

Application of the capital expenditure sharing scheme to the Marinus Link project

Report for Marinus Link Pty Ltd

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1. Introduction and summary

1.1 Scope of work

1. I have been asked by Marinus Link Pty Ltd (MLPL) to provide an independent expert report on how the “capital expenditure sharing scheme” (CESS) should be applied in relation to the Marinus Link project (“Marinus Link”). I have been asked to provide an opinion that would inform MLPL’s position on the CESS in its revised Revenue Proposal and may be included as a supporting document to that submission. The independent expert report would consider the following question:

Having regard to the purpose of the CESS and MLPL’s particular circumstances, in your opinion how should the CESS be applied to MLPL’s early works and construction expenditure?

2. I have been asked when providing this opinion to consider as a minimum:
 - a. The interests of electricity consumers;
 - b. The AER’s position on the CESS as presented in relevant AER guidelines, recent decisions and consultation processes;
 - c. MLPL’s submission on the CESS in its Revenue Proposal, submitted on 30 November 2024;
 - d. The AER’s proposed approach in its Initial Draft Decision; and
 - e. Any other matters I consider relevant.

1.2 Qualifications of the author

3. My name is Jeff Balchin, and I am the Managing Director of Incenta Economic Consulting. I have over 30 years of experience in relation to economic regulation issues across the electricity, gas, ports, airports, telecommunications, and water infrastructure sectors in Australia and New Zealand, which has included substantial advice in relation to the design of incentive compatible regulation in the energy sector in Australia and New Zealand.

1.3 Summary of findings

1.3.1 Background – the CESS in context

4. Regulation is applied to protect consumers from the excessive prices or inappropriate service levels that otherwise would result from the substantial market power of electricity networks. The long-term interests of consumers are maximised by setting prices at the minimum level, subject to providing the incentive and capacity for continued service provision – a that is, while consumers have an interest in low prices, they also have an interest in prices not being too low (and for the regulatory regime not otherwise being

defective) such that continued service provision may be adversely affected, notwithstanding how counterintuitive this may appear. For this reason, “cost” has a central role in determining (efficient) regulated prices.

5. A corollary of setting prices at cost, however, is that the incentive for firms to be efficient may be dulled, and so additional measures are typically applied to encourage efficiency, including:
 - a. providing financial incentives for efficiency (i.e., additional (lower) profits if efficiency improves (declines)) – the CESS is such a scheme of financial incentives for capital expenditure, and
 - b. administrative (regulatory) measures to identify and disallow imprudent/inefficient costs, with the threat of disallowance encouraging efficiency – the *ex post* review process is such a process for capital expenditure.
6. Importantly, these measures for encouraging efficiency come at a cost to consumers, and so need to be applied with care:
 - a. excessive financial incentives – which cause a wedge between price and cost – result in consumers paying more than required (for rewards) or potentially affecting investment (for penalties), and
 - b. administrative measures that are inappropriately applied may not provide a material motivator for performance, or alternatively may dissuade investment or add unnecessarily to the cost of regulation.

1.3.2 Setting the CESS incentive rate for the Marinus Link project

7. The incentive rate under the CESS should have regard to the benefits that financial incentives are expected to generate against the potential costs, and with consideration of the relative merits of *ex post* review as an alternative tool for motivating efficiency. Some of the factors that are relevant to the choice of the CESS incentive rate are:
 - a. the ease of achieving efficiency gains / cost control – with more difficult efficiency gains likely to require a greater financial motivation, in which case a higher incentive rate may be in the interest of consumers (all else constant)
 - b. the uncertainty of cost forecasts – which influences the risk that is caused by creating financial rewards or penalties based on the difference between forecast and actual expenditure (i.e., the potential for a material reward or penalty arises due to exogenous factors), with greater uncertainty implying that a lower incentive rate may be in the interests of consumers (all else constant)
 - c. the strength of incentives to reduce operating expenditure and the adequacy of service performance measures – with consumers benefiting from financial incentives that promote an efficient choice between operating and capital expenditure (where relevant), and that avoid encouraging a reduction in cost at the expense of service performance, and

- d. the effectiveness of ex post review as a motivator of efficiency, which depends on the complexity of the business and operations over which the review is undertaken (i.e., the level of information asymmetry between the regulated business and regulator) as consumers benefit from the best “tool” being applied to promote efficiency.
8. The specific topic of this report is the CESS incentive rate that in respect of the Marinus Link project during the construction of the project (noting that this largely falls within FY2026 to FY2030 regulatory period) that would best meet the interests of consumers. I conclude that an application of the CESS for the Marinus Link project that meets this objective would involve:
- a. a 10 per cent incentive rate up until the point that an overspend becomes material (in turn defined as a 10 per cent overspend)
 - b. then rely on the threat of ex post review to motivate prudent and efficient capital expenditure, implying a zero incentive rate for any overspend beyond 10 per cent, and
 - c. the 10 per cent incentive rate also applying down to a 10 per cent underspend, after which a zero incentive rate would apply.
9. This conclusion reflects the findings that:¹
- a. only a modest incentive is required to motivate MLPL, noting that – whilst important – its role during construction is relatively straightforward (i.e., oversee the construction contracts, secure approvals, manage stakeholders and manage any unforeseen issues)
 - b. the uncertainty in project cost forecasts is high, reflecting (amongst other things) the large, greenfields nature of the project
 - c. ex post review is likely to be particularly effective at motivating performance, given that MLPL is a purpose-made entity to deliver the Marinus Link project, and for which the construction contracts have been awarded, and
 - d. the receipt of concessional debt and equity finance by MLPL – the benefit of which will be passed through to consumers – will reduce MLPL’s capacity to absorb cost shocks, which will itself provide an additional motivation for efficiency.
10. A further finding underpinning the conclusions above is that there should be a clear separation between when financial incentives apply to motivate performance, and when ex post would operate. Amongst other things, this separation would avoid a situation where there is a material overspend, the additional expenditure is found to be efficient (i.e., via the *ex post* review) and yet a large financial penalty occurs. The prospect that the regulatory regime could deliver such a perverse outcome is not in the long term interests of consumers. However, a corollary of this separation of roles is that the CESS financial incentives are discontinued at some point (I recommend for overspends beyond

¹ Operating expenditure incentives will be irrelevant to MLPL during the construction phase because it will not have operating expenditure, and no material gaps in service performance regulatory measures were identified that may require modification of cost incentives.

10 per cent of the original forecast). If the prospect of zero financial incentives beyond a point raises concern, then I propose (as an alternative) that a lower incentive rate be applied to all levels of overspend (the 5 per cent originally proposed by MLPL would be appropriate in this case).²

1.3.3 Comments on the AER's initial draft decision and MLPL's proposed CESS incentive rate

11. MLPL proposed that an incentive rate of 5 per cent apply for any level of overspend or underspend. The AER's initial draft decision determined an incentive rate of 30 per cent to the first 10 per cent of any overspend or underspend, and for the incentive rate thereafter to reflect the average "natural incentive" rate applicable to MLPL (which I calculate to be approximately 5.9 per cent).
12. A clear difference between my proposal, and that of MLPL and the AER's initial draft decision, is that I recommend a clear separation between when CESS penalties apply from when ex post review would operate. As noted above, I recommend this in part to avoid the perverse outcome where expenditure is judged to be efficient and yet a large CESS penalty may apply. This aspect of my proposal draws heavily on the discussion that has occurred since MLPL submitted its revenue proposal (notably the AEMC rule change on targeted review and the subsequent consultation).
13. In terms of the incentive rates,³ in my view the AER's incentive rate would be likely to exceed what is required to motivate prudence and efficiency, and so is not in the long term interests of consumers. Indeed, I note that a large overspend could imply a very material financial penalty even if the overspend is judged to be efficient. While such an outcome may, at first sight, appear attractive to consumers, its prospect would be outweighed by the potential longer-term adverse consequences in terms of reducing the incentive and capacity for investment.
14. I have also undertaken a limited, desktop review of how other regulators provide incentives for efficiency in relation to the delivery of large transmission projects like the Marinus Link project. Whilst all regulatory regimes have their own specific contexts, I observe that:

² I note in the body of the report that the incentive effect of a 5 per cent incentive rate that applies to any overspend may be similar to the incentive effect of my proposal (a 10 per cent incentive rate applicable to the first 10 per cent of the overspend) given that the ultimate overspend (or underspend) is unknown, and so management effort would be driven by (amongst other things) the financial outcome for plausible overspends.

