model*, the worksheets are denoted as 'Dec-25.'
- '*Revised scenario*' – this is a further version submitted by MLPL which it describes as being required in the event that the AER does not approve the additional cost pass through events that it has proposed in December 2025. In the *Revised Risk Model*, the relevant worksheets are denoted as 'Dec-25 scenario.'

39. We consider both the *Revised base* and *Revised scenario* in subsequent sections of this report.

We have relied on the deterministic risk value as the basis for our assessment

40. For the purposes of our assessment, we have assumed that the proposed risk allowance of $364.9 million ($real 2023) corresponds with the probabilistic ('*Monte-Carlo P50'*) value of $414.3 million (nominal) and the deterministic ('*BetaPert expected value*') value of $452.3 million (nominal) that MLPL submits as a part of its *revised submission*.[7]

41. In absence of the Monte-Carlo modelling, we have relied on the deterministic risk assessment that MLPL has undertaken in its *Revised Risk Model*, and the deterministic value of risk that is produced from its *Revised Risk Model*, in order to communicate findings from our assessment on a consistent basis. Such findings could then, to the extent that it's deemed to be necessary, be incorporated back into MLPL's Monte-Carlo modelling. We show the respective values of risk as determined by these methods in Table 2.1.

Table 2.1: Comparison of risk values from the Original and Revised risk allowance ($millions, Nominal)[8]

	Original	*Revised base*	*Revised scenario*
Probabilistic risk value			
Monte-Carlo minimum	69.4	24.4	87.1
Monte-Carlo P1 (1% percentile)	169.0	n/a	n/a
Monte-Carlo P50 (50% percentile) analysis	411.8	414.3	440.7
Deterministic risk value			
BetaPert expected value	448.6	452.3	471.8

Source: EMCa derived from Risk Models provided by MLPL

6 MLPL Response to AER Supplementary Draft Decision. Page 31.

7 MLPL Project Risk Model (AER Submission) - December 2025.

8 Sourced from MLPL Project Risk Model (AER Submission) dated September 2025 provided in response to IR006 Question 7. This value does not include the further reduction of $1.5 million ($ real 2023) that MLPL had applied, as we were not provided with an updated Risk Model at that time.

2.2 Comparison of MLPL's proposals

42. In Table 2.2 we provide a comparison of the risk allowance proposed by MLPL as recorded in its respective Risk Model by risk category.

Table 2.2: Comparison of BetaPert expected value risk by risk category ($millions, Nominal)

Risk category	Original		Revised base		Revised scenario	
	Number of risks	BetaPert approx.	Number of risks	BetaPert approx.	Number of risks	BetaPert approx.
Compliance and Legal	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Environmental	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Financial and Revenue	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Health and Safety	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Procurement and Commercial	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Project Delivery	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Reputation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Technical / Design / Commissioning	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Risk & Contingency (R&C) Matters	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Blank	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Grand Total	**61**	**448.6**	**61**	**452.3**	**62**	**471.8**

Source: EMCa derived from Risk Models submitted by MLPL

43. We observe that the key changes for the *Revised base* are associated with the 'Project Delivery' and 'Procurement and Commercial' categories of risk, and also an unlabelled risk category included for the *Revised scenario*. In Table 2.3 we show the changes that we determine MLPL has applied to its Risk Model between versions.

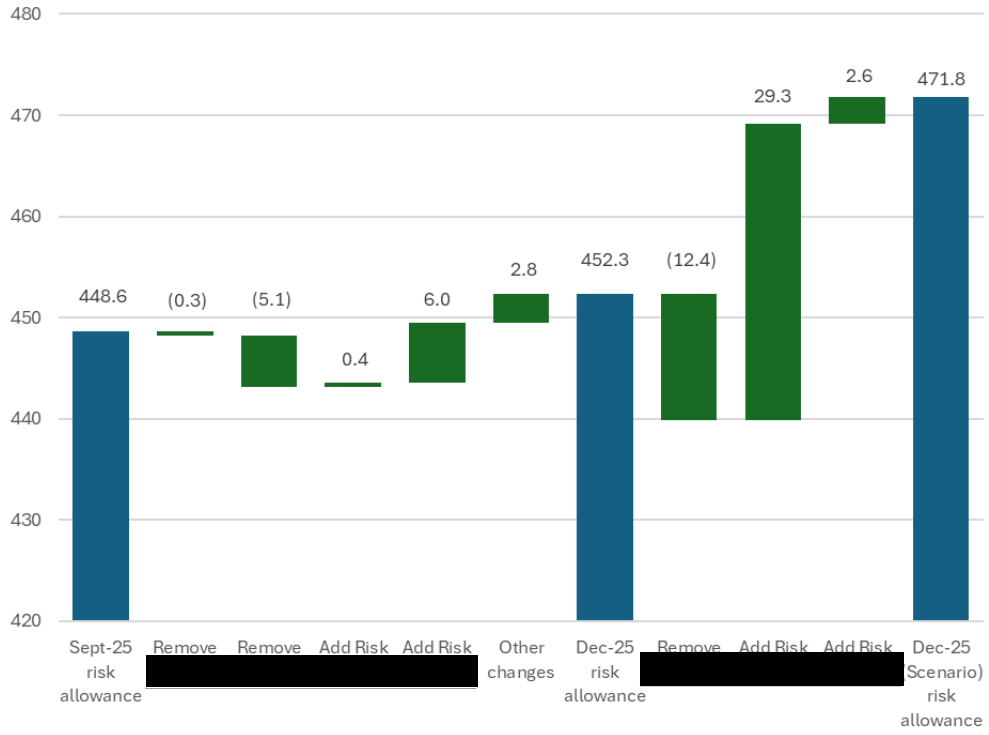
Table 2.3: Summary of changes to Risk Models ($millions, Nominal)

Risk	Count of risks (incl R&C Matters)	BetaPert expected value	Changes relative to the original submission
Original	61	448.6	n/a
Revised base	61	452.3	Remove Risk ID [redacted] Add Risk ID [redacted] Various changes to other risks
Revised scenario	62	471.8	Remove Risk [redacted] Add Risk ID [redacted] Various changes to other risks (same as *Revised base*)

Source: Derived by EMCa from Risk Models provided by MLPL

44. In Figure 2.1, we show these changes as a waterfall chart.

Figure 2.1: Summary of changes to BetaPert expected value of risk ($millions, Nominal)



Source: Derived by EMCa from Risk Models provided by MLPL

45. From Table 2.3 and Figure 2.1, we observe that for the *Revised base* case, MLPL has removed two sources of risk (-$5.4 million) but has added allowances for the biodiversity event and contractor insolvency event not included as pass through events (+[redacted]), which along with other adjustments has resulted in the slight uplift in the BetaPert expected value of risk. The 'other' changes result from updating the input assumptions, namely:

- Balance of Works (BoW) delay rate and work rates, and
- Updated probability for one risk.

46. For the *Revised scenario* case, the increase in the BetaPert expected value of risk including a contractor force majeure event and a claimed unavoidable contractor variations event if the AER does not accept these as pass through events in its Final Decision.

3 ASSESSMENT OF NEW INFORMATION ON APPLIED METHODOLOGY

Our review is based on the information provided by MLPL and the AER, within the scope of our review as outlined in section 1 and section 2.

In its documentation, MLPL was critical of the assessment approach undertaken by EMCa in our *Initial Review*. We have carefully considered the claims and assertions made by MLPL. We consider that the methodology we have applied to our review is consistent with the scope as requested by the AER and is fit-for-purpose in providing technical advice as to whether MLPL proposed an efficient and prudent expenditure forecast that is consistent with the requirements of the NER and aligned with the AER guidance materials.

In our *Initial Review* and in the current *Updated Review*, we have undertaken a governance level review that was supported by a bottom-up semi-quantitative review of the risk information provided by MLPL, including the *Revised Risk Model*. This approach, and the assessment outcomes, relies on the information provided to us by MLPL, including the evidence and assumptions that MLPL has made and the methodologies that it has employed.

