AUSTRALIAN ENERGY REGULATOR

Our Ref: 201179
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18 December 2020

Dear stakeholders

Re: AER's draft guidance note to support efficient delivery of actionable ISP projects—for consultation

We have released a draft guidance note as part of our work program to support efficient and timely delivery of large transmission projects, identified as 'actionable' in AEMO's Integrated System Plans (ISPs). This follows the work program letter we published on 17 November 2020 and has been informed by focus groups we held with stakeholders on 25 and 26 November 2020.

This letter accompanies the draft guidance note and summarises the issues raised by stakeholders and the rationale for our proposed approach. We invite stakeholders to provide feedback on the draft guidance note by 5 February 2021.

Our work program and draft guidance note

Our work program letter explained:

- Our role under the economic regulatory framework set out in the National Electricity Rules (NER) is to assess forecast expenditure (or costs) in determining the maximum amount of revenue network businesses can earn. We want to promote the efficient delivery of actionable ISP projects, and ensure consumers pay no more than necessary for these large projects, consistent with the National Electricity Objective.[1]
- Our work program seeks to provide more predictability about how we will assess actionable ISP projects under the economic regulatory framework, and improve our regulatory assessment tools/processes to ensure they remain fit-for-purpose for large actionable ISP projects.

As a first step, we are developing a principles-based guidance note for stakeholders to clarify how we intend to assess expenditure proposals for actionable ISP projects. This includes our expectations regarding the information that TNSPs will provide us. We consider this will improve the predictability and transparency of the regulatory process. This should in turn reduce regulatory uncertainty and increase confidence in cost forecasts and subsequent project delivery.

[1] That is, to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to: price, quality, safety and reliability and security of supply of electricity; and the reliability, safety and security of the national electricity system.

The draft guidance note collates and builds upon our learnings from recent contingent project applications for transmission projects, and the experiences of delivering large infrastructure projects in other sectors. This guidance note covers:

- The **contingent project application** (CPA) assessment process through which cost forecasts for actionable ISP projects are typically assessed. This section seeks to clarify what we expect TNSPs to demonstrate for our CPA assessment, to increase confidence in the quality of their cost forecasts and how they have assessed and managed risk.
- CPA **staging**, to clarify how we will approach sequencing actionable ISP projects through staged CPAs. This section will also set out how staged CPAs can be used in some circumstances to help understand and manage project risks better, and subsequently reduce uncertainty around cost forecasts.
- The **ex-post measures** that may apply to capital expenditure forecasts that contain actionable ISP project costs. This section seeks to provide greater predictability about how we may undertake ex-post reviews that can result in exclusions of capex from the roll forward of the regulatory asset base (RAB), in limited circumstances.

The draft guidance note seeks to promote efficient and prudent expenditure forecasts for actionable ISP projects through proactive risk management in the planning and design stage, as well as innovation in the procurement process. The draft guidance note also seeks to recognise that outturn costs can differ from those forecast and still be efficiently and prudently incurred, particularly in circumstances where risks are genuinely unforeseen and minimised through strong project controls and governance arrangements. We consider this will contribute to outcomes in the long term interest of consumers.

The draft guidance note is consistent with our initial views set out in the work program letter, and we have developed these to incorporate our learnings and stakeholder feedback.

Stakeholder feedback from focus groups

We held focus groups with stakeholders on 25 and 26 November 2020. The purpose of these sessions was to facilitate early stakeholder input and feedback on our initial views for the guidance note, as set out in the work program letter. This feedback provided valuable insights and has informed the development of our draft guidance note.

Overall focus group participants generally supported the objectives of the work program and guidance note. Key themes raised included:

- Cost increases from the ISP, to regulatory investment test for transmission (RIT-T) to CPA, and the need to re-test the costs against the benefits when there are material cost increases at the CPA stage—this was the most common issue raised. Relatedly, some stakeholders proposed links to the RIT-T, including the use of consistent cost categories to facilitate comparison between the RIT-T and CPA, and explanation of cost increases from the RIT-T to the CPA. Our draft guidance note takes account of this feedback. We also note the cost-benefit analysis occurs at the RIT-T stage (or via a re-application of the RIT-T if there has been a material change in circumstances). The cost-benefit impact of any subsequent cost increases would also be considered through AEMO’s feedback loop, which sets a cost limit for CPAs.
- Recording of post-completion data on actionable ISP projects, to increase transparency of how cost estimates progress and compare against outturn costs, and to inform and improve cost forecasting. Our draft guidance note takes account of this feedback.

