

PUBLIC SUBMISSION

Project EnergyConnect reopener

Response to the AER consultation paper on Transgrid's application to reopen the 2023–28 transmission revenue determination

To: Australian Energy Regulator

From: Cameron Lennie, developer of the Structured Continuity Assessment Framework (SCAF)

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Status: Public submission

Purpose of this submission

This submission provides structured continuity analysis relevant to consultation questions 7, 8, 9 and 11. It neither supports nor opposes Transgrid's application as a whole. Its purpose is to preserve distinctions important to the AER's assessment: project delivery versus system operation, capability improvement versus minimum required capability, and missing evidence versus demonstrated capability insufficiency.

The analysis uses the Structured Continuity Assessment Framework (SCAF) as a communication and decision-support method. SCAF structures specialist knowledge so that relationships, dependencies and consequences can be understood more clearly; it does not replace the engineering, economic, regulatory or legal expertise required to determine the application.

Executive position

The original Project EnergyConnect (PEC) delivery pathway experienced a demonstrable capability gap. That project-delivery gap threatened the delivery of additional transmission capability. On the public evidence reviewed to 2 September 2026, however, it does not by itself establish that failure to rectify the claimed event would have been likely to cause a material adverse effect on the reliability or security of the operating transmission system.

PEC can be highly important and capability-enhancing without the loss or delay of its benefits necessarily satisfying Criterion 6. The relevant question is not simply whether PEC improves reliability, security, resilience or economic outcomes. It is whether failure to rectify the adverse consequences of the claimed event would have been likely to materially adversely affect reliability or security within the relevant transmission system.

Three distinctions guide this submission:

1. Loss of an improvement in capability is not automatically the same as loss of the capability required to continue the critical function.
2. The existence of alternative mechanisms does not establish that they are timely, available, sufficient or sustainable.
3. An Evidence Gap must remain distinct from a demonstrated Continuity Gap.

Analytical framework

SCAF begins by defining the function that must continue, then distinguishes that function from the projects, assets, capabilities and dependencies that support it. This structure is used here to clarify the continuity implications of PEC; it does not replace the terminology, standards or tests applied under the National Electricity Rules.

Element	Meaning in this submission
Critical function	Maintain reliable and secure electricity transmission within the relevant transmission system.
SCAF working continuity threshold	The point at which available system capabilities would become insufficient to maintain the critical function under the defined operating conditions and credible contingencies.
Project-delivery question	Can PEC still be delivered through the original or replacement commercial and delivery arrangements?
Transmission-system question	Can reliable and secure transmission continue through existing capabilities and credible substitute responses?
Evidence Gap	The available information is insufficient to establish whether the required capability is present.
Continuity Gap	The available capability is demonstrated to be insufficient to maintain the defined critical function.

Within SCAF, the working continuity threshold is ordinarily described as Minimum Acceptable Continuity (MAC). In this submission, MAC is used only to distinguish reduced capability from demonstrated capability insufficiency. It is not a regulatory or engineering standard and is not proposed as a substitute for the Criterion 6 test. Determining whether reliability or security would be materially adversely affected requires the AER and relevant specialists to apply the NER, applicable technical standards and the available evidence.

Responses to consultation questions

Question 7 - Definitions of reliability, security and adverse effect

For the purpose of structured continuity analysis, this submission broadly agrees with the AER's proposed definitions of reliability and security. They appropriately focus on whether the transmission system can continue performing its required functions under expected operating conditions and remain within, or return to, required technical operating boundaries following credible contingencies. [1, section 3.2.3.2]

This submission suggests one clarification concerning "adverse effect". A reduction in the likelihood that the system will perform adequately, or a reduction in its ability to remain within or return to operational boundaries, may constitute an adverse effect even where the system is still expected to satisfy applicable standards. Such an effect would not necessarily be material and would not, by itself, satisfy Criterion 6.

The assessment should therefore preserve three distinct questions:

4. Does failure to rectify the claimed event cause an adverse change in reliability or security?
5. Is that adverse change likely to occur?

6. Are the likely adverse effects, considered individually and collectively, material?

On this basis, the loss of a reliability or security improvement should not automatically be treated as either immaterial or materially adverse. It should first be characterised as a change in system capability or continuity margin and then assessed for likelihood and materiality.