MLPL's revised risk allowance is based on the same methodology that we had reviewed in our *Initial Review*. We find that the new information provided in support of its originally identified risks provides additional evidence and rationale for the risk events that it has proposed, and which was not made available to use for our *Initial Review*. We present our review of the new information provided by MLPL and its advisers in section 4 of this report.

3.1 Introduction

47. In this section, we consider the new information provided by MLPL in its submission in relation to the methodologies it had applied in forecasting its risk allowance, and whether this leads us to alter the findings set out in our *Initial Review*.

48. Our assessment of the methods applied by MLPL is not intended to be a comprehensive review, nor does it purport to represent all methods that MLPL has applied in determining its risk allowance, or more generally its capex requirements for the Marinus Link project. Rather we focus primarily on matters which we consider impact the forecast risk allowance expenditure requirements, and as detailed in the subsequent sections of this report.

3.1.1 Contextual matters

49. We acknowledge the complexity of the Marinus Link project, including that the project:

- Is being delivered across multiple state and commonwealth jurisdictions
- Is not directly comparable to other electricity transmission projects, and
- Is being delivered using multiple contracts.

50. The industry has been subject to significant upward pressure in pricing, with infrastructure projects more generally being exposed to large cost increases. The Marinus Link project, like other infrastructure projects is exposed to these cost pressures, and related constraints that may develop for the supply of labour, materials and plant for infrastructure delivery.

51. In setting a prudent risk allowance, the AER must have consideration to the efficient level of risk that is reasonably required for the project by an efficient and prudent operator managing and mitigating the identified risks to a practicable extent. This is included in the capex allowance for revenue determination purposes, to preserve the incentive to invest efficiently. Other regulatory mechanisms exist and work together with the capex allowance to ensure that stakeholders interests are protected, but these other mechanisms are not matters covered in this report.

52. As established by AER guidelines,[9] and determinations of earlier projects,[10] setting of a risk allowance does not imply that all potential cost impacts to the project are completely covered, or result in completely de-risking the project.

3.1.2 Technical review of MLPLs proposal

53. The AER engaged EMCa as its technical consultant to help identify whether the proposed risk allowance was reasonable, and to the extent that EMCa found evidence of issues that may lead to an allowance that was not reasonable, prudent or efficient in accordance with the NER, then to provide an alternate estimate. As described in our October 2025 report,[11] our approach to this task incorporated an evidence-based assessment of the quality of MLPL's methodology, and application of reasonable inputs and assumptions to that methodology. Our assessment was based on a review of the information provided by MLPL to support these matters, including its submission materials, responses to information requests,[12] and testing of our understanding with MLPL staff.

54. We consider that our review approach is consistent with the NER and published guidelines that were (and remain) in effect prior to our assessment of MLPL's risk allowance. EMCa has applied this same 'fit-for-purpose' assessment approach in multiple prior reviews of regulatory expenditure proposals of Australian transmission and distribution network service providers.

3.1.3 General observations

55. Under the propose/respond regulatory model in place in the National Electricity Market (NEM), the onus is on MLPL as the NSP to present clear, consistent and compelling information and evidence to the AER and its consultants in support of its proposed capex allowance. The regulatory review process has provided MLPL with the opportunity to review and respond to the AER's Supplementary Draft Decision and matters raised in reports provided to the AER, such as our October 2025 report. To the extent that any such reports indicate that MLPL did not provide sufficient information to support its proposed risk allowance, MLPL has had the further opportunity to provide such additional information as it deems necessary and/or appropriate through its response.

56. MLPL has chosen not to substantively revise its risk allowance in light of the AER's Supplementary Draft Decision. MLPL has sourced input from its advisors to provide additional supporting information, and which we have taken into account in our review.

57. In its documentation, MLPL and its advisers have been critical of the assessment approach undertaken by EMCa in our *Initial Review*. We have carefully considered the claims and assertions made by MLPL.

58. We reject claims that we should have undertaken a different body of work involving detailed risk engineering reviews, and bespoke risk modelling. Further, and to the extent that MLPL did not provide sufficient evidence to support aspects of its proposed expenditure, MLPL

---

9 AER Final Guidance note – Regulation of actionable ISP projects. March 2021.

10 Including Transgrid HumeLink contingent project, AER Determination | Transgrid | HumeLink Stage 2 Delivery Contingent Project. August 2024.

11 Assessment of proposed risk allowance expenditure - Marinus Link FINAL v3 [PUBLIC]. EMCa. October 2025.

12 We issued two information requests, each making similar requests for artefacts and evidence that MLPL had relied upon in determining the costs and assigned probabilities for individual risks included in its risk allowance.

(and its advisors) have stated that EMCa should have attempted to develop such evidence or, in its absence, should not have formed any conclusion(s).

59. We consider that the methodology we have applied to our review is consistent with the scope as requested by the AER and is fit-for-purpose in providing technical advice as to whether MLPL has proposed an efficient and prudent expenditure forecast that is consistent with the requirements of the NER and aligned with the AER guidance materials. This approach relies on MLPL's ability to provide sufficient information and evidence to credibly demonstrate that its proposal meets the NER expenditure criteria. We are firmly of the view that the onus is on MLPL and not the AER and/or its technical consultant(s) to provide sufficient information and evidence to support its proposed allowance for the purpose of the regulatory review process. Consistent with this, our review is based on the information provided, including the assumptions that MLPL has made and the methodologies that it has employed.

60. In addition, several statements made by MLPL and its advisers are based on an incorrect interpretation of statements made in our October 2025 report. We have not sought to respond to these individual statements in this report other than to the extent that it is necessary to clarify our findings consistent with the overarching purpose of this report.

3.2 Assessment of MLPL's methodology for determining risk-costs

3.2.1 Application of MLPL's risk assessment methodology

We considered that the method for determining a risk allowance was reasonable

61. In our *Initial Review* we considered that the method adopted by MLPL to determine a risk allowance was consistent with AER guidelines, and that many of the risks and uncertainties identified by MLPL for the Marinus Link project stage 1 are reasonable. As stated in our October 2025 report:[13]

> *'The principle of including a probability-weighted allowance for asymmetric risks that are likely to occur, above those included in the cost estimate, is consistent with the AER's guidelines.'*

Our concerns related to how this method was applied, and the evidence that MLPL was able to provide in accordance with AER guidelines

62. In our *Initial Review*, we raised concerns in relation to the extent to which MLPL demonstrated[14] '*how its risk assessment represents reasonable and realistic expectations of risks that could be realistically encountered*.'

63. Our assessment found evidence that MLPL's application of its methodology for quantifying the identified risks results in an overstatement of the risk-cost allowance that it proposes for the Marinus Link, Stage 1 project. Specifically, based on the information provided to us we found that:

- The combination of likelihood and consequence applied by MLPL as a part of its 'bottom-up' workshop-based assessment, resulted in an over-estimation of the proposed risk-cost allowance – we found examples where the assessment of residual risk and the assignment of probability of occurrence were not sufficiently matched, such that the residual consequence (expressed as risk-cost) was over-estimated

[13] Assessment of proposed risk allowance expenditure - Marinus Link FINAL v3 [PUBLIC]. EMCa. October 2025.

[14] AER Final Guidance note – Regulation of actionable ISP projects. March 2021.

- Some risks were not sufficiently justified – a key tenant of the AER guidance material is that MLPL '*comprehensively and transparently identify and assess the different project risks for which it is seeking a cost allowance'*,[15] and
- Some risks were presented with an upward bias in the estimate of risk-cost – including where the worst case estimate appeared to reflect an extreme and very low likelihood case, such that, based on the evidence provided, it did not present a credible estimate when we compared it to MLPL's assigned likelihood of occurrence.

64. In its response, MLPL through its advisors has provided additional reference material that it claims supports its position that the methodology that it followed aligns with best practice. As noted above, our concerns are with the application of its methodology and our review sought to test that the application of MLPL's methodology did not give rise to potential bias.