- Scope of the guidance note. Even though the scope of the guidance note is focussed on actionable ISP projects, there were questions around whether they would or could be applied more generally. We have clarified that the guidance note is focussed on actionable ISP projects, but there are some elements that need to be considered in the context of the broader capital expenditure allowance (for example, any impacts of actionable ISP projects on other capital expenditure, and ex-post measures).
- Application of the guidance note to non-network options, and whether specific considerations are needed. We are continuing to consider this, and are interested in stakeholder views on this matter.

There was also interest in the opportunities we are exploring to amend the regulatory framework to further improve the assessment or delivery of actionable ISP projects in the medium to longer term, and other issues raised that were not related to the guidance note. We have collated these issues for later consideration as part of the wider work program.

The attachment to this letter contains a summary of the issues raised in the focus groups and our response (including those collated for later consideration).

Next steps, and invitation for submissions

We invite stakeholders to provide feedback on our draft guidance note by 5pm on 5 February 2021.

Stakeholders can send written submissions electronically to: TIRreview@aer.gov.au.[2] We prefer all submissions be publicly available to facilitate an informed and transparent consultation process. We will treat submissions as public documents unless requested.[3] If stakeholders wish to provide feedback in an alternative format, please email us to make arrangements.

We are holding an online stakeholder workshop on the draft guidance note on 28 January 2021. We invite interested stakeholders to register for this workshop by emailing TIRreview@aer.gov.au with attendee name(s) and organisation.

We aim to finalise the guidance note by March 2021. We then intend to update the guidance note periodically as we and TNSPs learn from the experiences of assessing and delivering actionable ISP projects.

We look forward to working with you on these matters.

Jim Cox
Deputy Chair
Australian Energy Regulator

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2 If stakeholders prefer to mail submissions, they can address these to Mr Mark Feather (General Manager, Policy & Performance) at Australian Energy Regulator, GPO Box 520, MELBOURNE VIC 3001.

3 We request parties wishing to submit confidential information to: clearly identify the information that is subject of the confidentiality claim, and reasons for the confidentiality claim; and provide a non-confidential version of the submission, in addition to a confidential one. We will place all non-confidential submissions on our website at www.aer.gov.au. For further information regarding our use and disclosure of information provided to us, see the ACCC/AER Information Policy, June 2014 available on our website.

Attachment – Key questions and answers from focus groups

This attachment sets out our responses to the questions and comments raised during our focus group sessions on 25 and 26 November 2020. These have been organised by guidance note topic: CPA assessment, CPA staging, and ex-post measures for actionable ISP projects.[4]

We have also collated the questions and comments we received on the broader work program or other issues outside the scope of the guidance note. We have sought to address these to the extent possible, noting that some questions can only be answered as we progress the work program. This includes issues raised on the transmission planning process that sit outside the economic regulatory framework (that is, the revenue determination process).

