

Comment on the further Feedback Loop for HumeLink project – feedback loop 4, by HumeLink Alliance Incorporated

July 17, 2024

We welcome the opportunity to comment on the further ISP feedback loop (feedback loop 4) for the HumeLink project.

1. The December 2023 HumeLink ISP Feedback Loop used an unconsulted-on ISP, in breach of the rules

As we maintained in our submission to the HumeLink Contingent Project Application – Stage 2 (CPA2), relying on the unconsulted-on Draft 2024 ISP for the Feedback Loop (feedback loop 3) was a breach of the national electricity rules (NERs).

AEMO says in the HumeLink ISP Feedback Loop 4 Notice: *‘Although not strictly required, Transgrid considered that it would be prudent for AEMO to assess the HumeLink project against this most recent ISP.’*¹ This statement is incorrect. The Feedback Loop at the time should have been undertaken with the 2022 ISP. To address this breach of the rules, the further Feedback Loop on the Final 2024 ISP is necessary under the NERs.

We expect the AER to enforce the letter of the law on such matters, and consider it a failure, that at the time the CPA2 was submitted, the requirement to undertake the Feedback Loop using the ‘latest ISP’ – the 2022 ISP, wasn’t enforced. As stated by James Glissan AM ESM KC, *‘The duty of the AER is to ensure that the Rules have been complied with both in the spirit and in the letter of the law.’*²

1.1. AEMO’s request to AER for confirmation of no action if non-compliance with consultation requirements

The Senate Estimates - Question on Notice from Senator Ross Cadell to AER on February 12, 2024,³ reveals that AEMO asked the AER to confirm in writing that *‘no action would be taken [by AER] in respect to any non-compliance with the requirement of the FBPG [Forecasting Best Practice Guideline] to separately consult on a draft ISP update’*.

In their response to the Question on Notice the AER states: *‘The AER did not provide a letter of no action’* and also *‘AER has discretion to determine whether and to what extent it will investigate possible breaches’*.

¹ AEMO, [Integrated System Plan \(ISP\) Feedback Loop Notice – HumeLink – 8 July 2024](#)

² Centre for Independent Studies (CIS), [Submission to HumeLink Contingent Project Application Stage 2 application, p5.](#)

³ Environment and Communications, [Answers to questions on notice, Climate Change, Energy, the Environment and Water Portfolio, Question No: SQ24-000327.](#)

A critical role of the AER is to enforce the national electricity law consistently, to ensure efficient outcomes and protect consumer interests above corporate or political interests. Allowing the ISP consultation to be skipped, undermines this role.

As we note in our submission to the CPA2, studies have found that there is systemic bias in the assessment of large infrastructure projects.

NSW Treasury's *Economic Appraisal Principles and Procedures Simplified* states:

*'International research on major infrastructure projects has found evidence of **systemic bias in project appraisals**,*

*The research suggests a tendency for the **costs of major projects to be underestimated and for demand forecasts to be inflated**. These conclusions are based on case studies of several hundred major infrastructure projects in over 20 nations and 5 continents.....'*

Given systemic bias in assessing major infrastructure projects with '*costs of major projects... underestimated*', and '*for demand forecasts to be inflated*' it is essential that AEMO and Transgrid are required to adhere to the rules and not cherry-pick the ISP to manipulate approval of funding for the HumeLink project.

To see what impact this breach of the rules has had on the trigger event for Transgrid to submit the HumeLink CPA2 we ask that, retrospectively, the Feedback Loop also be undertaken with the 2022 ISP.

1.2. Transgrid has had input into lessening HumeLink checks and balances

Transgrid also has had input into the decision to delete the 'Decision Rules' for the HumeLink project.⁴ Given that Transgrid argued that the 'Decision Rules' should be deleted, because the Feedback Loop would provide a robust check on the HumeLink project, it is particularly inexcusable that the Feedback Loop was allowed to be undertaken in breach of the rules.

Transgrid has a conflict of interest in advocating for checks and balances on HumeLink to be deleted, as its current Regulatory Asset Base and revenues will increase more than a massive 50% if HumeLink is approved.

⁴ The 'Decision Rules' to decide whether to advance/delay HumeLink were deleted from the Draft 2022 ISP, by AEMO in consultation with Transgrid. AEMO states: '*The decision rules that were outlined in the Draft 2022 ISP have been removed for the HumeLink project. After considering stakeholder feedback...*'. In a summary of material issues raised by stakeholders AEMO states: '*Transgrid's view was that the staged CPA process for HumeLink provides a future checkpoint for AEMO to confirm through an ISP Feedback Loop that the project is still beneficial, and the decision rules proposed introduce unneeded rigidity*', AEMO, 2022 ISP Consultation Summary Report.

