

# Response to supplementary questions

## 1. Can the AER be specific as to what costs and benefits, other than those to the consumer, were taken into consideration when reviewing the HumeLink PACR?

Humelink is considered an actionable project under AEMO's Integrated System Plan (ISP). A key function of the ISP is to identify actionable ISP projects in the optimal development path (ODP) for the National Electricity Market. The optimal development path is developed through rigorous analysis by AEMO and defines the project and timing of network investments needed to deliver net market benefits to consumers, while fulfilling public policy needs, security, reliability and sustainability expectations, through the energy transformation.

Where a project is identified as actionable, the network proponent must complete the Regulatory Investment Test for Transmission (RIT-T) which includes a Project Assessment Conclusions Report (PACR). The National Electricity Rules specify the process that RIT-T proponents must take when applying a RIT-T for an actionable ISP project. The rules and supporting instruments specify the costs and benefits that need to be included in the RIT-T. These are obligations that the RIT-T proponent must follow, as part of conducting or applying the RIT-T.

The AER's role in the RIT-T process is to establish and amend the RIT-T test and the Cost Benefit Analysis (CBA) guidelines (subject, in both cases, to the framework and requirements specified in the NER). The AER regularly reviews aspects of the test and the guidelines to ensure they remain fit for purpose and are currently consulting on [draft amendments to the guidelines](#).

While the AER writes the test and the guidelines that prescribe the processes, we do not undertake these assessments ourselves. Rather, we review whether networks have adhered to the prescribed test and process. We also have a dispute resolution role where interested parties wish to dispute the way in which the regulatory investment test has been applied.

Consistent with the rules, the AER's CBA guideline provides some direction on the classes of costs (NER clause 5.15A.3(b)(6)) and benefits (NER clause 5.15A.3(b)(4)) that must be included in calculating the present value of a credible option.

The Humelink PACR, published on 29 July 2021, states that the benefits for the preferred option are *primarily driven by avoided, or deferred, costs associated with generation and storage build*.<sup>1</sup>

The PACR also states that the estimated cost of the preferred option is comprised of

- 55 per cent transmission lines costs (5 per cent of which is land costs);
- 17 per cent substation costs (1 per cent of which is land costs); and
- 28 per cent biodiversity offset costs.<sup>2</sup>

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<sup>1</sup> Transgrid, [Humelink PACR](#), p.5

<sup>2</sup> Transgrid, [Humelink PACR](#), p. 58.

## **2. Has the AER ever approved a project proposal that wasn't the cheapest for consumers or the one with the highest net benefit for consumers?**

In undertaking the RIT–T, proponents are required to comply with the relevant rules.

Consistent with NER clause 5.15A.1(c), the preferred option is the credible option that maximises the net economic benefit across the market, compared to all other credible options. The net economic benefit of a credible option is simply the market benefit less the costs of the credible option.

Under NER clause 5.15A.1(c), the preferred option may have a net economic cost where the identified need is for reliability corrective action, providing inertia network services required under NER clause 5.20B.4, or providing system strength services required under NER clause 5.20C.3.

While the AER writes the test, and the guidelines that provide guidance on the application of the test, we do not undertake these assessments ourselves. Rather, we review whether networks have adhered to the prescribed test and process (including any relevant binding elements of the guidelines). We also have a dispute resolution role where interested parties wish to dispute the way in which the regulatory investment test has been applied.

## **3. Would the RIT–T process have to be redone if the updated cost didn't change the preferred option but it resulted in a negative net benefit?**

Under NER clause 5.16A.4(n), a RIT–T proponent must reapply the RIT–T, if it has published its PACR and still wishes to undertake the project, but there has been a material change in circumstances that, in the reasonable opinion of the RIT–T proponent, means the preferred option identified in the Conclusions Report is no longer the preferred option.

NER clause 5.16A.4(o) clarifies that such a change may include, but is not limited to, a change in the key inputs and assumptions (including following an ISP update) used in identifying the identified need or credible options assessed in the Conclusions Report.

We expect RIT–T proponents to demonstrate to stakeholders that they have:

- considered whether there has been a material change in the circumstances, and
- conducted the appropriate analyses to inform their decision.

For example, the 'Review of economic assessment' was published by ElectraNet in 2021<sup>3</sup>, to demonstrate that there had not been a material change in circumstances for Project EnergyConnect.

The AER will continue to work with proponents to ensure they fulfil their obligations under the NER.

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<sup>3</sup> ElectraNet, [Project EnergyConnect Review of economic assessment](#), 31 March 2021.

**4. Can the AER be confident that the latest cost hasn't altered the preferred option for HumeLink, especially as the claimed net benefit of Option 1C-new was almost identical with Option 3C (the preferred option)?**

Please see response to Question 3 for an outline of the material change in circumstance definition, as set out under the NER. The AER's role does not include assessing whether there has been a material change in circumstances for actionable transmission projects. This obligation falls on the proponent.