Contingent project application assessment

Stakeholder question / comment	AER response
Will the AER's existing 2007 process guideline for CPAs receive an update to ensure it stays relevant and compatible with the new CPA guidance note (e.g. advice on pre-lodgement consultation)?	Not at this stage. The 2007 process guideline highlights key NER processes and requirements to help TNSPs prepare contingent project application. This guidance note refers to and supplements the 2007 guideline, by expanding on the key considerations in assessing the CPAs for actionable ISP projects. It is consistent with the 2007 guideline.
Will some of the expectations/ recommendations in the CPA guidance note carry across to non-ISP CPAs, or will they be limited to CPAs for ISP projects?	This guidance note will only apply to actionable ISP projects, because these are large transmission infrastructure projects that tend to have greater uncertainty of costs and benefits than business as usual projects, and therefore greater risk of cost or schedule overruns. As such, we consider there are some areas of the CPAs for these projects that require particular focus and due diligence by the TNSP. Given the pipeline of actionable ISP projects that we expect to receive for assessment, these projects are our immediate focus. We may consider broadening the guidance to non-ISP projects in the future. We note that many of the expectations in this guidance note are transferrable to the preparation and assessment of CPAs for non-ISP projects.
Will the CPA guidance note raise the need to look at how the costs have progressed from the RIT-T Project Assessment Conclusions Report (PACR) to the CPA?	Yes, in the guidance note we propose to set out our expectation that TNSPs demonstrate how the costs have evolved from the RIT-T stage to the CPA. Throughout its CPA planning and preparation, we expect the TNSP will have kept us and stakeholders informed as the costs are refined through the tender stages, particularly of any significant changes.
When you talk about pre-lodgement consultation, is this before it comes in the regulatory proposal stage or before it comes in as a CPA?	Pre-lodgement consultation refers to the point at which the TNSP is preparing its CPA, before it is lodged with the AER. This is after the preferred option has been identified through the RIT-T process.

4 We have grouped similar questions for ease of reading / navigation.

What parameters are there around consultation to be undertaken by TNSPs – what are you trying to tease out and what requirements are there?	We do not want to be prescriptive and have focussed on outcomes / attributes. We expect TNSPs to consult with stakeholders, including consumers and impacted communities, and to demonstrate that they have considered and responded to the feedback received. Amongst the consultation principles, we expect the TNSP to consider the appropriate format for facilitating stakeholder engagement and understanding, having regard to the size and potential complexity of actionable ISP projects.
An ISP project, when actioned, may displace some capex that was forecast in the regulatory proposal. Will the AER focus on net costs (i.e. ISP project capex less displaced forecast capex), or the ISP project cost itself?	In assessing the contingent project application, the AER would take into account the capex already allowed for in the regulatory proposal (that has been displaced by an actionable ISP project), and effectively only allow the incremental capex in the CPA determination. We have updated the draft guidance note to provide clarity on how we treat the displacement of capex.
Is it expected that risks are costed?	Yes. The AER can assess and accept a project risk allowance in its contingent project determination for some 'residual' risks identified by the TNSP that cannot be efficiently mitigated, transferred or avoided. We expect the TNSP to evaluate each of these residual risks by transparently assessing the consequential cost[5] and the probability of incurring that cost.
Under the RIT-T stage of the project, a TNSP has to look at non-network options. Will the CPA guidance still apply to a TNSP if they take up a non-network option? Relatedly, will specific guidance be included on the role of non-network options and ensuring appropriate treatment/ assessment?	The CPA guidance has been drafted in the context of network solutions (i.e. transmission infrastructure projects identified as actionable in the ISP). Many of the expectations and principles contained in the guidance will also be applicable where the CPA is for a non-network solution. However, we are continuing to consider whether specific principles and/or expectations are required for non-network solutions, and are interested in stakeholder views on this point. Our guidance is focused on the CPA stage, which assesses the efficient expenditure needed to deliver the preferred project option. The treatment/assessment of different options is conducted by the TNSP at the preceding RIT-T stage.
To what extent does the AER expect these considerations and requirements should be undertaken for each of the options under consideration in the RIT-T, as opposed to the preferred option/ CPA only?	The CPA guidance focuses on the TNSP's planning and preparation of the CPA, and our assessment of the CPA. At this stage, the RIT-T application will have been completed and one preferred option identified for the TNSP to pursue. The guidance is focused on the TNSP's preparation of the CPA for that one preferred option that is being progressed.
It seems that the current work stream is needed to mitigate inefficiencies from a TNSP's point of view, but are the additional requirements being added going to place a greater burden on TNSPs and add to delivery timeframes?	We are seeking to provide clarity and predictability for TNSPs around our expectations when assessing the efficient expenditure for these large actionable ISP projects. We do not consider our guidance note imposes additional requirements or administrative burden on TNSPs. This is because it is intended to capture our existing expectations of TNSPs in preparing their CPAs, based on recent CPAs for