³ The main difference between my conclusions and MLPL's original proposal is that I propose a higher incentive rate, but with this applying only within a defined limit (up to a 10 per cent overspend), beyond which only ex post review would apply. It is plausible that the incentive effect of my recommendations and MLPL's original proposal are similar. In addition, as discussed earlier, I adopt MLPL's proposed incentive rate of 5 per cent in my alternative proposal (i.e., as appropriate if CESS penalties apply for any level of overspending).

- a. the use of administrative (regulatory) measures – like ex post review under the NER – rather than *ex ante* financial incentives are commonly used (for example, in the USA and aspects of the UK practice), and
- b. where *ex ante* financial incentives are applied, a lower incentive rate than the AER has proposed are commonly applied for projects with substantial cost uncertainty.

2. Economic and regulatory principles relevant to the incentive rates

2.1 The central nature of “cost” in price regulation

15. It is relevant first to set out the reason for price regulation under the National Electricity Law (NEL) and National Electricity Rules (NER), and specifically chapter 6A of the NER, exists. This regulation exists to address a material market failure, which is that electricity networks typically possess substantial and enduring market power. As a consequence, absent price regulation, prices would be expected to be substantially higher than they would if the market was competitive, which would depress economic activity and harm consumers more generally.⁴ In addition, the absence of competitive constraints facing energy networks may also lead firms to be less efficient in their operations, and to supply a level of quality that is not what consumers most desire. The clear objective of regulation, therefore, is to protect consumers from the misuse of this market power that otherwise would arise with respect to the price and services that are provided.
16. In terms of how regulated prices are determined, two competing interests of consumers must be confronted.
 - a. First, consumers have an interest in price being at the lowest level possible.
 - b. Secondly, however, the desire for low prices must be balanced against the competing interest of consumers for regulated networks to have the incentive and capacity to continue to provide the services that consumers want over the long term, including through new investment.
17. These competing desires are met by setting prices with reference to the cost of providing a service, with cost in this context being defined in an economic sense to include an appropriate return on investment and compensation for other risks incurred. The central focus on cost in well-designed price regulation is reflected in a number of the revenue and pricing principles set out in the NEL, including the following:⁵
 - (2) *A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in [providing regulated services] ...*
 - ...
 - (4) *Regard should be had to the regulatory asset base with respect to a distribution system or transmission system adopted ...*

⁴ In this report, I use the term “price regulation” or the “regulation of price” to refer to regulation whose intention is to control the level of prices, irrespective of whether a control is directly applied to each price. The AER determines a cap on the aggregate revenue for Both transmission and distribution businesses are

⁵ NEL, section 7A (noting that subsection (1) is an introduction, and so subsection (2) is the first revenue and pricing principle.

- (5) *A price or charge for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network service to which that price or charge relates.*

18. In addition, the processes and principles set out in Part C of Chapter 6A of the NER can also be interpreted as focussed on an operational level as to how cost should be derived (with the provisions dealing with incentive schemes – including the efficiency benefit sharing scheme and capital expenditure sharing scheme – being the principal exceptions).

2.2 A permitted departure from cost – financial incentives for efficiency

19. If the regulator was “all knowing”, then the task of price regulation would be simple. The regulator would simply set the price equal to the (efficient) cost of providing the service, and this would simultaneously protect the long-term interests of consumers and ensure continued service provision. Service provision would be assured because a firm would be fully compensated for cost
20. However, in practice, the regulator typically has imperfect information about what it should cost to provide regulated services and there are limitations that must be addressed in the scheme of regulation. In addition, the act of tying regulated prices closely to cost diminishes the incentive for a regulated business to be efficient, including to continue to adapt practices to pursue further efficiencies over time. Thus, if regulated prices are tied closely to cost then excessive cost may be incurred, with prices thereby unnecessarily high as a consequence.
21. It is for this reason that where price regulation is applied, it is almost universally accompanied with measures to target the potential for inefficiency in cost that may otherwise be induced by setting prices at the cost of providing a service. In regulatory regimes in Australia as well as the UK and New Zealand, the measures that typically are applied to encourage efficiency in operations are a combination of:
- a. *Administrative measures* – whereby the regulator assesses the prudence and efficiency of expenditure, and disallows the recovery of any costs that are found to be inefficient, with the threat of such a disallowance intended to motivate the firm to be efficient,⁶ and
 - b. *Financial incentives* – whereby the regulated business retains a share of any changes in efficiency (as measured), and so earns higher profits where efficiency improves, and lower profits if efficiency declines. The prospect of higher profits where efficiency improves is intended to motivate the firm to be efficient. The extent of a change in efficiency that is borne by the regulated business is referred to as the “incentive rate”.

⁶ The disallowance of cost recovery where a cost item is found to be inefficient will also provide a direct protection to consumers; however, the frequency of disallowances (and especially in relation to capital expenditure) is typically rare. This is consistent with the main role of such measures as being to create a threat that, in turn, provides a discipline on performance.

22. It is important to note, however, that both of these mechanisms come at a cost. Administrative measures impose a risk that the regulator disallows expenditure that was efficient (or approves expenditure that was inefficient). Similarly, incentive measures imply that price will be above or below cost for a period of time, and so imply (all else constant) that consumers will pay more than necessary, or that a risk is created as to whether the capability and incentive for continued service provision will exist. Accordingly, administrative measures need to be applied with caution and subject to appropriate safeguards,⁷ and the power of the incentive under financial incentive schemes should ideally be calibrated to motivate efficiency, but be just sufficient to achieve this, and so minimise the extent to which price departs from cost.
23. Of these two alternative measures, financial incentives are typically the preferred mechanism, and especially in situations where the regulator is likely to be most susceptible to an asymmetry of information compared to the regulated business. In such situations, the perceived threat that the regulator may identify where the regulated business is inefficient or imprudent and disallow some cost recovery may be low. In contrast, the prospect of a financial penalty for a reduction in efficiency, and reward for an improvement, may be particularly effective at motivating the regulated business and, in particular, making full use of its “private information” to pursue efficiency. Thus, to the extent that the financial incentives for efficiency are considered to be well-functioning, then less reliance need be placed upon administrative measures.
24. To this end, it is noted that the revenue and pricing principles in the NEL advocate use of financial incentives as a regulatory tool where possible, as follows:
 - (3) *A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to direct control network services the operator provides. The economic efficiency that should be promoted includes—*
 - (a) *efficient investment in a distribution system or transmission system with which the operator provides direct control network services; and*
 - (b) *the efficient provision of electricity network services; and*
 - (c) *the efficient use of the distribution system or transmission system with which the operator provides direct control network services.*
25. Similarly, Chapter 6A of the NER requires the AER to develop financial incentive schemes for, amongst other things, operating expenditure (the efficiency benefit sharing