65. MLPL's advisor, E3 Advisory stated that (emphasis added):[16]

> *'E3 Advisory's process was structured, **evidence-based** and designed to ensure rigour and compliance with the AER's guideline and the Rules requirements.'*

66. We found instances where the 'evidentiary' support provided with the regulatory submission was not adequate, so as to test and validate the assumptions that MLPL had applied in determining its risk allowance. We have now reviewed the additional materials provided by MLPL and its advisors in support of its *revised submission*.

Influence of extreme values, or combinations of assumptions, were not sufficiently justified

67. In response to our October 2025 report, and specifically our review of data in the MLPL Risk Model[17] included in our October 2025 report, MLPL and its advisers detailed how its approach aligned with industry practice including Infrastructure Australia (IA) guidelines.

68. We reviewed the reference to IA guidance materials cited by E3 Advisory.[18] We did not undertake risk modelling, nor did we represent the semi-quantitative analysis as being a replacement for risk modelling. The semi-quantitative analysis presented in our report was presented as being based on the Risk Model that MLPL had provided with its submission and values relied upon by MLPL in its BetaPert analysis as an approximation only.

69. We agree with E3 Advisory's statement that if a risk does not occur, then the impact is zero, however the modelling indicates that MLPL has assumed that the minimum value (or floor) was a materially positive number for each risk, and in aggregate.

70. Based on E3 Advisory's updated advice, the minimum level of risk included in its *revised submission* for its *Revised base* case is $26 million[19] which is similar to the $24 million included in the *Revised Risk Model* as we have shown in Table 2.1. Using the same approach, we looked back at the original submission and found that a minimum (or floor) value of $69 million was determined from the risk modelling at that time. We remain of the view that, a high minimum value is indicative of a potential upward bias in its estimate of risk allowance, though not definitive in itself. The approximations included in our October 2025 report, similarly show a large non-zero minimum value of risk.

71. The IA guidance note referred to by E3 Advisory also refers to removing the influence of extreme values, to remove potential bias and in this case the anchoring effect:[20]

---

15 AER Final Guidance note – Regulation of actionable ISP projects. March 2021. Page 17.

16 Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance. December 2025. Page 24.

17 MLPL Project Risk Model (AER Submission) dated September 2025 provided in response to IR006. Question 7.

18 Infrastructure Australia, Guidance-note-3A-probabilistic-cost-estimation-v2 accessed at https://investment.infrastructure.gov.au/sites/default/files/documents/guidance-note-3A-probabilistic-cost-estimation-v2.pdf

19 Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance. December 2025. Page 29.

20 Infrastructure Australia, Guidance-note-3A-probabilistic-cost-estimation-v2 accessed at https://investment.infrastructure.gov.au/sites/default/files/documents/guidance-note-3A-probabilistic-cost-estimation-v2.pdf

'The worst-case and best-case assessment are important parts of the process, to break the anchoring effect, but they are no[t] used in the model. It is important that they are both plausible and extreme so that they free participants to consider realistic levels of variation of the values used in the model, the P10, most likely and P90 values.'

72. The process described by E3 Advisory appears to broadly align with the IA guidance, however absent evidence that the application of its methodology has moderated the upper and lower boundaries, our October 2025 report stated that the distribution appeared overly influenced by extreme values which occur rarely and was upwardly biased.

3.2.2 Risk Model

We have relied on the proposed risk-cost allowances documented in the *Revised Risk Model* provided with the submission

73. For the purpose of our *Initial Review* and this updated assessment, we have focused on the risk-cost allowance provided in MLPL's *Revised Risk Model*,[21] which is also referred to by MLPL as the risk register. This is a deterministic value of risk expressed as the BetaPert expected value and is prior to the application of risk modelling using Monte-Carlo analysis.

74. Our *Initial Review* focused on excluding the individual risks that we considered did not meet the guidance note expectations, or that should be adequately covered by the allowances provided elsewhere in the proposed capex allowance. In other cases, we adjusted the probability or proportion of input costs that MLPL had assumed, based on the information we had available to us, in order to arrive at an alternative estimate. These adjustments led to a bottom-up estimate that we derived based on MLPL's BetaPert expected value methodology, and a further proportional adjustment (based on the original submission) to take account of MLPL's probabilistic risk modelling, including its Monte-Carlo analysis.

75. For example, in our October 2025 report, we made it clear that we have relied on this model and its contents in our review, as we were not provided with and therefore had no means to review the detailed probabilistic risk modelling using Monte-Carlo analysis and simulations undertaken by MLPL and its advisers in determination of its proposed risk allowance.

76. We did not independently develop a risk allowance and made no representation that the semi-quantitative analysis presented in our October 2025 report represented a superior method for developing a risk allowance for this project. Nonetheless, absent other methods, we were asked by the AER to determine an alternate estimate of risk allowance from the information provided by MLPL.

77. We concluded that whilst it is reasonable to allow contingencies for some risks and MLPL's methodology for determining those risks were reasonable, the application of its methodology resulted in an aggregate risk-cost that was higher than a prudent and efficient level. We found examples where MLPL presented some risks that are not aligned with the guidance note, and/or had overstated the cost impacts or probability for some risks.

The updated information has assisted with our understanding of the residual risk, and specifically the selection of input assumptions by MLPL

78. In its *revised submission*, MLPL has included Attachment 2, being a report by E3 Advisory that responds to the AER's Supplementary Draft Decision, including:[22]

- *'Providing additional context of the risk event and justification of the prudency and efficiency for individual risks, including for pass through events that have not been accepted by the AER.*
- *Updating the risk model to incorporate the most recent risk information available to the project, and determining an updated proposed risk allowance.*

[21] MLPL Project Risk Model (AER Submission) dated September 2025 provided in response to IR006. Question 7.

[22] Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance, December 2025. Page 4.

- *Identifying a comparable set of projects to undertake top down benchmarking and providing confirmation of the suitability of the updated proposed risk allowance.*
- *Presenting further rationale and evidence to support E3 Advisory's methodology, which aligns with the AER's guidance and accepted industry practice, and demonstrating that it does not have an upward bias.*
- *Highlighting instances where we believe EMCa's report contains errors or misinterpretations that materially affect the nature or outcome of the assessment by EMCa and/or the AER.'*

79. We have taken account of the additional information in our review of MLPL's revised risk allowance in section 4.

3.2.3 Benchmarking

Risk allowance should reflect the requirements of the project and cannot be definitively determined by benchmarking

80. In our October 2025 report, we noted that MLPL had relied on benchmarking undertaken by its advisers in its submission. We therefore tested the statements relied upon, including by reference to Australian project examples, despite a High Voltage Direct Current (HVDC) project not being undertaken in Australia for some time.

81. The reliance we placed on this analysis was limited. As documented in our October 2025 report, we remain of the view that the selected projects presented a wide range of possible risk allowances, and were not directly comparable to the scope of the Marinus Link project:[23]

> *'Neither [the UK or Australian] cohort of projects reflect the specific circumstances of the Marinus Link project, however, they indicate to us that a risk allowance in the range of 5-10% is likely to reflect a reasonable allowance. The risk allowance proposed by Marinus Link is at the top of this range.'*

82. We understand that E3 Advisory has updated the benchmark projects and concluded that the range of risk allocations for more comparable projects are from 8.7% to 10.5% as a portion of total project costs.[24] We do not dispute this analysis.

83. In is revised risk allowance, MLPL has proposed a risk allowance of $364.9 million ($real 2023), which is 10.4% of MLPL's proposed capital expenditure:[25]

> *'MLPL's proposed risk allowance is very closely aligned with the risk allowance for HumeLink and benchmarks well compared to other HVDC projects internationally.'*

84. MLPL concludes that its risk allowance should be comparable with, or slightly higher than, other major transmission projects such as HumeLink due to the specific challenges faced by the Marinus Link project. [26] This is a reasonable view, though it remains the case that MLPL's proposed revised risk allowance is at the upper end of the updated range that E3 Advisory has advised.