5 This is not limited to monetary cost impacts, as non-monetary impacts would also be quantified and costed.

	transmission projects, and is consistent with standard practice for delivering capital/ infrastructure projects across sectors. The guidance also operates within the current CPA process timeframes set out in the NER.
Regarding visibility of the procurement process and its outcomes: (a) does this need to link to use and accuracy of the original estimating manual transparency and benchmarking of key components (materials, labour, FX exposure, etc.) versus outturn contracting costs (b) will it also need to show (in a confidential manner to the AER) the benefits/efficiencies and competitiveness of the offers made?	(a) In preparing the forecast costs for CPAs, we expect TNSPs to be informed by historical costs where possible, but acknowledge that TNSPs have, so far, had limited experience in forecasting expenditure associated with projects of the size and potential complexity of projects identified in AEMO's ISP. We do, however, expect TNSPs to draw from the outturn contracting costs of completed actionable ISP projects in preparing future CPAs. (b) We expect TNSPs to demonstrate they are testing their costs with the market, where appropriate. In doing so, we expect the TNSP to keep us informed as to how the costs are refined throughout the tender stages. We also expect the TNSP to demonstrate how it has encouraged competition and innovation through its tender process.
Does the AER see these projects as having a fundamentally different construction risk profile, and how does that flow through to the assessment of risk allowances in ex-ante costs and the application of the capital expenditure sharing scheme (CESS)?	There is evidence that construction risk is more uncertain for large projects, as referenced in our work program letter. In our CPA risk assessments, we currently allow a cost allowance for some of these risks where they are uncontrollable and unforeseen. We expand on the underpinning principles in the draft guidance note. We discuss the application of the CESS to actionable ISP projects in the 'issues log' below.
Implicit in CPA guidance note is the assumption that the capital expenditure in the RIT-T PACR will be exceeded, but the PACR has done the cost benefit analysis. So if a TNSP has a higher cost in the CPA, we need to reconsider the benefits. Why are we contemplating a guidance note for a CPA where costs exceed the PACR?	We do not consider the CPA guidance contains an implicit assumption that the capital expenditure forecast in the RIT-T PACR will be exceeded. We recognise there are different levels of uncertainty around project cost forecasts as they proceed through the ISP, RIT-T and CPA processes (see 'issues log' table below). Where there are significant changes in cost forecasts after the RIT-T, we consider there are mechanisms to manage this in the NER, such as the material change in circumstances clause and actionable ISP project trigger event (see 'issues log' table below). To complement this, our CPA guidance sets an expectation for TNSPs to explain changes in cost forecasts from the RIT-T in its pre-lodgement consultation with stakeholders.

Staging contingent project applications

Stakeholder question / comment	AER response
Do you expect the staging CPA guidance note to address cost recovery of preparatory works?	Preparatory activities are defined in the NER and are distinct from larger early works activities. The staging CPAs guidance does not propose to separately discuss preparatory activities.