In addition to this obligation, under clause 5.16A.5(b) of the NER, to be eligible to submit a contingent project application to the AER, a RIT-T proponent must obtain written confirmation from AEMO, through the feedback loop, that:

- the preferred option addresses the relevant identified need specified in the most recent ISP and aligns with the optimal development path referred to in the most recent ISP; and
- the cost of the preferred option does not change the status of the actionable ISP project as part of the optimal development path as updated in accordance with clause 5.22.15 of the NER where applicable.

In performing the feedback loop on a RIT-T preferred option (if the preferred option, or its cost, differs from the ISP candidate option), AEMO must consider, amongst other things whether the optimal development path referred to in the most recent ISP still has a positive net economic benefit in the most likely scenario with the RIT-T preferred option.

**5. Don't the recently revealed changes in circumstance since the HumeLink PACR signify a 'material change':**

- 48% increase in cost to \$4.892bn, at the upper limit of the PACR range of \$3.3bn - 30%/+50%
- the latest estimate having a range of -50%/+50%, \$2.5bn to 7.5bn
- a 14% reduction in capacity from 2570 MW in the PACR to 2200 MW
- delays in Snowy 2.0 reducing the benefits
- assumptions made in the PACR that bolstered the benefits, now being confirmed otherwise:
  - the certainty of Kurri Kurri and Tallawarra B gas stations being built
  - Snowy 2.0's capacity factor being overstated
  - Opex of 0.5%, when the standard is 1% for lines and 2% for substations

Please refer to our response to question 3.

We consider that the observed increase in estimated costs of the Humelink project is relevant to a consideration by Transgrid as to whether there has been a material change in circumstances given these updated costs may change the conclusions in the PACR.

In view of the updated estimated costs of the preferred option, we expect Transgrid to demonstrate that it has considered whether in its reasonable opinion there has been a

material change in circumstances, including any supporting information considered by Transgrid to inform its reasonable opinion.

**6. What action will the AER take to ensure the cost-benefit analysis is redone and the project still has a net benefit?**

The AER works closely with RIT–T proponents to ensure that they meet their obligations. We expect RIT–T proponents to demonstrate that they have considered whether there has been a material change in circumstances, and that if necessary analysis has been conducted to inform this decision.

We note that the Australian Energy Market Commission (**AEMC**) finalised a rule change proposal in October 2022,<sup>4</sup> requiring RIT–T proponents to develop reopening triggers which would clearly indicate whether there was a material change of circumstances. This rule change intends to improve transparency about when a RIT should be reconsidered in light of new events, factors or circumstances for future RITs. This rule comes into effect on 9 October 2023.

**7. When the AER ultimately approves a capital cost amount for HumeLink to be added to the Regulatory Asset Base, is that figure the PACR estimate, some other figure, or the actual cost of construction?**

The AER is currently considering Transgrid’s CPA in a staged process. Transgrid submitted its contingent project application for Stage 1, Part 1 of HumeLink on [4 April 2022](#), and a CPA for Stage 1, Part 2 on [23 May 2023](#).

The AER assesses the proposed forecast cost as set out in that application, as part of our propose and respond model. Forecast costs that we approve is reflected in revenues until the end of the regulatory control period, which would be 2023-28 for the HumeLink project.

At the end of the regulatory control period, the actual cost of construction is added to the regulatory asset base which becomes the basis for setting revenues in future regulatory control periods.

**8. Will the opex allowance for HumeLink be set at 0.5% as assumed in the PACR, or can it be increased to some other amount at TransGrid’s request?**

We have not yet had the opportunity to assess operational expenditures for this project. When Transgrid proposes operational expenditures related to HumeLink, we will assess the proposed operational expenditures for prudence and efficiency under the requirements of the chapter 6A of the ANER.

We expect that operational expenditures will be contained in Stage 2 of this project, which we are due to receive in December 2023.

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<sup>4</sup> AEMC, [Material change in network infrastructure project costs](#), Rule determination, 27 October 2022

## 9. Would the AER like to see any changes in the current RIT–T process?

From 2021 to 2023, the AEMC conducted a [Transmission Planning and Investment Review](#). The AEMC self-initiated the Review to identify issues with, and explore reforms to, the existing frameworks for planning, investing in and delivering major transmission projects.

The AER provided multiple submissions to this review, including to the initial consultation paper ([link](#)), the options paper ([link](#)), and to the draft report ([link](#)), in which we set out our position in relation to the approach currently taken to delivering major transmission projects, and proposed reforms. We supported streamlining and removing unnecessary duplication in the economic assessment process for major transmission projects, and recommended that the final process include a number of features such as:

- increased transparency;
- a formal consultation opportunity for stakeholders; and
- robust consideration of a range of viable options, including non-network options.

On 18 May 2023, we published a consultation paper on the review of the cost benefit analysis (CBA) guidelines and application guidelines for its regulatory investment tests. We have published the [submissions](#) we received.