1.3. Further possible breach of the rules with Feedback Loop 4

AEMO's Feedback Loop 4 Notice states:

*'On 3 July 2024, Transgrid requested a fourth feedback loop assessment ("feedback loop 4") for the delivery of the HumeLink project containing the balance of project costs. The request noted that the **total cost, scope, and timing are unchanged since feedback loop 3.**'*

However, it is not clear that the cost of the HumeLink project is 'unchanged' since feedback loop 3.

- In the HumeLink CPA2, Transgrid maintains it has reduced the cost of the HumeLink project by \$237 million by going with a variable priced contract, rather than a fixed priced contract. However, it is likely that the cost of HumeLink will increase substantially with a variable priced contract. At the very least, the \$237 million cannot be considered a cost saving, and the net benefit of HumeLink with further cost blowouts under a variable priced contract also should be assessed.
- Also in the HumeLink CPA2, Transgrid states: *'we have estimated further cost savings of \$787 million from the investment synergies, which arise from concurrent investment in Humelink, Project EnergyConnect (PEC) and VNI West.* However, it is not clear whether these are actual savings, or a shifting of HumeLink costs to other projects.
- Industrial action at Transgrid in January 2024, with workers on Project Energy Connect demanding a 17% pay rise, suggests that the cost of HumeLink stated in feedback loop 3, December 2023, may well have increased substantially.⁵
- Transgrid has entered into contracts with the HumeLink, anticipating AER approval before the end of March 2024, and is incurring penalties of \$846,000 per day. This already will be close to an additional \$100 million.⁶
- A sizeable increase in the number of access tracks, means a higher project cost for HumeLink is inevitable. At the final Community Consultative Group (CCG) meeting, March 19, 2024, Transgrid said in relation to changes to the project since the completion of the Environmental Impact Statement (EIS) *'the biggest changes have been around areas of agricultural and forestry land impact because the project size has increased overall because more access tracks are needed.'* It is clear that these access tracks will add to the project construction cost as well as the biodiversity offset costs.

⁵ *'Workers at electricity transmission and distribution company Transgrid began industrial action on 5 January 2024 as Electrical Trades Union (ETU) NSW members push for a 17 per cent pay rise over the next three years'*, <https://greenreview.com.au/energy/industrial-action-taken-at-transgrid/>

⁶ <https://www.google.com/url?rct=j&sa=t&url=https://www.theaustralian.com.au/commentary/costly-muchhyped-is-the-humelink-even-worth-it/news-story/218a0ed708a7cd48004f9f7f0d4f6a22&ct=ga&cd=CAEYACoTMTEyNDY3OTMyNzU0NTQ3MzY2NDIaMzY1Mzk5ODY5MTJkNmQzMDpjb206ZW46VVM&usg=AOvVaw2wg-jaS270eZipl1xKGe5Y>

If any factors (listed above or otherwise) have increased the cost of the HumeLink project since feedback loop 3, this needs to be acknowledged and the feedback loop assessment redone with the current cost of the project.

2. Transgrid must re-submit the HumeLink Contingent Project Application – Stage 2

Transgrid must re-submit the HumeLink CPA2 as they weren't eligible to submit the one that AER is currently assessing. Because the Feedback Loop using the wrong ISP was undertaken, the 'trigger event' to submit the CPA2 wasn't satisfied.

The AEMO Feedback Notice acknowledges this stating: *'This AEMO confirmation via the feedback loop must be provided for a TNSP to be eligible to submit a contingent project application (CPA) to the Australian Energy Regulator (AER) for an actionable ISP project'*.⁷

3. Breach of the rules by undertaking the MCC assessment after submitting the CPA2

There have been a number of significant material changes in circumstance (MCC) for the HumeLink project. The MCC assessment is a trigger event that must be satisfied before submitting the CPA2. As the MCC assessment was done after submitting the CPA2 this was a breach of the rules.

Submissions to the MCC assessment identified numerous errors and omissions with the current MCC assessment, including the failure of the MCC to consider a feasible underground option⁸ with less impact on communities and the environment.⁹ As such, the AER cannot be confident that Transgrid's opinion has been made on a sound basis, that there has been no MCC for the HumeLink project and that the preferred option for the project remains the preferred option.

On the basis of the current MCC assessment, it is evident that there has been a MCC for the HumeLink project and the RIT-T needs to be reapplied to the project.