	These activities are unlikely to meet the threshold in clause 6A.8.1(b)(2)(iii) of the NER.[6]
Is the project staging guidance based on the HumeLink example? Relatedly, will the guidance note be consistent with TransGrid's Humelink letter and the AER's response that largely agreed with TransGrid's proposal?	The AER received a letter from TransGrid on 14 September 2020 notifying us of its proposed approach to stage CPAs for HumeLink, an actionable ISP project.[7] We responded to this letter on 13 October 2020, and this forms the starting point for our guidance on staging CPAs for actionable ISP projects. In developing guidance that is fit for purpose for all actionable ISP projects, and by undertaking stakeholder consultation, we recognised in the letter that our approach may evolve. We consider that the approach in the guidance note is broader than the HumeLink approach, and we had flagged that we may vary from this starting point as we progress our thinking and hear from stakeholders.
Do you think project staging will help with situations we have seen where governments have stepped in to fund early works?	The intention of our CPA guidance is to allow staged CPAs, in certain circumstances, to help reduce uncertainty associated with actionable ISP project costs and benefits. This may help with situations where governments have funded or underwritten early works activities for actionable ISP projects, but that is for governments to decide.
Even though a TNSP might propose staging, the total application should reflect the total project, is this correct? This is in reference to defining total project costs.	If a TNSP decides to lodge staged CPAs with the AER for an actionable ISP project, each CPA lodged should reflect the forecast expenditure associated with that stage. However, the sum of CPAs for an actionable ISP project should reflect the total project cost. The total project cost will be assessed in the feedback loop by AEMO.
What would happen if a TNSP does a stage one CPA and gets an allowance to undertake these early works, and then decides not to proceed with the project?	We expect TNSPs to stage the regulatory process (through staged CPAs) only when they expect each stage to go ahead (this differs from project staging for option value, where subsequent stages are contingent upon decision rules). However, we recognise there may be a number of reasons why the remainder of the project does not proceed after a previous CPA is approved. In these situations, the TNSP should treat the costs of the first stage of the project in line with its capitalisation policy and cost allocation methodology. These costs can then be recovered in accordance with the regular revenue determination processes.
Seems this staging is a bit about customers underwriting option value and staging risks – is that the case? If so, it goes to who is best placed to carry this. Links to who caries this on the supply/ generation development side may be appropriate.	We consider appropriate staging of the regulatory process can reduce risk for consumers. This is because consumers would face lower costs and higher transparency if TSNPs are provided with a revenue allowance for one stage of a project instead of the full project costs, and then part of the project did not proceed (all else equal). However, we also recognise there are challenges associated

6 This states that the proposed contingent capital expenditure in a CPA must exceed either $30 million or 5% of the value of the maximum allowed revenue for the relevant TNSP for the first year of the relevant regulatory control period (whichever is the larger amount).

7 See AER, TransGrid - HumeLink contingent project - Staging of the regulatory process, 2020.

	with staging the regulatory process through staged CPAs, and consider it is only appropriate in certain circumstances (which we outline in the draft guidance note).
If a TNSP wants to lodge staged CPAs with the AER for an ISP project, will your guidance note state when the AER will or will not accept a staged application? Relatedly, who decides on the circumstances that CPA staging can occur?	We have included an expectation for TNSPs to consult us on their CPA staging intentions prior to lodging staged CPAs. Our draft guidance explains the circumstances where we consider staging CPAs can be appropriate, and the challenges associated with breaking the project into too many CPAs. Ultimately, the AER is responsible for making a contingent project decision for each CPA lodged with it, in accordance with the requirements in the NER.
Is the staging of a capital expenditure allowance or is it more an operating expenditure allowance that is related to a future capital expenditure project?	Under NER clause 6A.8.2(b)(3), contingent project applications must contain a forecast of the capital and incremental operating expenditure, for each remaining regulatory year which the TNSP considers is reasonably required for the purpose of undertaking the contingent project. It is up to the TNSP to decide what is capital expenditure and what is incremental operating expenditure, in accordance with its capitalisation policies and cost allocation methodologies. We will then assess this in making the contingent project determination.

Ex-post measures

Stakeholder question / comment	AER response
How much has been previously disallowed from historical large transmission projects during ex-post reviews?	The ex-post measures in the NER only allow the AER to exclude capital expenditure from the roll forward of the RAB in limited circumstances.[8] Because TNSPs have historically been more likely to underspend than overspend their capital expenditure allowance, the AER has not previously excluded capital expenditure from the roll forward of the RAB ex-post. However, the AER's explanatory statement to the capital expenditure incentive guideline references some examples where other regulatory bodies have excluded capital expenditure ex-post.[9]
With ex-post review, in which National Electricity Market (NEM) regions would it apply?	The ex-post measures guidance will apply to incurred capital expenditure that relates to the forecast capital expenditure accepted or substituted by the AER for the review period (including net pass through amounts).
Is there a materiality threshold against which you test the difference between forecast costs and actual	There is no materiality threshold in the NER provisions for ex-post measures. However, our capital expenditure incentive guideline states that we will consider whether the TNSP has