⁷ It is noted that the *ex post* review provisions in the NER apply a number of safeguards that are designed to reduce the risk of inappropriate disallowances being applied, which include that the review is only activated (aside from cases of related party expenditures or changes to capitalisation policy) where the network has overspent against the AER allowance, and that only information reasonably available to the regulated business at the time of making the relevant decision may be considered (NER, clause S6A.2.2A). Moreover, as discussed further below, the AER has provided guidance as to how it will apply the review, which includes that it would undertake an initial analysis of the reasons for an overspend and, based on that analysis, decide whether to undertake a detailed *ex post* review.

scheme, EBSS) and capital expenditure (the capital expenditure sharing scheme, CESS). As explained further below, the focus of this report is on the incentive rate that is applied under the CESS in relation to MLPL during the construction phase of the asset. Consistent with the discussion above, the guidance in the NER for the design of the CESS includes the following:⁸

(a) *A capital expenditure sharing scheme is a scheme that provides Transmission Network Service Providers with an incentive to undertake efficient capital expenditure during a regulatory control period.*

...

(c) *In developing a capital expenditure sharing scheme, the AER must take into account the following principles (the capital expenditure sharing scheme principles):*

(1) *Transmission Network Service Providers should be rewarded or penalised for improvements or declines in efficiency of capital expenditure; and*

(2) *the rewards and penalties should be commensurate with the efficiencies or inefficiencies in capital expenditure, but a reward for efficient capital expenditure need not correspond in amount to a penalty for the same amount of inefficient capital expenditure.*

...

26. Equally, however, there are situations where financial incentives are more difficult to apply or that come with greater risk, such as where the required level of expenditure is subject to substantial uncertainty that derives from external factors, but it is difficult to distinguish between those matters that may be controlled and those that cannot. In this case, administrative measures may be a preferred means of encouraging efficiency in expenditure (and capital expenditure in particular). I elaborate on this matter further below.

2.3 How to decide upon the incentive rate within the CESS

2.3.1 The Capital Expenditure Sharing Scheme

27. The “capital expenditure sharing scheme” (CESS) operates to provide a continuous incentive to reduce capital expenditure at a predetermined incentive rate. The mechanics of the standard CESS are as follows:

⁸ NER, clause 6A.6.5A. This clause also refers to the capital expenditure efficiency objective, which is (essentially) to ensure that only prudent and efficient capital expenditure is included in the RAB. From the perspective of incentive schemes, this equates to encouraging efficiency in (actual) capital expenditure, and so this objective effectively repeats the direction from clause 6A.6.5A(a) as quoted above.

- a. An efficiency gain or loss is defined as a difference between the capital expenditure allowance for a regulatory period, and actual expenditure. The only adjustments to the cost allowances that are currently permitted are:
 - i. where an approved cost pass through has taken place, in which case the allowances are increased for the pass through, and
 - ii. where there has been a material overspend, the AER has undertaken an ex post review and determined that part or all of the overspend should not be recovered, in which case the actual expenditure is adjusted by the extent of the disallowance.
 - b. The net present value of the underspend (overspend) is calculated as at the end of the regulatory period, which is interpreted as the aggregate change in efficiency.
 - c. The predetermined incentive rate is then applied to the aggregate change in efficiency to determine the reward (penalty) that the CESS will deliver. Under the standard CESS the incentive rate is 30 per cent.
 - d. A calculation is then undertaken of the benefit (penalty) that the regulated business has already received (incurred) during the regulatory period via a saving in (additional) financing costs due to the underspend (overspend). This benefit or penalty that is received during the regulatory period is often described as the “natural incentive” under a price/revenue cap.
 - e. The difference between the intended reward (penalty) under the CESS, and the reward (penalty) already received, is then applied as an adjustment to revenue over the next regulatory period (the aggregate adjustment is provided via a smoothed allowance over the period).
28. The CESS guideline now contains additional flexibility in relation to the application of the CESS to major transmission projects, including ISP projects. In particular, the AER has provided itself with the flexibility to:
- a. not apply the CESS to certain classes of expenditure, in which case the natural incentive alone will apply, and
 - b. vary the incentive rate for some or all of the categories of capital expenditure associated with the project.
29. How the CESS applies in relation to ISP projects has been the subject of further recent discussion.
- a. The AEMC commented that it appeared to be an unusual outcome whereby the AER may undertake a detailed ex post review in relation to an overspend, but find the overspend to be prudent and efficient, and yet a penalty may apply in relation to the overspend.

- b. The AER is currently consulting on further changes to the CESS, and its draft view is that it should provide itself with further flexibility in relation to large transmission projects, which include to:
 - i. make adjustments to the cost allowances to take account of changes in the scope of the project when applying the CESS in the following review (this would imply that allowances could be changed outside of cost pass throughs), and
 - ii. allow firms to propose how the interface between the CESS and the ex post review process should be managed, which may include to not apply CESS penalties where project costs are found to be efficient.
- 30. An important question when determining how efficiency of expenditure should be encouraged is how the incentive schemes should be calibrated, and the relative role of financial incentives and administrative means.

2.3.2 Principles for guiding the selection of the incentive rate

Introduction

- 31. The choice of incentive rate in relation to capital expenditure should be undertaken with reference to the benefits from a higher incentive rate (in terms of potentially encouraging greater efficiency) against the costs (in terms of customers paying higher prices than necessary, or a potential adverse impact on investment, depending on the sign of the efficiency change). Part of this assessment should also involve a consideration of whether the alternative tool on the table for motivating efficiency – the prospect of ex post review and potential disallowance – may have advantages over financial incentives in the particular context.
- 32. Some of the potential factors that will be relevant for the choice of incentive rate – and whether to rely upon financial incentives rather than administrative measures – are discussed next.

Ease of controlling expenditure / making efficiency gains

- 33. As discussed above, the purpose of financial incentives is to encourage regulated businesses to control costs and pursue further efficiency gains, where possible. The implicit assumption is that, absent a clear financial incentive to pursue efficiency gains, management will not devote the effort that is required. To this end, it is widely accepted that one of the principal detriments of market power is that firms pursue the “easy life” and become slack in their operations, and so earn part of their monopoly rent by having higher costs than is necessary.
- 34. It follows from this that the extent of financial incentive that is required to encourage efficiency will depend upon the difficulty and the extent of effort that is required to find efficiency gains.

- a. To the extent that there are easy efficiency gains to be made – such as in the situation immediately after the privatisation of formerly state-owned assets – there may be substantial “low hanging fruit”. A low incentive rate may be sufficient to encourage these gains.⁹ Applying a low incentive rate in this circumstance would encourage the gains, whilst minimising the gap between price and efficient cost (and, in the case of gains, pass on a greater share of those gains to customers).
- b. Where firms are already close to the efficiency frontier and so making further efficiency gains requires additional effort and potentially a cash investment – for example, a fundamental restructure of a business that brings with it substantial redundancies – then a higher incentive rate may be required to encourage these gains. In this situation, providing a larger share of the gains to the regulated business would be in the interests of customers because efficiency gains would be encouraged that would not have occurred under a lower incentive rate.