PEC may increase transfer capability, system strength, supply diversity and resistance to islanding. Delay or loss of those improvements may reduce continuity margin and increase reliance on other capabilities. That does not automatically establish the likely material adverse effect required by Criterion 6, but neither should every reduction be excluded from consideration merely because a specific standard breach has not been identified.

This response addresses the analytical separation of adverse effect, likelihood and materiality. It does not offer a legal opinion on the correct construction of Criterion 6.

Question 8 - Interpretation of “likely” and “materially”

This submission considers that “likely” and “materially” should be assessed separately but then brought together through explicit counterfactual scenarios. Neither should be inferred solely from the importance of PEC, the existence of a possible adverse outcome, or the existence of a mechanism intended to prevent that outcome.

Likelihood

The assessment of likelihood should identify the complete causal pathway between failure to rectify the claimed event and the asserted reliability or security effect. This includes not only the probability of the initial system condition arising, but also the probability that available market responses, backstops, operational controls or substitute capabilities would prevent or manage the effect.

The existence of a response mechanism does not, by itself, establish that sufficient response capability will be available. Each material alternative should be assessed according to:

7. the capability it would provide;
8. its availability under the relevant conditions;
9. the time required to activate it;
10. the duration for which it could be sustained; and
11. its dependence on other potentially constrained capabilities or resources.

Apparently separate alternatives may share dependencies such as specialist labour, major equipment, generation availability, fuel, approvals, network connections, financing or lead time. Treating each alternative as independently available may therefore overstate the system’s practical options.

Materiality

Materiality should concern the significance of the adverse effect on the transmission system’s ability to perform its required function. Relevant considerations may include:

12. the magnitude of the capability reduction;
13. proximity to applicable reliability or security limits;
14. duration and frequency;

- 15. geographic extent and affected demand;
- 16. the contingencies under which the effect arises;
- 17. the system's ability to recover;
- 18. dependence on emergency intervention, including load or generation shedding; and
- 19. the combined effect of multiple individually limited impacts.

A reduction in capability or continuity margin may be real without being material. Conversely, continued operation should not automatically be treated as evidence that an effect is immaterial where continuation depends on temporary, uncertain or emergency measures.

Combined assessment

The AER could apply these considerations through scenarios that distinguish:

- 20. continuation with strong capability margin;
- 21. continuation with reduced but sufficient margin;
- 22. conditional continuation dependent on successful interventions;
- 23. temporary or recoverable capability insufficiency; and
- 24. sustained capability insufficiency.

This would allow the AER to distinguish a possible adverse effect from a likely one, and a measurable reduction in capability from one that is materially adverse for the purposes of Criterion 6. It would also keep an Evidence Gap—where the performance of alternatives is unknown—separate from a demonstrated Continuity Gap.

This submission does not propose a numerical probability or materiality threshold. Those thresholds must be determined through the applicable regulatory and specialist assessment.

Question 9 - Whether Criterion 6 has been demonstrated

On the public evidence reviewed to 2 September 2026, this submission's answer is no. Transgrid has demonstrated that PEC provides significant reliability, security and resilience benefits, but the reviewed evidence does not establish the further proposition that failure to rectify the claimed event would have been likely to cause a material adverse effect on the reliability or security of the relevant transmission system.

This conclusion does not mean that no adverse effect could occur. It means that the public evidence does not adequately connect the following elements:

- 25. failure to rectify the claimed event;
- 26. non-delivery or material delay of PEC;
- 27. loss or degradation of particular system capabilities;
- 28. the availability and performance of substitute responses; and
- 29. a likely material adverse reliability or security outcome within the relevant system boundary.

The evidence supports that PEC would increase transfer capability, strengthen interconnection, contribute system strength, improve supply diversity and reduce South Australia's exposure to islanding. These are meaningful capability improvements. Their loss or delay may reduce continuity margin and increase dependence on other capabilities, but that is not sufficient by itself to demonstrate the outcome required by Criterion 6.