8 For clarity, this refers to actual (or incurred) capital expenditure.

9 See AER, Explanatory statement: Capital expenditure incentive guideline, November 2013, p. 50.

costs?	spent more than its capital expenditure allowance, and whether the over-spend is significant.[10] Our ex-post measures guidance is consistent with this.
How does the AER assure that a CPA has the right costs in it? There might be unforeseen costs that a TNSP could not know.	The regulatory framework recognises that ex-ante forecasts are uncertain, and there may be unforeseen costs that a TNSP could not know ex-ante. There may also be unforeseen cost savings and efficiencies. This is why the framework contains cost pass through and re-opener mechanisms, and one reason why the ex-post review is a 'last resort' check and incentive to promote efficient and prudent capital expenditure. However, we consider many risks that result in cost overruns on infrastructure projects can be foreseen and controlled through proactive risk management. This forms the basis of our CPA guidance, which sets out our expectations for TNSPs to proactively manage project risks.
Information coming from consumers suggests that they are concerned when there is underspend and capex popping up in the next regulatory period. What is a prudent project deferral and what is not a prudent deferral?	The ex-post measures in the NER only allow the AER to exclude capital expenditure from the roll forward of the RAB in limited circumstances.[11] Outside of inflated related party margins and capitalisation of operating expenditure, capital expenditure can only be excluded from the RAB when a TNSP overspends against its capital expenditure allowance. Deferring actionable ISP projects is unlikely to result in these ex-post review criteria being met, although it would likely be identified through the ex-post statement. As such, we do not consider the ex-post measures can determine whether a deferral of an actionable ISP project was efficient or prudent. However, we have referred to this in the ex-post statement section of the guidance. We are also open to exploring this issue further as part of our broader work program.
Is the contingent project expenditure bucket subject to the same ex-post treatment or is it subject to the RAB expenditure bucket assessment as a whole? Relatedly, is the AER considering whether any ex-post review triggered by an ISP project should be limited to that ISP project (rather than opening up all capex in the regulatory period to an ex-post review)?	In assessing a CPA, we determine the incremental revenue which is likely to be required by the TNSP in each remaining regulatory year as a result of the contingent project being undertaken. This then gets added to the overall revenue allowance for the TNSP's regulatory control period. The ex-post measures apply to a TNSP's total capital expenditure allowance, which includes the contingent project determinations made during the regulatory control period. Our proposed guidance applies to ex-post measures that are conducted on capital expenditure allowances that include actionable ISP project costs. As actionable ISP project costs are likely to be a large proportion of the total capital expenditure incurred by the TNSP, this is likely to be our focus in any ex-post review .
Determining overspend can be problematic given it is not against the allowance for the 5 years regulatory	We recognise it can be complex for stakeholders to understand how ex-post measures may work for actionable ISP projects delivered over multiple periods. It is correct that

10 See AER, Capital expenditure incentive guideline, November 2013, pp. 14-15.

11 For clarity, this refers to actual (or incurred) capital expenditure.

control period but for 5 years spread over the end of the previous period and the first few years of the current.	the 5 year 'review period' for ex-post exclusions from the RAB is spread over two periods. We have clarified this in the draft ex-post measures guidance.
Does the ex-post measures guidance note consider financeability of the ISP actionable projects? TransGrid and ElectraNet made a submission to AEMC to change rules including indexation of RAB and timing of depreciation.	We are engaged in the AEMC's financeability rule change process, and made a submission to this on 3 December 2020. Our submission is published on the AEMC's website.[12] We do not consider the financeability issues raised in the rule change requests directly affect the ex-post review guidance.