3.3 Summary and implications

85. MLPL has retained the same methodology for the development of its risk allowance. Assisted by new information and new explanations, we consider that its methodology and its application of that methodology, are reasonable.

---

23 Assessment of proposed risk allowance expenditure - Marinus Link FINAL v3 [PUBLIC]. EMCa. October 2025.

24 Attachment 3, Aurecon Response to Supplementary Draft Decision. December 2025.

25 MLPL Response to AER Supplementary Draft Decision. Page 18.

26 MLPL Response to AER Supplementary Draft Decision. Page 11.

4 ASSESSMENT OF NEW INFORMATION ON REVISED RISK ALLOWANCE EXPENDITURE

We consider that the issues that we had previously identified in our *Initial Review* have been largely addressed in MLPL's *revised submission*.

The additional supporting information has addressed the majority of our concerns in relation to MLPL's originally-proposed risk allowance. We accept the adjustments that MLPL has made to remove risks that are now closed as prudent, and also to update for the revised BoW contract pricing included in its revised risk allowance. However, we also find that whilst the new information has supported many of the risks, there are a small number that we consider are not sufficiently justified or are likely to duplicate risk events of other elements of the capex allowance.

In considering the *revised submission*, MLPL has proposed new risks that we consider are not sufficiently justified or do not address feedback from the AER in its Supplementary Draft Decision. Specifically, the new risk events are responding to the same or similar risk causes as existing risks and are similarly derived.

Whilst we have identified some areas where MLPL's proposed risk allowance are not fully substantiated, given the complexity of the project and contractual arrangements, and consideration to the range of comparative risk allowances provided by MLPL, we consider that the revised risk allowance is for the most part a reasonable estimate.

4.1 Introduction

86. In this section we present our assessment of the new information presented in support of MLPL's revised risk allowance.

87. We first consider the changes to the existing risks included in MLPL's original submission, to determine if that new information leads us to alter our findings, and if so, on what grounds we reach a different conclusion.

88. We then consider the new information for the new risks, for both the *Revised base* case and the *Revised scenario* case, to determine whether we consider that the new risks, and resulting risk allowance, are reasonable in accordance with AER guidance and the NER more generally.

89. Consideration of the proposed risk allowances are subject to the AER's consideration of the proposed pass through events. In forming our views, we have reviewed the reasons included by the AER in its Supplementary Draft decision, and whether we consider that MLPL has adequately demonstrated that these events require an additional risk allowance to be included.

4.2 Assessment of new information for existing risks

4.2.1 What MLPL has proposed

MLPL has made three key changes to the 61 risks included in its original submission

90. As detailed in section 2, the proposed risk allowance of $452.3 million (nominal, probability weighted) reflects MLPL's update to its original submission of $448.6 million (nominal, probability weighted).

91. MLPL has provided its *Revised Risk Model*, and report from its adviser E3 Advisory responding to the issues identified in the AER's Supplementary Draft Decision and our original October 2025 report.

92. In relation to the list of risks submitted with its original (September 2025) submission, we identified three sources of change:

- Removal of two risks: Risk ID 1 *Increase in insurance premium costs due to market or global events* and Risk ID 36 *Changes to executed contracts, resulting from changes in scope and design during negotiations phase with preferred Balance of Works Contractor*, totalling $5.5 million[27]
- Increase in probability and 3-point estimates for Risk ID 3F *Interface milestones is not achieved by a contractor impacting another contractors ability to perform works* totalling $1.7 million, and
- Increase in BoW contract cost assumptions, totalling $1.1 million.

93. We consider the risks added by MLPL separately in section 4.3.

Removal of two risks that are now closed is prudent

94. MLPL has proposed to remove Risk ID 1 and Risk ID 36, by reducing the probability of the risk occurring to zero in the *Revised Risk Model*. This has the effect of removing $5.5 million (nominal) from the total risk allowance.

95. In Attachment 2, E3 Advisory states that Risk ID 36 is closed, given completion of the negotiation phase of the BoW contract.

96. E3 does not explicitly state why Risk ID 1 is removed, however based on statements in Attachment 2[28] we infer that the risk has been realised with actual costs of insurance exceeding the proposed risk allowance.

97. We consider that the removal of these two risks from the risk allowance on the basis that the risks have now been closed is prudent.

Change in probability and three-point estimates for one risk is not explained

98. We also observe a change in probability for Risk ID 3F from 20% to 30%, and a change in the 3-point estimates for this risk. The basis of the probability of occurrence is unchanged in the *Revised Risk Model*, which states that (emphasis added by EMCa):[29]

> *'This risk is rated as unlikely (20%) due to the inherent complexity in managing multiple interdependent milestones across contractors. Despite robust Interface Management Plans, Interface Deeds, and contractually stipulated liquidated damages designed to encourage timely achievement of milestones, external factors such as weather, regulatory interventions, or unforeseen events could still result in missed milestones. Additionally, ineffective communication or poor planning by one party can lead to*

[27] This value may differ from values stated earlier in this report due to rounding.

[28] Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance. December 2025. Page 26.

[29] MLPL Project Risk Model (AER Submission) - December 2025.

cascading effects. Nevertheless, ***comprehensive project control mechanisms reduce the likelihood of significant milestone delays****.'*

99. We could not find reference to an explanation of the change to 30%, when the rationale refers only to 20% probability of occurrence, nor justification for the increase in the 3-point estimates as shown in Table 4.1.

Table 4.1: Comparison of changes to Risk ID 3F

Factor	Original Risk Model	*Revised Risk Model*
Probability of occurrence	20%	30%
Cost basis value	Delay Rate (BoW CDCS[30]) $[redacted]	Delay Rate (BoW CDCS) $[redacted]
Best case	Minor delay to non-critical activity, 1 week delay. 7 Days	Minor delay to non-critical activity, 2 weeks delay. 14 days
Most Likely case	Critical activity milestone not achieved, 2 week delay, contractor delays claim. 14 days	Critical activity milestone not achieved, 4 week delay, contractor delays claim. 30 days
Worst case	Critical activity milestone significantly delayed, resulting in 6 week delay. 42 days	Critical activity milestone significantly delayed, resulting in 8 week delay. 60 days
BetaPert approximation	[redacted]	[redacted]

Source: EMCa derived from Risk Models provided by MLPL

100. Applying the new delay rate but retaining other September 2025 assumptions reduces the risk allowance to $[redacted] (Nominal, rounded), or a difference of $[redacted] (Nominal, rounded).

Increase in BoW contract cost basis is likely to be reasonable

101. MLPL has adjusted the cost basis for its risks, arising from conclusion of its BoW contract with the key changes shown in Table 4.2.

30 Converter Station Design, Supply & Installation.

Table 4.2: Comparison of BoW cost basis assumptions

Category	Item	Unit	Delivery (*Original*)	Delivery (*Revised base* case)	Increase or (Decrease)
Contract Value	Contract Value / Total Base (BoW LCC[31])	*total*	$[redacted]	$[redacted]	[redacted]
Contract Value	Contract Value / Total Base (BoW CDCS)	*total*	$[redacted]	$[redacted]	[redacted]
Design	Design Cost (BoW LCC)	*total*	$[redacted]	$[redacted]	[redacted]
Design	Design Cost (BoW CDCS)	*total*	$[redacted]	$[redacted]	[redacted]
Work Rate	BoW Total	*per day*	$[redacted]	$[redacted]	[redacted]
Work Rate	Work Rate (BoW LCC)	*per day*	$[redacted]	$[redacted]	[redacted]
Work Rate	Work Rate (BoW CDCS)	*per day*	$[redacted]	$[redacted]	[redacted]
Delay Rate	Delay Rate (BoW - Total)	*per day*	$[redacted]	$[redacted]	[redacted]
Delay Rate	Delay Rate (BoW LCC)	*per day*	$[redacted]	$[redacted]	[redacted]
Delay Rate	Delay Rate (BoW CDCS)	*per day*	$[redacted]	$[redacted]	[redacted]

Source: EMCa derived from Risk Models provided by MLPL

102. Most of the BoW contract related costs have decreased, however the delay costs for LCC has increased compared with the original submission. This is associated with both a net increase to the total, and a redistribution of the costs between the LCC and CDCS works.