Uncertainty of expenditure requirement

35. Implicit in the discussion above about the ease of controlling costs and making efficiency gains is that the expenditure is controllable, and so any measured change in expenditure compared to the forecast would reflect the effort of the business – either an efficiency gain (for which a reward is due) or inefficiency (for which a penalty is appropriate). However, forecasts of expenditure will inevitably contain an element of uncertainty that arises due to factors beyond the control of the business, and hence part of the reward or penalty (and so the gap between price and efficient cost) will not reflect a change in efficiency, but rather will reflect the randomness of expenditure requirements, that is, a “windfall”.
36. As the extent of the uncertainty in forecasts increases, then the risk of applying financial incentives to encourage efficiency also increases. This, in turn, would imply that a lower incentive rate would be optimal for consumers, or potentially using a different regulatory tool for motivating efficiency than financial incentives (i.e., ex post review) where the uncertainty is particularly high.
37. It is noted, however, that it is possible to employ measures that reduce the effect of uncertainty on the measurement of inefficiency. Some of the potential measures that the AER has employed, or has discussed in a recent consultation, include the following:
 - a. *A portfolio effect* – for projects being undertaken by a large entity, then some of the forecast errors in one particular cost item would tend to be cancelled out by opposing errors in other cost items, which would reduce the uncertainty in the overall forecast. In addition, under the current CESS scheme, a TNSP (in relation to non-ISP projects) is able to defer projects to the next regulatory (where it is able to do so)¹⁰ in order to

⁹ During the earliest discussions of incentives schemes in Australia, an economic model was presented that derived the optimal incentive rate from the point of view of customers, noting that a higher incentive rate would induce more gains, but provide customers with a smaller share. One of the results was that if gains were expected to rise linearly with

¹⁰ The TNSP’s capacity to defer projects would be subject to meeting its reliability obligations, and affected by the potential for penalties under the service incentive scheme (service target incentive scheme, STPIS).

remain within the original regulatory allowance (and so avoid a financial penalty), without incurring a penalty.¹¹

- b. *Permit pass throughs for identified cost changes* – such as the effects of a change in regulatory requirements, which have the effect of changing the base against which efficiency is measured. While the NER specifies a range of default pass through events, and permits the AER to approve further events, the NER provisions place tight restrictions around what can be a pass-through event.
- c. *Make an automatic adjustment for capex that is linked to exogenous factors* – the AER has recently proposed that the customer connection capex allowance for distribution networks be varied in line with the difference between forecast and actual connection numbers.
- d. *Make an adjustment for changes in scope* – the AER has also recently suggested that a change to the allowance against which efficiency is measured may be made where there has been a change in “scope” of the NSP’s expenditure requirements. This adjustment would be applied on an *ex post* basis, and require the NSP to convince the AER of the appropriateness of the adjustment.

Consistency with incentives to reduce operating expenditure and to improve service performance

- 38. One of the original objectives when setting the incentive rate for the CESS was to avoid creating a perverse incentive to favour either a capital or operating solution to a network need in situations where substitutes exist. That is, a higher incentive rate for operating expenditure (i.e., in the EBSS) may encourage capital solutions to be preferred and vice versa if the capital expenditure incentive rate (i.e., in the CESS) is higher. Indeed, the current standard incentive rate for the CESS of 30 per cent was originally justified on the basis that this was consistent with the implicit incentive rate in the EBSS, although this equality now would be met with an incentive rate of between 16 per cent and 21 per cent.¹²
- 39. The importance of the objective to align the incentive rates for operating and capital expenditure will depend on the significance of the situations where an NSP will face a

¹¹ In this situation, in principle, the TNSP would be delivering “less for the same”, and so would imply a reduction in efficiency *if* costs were fully controllable (i.e., if there was no uncertainty in cost forecasts). Note, however, that TNSPs are only permitted to defer costs in this manner to avoid a penalty. The standard CESS calculations require an adjustment for deferrals where the TNSP underspends against the allowance.

¹² The EBSS is structured differently to the CESS, and results in any change in cost being borne (as a benefit or penalty) for 6 years, and which is then passed through to customers. As such, the incentive rate is implicit (it is calculated as the proportion of the present value of a perpetual cash flow that occurs in the first six years), and so depends on the (real) WACC that is employed. The 30 per cent incentive rate was calculated using a real WACC of around 6.5 per cent, whereas the current real WACC of around 3 per cent (the approximate MLPL real WACC for the FY2026 to FY2030 regulatory period) to 4 per cent (the approximate real WACC cited in the HumeLink Stage 2 decision) implies a much lower (16 per cent to 21 per cent) implicit incentive rate. It is noted for completeness that it is straightforward to restructure the EBSS calculations so that the incentive rate would be a direct input to the calculation.

choice between an operating and capital solution, and where a difference in incentive rates is likely to affect that choice.

40. A related consideration when setting capital expenditure incentive rates in particular is the comprehensiveness and robustness of measures to regulate service performance. Where there are gaps in service regulation (referring here generally to financial incentives, regulatory obligations and transparency measures), then attaching strong financial incentives to capital expenditure may provide a perverse incentive to either reduce service levels, or to not improve service in a manner that may be beneficial to consumers.

Effectiveness of administrative measures to identify and penalise inefficiency

41. As discussed earlier, a principal benefit of financial incentives is that they overcome the information asymmetry between the regulator and regulated business. In situations where the regulated entity is complex – for example, operating a large network and providing a range of services – the potential information disadvantage of the regulator may be large. However, information disadvantage is likely to be less material where the activity in question is simpler and/or narrower.
42. Moreover, whilst financial incentives have distinct advantages over administrative measures (i.e., *ex post* review) in some contexts as discussed earlier, administrative measures have advantages over financial incentives in other contexts. Specifically, and most relevant to the matters addressed in this report, *ex post* review is particularly adept at dealing with situations where the *ex ante* forecasts are subject to substantial uncertainty. In this circumstance, an analysis of the prudence and efficiency of the actual decisions of the regulated business will provide for a much better accounting of the business's actions, and so not generate the same risk as financial incentives.

2.4 Should TNSPs share the risk of the *efficient* cost of an ISP project being greater than forecast?

43. The discussion about the CESS has frequently suggested that one purpose or benefit of the scheme is to share the consequences of a situation where a project is more costly to deliver than expected between consumers and the regulated business. The proposition here is that the efficient cost of the project may be uncertain at the time that the project commences, and that consumers would benefit from being shielded from the full effects of any overrun.
44. Importantly, this role for the CESS would extend beyond providing an incentive for the regulated business to be efficient in its delivery of the project, and imply that the regulated business would be providing a form of partial insurance to consumers against the risk of potential cost overruns. This partial insurance role would appear to be beyond the intended purpose for the CESS – which, as discussed above, is to provide an incentive for efficient capital expenditure – but it does raise the question of whether TNSPs should provide this partial insurance, and whether this would be in the interests of consumers.