Issues log of other questions / comments

Stakeholder question / comment	AER response
Is there anything in the contingent project process that causes an ISP project to be 'blocked' or reconsidered if its forecast cost is far above amounts used for the purposes of the RIT-T, such that expected net economic benefits of the project become very marginal or negative?	The ISP and RIT-T processes are responsible for the cost benefit analysis that allows TNSPs to select a preferred option for an actionable ISP project that maximises net economic benefits, and make an investment decision. Our guidance note focuses on the revenue (including contingent project) determination processes. If forecast project costs change significantly after the RIT-T application, this may constitute a material change in circumstances, which may require a reapplication of the RIT-T under clause 5.16A.4(n) of the NER. Further, before a CPA can be lodged with the AER, the TNSP must satisfy the actionable ISP project trigger event set out in clause 5.16A.5 of the NER. This contains a criterion which 'caps' the forecast project cost that can be included in the CPA to the project cost used in AEMO's feedback loop. The feedback loop, among other things, checks that the updated costs do not change the status of the actionable ISP project as being part of the optimal development path.
Before you get to the CPA question and the scope of this work, should consider the AER's total role in the process in developing the cost estimates. Much of the concerns being raised by our members is focussed on the work that precedes the CPA – that is, the work in the ISP and RIT-T.	We understand the concerns being raised by stakeholders on the progression of cost and benefit estimates through the ISP, RIT-T and CPA processes. The recent reforms to make the ISP actionable were agreed by the COAG Energy Council, which saw the need for more integrated whole-of-system planning to manage the energy transition from aging thermal generation to renewable and flexible generation (and other innovative technologies). AEMO was provided with the responsibility to deliver the ISP, and a number of governance arrangements were put in place to support/ oversee this, such as the AER binding guidelines, AER transparency review, ISP Consumer Panel, and dispute resolution processes. As part of our broader work program, we are in the early stages of exploring whether there are opportunities to amend the regulatory framework to further improve the assessment

12 See AER submission – Consultation on TransGrid and ElectraNet participant derogations: Financeability of ISP projects - 3 December 2020

	or delivery of these projects in the medium to longer term. This includes exploring potential changes to the CPA and RIT-T processes that could allow for a more robust assessment of project benefits alongside more reliable project cost estimates, while enhancing stakeholder input and streamlining the overall process. We intend to consult with stakeholders on these other reform options when our thinking is further progressed, and will welcome views and suggestions from stakeholders.
There is concern that the cost projections done during the ISP and RIT-T are incorrect. Is that outside the scope of these guidelines?	The cost forecasts developed for the ISP and RIT processes are out of scope for this guidance note, which focusses on the economic regulatory framework (e.g. the CPA process). However, we note that cost forecasts naturally progress and increase in reliability over time. At the ISP planning stage, cost forecasts have a wider range of accuracy than the CPA stage. This is because there is less information available at the ISP stage and many options being assessed, and it is costly to generate more accurate cost forecasts. In comparison, at the CPA stage, the preferred option has been selected and the TNSP is getting ready to deliver the project, so it is efficient to spend more to generate more accurate cost estimates. As such, we consider it can be efficient for the range of accuracy of cost estimates to narrow from the ISP to the RIT-T to the CPA stage. What is important is developing a good understanding of the distribution of cost forecasts for transmission projects, so the estimates at each stage of the process are not biased. It is also important for TNSPs to invest in developing appropriate cost forecasts for each stage of the process, so cost estimates progress within their expected ranges of accuracy.[13]
Does the AER have an appetite in seeking rule changes to encourage better cost and risk allocation for these large transmission projects, to manage this transition and place risks with parties best placed to manage them?	Our draft CPA guidance includes the principle that project risks should sit with the parties best placed to manage the risk, in the section on procurement. As part of our broader work program, we are in the early stages of exploring whether there are opportunities to amend the regulatory framework to further improve the assessment or delivery of these projects in the medium to longer term. We intend to consult with stakeholders on these other reform options when our thinking is further progressed, and will welcome views and suggestions from stakeholders.
Picking up on the Grattan work and that forecasting big projects is hard – we don't think it is apples with apples to compare transmission projects with rail projects, for example, which have more moving parts. So our view is that it's unacceptable for TNSPs to get it wrong. Victoria introduced an overrun limit on the cost of rolling out smart meters.	We recognise that large transmission projects are unlikely to contain the same level of project risk as road or rail megaprojects, particularly those that require tunnelling or have inflexible routes through challenging areas (e.g. cities). We note that the CESS already provides a penalty for overspends against the capital expenditure allowance, and has the potential to be adjusted. Further strengthening these types of incentives for actionable ISP projects may also have unintended consequences that would need to be assessed.