103. The combination of the change in probability for Risk ID 3F, and the application of a revised cost basis affecting multiple risks is an additional $[redacted] (nominal, probability weighted basis). Excluding the changes for Risk ID 3F, the change to other risks is $[redacted]

Balance of risks included in its original submission are unchanged

104. For the majority of risks, we have not identified any material change to the risk definition, probability of occurrence or estimate of risk-costs. MLPL has provided further description and justification of the top-30 risks as Appendix A to the response to risk allowance assessment prepared by E3 Advisory, including:

- Risk scenario additional detail
- Further justification / evidence for probability and consequence valuation, and
- Additional supporting documents.

105. Further information is also included as supporting its project benchmarking (Appendix C) and what it considers are errors and misinterpretations in our October 2025 report (Appendix D). We consider this material in our assessment.

4.2.2 Our assessment

Our focus has been on the top-30 risks, and those risks where we had identified areas of concern

106. Whilst our focus was on the top-30 risks, we also drew from materials provided by MLPL in its submission to respond to the areas of concern highlighted in the AER's Supplementary Draft Decision and our *Initial Review*.

[31] Land Cable Civils.

The removal of risks as proposed by MLPL is reasonable

107. MLPL has proposed removal of Risk ID 36 *Changes to executed contracts, resulting from changes in scope and design during negotiations phase with preferred Balance of Works Contractor*. MLPL states that the risk is now closed following the completion of the negotiation phase of the BoW contactor. Removal of the risk event is prudent.

108. MLPL has also removed Risk ID 01 *Increase in insurance premium costs due to market or global events without explanation.* We assume that the risk has been closed following finalisation of insurance cover, and on that basis, removal is prudent.

Increases in the (non risk-related) cost basis assumed by MLPL are outside the scope of our review

109. We have assessed this element of change on the basis that MLPL has updated its cost inputs to align with the BoW contract agreement, which remains beyond the scope of our review. The updated costs then flow through the updated calculation of individual risk-costs.

110. For the purpose of our risk-cost assessment, we have relied on the updated cost basis provided with MLPL's December submission.

Application of quantitative schedule risk analysis provides additional assurance

111. We had expected to be provided with a schedule risk analysis (SRA), as we consider this to be an appropriate tool for a complex project such as Marinus Link. However, one was not provided to us.[32]

112. As an approximation, we used the BetaPert analysis to understand the impact of the assumptions that had been applied. In our October 2025 report, we also acknowledged that our approach was likely to overstate the likely delay, due to factors such as:

- Calculation of delay is applied to individual contract milestones and may not result in a delay to the overall schedule or critical path, and
- Where MLPL does have cost exposure this may not result in a time or schedule delay to the project.

113. In its *revised submission*, E3 Advisory states that:[33]

> *'The P50 outcome of the schedule risk assessment confirms that the applied MLPL schedule contingency of 141 days is appropriate and there would not be a delay to the overall project from the P50 risk outcome of the 61 risks.'*

114. According to the SRA report prepared by E3 Advisory, [34] Quantitative Cost and Schedule Risk Assessment (QCSRA) was undertaken by TBH in 2024, and a follow-up analysis undertaken by E3 Advisory in 2025. In the latter case, E3 states that:[35]

> *'E3 Advisory undertook a schedule risk assessment using Safran modelling software which applies the individual risk events to the appropriate activity in the master schedule. The P50 outcome of the schedule risk assessment confirms that the applied MLPL schedule contingency of 141 days is appropriate and there would not be a delay to the overall project from the P50 risk outcome of the 61 risks.'*

115. Also, that:[36]

> *'This subsequent assessment, conducted by E3 Advisory in collaboration with external expert advisors, reviewed the nature and characteristics of risks expected during development and construction, evaluated why certain risks must remain with MLPL, and*

32 Assessment of proposed risk allowance expenditure - Marinus Link FINAL v3 [PUBLIC]. EMCa. October 2025.

33 Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance. December 2025. Page 28.

34 SRA Report – Marinus Link Stage 1. E3 Advisory. August 2025.

35 Attachment 2, E3 Advisory Report - Response to AER on Risk Allowance. December 2025. Page 28.

36 SRA Report – Marinus Link Stage 1. E3 Advisory. August 2025. Page 6.

outlined a defensible methodology for deriving a prudent and efficient cost allocation. Reflecting the project's advancing procurement stage, with two of the three construction packages awarded, the assessment also addressed the evolving risk profile and described the process for updating the risk allowance in the revised Revenue Proposal, including risks associated with the Balance of Works (BoW) package yet to be finalised.'

116. Based on the representation of its process included in the E3 Advisory report, we consider that MLPL has applied a reasonable process and which provides additional assurance to schedule-related aspects of the risk allowance for the Marinus Link project.

Updated and new information provided for existing risks largely supports the assumptions of cost and likelihood that have been adopted by MLPL

117. We have reviewed the new and additional supporting information provided in MLPL's response, and which focusses on the top-30 risks. In general, it reflects the same risks previously provided to the AER and which we considered in our *Initial Review*.

118. The new information provided in the report by E3 is largely qualitative in nature and reinforces the use of the expert assessment of subject matter experts (SME) in the workshop-led process that E3 Advisory has described to us. As stated in our October 2025 report, we considered it likely that MLPL's workshop process drew from other evidence to assist the SMEs with their consideration of each risk event, and that they would have specifically used a process to remove any bias. It was this information that we were seeking at that time, and which we had identified in our *Initial Review* was missing.

119. MLPL has directed us to new and additional supporting contextual and supporting information, which we consider is essentially what we would have expected to be input to the workshop-led process. Based on our review of the sample of information now provided, we consider that MLPL has taken reasonable steps to provide additional context and explanations for the selection of its input assumptions that has led to its selection of probabilities and consequences.

120. In most instances, the new and additional supporting information has addressed our key areas of concern, such as:

- The probability of occurrence of the risk has been reasonably derived, which we consider being supported by an SME assessment process that is likely to provide a reasonable estimate.
  - As a part of our *Initial Review*, we noted relatively high probability of occurrence for several risks. To a material extent, MLPL was now able to provide sufficient evidence to support its assumptions.
- The selection of consequence has been reasonably derived:
  - For its estimate of most likely consequence, the rationale provided by MLPL generally supports the provided estimate. A key contributor of the risk allowance is project delivery risk. In our *Initial Review*, we had identified areas where MLPL did not appear to have taken sufficient account of (or at least had not demonstrated that it had taken sufficient account of) contractual risk and contingency provisions, including schedule risk. After review of the additional information provided by MLPL, MLPL has reasonably demonstrated that it is exposed to a higher level of residual risk in its contractual framework than was demonstrated in its original submission, and as a result the estimates are sound.
  - For its estimate of worst case consequence, MLPL has provided additional context and case examples that can be more directly related to the Marinus Link project than was evident in the original submission. As a result, we consider that MLPL has considered the impacts of its contractual provisions, schedule management and existing controls such that the worst case consequence that it has determined, albeit a low probability event, is possible.
  - For its estimate of best-case consequence, whilst we remain concerned that in general best-case consequences still result in an overall cost to MLPL, the net effect

of its revised Monte-Carlo modelling results in a minimum (or floor value) of aggregate risk allowance that is materially lower than presented in its original submission. On that basis we consider that the best case estimates are reasonable.

121. MLPL has also provided a number of examples where cost or schedule risk has been realised (or probability has been increased) including higher insurance costs (Risk ID 1) and the reduction in float time (Risk ID 3B) from converter stations, which it describes as not known at the time of BoW contract negotiations. In addition, MLPL has also directed us to relevant contextual information that has assisted us understand the basis for its assumptions in relation to market conditions, social licence and other matters.

