

Questions and answers from AER webinar on the draft Integrated System Plan guidelines

4 June 2020

This note summarises the questions raised at the AER webinar on 4 June, as well as the answers we provided. We have also expanded on some of our answers provided at the webinar (shown in italicised text).

Introduction

Q. Will the Australian Energy Market Operator (AEMO) be required to explain the use of discretion?

A. Yes, AEMO should be explaining how it uses its discretion and we see this as key to transparency. In particular, while AEMO has flexibility over how it picks the optimal development path, it must explain how the risks it has considered has informed this choice. Where AEMO takes a risk averse approach, it will need to identify what the optimal development path would have been under a risk neutral approach so it can be transparent about some of the costs involved with taking a risk averse approach.

Q. Even though the AER's Integrated System Plan (ISP) guidelines will not apply to the 2020 ISP, will AEMO be identifying scenarios to use in applications of the regulatory investment test for transmission (RIT-T)?

A. AEMO has the ability to identify relevant scenarios for RIT-T applications to explore. If AEMO does not do this, the RIT-T will proceed as currently where the transmission business selects scenarios for its assessment. We have provided for this in the draft cost benefit analysis guidelines (CBA guidelines).

The cost benefit analysis for the ISP

Q. Is AEMO able to apply likelihood-based weightings to inputs, and not just outcomes?

A. The draft CBA guidelines require AEMO to apply likelihood-based weightings to scenarios under the risk neutral approach. AEMO might also use likelihood-based weightings, for example, when valuing benefits associated with changes in outages. In such cases, AEMO may need to apply probabilities and a value of customer reliability to understand the likelihood and consequence of outages occurring. In general, we have not provided specific guidance on probability-weighting inputs. *An exception to this might be if AEMO establishes that there is material uncertainty in an ISP project's costs. In such cases, the cost is required to be the probability weighted present value of the project's direct costs under a range of cost assumptions.*

Q. Which of the actionable ISP projects in the draft 2020 ISP would be subject to the updated RIT–T guidance?

A. The new RIT–T guidance would only cover Victoria–NSW Interconnector (VNI) west and Queensland–NSW Interconnector (QNI) medium, as these have not reached the project assessment draft report stage.

Q. Will AEMO be required to have regard to findings in the Renewable Integration Study?

A. The draft CBA guidelines do not explicitly refer to the Renewable Integration Study. While this is something that we would expect AEMO to have regard to, we have not made this a requirement. We will consider this further when developing the final CBA guidelines.

Q. Are the market benefits in the ISP essentially the quantification of relative costs?

A. The National Electricity Rules (Rules) specify what market benefit classes AEMO must consider in the ISP. These classes, along with our draft CBA guidelines, do not necessarily limit benefits to avoided costs. AEMO may use avoided costs to value benefits, and the draft CBA guidelines clarify that when valuing market benefits, AEMO needs to consider the differences in resource costs of each development path compared to the counterfactual. However, the draft CBA guidelines also require AEMO to consider other market benefit classes that the resource cost approach may have missed. In such cases, AEMO may have to estimate certain market benefit classes separately. There are multiple methodologies that AEMO could use to value different market benefit classes, including by market development modelling or using the information that such modelling provides.

Q. How will market benefits not captured in least-cost modelling be included in a co-optimisation? While AEMO could estimate this at the end, it may be difficult to incorporate this in the co-optimisation where there are many generation and transmission options.

A. While AEMO ultimately has discretion over how it conducts this analysis, we expect it will conduct layers of modelling. That is, after conducting least cost modelling, AEMO will derive a range of projects for development paths, on which it will then test for market benefits and costs. Competition benefits provides a good example of this because resource cost changes in the first instance will not provide an estimate of competition benefits. To estimate competition benefits, after taking the co-optimised outcome, AEMO would need to do further analysis that involves simulating bidding behaviour.

Q. How can AEMO's estimates of market benefit classes factor in the value that consumers might place on lower risk factors? To the extent that AEMO's need to consider 'consistency with consumer preferences' captures the value that consumers might place on lower risk, how will this be assessed?

A. Under the draft CBA guidelines, AEMO must consider consumer views. This includes consumer views when it comes to risks. For instance, AEMO would consider consumer views to show that its approach to risk is a reasonable reflection of consumers' risk preferences given consumers are the end-users that pay for transmission investments. AEMO has

flexibility over how it accounts for consumer preferences, recognising that this can be quite a challenging task. The draft CBA guidelines provide some options for AEMO to consider, such as consulting with the ISP consumer panel and asking specific questions when it requests submissions on its draft ISP. AEMO could also seek consumer views through stakeholder or consumer-specific forums/workshops.