13 See, for example, AACE International Cost Classifications and Expected Ranges of Accuracy.

Noting that transmission investments aren't rocket science, is there merit in putting a similar cap on TNSPs, to give them more incentive to get their cost estimate right in the first place?	As part of our broader work program, we are in the early stages of exploring whether there are opportunities to amend the regulatory framework to further improve the assessment or delivery of these projects in the medium to longer term. We intend to consult with stakeholders on these other reform options when our thinking is further progressed, and will welcome views and suggestions from stakeholders.
Is the information gathered by the AER being used to assist AEMO and others in estimating capital expenditure for other actionable ISP projects in the future?	Our draft ex-post guidance proposes to report key information about the delivery of actionable ISP projects in the ex-post statements we are required to make for each transmission revenue determination. We are also considering collecting information on actionable ISP projects into a central record/database, which could ultimately inform our ex-ante cost assessments at the CPA stage, as well as help inform AEMO's cost forecasting in the ISP. We understand AEMO is also currently doing some work to improve its cost forecasting in the ISP.
Megaprojects report is really interesting, there has been a lot of research on large infrastructure project outcomes (e.g. research in UK on the costs and what the sticking points are for efficient delivery) – has AER done work to find out what the sticking points are for electricity transmission projects?	There haven't been enough actionable ISP projects assessed and delivered to do this yet. However, our guidance note has been informed by our learnings from recent transmission CPAs (e.g. for Project EnergyConnect and Eyre Penisula Reinforcement), as well as insights from procuring and delivering large infrastructure projects in other sectors. For example, there is evidence that project governance, project definition and procurement, and risk management are critical to success in efficient project delivery.[14] As noted above, we are also considering collecting information on actionable ISP projects into a central record/database, so we can build this knowledge over time.
Will the applicability of other incentives such as the CESS and efficiency benefit sharing scheme (EBSS) for some ISP projects also be considered in the context of the ex-post review /incentive? I'm aware there have been requests for those incentives to not apply to some ISP projects.	As part of our broader work program, we are in the early stages of exploring whether there are opportunities to amend the regulatory framework to further improve the assessment or delivery of these projects in the medium to longer term. This includes exploring changes to improve incentives for efficient actionable ISP project delivery and risk allocations. In particular, exploring how the CESS applies to actionable ISP projects, and interacts with other incentives. We intend to consult with stakeholders on these other reform options when our thinking is further progressed, and will welcome views and suggestions from stakeholders.
Does application of the CESS give TNSPs a bonus for overestimating?	The overarching objective of the CESS is to provide TNSPs with an incentive to undertake efficient capital expenditure during a regulatory control period. It achieves this by rewarding TNSPs that outperform their capital expenditure allowance and penalising TNSPs that spend more than their

14 See See Deloitte, Capital projects: Project and risk management—Leading practices, January 2016; PwC, Managing capital projects through controls, processes, and procedures, 2014; PwC, Six key ways to de-risk your infrastructure project; KPMG, Managing risk in the Australian construction industry, May 2020; Grattan Institute, Cost overruns in transport infrastructure, October 2016; McKinsey & Company, A risk-management approach to a successful infrastructure project, November 2013; Australian Government Department of Infrastructure and Transport, Infrastructure Planning and Delivery: Best Practice Case Studies Volume 2, February 2012.

	capital expenditure allowance. The CESS also provides a mechanism to share efficiency gains and losses between TNSPs and consumers. Therefore, when the CESS is considered holistically, it encourages TNSPs to find efficiencies and underspend against their capital expenditure allowance by providing a CESS reward/penalty in the forecast period. This results in lower incurred capital expenditure, which is what is rolled into the RAB (subject to ex-post measures) and recovered from consumers over the remaining economic life of the asset. We are also open to exploring this issue further as part of our broader work program (see response directly above).