122. Overall, we consider that MLPL has provided sufficient additional information that indicates to us that the consequences that it describes are reasonably based on the nature of the project, economic conditions and contractual arrangements. Further that it is reasonable to accept that an SME-based engagement, with access to this level of information and the specific details of the project and contracts should develop a reasonable estimate of the probability of the risks occurring, and provide a reasonable estimate of risk allowance.

We remain concerned by the possible duplication of risks included in the *Revised Risk Model*, however to a lesser degree than included in our *Initial Review*

123. We remain concerned that the revised risk allowance includes a level of duplication of some risks and risk events despite assurances by MLPL and its advisers that any duplication has been removed. We consider that MLPL has not sufficiently demonstrated that these provisions are reasonable. We are not convinced that they are not duplicative of other risk-cost allowances or are in addition to allowances included in other parts of its capex forecast, including for social licence costs. However, in light of the new information provided by MLPL, we consider it reasonable to accept that any further duplication is much lower than was indicated from the information that MLPL originally provided.

124. For example, our revised assessment identified that:

- MLPL has linked some risks to meeting its [redacted] obligations (e.g. Risk ID 4A [redacted] *associated with the project during the development phase*, and Risk ID 4B [redacted] *associated with the project during the delivery phase*) which are subject of separate review process by the AER. As a further example of possible duplication, as identified in our *Initial Review*, we could not discern, a difference between the derivation of Risk ID 4A and 4B other than the assigned probability based on the stage of the project, and when aggregated totals 65%, which appears high.
- MLPL has retained provision for cost escalation above existing allowances as it relates to service provider costs (Risk ID 26 *MLPL Service provider costs escalate over time above existing allowances*). The residual risk is assessed at a probability of 45% and the most likely consequence is $[redacted], with a BetaPert expected value of $[redacted]. In our *Initial Review*, we formed a view that MLPL had control over the selection and appointment of service providers and therefore its costs. The broader issue of forecast cost escalation is typically a matter for the AER to consider, and whilst we note MLPL's comments regarding current inflationary pressure, we understand that the AER does not typically include additional allowances for variations in forecast inflation.
- MLPL has retained Risk ID 100 *Repeated failure of a testing or commissioning requirement (Project)* at a probability of 45% and Risk ID 28 *Insufficient flow of generative output or insufficient demand to conduct testing and commissioning* at a probability of 20%, both valued based on delay rates to Cable System (CBS) and Converter Station Design and Supply of Equipment (CDSE) contracts. Our reading of the additional information from MLPL is that Risk ID 28 is captured as a cause of risk included by Risk ID 100, and therefore assuming Risk ID 100 is retained, Risk ID 28 is not required. A similar and potential overlap relates to modelling, in addition to generation availability for commissioning.

- Risks relating to design interfaces are also similarly present in multiple risks such as Risk ID 64 *The asset control systems established by contractors fail to meet required performance i.e. SCADA and Metering Systems, resulting consequential impacts on MLPL* and Risk ID 3C *Design changes not communicated / coordinated between contractors.*

125. From the information available to us on the above examples, we estimate that the potential for overlap with regard to risks retained in the *Revised base* case is in the order of 2-3% and which lead to an overstatement of the *Revised base* case.[37]

4.3 Assessment of new risks included in risk allowance

4.3.1 What MLPL has proposed

In its Supplementary Draft Decision, the AER did not approve four proposed pass through events proposed by MLPL

126. The AER did not approve four of the pass through events proposed by MLPL in its Supplementary Draft Decision, stating that:[38]

> *'MLPL also proposed a number of novel nominated pass through events that we have not accepted for any other Australian network service provider. We do not accept MLPL's proposed unavoidable contract variations event, contractor force majeure event, contractor insolvency event and biodiversity event. We do not consider that these events are appropriate to be accepted as nominated pass through events.'*

127. We were not asked to consider the proposed pass through events in our *Initial Review*.

MLPL has included additional risk allowances in response to the AER's Supplementary Draft Decision regarding pass though events

128. As shown in section 2, MLPL has introduced four new risks in response to the AER's Supplementary Draft Decision that has increased the revised risk allowance:

- For the *Revised base* case, an increase of $[redacted] for Risk ID 125 *Contractor insolvency event* and Risk ID 123 *Biodiversity event* in place of pass through events that were not accepted by the AER in its Supplementary Draft Decision, and
- For the Revised scenario case, an increase of $[redacted] for Risk ID 124 *Unavoidable Contractor Variations (if not accepted as a Pass-through Event)* and Risk ID 126 *Contractor Force Majeure Event (if not accepted as a Pass-through Event)* which MLPL states is in the event the AER does not accept the associated pass through events that it has proposed. After accounting for the proposed removal of Risk ID 3A *Interface scope gaps and/or overlaps between contractors,* the additional BetaPert expected value of risk reduces from $[redacted] to $[redacted].

129. MLPL has provided additional details for the additional risks in response to the excluded pass through events in its Appendix B, which we have taken into account in our assessment.

---

37 The percentage is based on the BetaPert expected value of $445.9 million, corresponding to the *Revised base* BetaPert expected value of $452.3 million after subtraction of the new risks Risk ID 123 and Risk ID 125 totalling $6.4 million.

38 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 311.

4.3.2 Our assessment of new risks proposed in MLPL's *Revised base* case

Contractor insolvency event (Risk ID 125)

AER did not accept the cost pass through for Contractor insolvency event

130. In its Supplementary Draft Decision, the AER did not approve the proposed cost pass through event: [39]

> *'On the basis that we consider that a prudent service provider could reasonably prevent an event of that nature or type from occurring or substantially mitigate its cost impact, we consider that accepting this pass through event would be inconsistent with the nominated pass through event considerations under the NER. We therefore [do] not approve the inclusion of this proposed pass through event in the Supplementary Draft Decision.'*

MLPL has proposed a new risk, Risk ID 125 Contractor insolvency event

131. MLPL has included a risk event for contractor insolvency, rated as medium risk with a probability of occurrent of 5% (rare) and risk cost of $[redacted]. The risk event is described as:[40]

> *'The contractor becomes insolvent during the project lifecycle, requiring MLPL to appoint a new contractor.'*

132. MLPL has an existing risk event (Risk ID 29) for the replacement of a contractor due to reasons outside MLPL's control. In our October 2025 report, we considered that this was a reasonable risk to include. We compare the risks in Table 4.3.

[39] Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 35.

[40] MLPL Project Risk Model (AER Submission) - December 2025.

Table 4.3: Comparison of contractor insolvency risks

Risk attribute	Risk ID 29	New Risk ID 125
Risk title	Replacement of contractor due to reasons outside MLPL control	New Risk - Contractor Insolvency Event
Risk description	Existing contract is terminated resulting in replacement of contractor to complete the project	The contractor becomes insolvent during the project lifecycle, requiring MLPL to appoint a new contractor[41]
Risk causes	1. Contractor abandonment 2. Contractor breach of contract 3. Contractor poor HSE performance 4. Contractor insolvency	The contractor experiences cash flow issues due to mismanagement and volatile market conditions. They are unable to pay their suppliers and staff, leading to project work stalling. Eventually, the contractor declares insolvency, leaving MLPL with no option but to engage a new contractor.
Residual risk level	Medium	Medium
Probability of occurrence	5%	5%
Cost basis	BoW contract value	BoW contract value
BetaPert approximation (P50)	$[redacted]	$[redacted]

Source: MLPL Risk Model

133. We looked into the difference in the assessed BetaPert expected value and determined that Risk ID 125 values were hard-coded. We could reproduce the risk allowance assumed for Risk ID 125 based on the costs relied upon in MLPL's original submission and, when updated for the new costs in December 2025, were the same as Risk ID 29.