45. In my view, TNSPs are not well-placed to provide such a partial insurance against the risk of (efficient) cost overruns, and requiring TNSPs to do so in the context of large transmission projects (i.e., ISP projects, like Marinus Link) would threaten investment incentives and ultimately be to the long-term detriment of consumers.
46. It is instructive to compare the structure of TNSPs to that of insurance companies, which are in the business of taking on risk in return for an insurance premium. However, in order to manage this risk – and ensure continued financial viability – insurance companies will typically:
 - a. take on a wide portfolio of risks (in terms of type and/or geography), and so rely upon the natural diversity of claims to reduce the overall risk (if not done directly, the benefits of this diversification may be achieved indirectly through reinsurance), and
 - b. hold substantial reserves (in the form of financial assets) to cover situations where correlated events trigger a substantial increase in aggregate claims.
47. In addition to this, the cost of capital to insurance companies – and so the returns that investors require to devote capital to the activity – is typically substantially higher than that of utility firms.¹³
48. Compared to insurance companies, regulated networks are not well structured to bear the material risk that would be implied by partial insurance of (efficient) cost overruns in the context of the large transmission projects. Requiring TNSPs to provide this service implicitly as part of the CESS settings would create a material risk of determining efficient investment.
49. Rather the appropriate response to uncertainty in (efficient) cost estimation is to:
 - a. take account of the uncertainty in project costs when deciding to undertake the project, which I note is already a key component of the test that is required to be applied when determining whether to pursue the project in question
 - b. for the cost risk to lie principally with consumers, although noting that the option exists for governments to assist should they choose (so that the cost risk would be borne by a wider group of parties again).

¹³ In work that we have undertaken for a different assignment, we estimated the asset beta for insurance businesses to range from 0.77 (for property and casualty) to 1.14 (life insurance), which was based on US insurance companies over the 10 years ending with calendar year 2019 (i.e., predating the Covid-19 period). This compares to an asset beta of 0.24 that is implied by the AER's standard regulatory settings. While there are other factors aside from risk-bearing that would be expected to cause insurance business to have a higher asset beta than utilities (such the tendency for insurance company revenue to decline during economic downturns), these figures suggest nonetheless that the activity of efficient risk bearing are likely to have a higher asset beta (and so cost of capital) than a utility service.

3. Determining the appropriate CESS incentive rate for the Marinus Link project

3.1 Introduction

50. The focus of this report is on how the CESS should apply to the Marinus Link project during its construction phase. This is an ISP project, and like many of the other ISP projects, there are a range of factors that distinguish it from the standard activities of the NSPs.
- a. First, there is limited capacity for “portfolio effects” to reduce the effects of cost uncertainty in relation to ISP projects (and so address the risk arising from financial incentives) due to the size of the projects. For MLPL this situation is even more marked because the Marinus Link project will be its only project.
 - b. Secondly, *ex post* review will apply to the ISP project in isolation for all TNSPs, and so there is no capacity to reduce the risk of *ex post* review by underspending in other areas, although the capacity to do so would be limited in any event (due to the size of the projects and, for MLPL, because Marinus Link is its only project).
 - c. Thirdly, the projects are typically greenfields projects and so subject to substantial cost uncertainty. I discuss this uncertainty further below.
 - d. Fourthly, the scope of activities and decisions that the incentives are trying to influence is limited to the delivery of the project. The decision over whether to undertake the project in question is subject to a range of additional measures, including the role of AEMO (through preparation of the Independent System Plan and requirement to sign-off that the project remains justified during the contingent project application process, and via the requirement to undertake a RIT-T assessment for the project). This contrasts with the ordinary operation of the CESS where a key goal – and especially in relation to renewal expenditure – is to influence how regulated businesses choose between alternative projects.
51. I now turn to the specific measures of the Marinus Link project in more detail.

3.2 Characteristics of the Marinus Link project relevant to the incentive rate

3.2.1 Complexity of the efficiency task

52. Consistent with the discussion above, the principal choices over what to build in relation to the Marinus Link project have been made, and so the activities that any incentives (financial or regulatory) are intended to affect relate to the delivery of the project. In addition, but the time the new regulatory period commences, MLPL will have made the key decisions about how the project should be delivered, namely through:
- a. a principally fixed price contract for the cables (aside from onshore civil works)
 - b. a principally fixed price contract for the converter station equipment

- c. an incentive-based contract for the remainder of construction (balance of works)
 - d. the appointment of an integrated delivery partner to assist in overseeing the construction contractors, and
 - e. in-house provision of the remainder of the tasks, including stakeholder management, securing approvals and negotiating with landowners.
53. The purpose of the incentives for the project delivery phase are to ensure that the contracts are managed prudently and efficiently and the remaining in-house tasks are performed effectively. As a component of this, the predictable issues that will arise during the construction of such a large infrastructure project need to be managed efficiently. Whilst the residual activities of MLPL are very important, these are reasonably narrowly confined and straightforward tasks for which CESS incentives would be intended to motivate.

3.2.2 Uncertainty in expenditure

54. MLPL is exposed to a series of inherent risks that cannot be removed (or removed efficiently) through better forecasting or insurance or like products.
55. MLPL can remove or substantially mitigate some risks, such as:
- a. its exchange rate and commodity price exposure in the cable and converter station equipment contracts, it can ameliorate via entering into standard hedging arrangements, and
 - b. damage to property during construction, which it can mitigate via insurance, subject to the deductible and policy limit.
56. However, MLPL is exposed to a range of risks including:
- a. sea floor conditions, which may require rerouting and/or higher cost cable burial options
 - b. weather during the construction period, and the possibility of more lost days than expected
 - c. conditions along the route where the cable will traverse the land, and the potential for a need to change the route or incur greater HDD costs
 - d. differences between the forecast and actual real wage growth, noting the indexation in the contracts
 - e. approvals processes taking longer than expected, and
 - f. approvals requirements being more onerous than expected

57. Importantly, this uncertainty cannot be resolved through better forecasting or more studies – for example, it is not efficient to survey the ground conditions along the entire cable route, and the weather conditions during construction cannot be known in advance.
58. Moreover, as the AER has recognised, ISP proponents have fewer opportunities to manage these inherent risks than TNSPs. In particular, as MLPL is a single asset business:
- a. it is not in a position whereby the forecast errors for one project will be offset by other projects in its portfolio as it does not have a portfolio, and
 - b. similarly, it cannot defer other projects in its portfolio to make up for cost overruns in the ISP project as it does not have other projects.

3.2.3 Consistency with other incentive schemes

59. During the construction of the project, MLPL will not have any opex, and so there is no benefit in seeking to align the incentive rate with the incentive rate that may be applicable to opex.¹⁴
60. In relation to service incentives, it is unclear to what extent MLPL may be encouraged to compromise service levels for customers in order to reduce project cost. The main service-related concern for TNSPs from having high financial incentives is that projects are delayed (e.g., a major renewal), and customers may be exposed to greater risk of asset failure as a consequence. However, a high incentive rate would be unlikely to encourage MLPL to allow construction times to slip given that delay to the project would be likely to raise the overall cost of the project. It may be possible that a high incentive rate would encourage MLPL to “cut corners” in some manner, although its exposure to *ex post* review may mitigate this incentive (for example, this would mitigate the incentive to deliver a project that does not provide the intended outputs).¹⁵ Overall, I do not think that the potential presence of gaps in service regulation provides a reason to alter the CESS incentive rates.

3.2.4 Effectiveness of ex post review

61. As discussed earlier, many of the sources of asymmetric information that may reduce the effectiveness of the threat of ex post review in the context of a typical utility are not present in the case of the Marinus Link project. That is, unlike a standard TNSP or DNSP – that have large networks and provide a variety of services, and may employ a range of operating models to deliver projects – MLPL’s sole activities will be to deliver the Marinus Link project, and noting further that the principal contracts for the delivery of the project have already been awarded. Accordingly, the main focus of any ex post prudence test would be to test the prudence and efficiency of:

¹⁴ However, I note for completeness that aligning MLPL’s CESS incentive rate with the implicit incentive rate for opex would imply an incentive rate of 16 per cent given the WACC that is applicable to the construction period.