On 28 July 2023, the AER published [draft guideline amendments](#) to the Cost Benefit Analysis guidelines and the Regulatory Investment Test (RIT) application guidelines. Submissions close on 8 September 2023 and we encourage interested stakeholders to make a written submission.

We will update our RIT–T Guidelines by 9 October 2023.

## 10. What action will the AER take with HumeLink’s cost estimates being so wildly underestimated, effectively constituting a five-fold increase in three and a half years:

- PADR (Jan 2020) - \$1.350bn (for more expensive single-circuit lines)
- PACR (July 2021) - \$3.317bn (-30%/+50%)
- July 2023 update - \$4.892bn (-50%/+50%)

The AER assesses the prudence and efficiency of the forecasts put before us, as part of the contingent project application.

Under the NER, responsibility for assessing whether there has been a material change in circumstances for transmission projects rests with the project proponent (in its reasonable opinion).

As indicated in our response to question 5, we consider that the observed increase in estimated costs of the Humelink project is relevant to Transgrid’s consideration whether there has been a material change in circumstances, given that these updated costs may change the conclusions in the PACR.

### **11. How does the AER stop proponents from understating costs and overstating benefits to manufacture a net benefit to get a RIT–T approved?**

RIT–T proponents must adopt the inputs and assumptions used in AEMO’s Integrated System Plan (ISP) for actionable ISP projects, in their own assessments and analyses of proposed projects, unless there is good reason for departure. We consider that RIT–T proponents’ adoption of AEMO data in their analyses, should go some way towards lessening the likelihood that their stated costs and benefits are inaccurate.

We undertake a [transparency review](#) on key inputs and assumptions in the ISP however our role is to not to assess whether an investment should be made or what design, including route it should be taken.

AEMO’s [2022 ISP](#) is a whole-of-system, comprehensive roadmap for the National Electricity Market that incorporates rigorous cost-benefit analyses, complex models, and AEMO’s extensive power system expertise, to identify the optimal development path and projects which must be actioned moving forward.

The 2022 ISP includes various supporting materials such as chart data, geospatial data, and inputs, assumptions and scenarios, which can be used for modelling purposes.

Where practical, RIT–T proponents include all modelling from AEMO’s ISP, in their own assessment and analyses.

### **12. How much of the total allocation is for equipment that can be reused, as distinct to sunk cost for design etc?**

In relation to HumeLink, the AER can only provide information about the material that has been put to us. This includes information on HumeLink Stage 1, [Parts 1 and 2](#) only.

Stage 1 of HumeLink (early works) includes the procurement of some long lead assets which TransGrid consider can be resold. The cost of these assets would be approximately \$260 million.

### **13. What is the impact on consumer bills of HumeLink (costing \$5bn)?**

The AER can only provide information about the material that has been put to us. This includes information on HumeLink Stage 1, [Parts 1 and 2](#) only. An accurate assessment of HumeLink’s impact on consumers’ energy bills will not be known until the conclusion of the CPA process.

In relation to [Stage 1, Part 1](#), the AER published its [final decision](#) on 17 August 2022. In this decision, we estimated that the approximate impact of HumeLink (Stage 1, Part 1) on consumers’ energy bills would be an increase of \$2.80 per annum for residential customers, commencing in 2024-25.

In relation to [Stage 1, Part 2](#), the AER closed submissions on 30 June 2023 and we are currently reviewing TransGrid's contingent project application. We expect to make a decision on the application in the coming months.

### **Additional information**

There is a further aspect of Mr Cox's testimony that we would like to clarify (page 23 of the transcript). This relates to consideration of the negative impacts of transmission infrastructure, such as a reduction in visual amenity, the loss of farming land or environmental impacts caused by a transmission line.

Under the National Electricity Rules, the economic cost benefit analysis for the Integrated System Plan and Regulatory Investment Test is focused on the market benefits and costs of a project to all those who produce, distribute and consume electricity in the market. That is, the benefits and costs to those parties in their capacity as producers, distributors or consumers of electricity.

Under this legislation, amenity impacts experienced by electricity consumers are not included in their own right in the economic cost benefit analysis. However, practically speaking, those impacts do come into play in the cost benefit analysis. Delay caused by landholder and community resistance, arising from amenity impacts, could reduce the benefits of a new transmission investment. This is because these benefits might not be realised as quickly as might otherwise be possible. Expenditure by network businesses in order to reduce these delays can also be considered. Community and landholder resistance is also potentially relevant to whether the project is feasible at all (and therefore needs to be considered as part of the planning process).

We note that, whilst the AER writes the test and the guidelines that prescribe the processes, we do not undertake these assessments ourselves. Rather we review whether networks have adhered to the prescribed test and process. We also have a dispute resolution role where interested parties wish to dispute the way in which the regulatory investment test has been applied.