The new risk event is not separable from other risk events included in the risk allowance

134. We conclude that Risk ID 29 and Risk ID 125 include causes that are similarly derived. Specifically, that contractor insolvency is a risk cause for both risks, and the value of risk is equivalent once corrected for its revised BoW costs to the existing Risk ID 29. We therefore consider that MLPL has not adequately demonstrated that an additional risk is prudent or reasonable to include in the risk allowance.

Biodiversity event (Risk ID 123)

AER did not accept MLPL's proposed cost pass through biodiversity event

135. In its Supplementary Draft Decision, the AER did not approve MLPL's proposed cost pass through event: [42]

> *'On the basis that we are satisfied that MLPL can substantially mitigate the cost impact of such, we consider that accepting this pass through event would be inconsistent with the nominated pass through event considerations under the NER. We therefore do not approve the inclusion of this proposed pass through in the Supplementary Draft Decision.'*

41 In the *Revised Risk Model* for the *Revised scenario* there is a minor variation to the risk description which states 'A contractor is declared insolvent, requiring MLPL to appoint an alternative contractor.'

42 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 37.

136. As noted by the AER in its Supplementary Draft Decision, MLPL has sought to manage this risk through a risk allowance in its proposed capex, specifically Risk ID 6 *Uncertainty in the availability, timing and cost of biodiversity offsets* and Risk ID [redacted]

MLPL has proposed a new risk, Risk ID 123 Biodiversity event

137. MLPL has included a risk event for uncertain biodiversity impacts, rated as low risk with a probability of 15% (unlikely) and risk cost of $[redacted]. The risk event is described as:[43]

> *'Decision by a planning authority to change MLPL's biodiversity obligations which requires additional measures be taken to avoid and minimise biodiversity impacts (or to refuse an application based on those impacts).'*

138. MLPL has included an existing risk event, Risk ID 6 for *uncertainty in the availability, timing and cost of biodiversity offsets*. In our October 2025 report, we considered that this was a reasonable risk to include. We compare the risks in Table 4.4.

[43] MLPL Project Risk Model (AER Submission) - December 2025.

Table 4.4: Comparison of biodiversity and environmental-related risks

Risk attribute	Risk ID 6	Risk ID 123
Risk title	Uncertainty in the availability, timing and cost of biodiversity offsets	New Risk - Biodiversity Event
Risk description	Uncertainty in availability of suitable environmental offsets for impacts on species and/or communities required through state or Commonwealth impact assessment processes impacting construction activities. Offsets have been identified for approval route; however, the final alignment plan is likely to change resulting in revised offsets.	Decision by a planning authority to change MLPL's biodiversity obligations which requires additional measures be taken to avoid and minimise biodiversity impacts (or to refuse an application based on those impacts).
Risk causes	1. Uncertainty of offset requirements 2. Increase in offset market costs prior to finalisation of BoW contract negotiations 3. Site surveys undertaken to date based on limited access for proposed route alignment 4. Increase in actual disturbance footprint prior construction exceeds original forecast 5. BoW contractor includes a markup to offset costs 6. Failure by the BoW contractor to secure offsets in time for planned construction commencement 7. BoW contractor does not accept offset scope under contract	1. Changes to route design and/or construction methodology 2. Changes to the biodiversity offset methodology 3. Uncertainty regarding the application of conditions in the Environmental Effects Statement 4. Planning authority which requires additional measures be taken to avoid and minimise biodiversity impacts
Residual risk level	Low	Low
Probability of occurrence	20%	15%
Cost basis	Cost of Biodiversity Provisions	Biodiversity Provisions
BetaPert approximation (P50)	$[redacted]	$[redacted]

Source: MLPL Risk Model

139. We looked into the difference in BetaPert expected value between Risk ID 6 and Risk ID 123, however the Risk ID 123 values were hard-coded. We could not reproduce the BetaPert expected value based on the stated cost basis, or assumptions included in the *Revised Risk Model*, instead getting a value much lower than MLPL had assumed.

The new risk event is not separable from other risk events included in the risk allowance

140. We compared the risk description, causes and controls in the information provided in the *Revised Risk Model* and accompanying risk reports. Whilst in places, Risk ID 123 is expressed as being in response to a change in external regulatory requirements for biodiversity, in other places the difference between Risk ID 123 and Risk ID 6 relating to changes in project scope and methodology are less clear.

141. We consider that the differences between these risks are not sufficiently material to justify inclusion of an additional risk event. When considering the relatively low value attributed to this risk and existing provisions for externally imposed changes to regulations across other risk events, MLPL has not adequately demonstrated that an additional risk is prudent. For example, MLPL has included Risk ID [redacted] which also addresses uncertainty in the scope and cost of [redacted].

Summary of assessment of new risks in *Revised base* case

MLPL has not sufficiently justified the inclusion of new risk events in its *Revised base* case

142. From the information available to us for the above risks, MLPL has not sufficiently justified that the proposed risk events (Risk ID 123 and 125) totalling $[redacted] as identified in Table 4.3 and Table 4.4 are justified. These represent just over 1% of MLPL's proposed allowance.

143. When combined with our finding on overlap of some retained allowances (as described in 4.3.2), in aggregate we estimate that the *Revised base* case (i.e. inclusive of the retained risks and new risks) is overstated by approximately 3 to 4%.[44]

4.3.3 Our assessment of new risks proposed in MLPL's *Revised scenario* case

Unavoidable contract variations event (Risk ID 124)

AER did not accept MLPL's cost pass through for unavoidable contract variations event

144. In its Supplementary Draft Decision, the AER was not satisfied that MLPL's amended drafting of the pass through event would promote prudent and deficient delivery of the project. The AER make three clear statements as to the reasons for not accepting the pass through event:

> *'Despite MLPL's revised proposal to narrow the scope of the pass through event to a change in costs associated with the project design and route selection, we maintain the view that a change in project design and route is not well defined nor outside MLPL's control (e.g. expected project costs may inform changes to route selection that is within MLPL's control)*,[45]
>
> *Given the stage of development of the project, we are not satisfied that the proposed pass through event will promote prudent and efficient delivery of the project,* [46] and
>
> *On the basis that we consider that a prudent service provider could reasonably prevent an event of that nature or type from occurring or substantially mitigate its cost impact, we consider that accepting this pass through event would be inconsistent with the nominated pass through event considerations under the NER. We therefore do not approve the inclusion of this proposed pass through event in the Supplementary Draft Decision.'*[47]

---

44 The percentage is based on the BetaPert expected value of $452.3 million.

45 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 32.

46 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 33.

47 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 33.

MLPL has proposed a new risk, Risk ID 124 Unavoidable contract variations event

145. MLPL has included a risk event for unavoidable contract variations, rated as high risk with a probability of occurrence of 20% (unlikely) and risk cost of $[redacted]. The risk event is described as:[48]

> *'A variation to a contract relating to the construction of Stage 1 of Marinus Link is required to accommodate a change in the project design or proposed route which are outside MLPL's direct control and has a material impact on MLPL's costs of constructing or commissioning Marinus Link.'*

146. MLPL has included provision for specific variations to the contract due to changes in regulatory requirements, latent conditions, cable route and labour force related issues and productivity, all of which are referred to as the causes of this risk.

The proposed risk event is not separable from other risk events

147. We did not see sufficient justification to address the concerns raised by the AER in its consideration of the cost pass through event, specifically that relates to why an additional risk is prudent and reasonable. We observe that the specific variations to the contract cited by MLPL for this risk event are in fact included as separate risk events.

148. This risk event appears to be a catch-all provision, informed by estimates ranging from 2.5% (best case) to 7.5% (worst case) of the total contract value. When considered alongside the specific risks that MLPL has already included, MLPL has not demonstrated how this risk is not already considered in the risk allowance. In our view, this risk does not meet the intent of the guidelines as it does not 'comprehensively and transparently' identify and define this risk including to differentiate it from other project risks that MLPL has included.