¹⁵ One potential effect of high financial incentives on capex is that MLPL has less regard to wider market costs during the testing and commissioning phases of the project.

- a. its management of the construction contracts, including the active monitoring and management of the interfaces between the contractors
 - b. its delivery of the other activities required for the project, such as obtaining approvals and managing stakeholders, and
 - c. its timely response to any unforeseen issues that may arise during the construction period, as discussed already above.
62. In my view, this narrow scope of MLPL's activities during the construction period means that its conduct will be particularly amenable to review by an outside party (i.e., the AER), which in turn means that the prospect of an *ex post* review should be an effective motivator of performance.

3.2.5 Other factors – MLPL's unique financing arrangements

63. MLPL will be in a unique position for regulated businesses in that it is proposed to be financed entirely via concessional finance. That is, its equity finance will be provided by the Commonwealth, Victorian and Tasmanian Governments, and its debt finance is proposed to be provided by the Clean Energy Finance Corporation (CEFC). Moreover, as part of this arrangement, the proportion of debt finance will be higher than would be typical where finance is provided on a commercial basis (with debt commencing at about 80 per cent of the project cost). The benefits of this concessional finance (reflected in both the concessional rates of return as well as the higher leverage level) will be passed on in full to consumers under the new concessional finance rules.¹⁶
64. The fact that MLPL will have concessional equity finance, and commence with a higher level of debt (and so lower level of equity) than would ordinarily be the case, means that MLPL will naturally have less capacity to absorb the effects of risk than firms that are financed commercially. This reduction in risk bearing capacity arises because the profit (equity) share of regulated revenue is the principal source of the "headroom" through which regulated utilities are able to bear an element of risk and the presence of this concessional finance means that this profit line item will be substantially lower.
65. The AER quite rightly adopts a policy of ignoring the actual financial decisions of regulated businesses in the ordinary course of events, with the effect that regulated businesses bear the risk of their own financing decisions but also reap the benefits. However, as MLPL's unique financing arrangements are intended to benefit consumers directly, there is an arguable case for placing weight on MLPL's financing arrangements when determining the incentive rate. In my view, the principal implications the AER should draw from MLPL's lower capacity to bear risk is that this is likely to:
- a. create a further motivation for MLPL to manage the project as prudently and efficiently as possible, and so act to magnify the effects on MLPL of any given financial incentive, and

¹⁶ NER, rule 6A.3.3.

- b. also magnify the potential for project cost uncertainty to create an adverse incentive to invest.
66. It follows that the presence of MLPL's unique financing arrangements would argue for a lower incentive rate for the CESS applicable during construction than would otherwise be the case.

3.3 Implications for the incentive rate for the Marinus Link project

3.3.1 Exclusive reliance on ex post review would be defensible

67. In my view, one implication from the discussion above that could be drawn is that it would be quite appropriate in relation to the Marinus Link project to rely solely on the threat of ex post review to motivate prudence and efficiency during the construction of the project.¹⁷ This implication reflects:
- a. the greater effectiveness of ex post review as a motivator of prudence and efficiency for MLPL during the construction of the Marinus Link project given MLPL's sole purpose being to deliver the project and the comparatively straightforward (although important) role that MLPL will be required to perform in that regard, and
 - b. the risk to consumers that is created by applying financial incentives given the uncertainty in the efficient cost of delivering the Marinus Link project (i.e., the risk that consumers pay too much, or that investment incentives are adversely affected, due to financial rewards / penalties occurring for purely external factors) – in contrast, as ex post review will focus on the decisions of MLPL in light of the circumstance of the project as it evolves during construction, the ex ante uncertainty in project costs poses less risk to consumers.
68. As I discuss further below, there is precedent from other regulators for relying upon ex post review as the exclusive tool for motivating efficiency during the construction phase of major infrastructure projects.
69. One potential issue that arises with the application of ex post review under the NER at present is that such a review is only triggered if the project cost exceeds the ex ante regulatory allowance. In addition, the AER's preference – as reflected in the current capital expenditure incentives guideline – is only to apply an *ex post* review where the overspend against the allowance is deemed to be material. This may suggest gap in the incentive scheme where construction costs turn out to be lower than expected, and underspending against the allowance occurs.¹⁸
70. In my view, this concern is likely to be overstated during the construction of major projects, at least during the early years of construction. This is because unforeseen issues may arise at any time, and so even if a project is ahead of budget at a point in time, an

¹⁷ I note that it may be possible to draw the same conclusions in relation to all major, greenfields transmission projects; however, this report has been prepared with reference to the specific circumstances of the Marinus Link project.

¹⁸ In the context of MLPL, such an outcome would most likely mean that

unexpected event later in the project may imply that the conditions for ex post review are triggered. The *ex post* review in this case would examine all decisions, including those while the project was ahead of budget. However, an alternative would be to have financial incentives apply in situations where the conditions for *ex post* review are not met (i.e., there is an underspend or immaterial overspend), which I discuss next.

3.3.2 Ex post review for material overspends, otherwise a modest incentive rate

Overview of proposed model

71. The alternative, and the model that I propose, is to rely upon:
 - a. *ex post* review to be relied upon as the sole motivator of prudence and efficiency for a material overspend, and
 - b. a financial incentive to apply to encourage prudence and efficiency in the zone where an overspend would be deemed to be immaterial, and in relation to underspends, with the incentive rate set with reference to the considerations discussed earlier.
72. An important implication of this model is that there would be no financial penalty applied where an overspend that is beyond the threshold for materiality was found to be prudent and efficient. I note that this outcome would be consistent with the AEMC's recent observations that it would be an unusual outcome for material CESS penalties to apply in relation to an overspend that is subsequently deemed by the AER to be prudent and efficient.¹⁹
73. In terms of specifying the model, the important decisions are to:
 - a. establish the threshold above which an overspend should be deemed to be material, and
 - b. determine the incentive rate that applies within zone where expenditure does not amount to a material overspend.

Threshold for application of financial incentives

74. I note that the AER's initial draft decision for MLPL, as well as the AER's decision in relation to the HumeLink construction expenditure, implicitly adopted a 10 per cent threshold as the point after which changes in expenditure were deemed to be sufficiently material that financial incentives should be moderated. In my view, this threshold would be an appropriate point for an overspend to be judged to be sufficiently material for *ex post* review to be activated.

Incentive rate within the threshold

75. In terms of the incentive rate that is applied within this threshold, the discussion above suggests that this rate should be set at the minimum that is sufficient to encourage MLPL

¹⁹ AEMC (2024), Rule determination – National Electricity Amendment (Managing ISP project uncertainty through targeted ex post reviews) Rule 2024, August, p.20.

to be prudent and efficient in its delivery of the project. I have considered two indicators of this sufficiency of incentive.