Q. Will there remain a disconnect between a project providing a net market benefit and a project that will deliver the lowest prices to end users?

A. This is not necessarily true. Sometimes a project with a net economic benefit in one or more scenarios will also be the lowest cost project option. However, this is not always the case. When considering the costs of projects, you would also consider whether the benefits outweigh the costs. This is always the case with cost-benefit analysis, as opposed to only being concerned with what is lowest cost. A good thing about the ISP is that it does have least cost optimisation inside it, but the cost-benefit analysis across options considers both market benefits and costs. *Projects that optimise net economic benefits across the market should produce efficient market-wide outcomes, which promotes the long term interest of electricity consumers. We expect this would lead to lower prices for end users, particularly over time.*

Contributions from market participants

Q. The Energy Security Board's (ESB's) renewable energy zone (REZ) framework sets out the role of a REZ developer. If a market participant takes the role of a REZ developer, would that constitute a wealth transfer or could its contribution bring forward a partially regulated REZ network project?

A. Contributions from market participants (such as generators) are treated as wealth transfers under a market-wide cost-benefit analysis. The contribution would be a cost to the market participant, which is a direct transfer to the party that would have otherwise funded that portion of the project. As such, it is not a new benefit, but a transfer of wealth, and therefore treating it as a new benefit would mean double counting. A market-wide cost benefit analysis is important for network investment because of network effects. That is, any one investment will affect various parties and business cases across the meshed network. It is important to recognise that a privately profitable project may not necessarily be efficient market-wide. It is also worth noting that the Rules currently require the RIT-T to be a market-wide cost benefit analysis, and this was required before the ESB Rule change to make the ISP actionable.

Q. Will third party contributions towards REZ developments be treated differently if the REZ developer was a third party that was not a market participant?

A. Yes, if the contribution comes from outside the market (e.g. a government contribution) this would not constitute a wealth transfer.

Staged projects

Q. What happens with the AEMO feedback loop and the contingent project application for a staged RIT-T?

A. The Rules allow contingent project applications to cover a project or a stage of a project. If the RIT-T has identified a staged project as the preferred option, the first stage would go through the feedback loop and then the contingent project application. If circumstances consistent with the second stage occurring (as contemplated by the decision rule) eventuate, the second stage would commence. This separation is important because the second stage may not ultimately be needed.

There are a few approaches to staging. Under one approach, the ISP identifies a project stage as an actionable ISP project, so that each stage is its own actionable ISP project. Under this approach, each stage would go through a RIT-T application and the feedback loop, and have its own contingent project application.

Alternatively, staging can occur within a single actionable ISP project, identified at the ISP or RIT-T stage. Under this approach, the RIT-T would apply to the whole project, but each stage would go through the feedback loop individually and have its own contingent project application.

Q. For a staged project, how can the approach be changed when different circumstances occur which would lead to a different outcome?

A. A major benefit of project staging is how this responds to changes in circumstances. If circumstances were to change, you may or may not need the next stage to go ahead. Where the ISP has identified a project stage as an actionable ISP project and circumstances have changed (for example, in a subsequent ISP), AEMO would consider the new circumstances in determining whether the next stage (that is, the subsequent actionable ISP project) would go ahead. Where staging has occurred within a single actionable ISP project in a RIT-T application and there was a material change in circumstances, the RIT-T would be reapplied. Similarly, this would affect whether the next stage would go ahead.

Changes to the RIT-T

Relevant scenarios in the RIT-T for actionable ISP projects

Q. Is it correct that RIT-T proponents do not apply a risk averse approach? Instead, they model scenarios as specified by AEMO, which may be the outcomes of AEMO's risk adverse analysis, rather than the risk neutral scenarios?

A. *RIT-T proponents will effectively apply a risk averse approach upon AEMO's direction. AEMO will direct this through referencing the risk in the identified need and through directing the RIT-T proponent to explore a sub-set of ISP scenarios that reflects AEMO's consideration of risk. However, RIT-T proponents must still seek to maximise net economic benefits (which means they cannot base their decision rule on minimising regrets). In the draft CBA guidelines, risk neutral versus risk averse refers to the weight given to scenarios in*

evaluating development paths or project options, where risk-neutral refers to likelihood-based weightings. To the extent that AEMO directs the RIT-T proponent to explore a sub-set of the ISP scenarios, this changes the weightings provided to the risks that emerge in scenarios relative to if the RIT-T proponent considered the full range of ISP scenarios. While the RIT-T proponent must weight the remaining relevant scenarios in proportion to their relative likelihoods, this approach will place a greater emphasis on the risks that arise in the scenarios AEMO has identified as relevant.