Contractor force majeure event (Risk ID 126)

AER did not accept the cost pass through event

149. In its Supplementary Draft Decision, the AER was not satisfied that the amended drafting of the pass through event would promote prudent and efficient delivery of the project. The AER stated that: [49]

> *'...the impact of a force majeure event are matters that should already be contemplated and appropriately reflected in the commercial terms negotiated between MLPL and its contractors. The allocation of such risks is a contractual issue within MLPL's control, arising from the agreements it has entered into with its delivery partners. Accordingly, MLPL and its contractors are best placed to anticipate and manage the consequences of these events. For this reason, we do not propose to accept this nominated pass-through event, which, in substance, pertains to the terms of the relevant contractual arrangements. On the basis of these considerations we determine that accepting this pass through event would be inconsistent with the nominated pass through event considerations under the NER. We therefore we do not approve the inclusion of this proposed pass through event in the Supplementary Draft Decision'*

MLPL has proposed a new risk, ID 126 Contractor force majeure event

150. MLPL has included a risk event for contractor force majeure, rated as medium risk with a probability of 5% (rare) and risk cost of $[redacted]. The risk event is described as:[50]

> *'A material change in construction costs incurred by MLPL due to an unforeseen force majeure event impacting the construction contractor, where the costs are not covered by*

48 MLPL Project Risk Model (AER Submission) - December 2025.

49 Supplementary Draft Decision: Marinus Link Stage 1, Part B (Construction costs) Electricity Transmission Determination 2025–30. AER. Page 34.

50 MLPL Project Risk Model (AER Submission) - December 2025.

an existing insurance policy or other pass through event and the force majeure event is declared in accordance with the terms of the relevant contract.'

The proposed risk event is not separable from other risk events

151. The concerns raised by the AER in its consideration of the cost pass through event, indicated that contract force majeure (FM) is a matter for consideration of risk allocation in commercial arrangements between MLPL and its contractors.

152. Whilst we consider there remains a potential risk of a FM event, MLPL has already included provision for insurance, and has included a further risk event (Risk ID 30) for uninsurable risks and/or gaps in cover, that includes FM events as a possible cause.

153. This risk event appears to be a catch-all provision, informed by estimates ranging from $[redacted] (best case), $[redacted] (most likely case) and $[redacted] (worst case). When considered alongside specific risks nominated by MLPL, MLPL has not demonstrated how this risk is not already considered in the risk allowance. In our view, this risk does not meet the intent of the guidelines as it does not 'comprehensively and transparently' identify and define this risk including to differentiate it from other project risks that MLPL has included.

The removal of Risk ID 3A may be contingent on inclusion of Risk ID 124 and 126

154. In response to the AER's Supplementary Draft Decision, MLPL states that inclusion of Risk ID 3A *Interface scope gaps and/or overlaps between contractors* is required, as it reflects the risk of scope changes, being different to and not reflected in other risks. However, in making changes to the *Revised scenario* case, which includes the addition of Risk ID 124 and Risk ID 126, MLPL has removed Risk ID 3A.

155. We infer that removal of Risk ID 3A is contingent on the approval of the additional risk events, however we could not find reference to any dependency between these risks in the *Revised scenario* case.

Summary of assessment of new risks in *Revised scenario* case

MLPL has not sufficiently justified the inclusion of new risk events in its *Revised scenario* case

156. From the information available to us for the above risks, MLPL has not sufficiently justified that the proposed risk events (Risk ID 124 and 126) totalling $[redacted] (after the proposed removal of Risk ID 3A by MLPL) are justified. If MLPL was to apply the *Revised scenario* case for its proposed risk allowance, and given the implications for the issues we have identified in the *Revised base* case, we estimate that the *Revised scenario* case is overstated by approximately 7% to 8%.[51]

4.4 Implications for proposed expenditure allowance

MLPL has provided significant and relevant new information that largely addresses issues that we identified in our *Initial review*

157. The issues that we had previously identified in our *Initial Review* have been largely addressed by the new information now provided in MLPL's *revised submission*. .

158. Based on our review of the new and additional information provided, we consider that MLPL has taken reasonable steps to provide additional context and explanations for the selection of its input assumptions that have led to its selection of probabilities and consequences, consistent with the objective of the AER guidance materials. The additional supporting contextual and supporting information was not made available to us as part of our Initial

[51] The percentage is based on the BetaPert expected value of $471.8 million.

Review, and which we consider is similar to that which we would have expected to be used in the development of its risk allowance.

The additional supporting information has addressed the majority of our concerns in relation to the originally proposed risk allowance

159. MLPL has made a number of adjustments to its original risk allowance, including by removing some risks and adjusting some of the original costings. MLPL's removal of two risks that are now closed is prudent. We also consider that updating relevant risk allowances for the revised BoW contract pricing is prudent.

160. Whilst the new information supports many of the risks, there are a small number that, based on the information provided, appear to be duplicating similar risk events or other elements of the capex allowance. However, we consider that, subject to review by the AER for matters that potentially extend into other parts of the capex forecast and are beyond the scope of our review, the issues that we identified are not likely to have a material impact to the revised risk allowance.

MLPL has not sufficiently justified the inclusion of new risk events

161. MLPL has proposed a further four risk events, two of which are included in its *Revised base* risk, and a further two which are contingent on the AER's consideration of the re-submitted pass through events included in its *Revised scenario* risk.

162. The information provided by MLPL indicates that the new risk events respond to the same or similar risk causes as existing risks and are similarly derived. We consider that MLPL has not sufficiently demonstrated that the additional risk allowances are prudent, or that they are reasonable to include in addition to the provisions already contained within other parts of its capex allowance.

163. Our assessment of MLPL's proposed new risks has been undertaken based on the materials provided by MLPL and assumes disallowance of relevant pass through events by AER, noting that review of the pass through events themselves is not within our scope.

The revised risk allowance proposed by MLPL is within a reasonable range

164. We conclude that the issues that we have identified lead to an overstatement of the proposed risk allowance. However, based on the updated information, we now consider that such overstatement is relatively small.

165. We have not sought to model the impact of any adjustments for the issues that we identified to determine a Monte-Carlo P50 risk allowance in real terms, as we do not have access to MLPL's risk modelling. Consistent with the approach outlined in this report, we present this in terms of the BetaPert expected value of risk. However, we consider that our conclusions on the implications would be similar if applied through Monte Carlo modelling.

166. We consider that the BetaPert expected value of risk for its *Revised base* case is overstated by approximately 3 to 4% of the BetaPert expected value of risk. This value corresponds with the BetaPert expected value of additional risks included in its *Revised base* case after adjustment for the level of duplication we identified and the new risks that MLPL has not reasonably justified.

167. We take this view after considering the new information that indicates to us that:

- MLPL's methodology for determining a risk allowance is reasonable
- MLPL has provided new and additional information that supports application of its methodology, and taken as described to us, is likely to produce a reasonable estimate of risk allowance making use of several rounds of development and review by SMEs, including further review in response to the AER's Supplementary Draft Decision, and
- MLPL has substantially mitigated our concerns that the individual risk parameters are upwardly biased, including by providing new and updated information that clarifies and now provides adequate justification for a significant quantum of the risk allowance that

was not initially adequately justified and which, absent such justification, we found to be overstated at that time.

168. Our revised assessment compares with a range of 30% to 45% that we considered that MLPL had overstated is risk allowance from our *Initial Review*.

169. If MLPL was to apply its *Revised scenario* case as the basis of its proposed risk allowance, being a further increase to the *Revised base* case, we consider that based on the issues that we identified, the *Revised scenario* case is overstated by approximately 7 to 8%.

170. Our revised assessment represents a much lower percentage of the overall project cost that MLPL has proposed for the Marinus Link project. Given the complexity of the project and contractual arrangements, taking account also of the range of comparative risk allowances provided by MLPL, and notwithstanding the factors above that could be considered to represent an overstatement, MLPL's proposed risk allowance could be considered to be within a reasonable range for a project of this nature and relative to its total estimated cost.