4. Critical flaws in the Final 2024 ISP

AEMO in the Final 2024 ISP has acknowledged critical flaws raised in consultation that affect HumeLink, but has failed to correct them. Therefore, the new feedback loop 4 referring to the Final ISP cannot be relied upon to confirm that HumeLink should proceed. The Final 2024 ISP has failures as follows:

4.1. The ISP fails to include massive environmental and community costs of projects – The objective of the national electricity market is efficient outcomes. And yet the net benefit of HumeLink and other projects in the 2024 ISP, excludes environmental externality costs.

⁷ AEMO, *Integrated System Plan (ISP) Feedback Loop Notice – HumeLink – 8 July 2024*

⁸ https://www.stophumelink.com.au/files/ugd/805824_0e929837d10241e28e148cdfdaa30241.pdf

⁹ Assessing an underground option, with less environmental impacts, is a legal obligation under the NSW Environmental Planning and Assessment Regulation 2000 and the Environment Protection and Biodiversity Conservation Act (EPBC Act).

Environmental externalities are market failures and must be taken into account to ensure efficient outcomes.

AER's cost-benefit guidelines explicitly exclude environmental externalities.

- Exclude from its analysis, the costs (or negative benefits) of an ISP project's harm to the environment or to any party that is not prohibited under a law, regulation or other legal instrument.

AER, *Cost benefit analysis guidelines - Guidelines to make the Integrated System Plan actionable*, August 2020, p91.

This practice is inconsistent with government cost-benefit analysis and is leading to inefficient outcomes. See the following excerpt from the RIT-T cost-benefit analysis guidelines that illustrates the problem with omitted externalities for transmission lines.

Example 20: Externalities

Negative externality

Assume a credible option is a local gas-fired peaking generator, planned for development in close proximity to an existing hotel. The RIT-T proponent expects the development of the generator will reduce the nearby hotel's annual earnings (due to a loss of visual amenity). The present value of this loss is \$15 million.

In this example, the \$15 million cost borne by the hotel's proprietor is a negative externality. While the development of the gas-fired peaking generator drives this cost, the generator's developer will not incur the cost. It is therefore not part of the credible option's costs.

Source: AER, *Application guidelines Regulatory investment test for transmission* December 2018

A power station is at one point, spatially. A transmission line, like HumeLink, is impacting communities and environment all along its 365 km length. If there is a \$15m present value cost every kilometre, for the 365 km length, the cost would be \$5.5 billion ($\$15\text{m}/\text{km} \times 365\text{km} = \5.5 billion).

These and other costs, like increased risk of bushfires¹⁰ and reduced productive efficiency of agriculture as a result of overhead transmission lines, need to be taken into account when assessing projects in the ISP.

¹⁰ Particularly a project like HumeLink with over a third of the route in bushfire prone land.

4.2. The ISP should model the completion of the project at the timetable approved – The Centre for Independent Studies (CIS) submission to the Draft 2024 ISP¹¹ finds that *‘Delaying HumeLink’s delivery from 2026-27 to 2029-30, as projected in the 2024 TOOT analysis, has a critical impact. Pushing back HumeLink’s costs by three years significantly lowers discounted network expenses, increasing its net market benefits. Our calculations indicate that reverting HumeLink’s delivery timing to 2026-27 would greatly reduce its net market benefits, from \$1 billion to just \$185 million. Combined with other factors discussed, this would likely make HumeLink’s net present value negative, endangering its business case’*.

It is also concerning that Transgrid advocated for an ‘actionable window’ for HumeLink, that allows AEMO to model HumeLink completed at a date inconsistent with the timetable approved, when the net benefits of the project are significantly increased in the ISP with this option;¹²

4.3. Opex cost for HumeLink is understated – Transgrid’s opex current practice is 3.4% of capex. Transgrid modelled this opex assumption in the HumeLink MCC assessment. In our submission to the MCC assessment we estimate that an assumption of 3.4% opex would decrease the ISP net benefit of the HumeLink project by around \$900 million, see Table 6 below.

Table 6: Impact of 3.4% opex on net benefit results

	Present value net benefits and opex costs		
	Present value	Increase in PV costs assuming opex 3.4%	Scenario with opex 3.4%
	\$m	\$m	\$m
AEMO Draft 2024 ISP net benefit (1% opex)	953	-911	42
MCCA net benefit (0.5% opex)	4190	-1100	3090
PV opex 0.5%	-190		
PV opex 1%	-379		
PV opex 3.4%	-1290		

¹¹ <https://www.cis.org.au/wp-content/uploads/2024/03/Centre-for-Independent-Studies-Draft-2024-ISP-Submission.pdf>