Comparing potential penalties with the cost of prudent actions

76. One indicator of the sufficiency of the incentive is to compare the potential reward or penalty to MLPL that will arise under a particular incentive rate with the cost of the activities that the incentives are intended to influence. As discussed earlier, the construction works have been awarded under three contracts (two of which are largely fixed price), and the prudence and efficiency of MLPL will depend upon how well MLPL oversees the contractors (as per the contracts), and undertakes its residual roles (including securing approvals, managing stakeholders and addressing issues as they arise).
77. I have reviewed MLPL's forecast capital expenditure for its support activities, and I calculate that the forecast cost of the activities that may "scale" depending on the issues that arise during the project's delivery are approximately \$240 million.²⁰ Turning first to the maximum financial penalty of MLPL (i.e., assuming a 10 per cent overspend), I note that:
- a. a 5 per cent incentive rate (as MLPL proposed) would imply an \$18 million penalty, which is equivalent to 7 per cent of the "scalable" costs discussed above
 - b. a 10 per cent incentive rate would imply a \$36 million penalty, which is equivalent to 15 per cent of the "scalable" costs discussed above, and
 - c. a 30 per cent incentive rate (as the AER determined in its initial draft decision) would imply a \$108 million penalty, which is equivalent to 44 per cent of the "scalable" costs discussed above.
78. I observe that the outcome generated by a 30 per cent incentive rate (a maximum penalty of \$108 million) would appear to be a high penalty relative to the cost of the activities that are intended to be influenced (being 44 per cent of those costs), and likely to be higher than required to motivate MLPL. Equally, however, I agree with the AER that an incentive rate of 5 per cent may not be large enough to motivate a large step up in these scalable activities if required to manage unexpected vicissitudes. In my view, however, an incentive rate of 10 per cent would generate a potential penalty that is sufficient to motivate a substantial increase in MLPL's effort if required, noting that:
- a. the maximum financial penalty (approximately \$36 million) would be equivalent to 15 per cent of the total of the "scalable" activities, and so a larger percentage of the subset of activities that may be relevant to a particular event, for example:
 - i. the penalty of \$36 million would equate to 175 per cent of the forecast cost of the function entitled "environmental impact assessments and management"

²⁰ I derive this by commencing with MLPL's overall forecast cost for support activities of \$519.3 million, and deduct insurance, corporate overheads and payments for other specific items (landholder payments and the contribution to a community fund). This amount includes the costs associated with MLPL's integrated delivery partner.

(\$20.6 million), which would be the area where effort would be “stepped up” if an unexpected issue arose in relation to such approvals

- ii. the penalty of \$36 million would equate to 25 per cent of the forecast cost of the function entitled “program and project management” (\$144.9 million), which would be the area where effort would be “stepped up” if the prudent administration of the construction contracts required a step up in effort.
- b. even with a more modest overspend (a 5 per cent overspend), the CESS penalty (\$18 million) would still be a meaningful proportion of the overall cost of the “scalable” activities (7.5 per cent), and remain a substantial proportion of the cost of the subset that may be relevant to any particular issue.

Implicit loss to equity holders from the penalty

- 79. A second indicator of the likely incentive effect of a penalty is to consider what the penalty in question would mean for the loss of the equity investors’ investments. Equity investors control how firms respond to emerging risks, and so the significance of a financial penalty in terms of their investments will provide an indication of the importance that prudent risk management is likely to have for the board, and with flow-on effects into the organisation.
- 80. To this end, I agree with the view in MLPL’s proposal – citing previous work from HoustonKemp – that, as regulated utilities tend to be highly financially levered, the effect of a penalty on equity investors becomes magnified (i.e., because none of the shortfall is borne by debt providers, provided the firm does not become insolvent). Due to this magnification, even financial incentives that appear modest could have a realistic effect on how a board determines the priorities for management.
- 81. In terms of the discussion above, I observe that if there is a 10 per cent overspend and a 10 per cent incentive rate (as I propose), then 25 per cent of this overspend component would be lost via the CESS penalty, assuming the regulatory benchmark leverage of 60 per cent debt-to-assets is employed ($= 10\% / 40\%$). Moreover, as MLPL’s submission also noted, once MLPL’s higher (concessional) leverage is considered, this magnification of effect is even larger (the 10 per cent penalty rate would lead to a loss of 50 per cent of the equity investment in the overspend via CESS penalties, applying MLPL’s proposed leverage of 80 per cent). I set out in section 3.2.5 why it is valid for the AER to depart from the AER’s standard practice and consider MLPL’s actual financing arrangements.
- 82. In my view, the prospect of equity investors losing 25 per cent of the investment in the overspend component would be sufficient for a board to be motivated to ensure that management implement prudent oversight of the delivery of a project. This conclusion in relation to MLPL would be stronger again given its expected higher (concessional) leverage LEVEL.

Guidance from other regulatory decisions

83. More generally, however, I observe that an incentive rate of 10 per cent is similar to the financial incentives that are applied in similar situations by other regulators in cases where financial incentives are applied (which I discuss in section 3.5.2).

Summary

84. Accordingly, I propose that:
- a. an incentive rate of 10 per cent apply for overspends up until 10 per cent of the project cost, and
 - b. higher levels of overspend will trigger the ex post review process, and so a zero incentive rate will apply to these higher levels of overspend.

Symmetric financial incentives

85. One issue that is not addressed in the discussion above is how a large underspend should be treated. Symmetry would suggest that a zero incentive rate should also apply for underspends beyond 10 per cent; however, unlike the case of an overspend, there is no alternative mechanism (i.e., the equivalent of ex post review) that will continue to encourage prudence and efficiency if the underspend exceeds the 10 per cent threshold.
86. Notwithstanding the concern just expressed, in my view the incentive scheme should be symmetric and imply a zero incentive rate for an underspend below 10 per cent. I say this for the following reasons.
- a. First, MLPL will not know the overall outcome for the project cost until it is complete. Thus, even if the project looks like it may have a final cost that is substantially below budget (i.e., more than 10 per cent), there will still be a prospect that the final project cost sits within the incentive band (i.e., within ± 10 per cent), which will provide some incentive to minimise cost.
 - b. Secondly, the AER has interpreted consumers as having a preference for symmetric incentive schemes, which I have taken into account.

3.4 Alternative model – low incentive rate without a threshold

87. A key proposition in my preferred model as discussed above is that there should be a clear demarcation between when financial incentives operate to motivate behaviour, and when the threat of ex post review would apply. As I noted above, the proposition that financial incentives may operate exclusively for a zone of overspending is already inherent in the AER's current description of how it conducts ex post review, which the AER says would be limited to a "material" overspend. My proposal is simply to define what is meant by "material". In addition, the idea that ex post review would apply exclusively within a zone responds to the AEMC's observation that it appears illogical for financial penalties to be applied where expenditure is found to be prudent and efficient, as discussed earlier. The exclusive reliance on ex post review where overspends

are above a threshold also reflected my view that the threat of ex post review is a particularly effective tool for encouraging prudence and efficiency for projects the Marinus Link project.

88. However, if there were to be a concern that financial incentives for efficiency should continue even where ex post review operates (i.e., the overspend is material), then the appropriate course of action would be to apply a lower incentive rate than I propose, and to continue the financial incentive as the overspend. MLPL's proposed incentive rate of 5 per cent would be appropriate in this context. I further note that the "incentive effect" of a 5 per cent incentive rate may well be similar to the incentive effect of the incentive rate that I propose.
- a. That is, as discussed above, the final overspend (or underspend) will be uncertain, and indeed there may not be confidence as to the likely final position until construction is close to complete. This uncertainty in the final outcome means that a regulated business is likely to plan its activities based on the plausible outcomes for expenditure and the financial penalties that flow from this (the "planning penalty").
 - b. If a plausible level of overspend was around 20 per cent, then the "planning penalty" under MLPL's original proposal (5 per cent on a 20 per cent overspend) would be similar in magnitude to the "planning penalty" under my proposal (i.e., 10 per cent on half of the overspend). Indeed, as the financial incentives under MLPL's original proposal were not capped, the planning penalty potentially may be larger than under the scheme that I propose, implied a larger incentive effect than the scheme that I recommend.²¹

3.5 Comparison to other regulatory decisions

3.5.1 MLPL's proposal and the AER initial draft decision for MLPL

89. MLPL proposed a CESS incentive rate of 5 per cent, irrespective of the level of overspending (or underspending). The AER's initial draft decision in relation to MLPL was to apply:
- a. an incentive rate of 30 per cent up until an overspend of 10 per cent, and
 - b. an incentive rate for higher levels of overspend that was set at a constant rate that is consistent with the average of the "natural incentive" rate during the five-year construction period. Given the MLPL real WACC of approximately 3 per cent, combined with a 5 year construction period, I calculate the average of the natural incentive rate to be approximately 5.9 per cent.²²

²¹ Having said that, in my view it would be in the long term interests of consumers for the total exposure to CESS penalties to be capped at some level (for example, at an overspend of 20 per cent), even though this would imply a zone in which only the threat of ex post review was available to motivate performance.