A central limitation is the absence of a dedicated counterfactual assessment comparing completed, materially delayed and non-completed PEC scenarios. The AER consultation paper records that AEMO had not modelled the consequences of PEC being materially delayed or never completed. Consequently, the public evidence identifies potential effects and continuation mechanisms but does not establish their combined likelihood, timing or materiality. [1, section 3.2.3.2; 3]

The available information supports the following continuity distinctions:

Scenario	Evidentiary conclusion
PEC completed	Transmission capability and continuity margin are strengthened.
PEC materially delayed	Additional capability is deferred and reliance on alternatives increases; a material adverse effect is not established.
PEC not completed and alternatives succeed	The function may continue with reduced margin, greater dependence or higher cost.
PEC not completed and alternatives are constrained	A potential continuity gap exists, but its likelihood, timing and materiality have not been demonstrated.
Severe coincident disruption without PEC	The outcome is indeterminate on the reviewed public evidence.

Alternative mechanisms should not be assumed either sufficient or insufficient merely because they exist. Their capability contribution, availability, activation time, sustainable duration and common dependencies require evidence.

Evidence that could materially change this assessment includes:

30. a defined and time-bounded non-completion or material-delay counterfactual;
31. identification of the reliability or security capability, requirement or standard at risk;
32. the conditions and probability under which the adverse effect would arise;
33. the capability, readiness and durability of market responses, backstops and operational controls;
34. analysis of common dependencies and coincident constraints;
35. the expected duration, geographic extent and recoverability of the effect; and
36. a clearly defined transmission-system boundary.

The appropriate conclusion is therefore that a material adverse reliability or security effect has not been demonstrated on the reviewed public record, while possible future effects remain conditional and require specialist assessment. This is an Evidence Gap, not proof that the system has either sufficient or insufficient continuity capability under every relevant scenario.

Question 11 - The relevant transmission system

From a continuity-analysis perspective, the relevant system should include both the NSW and South Australian transmission systems where a claimed adverse effect arises through their interconnection or shared dependence on PEC. [1, section 3.2.3.4]

PEC is an interconnector. Its relevant functions—interregional transfer, supply sharing, reduced exposure to islanding and aspects of system strength—cannot be understood fully by examining only one side of the connection. Restricting the analytical boundary to NSW could exclude consequences occurring in South Australia even where those consequences arise from the same capability, dependency or event being assessed.

Including both systems should not mean treating every condition anywhere in the National Electricity Market as part of the Criterion 6 assessment. The boundary should be limited to systems and consequences having a demonstrated material causal relationship with failure to rectify the claimed event.

This submission recommends that the AER present its assessment in two connected views:

- 37. Criterion boundary: the transmission system or systems that the AER determines are legally relevant under the NER.
- 38. Operational dependency boundary: the connected capabilities, dependencies and consequences needed to understand how the system would actually behave.

Within those views, effects should be identified separately for NSW and South Australia before their combined significance is considered. This would:

- 39. make the location and nature of each claimed effect visible;
- 40. prevent cross-border dependencies from disappearing because of an organisational boundary;
- 41. avoid treating an effect in one jurisdiction automatically as an effect in both;
- 42. reduce the risk of double counting; and
- 43. show whether the Criterion 6 conclusion changes when the boundary changes.

Accordingly, this submission considers that both NSW and South Australia should be included in the continuity assessment where the evidence establishes a relevant causal connection. The legal meaning of “relevant transmission system” and the boundary ultimately applied under Criterion 6 remain matters for the AER to determine.

Scope of response

This submission responds selectively to consultation questions 7, 8, 9 and 11, where structured continuity analysis can assist with the distinction between system capability, adverse effect, likelihood, materiality and system boundary.

It does not provide concluded responses to questions 1–6, 10 or 12:

- 44. Questions 1–6 require legal interpretation and detailed contractual and factual assessment of occurrence, reasonable control and foreseeability.
- 45. Question 10 requires legal interpretation of whether Criterion 6 applies to reliability and security jointly or to either reliability or security separately.
- 46. Question 12 concerns the legal, regulatory-economic and accounting treatment of committed, proposed and previously incurred expenditure.

These matters require evidence and specialist expertise that this submission does not possess. Declining to answer them avoids converting a continuity-analysis observation into a legal, contractual or economic conclusion.