Q. What are the AER's reasons for restricting which scenarios a RIT-T for an actionable ISP project can consider to the scenarios that AEMO has identified as relevant?

If another scenario becomes apparent, how or what process would enable the RIT-T proponent to assess this?

A. This feature of the draft CBA guidelines aims to support alignment between the ISP and RIT-T, which is important given the RIT-T analysis flows on from AEMO's analysis when optimising across the National Electricity Market. Giving RIT-T proponents the flexibility to include new scenarios relative to what AEMO had already explored and consulted on could duplicate the analysis that AEMO has already done. This would also create scope for an inconsistent analysis that leads the solution away from the optimal development path.

AEMO can only direct RIT-T proponents to consider scenarios from the inputs, assumptions and scenarios report (IASR) because these are developed through a robust consultation process. However, if there has been a material change in circumstances that are yet to be reflected in a new ISP or ISP update, the RIT-T proponent can adjust the relevant scenarios to reflect this updated information.

Q. Could AEMO direct, as a relevant scenario, a scenario IASR with a specific sensitivity (for example, the Central scenario with an early retirement of a specific generator)?

If the sensitivity reflects a risk being realised, and that risk was relevant to the identified need, how will the RIT-T proponent assess that risk?

A. Under the draft CBA guidelines, AEMO can only direct scenarios as relevant if they were in the IASR, as the subsequent creation of new scenarios would not allow stakeholders the same opportunity to engage and provide feedback. As such, AEMO cannot direct RIT-T proponents to introduce a scenario that is a sensitivity-adjusted scenario from the IASR.

AEMO is able to incorporate key risks in ISP scenarios, as well as through how it frames the identified need, which drives the RIT-T analysis. The draft RIT-T guidance includes sensitivity testing, but this occurs after the preferred option is selected. As such, it may be difficult for a RIT-T proponent to factor in risks that arise in sensitivities and not scenarios.

Extent of analysis required in the RIT-T for actionable ISP projects

Q. The draft CBA guidelines appear to continue to require extensive sensitivity testing at the RIT-T stage. Is this the intention, given the streamlining of scenario at the RIT-T stage?

A. We do not necessarily agree that additional sensitivity analysis is extensive or a key feature of the new RIT-T guidance. We do ask RIT-T proponents to explore sensitivity

testing, which is important for transparency so stakeholders can see how robust the RIT–T outcome is to key risks. *The draft CBA guidelines do not place requirements on RIT–T proponents to perform sensitivity testing. Rather, sensitivity testing is a binding consideration. In considering whether or how to perform sensitivity testing, the draft CBA guidelines specify that RIT-T proponents must have regard to any relevant risks that stakeholders identify.*

Q. Is a RIT–T proponent for an actionable ISP project required to do their own modelling? If the proponent and stakeholders in the consultation process think AEMO have considered all credible options, can they just accept AEMO modelling?

A. We expect that there will typically be multiple credible options for the RIT–T to explore. In fact, AEMO may specify that the RIT-T must explore multiple options (for example, credible non-network options proposed in response to the draft ISP). If there are genuinely no other credible options (that is, other than the actionable ISP project), RIT–T proponents could plausibly just accept AEMO’s modelling. In practice, such a situation would be unlikely for large ISP projects, which we would typically expect to test multiple credible options.

Feedback loop

Q. What form will the AEMO feedback loop take? For example, will this be through separately provided advice (and will this be public) or an ISP update? Can AEMO choose to not provide this advice and instead wait for an update or release of an ISP?

A. The feedback loop takes form as written confirmation from AEMO. The CBA guidelines require AEMO to publish this written confirmation. This would not result in an ISP update if the project passes the feedback loop. It is worth noting that these requirements stem from the Rules rather than from the CBA guidelines.

Q. Does feedback loop occur after project assessment draft report or the project assessment conclusions report?

A. The feedback loop occurs after the project assessment conclusions report.

Forecasting best practice guidelines

Q. What is the consequence if AEMO has failed to follow the binding elements in the forecasting best practice guidelines? Could the ISP become invalid, and if so, who would decide this?

A. We would have regard to AEMO’s compliance (or otherwise) when deliberating on an ISP dispute or when conducting transparency reviews. As such, non-compliance increases the likelihood that we would make an adverse decision, which should therefore incentivise AEMO to work closely with us early on and to ensure its compliance. Non-compliance with the binding elements of the forecasting best practice guidelines does not invalidate the ISP. *Where a dispute on the ISP is upheld AEMO may consider whether this would justify an ISP update. Matters that may be disputed at ISP stage are limited to matters of process.*