²² This value assumes a constant absolute overspend in each year of the regulatory period, and is derived as the within period financing cost that is caused by the overspend (in NPV terms), divided by the total

90. Ex post review would be undertaken when an overspend was found to be material, which would operate in addition to (rather than as a substitute for) the CESS incentive.
91. A key difference between both MLPL's proposal and the AER initial draft decision on the one hand, and my proposal on the other, is that I have proposed that the CESS be implemented to have a clear demarcation between when CESS penalties would apply to motivate performance, and when ex post review would be relied upon for this purpose. My conclusion in this regard draws upon the discussion in the recent AEMC targeted review rule change and the AER's subsequent consultation arising from that rule change, which were not available in time for MLPL's November 2024 proposal (and so were not part of the proposal the AER was considering). In my view, the recently emerging view that CESS penalties and ex post review should have separate areas of operation would imply an improvement to the regulatory regime as it applies to projects like the Marinus Link.
92. In terms of the incentive rates, as I discussed earlier it is not obvious that the incentive effect of MLPL's original proposal (i.e., a 5 per cent incentive rate on any level of overspend or underspend) would be materially different to my proposal (a 10 per cent incentive rate applying to an overspend up to 10 per cent). This is because the final level of overspend is uncertain, and so MLPL would be expected to plan its activities based on an assumed "plausible" level of overspending. If MLPL planned on the basis that an overspend of 20 per cent was plausible, then the incentive effect of my proposal and MLPL's original proposal would be the same.
93. In terms of the AER's initial draft decision, it follows from the discussion above that I do not think an incentive rate of 30 per cent up until an overspend of 10 per cent is necessary to encourage MLPL to be prudent and efficient in relation to the delivery of the project, but rather that a much lower incentive rate would be sufficient. Thus, in my view, the AER's initial draft decision would have the potential to cause a much larger wedge between price and cost than is required, which is to the detriment of consumers. Moreover, continuing the CESS penalties beyond the 10 per cent threshold (albeit at a reduced rate beyond this) creates the potential for a very large penalty that is unnecessary to motivate behaviour, and so not in the long term interests of consumers.²³

3.5.2 Precedents from other regulators

94. As a caveat to the discussion below, I am not an expert in the application of economic regulation in other countries (aside from New Zealand, where I do substantial work), and so the observations below are based on a limited desktop review of other regulators' decisions or relevant secondary materials.
95. My understanding is that US regulators principally apply the threat of ex post disallowance as the tool to encourage the efficient delivery of transmission projects,

overspend (also in NPV terms). An alternative would be to assume an equal proportionate overspend in each year of the five-year construction period, which would imply an average "natural incentive" rate of 6.3 per cent.

²³ For example, assuming an incentive rate of 5.9 per cent for overspends beyond 10 per cent implies that a 50 per cent overspend would generate a total penalty of \$193 million, which is of similar magnitude to the total of the "scalable" activities (approximately \$240 million) that I discussed earlier.

which is consistent with the findings in this report.²⁴ Like in Australia, the decision on the selection of the transmission project is subject to substantial prior regulation, much of which is done at the State level.²⁵

96. In relation to the United Kingdom, there are three different precedents that may be informative to the issues we face in Australia.
 - a. *Offshore wind transmission projects* – in the UK, one of the avenues by which transmission to offshore windfarms has been developed is for the generators to construct the transmission assets, and then for these assets to be transferred to regulated transmission businesses. The transfer value for the assets (i.e., the value that is then recovered from consumers) is set at the cost that is incurred,²⁶ subject to an efficiency test.²⁷
 - b. *New interconnector projects to continental Europe* – these projects are typically entrepreneurial (i.e., funded by electricity price differentials); however, proponents may opt into a semi-regulated regime that offers a floor to revenue in return for a cap on revenue. The floor and cap on revenues are based on achieving a return on a regulatory value,²⁸ and the regulatory value is determined at the cost incurred, subject to an efficiency test.²⁹
 - c. *Standard transmission projects* – Ofgem applies a 50 per cent incentive rate to expenditure over which Ofgem considers it has a high confidence as to the likely cost of the project (referred to as the “high confidence base line costs”), and a 15 per cent incentive rate for all other projects.³⁰ Ofgem’s definition of “high-confidence baseline costs” is those costs “where Ofgem has a high confidence in its ability to independently set an expenditure allowance”.³¹
97. In relation to **New Zealand**, whilst there has been some evolution in the incentive scheme for TransPower’s major capital expenditure since the new regulatory regime was

²⁴ This is consistent with the advice the AER received in: HoustonKemp (2020), Regulatory treatment of large, discrete electricity transmission investments, Report to the AER, pp.103-104.

²⁵ The HoustonKemp report also notes that, similar to Australia, different US jurisdictions have used “competition for the market” to simultaneously award rights to construct and to set regulated revenues; however, this is not relevant to the matters addressed in this report.

²⁶ A competitive tender process is run to determine the regulated revenue that is required given the transfer value of the assets.

²⁷ Ofgem, 2012, Offshore Electricity Transmission: Updated proposals for the enduring regime, May, p.21.

²⁸ The rate of return used to set the floor is the cost of debt finance, and the rate of return used to set the cap is the cost of equity.

²⁹ Ofgem, 2024, Interconnector Cap and Floor Regime Handbook, December, p.94.

³⁰ This is discussed in: SP Networks, 2019, RII02 Business Plan – Annexure 33, December.

³¹ SP Networks, 2019, RII02 Business Plan – Annexure 33, December, p.4.

introduced in New Zealand from 2010,³² the current regime applies a default incentive rate of 15 per cent,³³ but with an option to propose a different value.

98. Whilst all regulatory regimes have their own specific contexts, I observe that:
- a. the use of administrative (regulatory) measures – like ex post review under the NER – rather than ex ante financial incentives are a commonly used (for example, in the USA and aspects of the UK practice), and
 - b. where ex ante financial incentives are applied, a lower incentive rate than the AER has proposed are commonly applied for projects with substantial cost uncertainty.

³² The initial incentive scheme for TransPower's major projects required TransPower to bear 100 per cent of any overspend compared to the allowance, and permitted TransPower to apply for a reward for efficiency gains where there was an underspend (a contribution to the underspend needed to be demonstrated). However, in view of the asymmetric nature of the regime, the capital expenditure allowances were determined at the P90 value.

³³ A deadband (i.e., where a zero per cent incentive applies) operates for outcomes between the P30 and P70 limits at the time the forecast is made.