¹² AEMO 2023, Consultation summary report – Update to ISP Methodology

- 4.4. Interrelated projects, VNI West and Sydney, should not be treated as sunk costs when assessing the net benefit of HumeLink in the 'take one out at a time' TOOT analysis. The CIS states: *'the ISP should consistently, logically, and transparently decide which projects are considered together as a connected subsystem rather than individually (as is done with TOOT analyses). This approach ensures a proper understanding of how much transmission cost increases would make a project no longer viable....The most egregious abuse of this method centres on the consideration of HumeLink and VNI West, as well as potentially Sydney Ring, all via individual TOOT analyses'*;
- 4.5. The remaining, yet to be incurred, cost to of Snowy 2.0 should not be treated as a sunk cost;
- 4.6. The business case for HumeLink depends entirely upon the 82% Renewable Energy Target being achieved by 2030. Appendix 6 of the ISP makes this clear. This 82% is now not achievable. It is necessary to consider a scenario where the Renewable Energy Target is not achieved, to prevent over-investment, so consumers are adequately protected and efficient outcomes are achieved. By not considering a scenario where the 82% target is not met, the ISP is falling victim to inflated '*demand forecasts*' systemic bias.¹³
- 4.7. The existence of 'perfect foresight' in the modelling process means that benefits of HumeLink are certainly overstated – the ISP assumes gas/battery investments will be timed to perfection therefore overestimating the benefit of HumeLink.¹⁴

5. Concluding remarks

Our previous submissions to the HumeLink CPA2 and MCC assessment have raised serious concerns about the economic merit and environmental consequences of the HumeLink project, as well as other breaches of the rules.

Undertaking the feedback loop 3 confirmation not using the "latest ISP" at the time, the 2022 ISP, was a breach of the rules. Other apparent breaches of the rules that have been identified for the HumeLink project include:

- Failing to undertake the MCC assessment, a 'trigger event' prior to submitting the CPA2. The CPA2 was submitted on December 21, 2023. The MCC assessment was published more than two months later, February 29, 2024. In correspondence, the AER made clear to Transgrid the requirement to undertake the MCC assessment **prior** to submitting the CPA2, but this was ignored.
- Submitting the HumeLink CPA1 (part 2) on 23 May 2023 when the cost of the project had likely increased. It seems likely that the rules were breached in submitting the CPA1 (part 2) as it is expected that the cost of the HumeLink project had increased in breach of NER Clause 5.16A.5(d). We asked in our submission to the CPA2 what the cost of the HumeLink project was on May 23, 2023, when the HumeLink CPA1 (part 2) was submitted, and would appreciate a response to this question.
- Approving funding for HumeLink when it had a net cost in the RIT-T considering:

¹³ NSW Treasury's *Economic Appraisal Principles and Procedures Simplified*.

¹⁴ <https://www.cis.org.au/wp-content/uploads/2024/03/Centre-for-Independent-Studies-Draft-2024-ISP-Submission.pdf>

- a. sensitivity to discount rate;
- b. delays with Snowy 2.0;
- c. commitment of both Kurri Kurri and Tallawarra B gas fired generators and VNI West delayed;
- d. assumptions about opex;
- e. errors in escalation used;
- f. assumptions that VNI West and Sydney Ring were sunk costs;
- g. assumption that in July 2021 the remaining cost of Snowy 2.0 was sunk.

Transgrid states that Humelink will be its largest capital project since construction of the existing network. Its Regulatory Asset Base and revenues will increase more than 50% if HumeLink is approved.

The size of this project means that breaches of the rules cannot be tolerated and modelling must be robust. Because of failures in Transgrid's current MCC assessment for the HumeLink project, the AER cannot be confident that Transgrid has formed its opinion that there has been no MCC for the HumeLink project on a sound basis. As such the RIT-T must be reapplied to the HumeLink project. Once this is complete, the feedback loop can be undertaken.¹⁵

The material changes in circumstance for the HumeLink project mean that it is not clear that the best option for the HumeLink project is being assessed in the feedback loop. This combined with the bias in the ISP modelling and likely project cost increases since feedback loop 3, mean the feedback loop 4 cannot be relied on to establish that the HumeLink project has a benefit for the people of Australia.

To ensure efficient outcomes in the national electricity market the rules must be enforced and bias in modelling must be corrected.

¹⁵ In the determination of the MCC rule change the AEMC stated: '*As highlighted by stakeholders in submissions to the consultation paper, there are other mechanisms that may help address the impacts of cost impacts, the form of the CPA process and the **'feedback loop'**. While these mechanisms are important safeguards, they **do not fully address the specific issue that the current MCC provisions seek to address** – ensuring that the preferred option identified through the RIT process remains the most net beneficial option after a material change in circumstances. Consequently, the Commission concluded that there is a need to revise the current MCC provisions...*'