Limited observation relevant to Criterion 1

Although this submission does not answer questions 1–6, the SCAF assessment identified a communication issue that may assist the AER’s examination of the claimed “Contract Failure” event.

A single event label can compress several analytically different matters:

- 47. background conditions;
- 48. an occurrence or series of occurrences;
- 49. deterioration in capability;
- 50. detection or receipt of information;
- 51. organisational recognition of the problem;
- 52. a decision that the existing pathway was no longer viable;
- 53. adverse consequences; and
- 54. rectification or continuation actions.

These elements may occur at different times and may be supported by different evidence. In particular, the date on which a condition began, the date on which information became available, the date on which Transgrid recognised the implications, and the date on which it made a formal decision should not automatically be treated as the same date.

Separating these elements could help the AER identify:

- 55. what is said to constitute the event;
- 56. when each component occurred;
- 57. what Transgrid knew or could reasonably have known at each point;
- 58. which matters were within or beyond Transgrid’s reasonable control;
- 59. when adverse consequences emerged; and
- 60. which actions constituted rectification.

This decomposition does not determine whether Contract Failure satisfies Criterion 1, whether it was beyond Transgrid’s reasonable control, or whether it could reasonably have been foreseen. It provides a structure through which the relevant evidence and specialist judgement can be applied more transparently.

Conclusion

Project EnergyConnect is an important capability-enhancing project. The reviewed evidence supports that it would strengthen interregional transfer, system strength, supply diversity and resilience. The original PEC delivery pathway also experienced a demonstrable capability gap.

Those findings do not, by themselves, establish that failure to rectify the claimed event would have been likely to materially adversely affect the reliability or security of the relevant transmission system.

On the public evidence reviewed to 2 September 2026, the necessary counterfactual connection has not been demonstrated between:

- 61. failure to rectify the claimed event;
- 62. loss or delay of PEC's capability contributions;
- 63. the availability and performance of substitute responses; and
- 64. a likely material adverse reliability or security outcome.

The appropriate conclusion is therefore limited but meaningful: a material adverse reliability or security effect has not been demonstrated on the reviewed public record. Possible effects remain conditional and require further evidence and specialist assessment.

SCAF assisted by separating project delivery from system operation, capability improvement from required capability, and an Evidence Gap from a demonstrated Continuity Gap. It structures the assessment; it does not determine the legal or technical outcome.

Source basis and limitations

Evidence cut-off: 2 September 2026.

Source	Evidentiary treatment
AER consultation paper dated 1 September 2026	Direct evidence of the AER's preliminary position and reasoning; secondary evidence of underlying material that it summarises.
Transgrid's PEC reopener application dated 13 February 2026	Direct evidence of Transgrid's claims, analysis and proposed position; not independent proof of contested matters.
AEMO's follow-up advice dated 26 June 2026	Authoritative evidence of AEMO's analysis, conclusions and stated analytical limitations.

The AER's position was preliminary at the evidence cut-off. This submission was prepared from publicly available information and may not reflect confidential or subsequently provided evidence available to the AER or other parties.

The working SCAF continuity threshold has not been verified as an electricity-engineering standard. The analysis has not been independently replicated or reviewed by an electricity engineer, regulatory economist or energy lawyer.

The submission should be reconsidered if:

- 65. Transgrid provides material additional factual or contractual evidence;
- 66. AEMO or another qualified body produces relevant delay or non-completion modelling;

- 67. the relevant transmission-system boundary is determined;
- 68. material assumptions about substitute capability change; or
- 69. the AER publishes its final decision.

This submission was prepared by Cameron Lennie, developer of SCAF, using AI-assisted analysis and drafting. The author reviewed and adopted the submitted reasoning. AI assistance does not constitute independent verification or specialist advice.

References

- [1]** Australian Energy Regulator, Consultation paper - AER preliminary position on Transgrid's application to reopen the 2023–28 transmission revenue determination for Project EnergyConnect, 1 September 2026.
- [2]** Transgrid, Project EnergyConnect - An application to reopen the 2023–2028 Revenue Determination, 13 February 2026.
- [3]** Australian Energy Market Operator, Follow-up advice on system security and reliability in relation to Project EnergyConnect, 26 June 2026.

This document provides structured continuity analysis. It is not legal, engineering, economic or regulatory advice.