

Integrated System Plan Feedback Loop Notice – HumeLink (Early Works)

AEMO publishes this notice pursuant to its function under section 5.16A.5(b) of the National Electricity Rules (NER).

Context

AEMO's Integrated System Plan (ISP) establishes a whole-of-system plan for the efficient development of the power system. In July 2020, AEMO published the 2020 ISP¹, which used quantitative assessment and scenario analysis to identify an optimal development path. The 2020 ISP was subsequently updated in December 2021 to incorporate significant changes to the inputs, assumptions and scenarios that were used in the 2020 ISP.² The optimal development path contains a series of power system investments, some of which are classified as "actionable ISP projects". The ISP triggers a regulatory approval process for projects with this classification.

While the ISP sets out a whole-of-system plan, Transmission Network Service Providers (TNSPs) are required to assess the actionable components of this plan through the Regulatory Investment Test for Transmission³ (RIT-T). Following completion of the RIT-T, a TNSP may seek written confirmation from AEMO to confirm that the preferred option from the RIT-T remains aligned with the optimal development path in the most recent ISP. This process is referred to as the "feedback loop".

The HumeLink project

The HumeLink project is a proposed transmission upgrade connecting the Snowy Mountains Hydroelectric Scheme to Bannaby. There are two stages for HumeLink:

- Early Works – Pre-construction activities that can be taken now, while keeping open the option to either continue, defer, or cancel the project as new information becomes available.
- Implementation – New 500 kV transmission lines that link the Greater Sydney load centre with the Snowy Mountains Hydroelectric Scheme and Project EnergyConnect in south west New South Wales.

In December 2021, Transgrid completed a RIT-T to assess the technical and economic viability of the project⁴. The RIT-T estimated net market benefits for the project of \$491 million. Transgrid's feedback loop request provides that the cost estimate for the project is \$3,317 million, which includes \$330 million for early works.⁵

Feedback loop assessment requirements

On 25 January 2022, Transgrid sought written confirmation from AEMO that the early works stage of the HumeLink project satisfies the requirements under the feedback loop. To be eligible to submit a contingent project application in relation to an actionable ISP project (or a stage of an actionable ISP project), a RIT-T proponent must obtain written confirmation from AEMO 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.

¹ AEMO. 2020 Integrated System Plan, at <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2020-integrated-system-plan-isp>.

² AEMO. Update to the 2020 Integrated System Plan (ISP), at <https://aemo.com.au/-/media/files/major-publications/isp/2021/update-to-the-2020-isp.pdf>.

³ The RIT-T process is a regulatory mechanism that applies an economic cost-benefit test on new transmission electricity infrastructure proposed for the National Electricity Market (NEM). It is designed to identify the most economically efficient infrastructure investment option, so the investment meets the long-term needs of consumers.

⁴ Transgrid. HumeLink RIT-T, at <https://www.transgrid.com.au/projects-innovation/humelink#RIT-T-process-and-submissions>.

⁵ Costs are presented in real 2020-21 dollars. These costs are equivalent to \$3.28 billion and \$327.6 million in real 2017-18 dollars.

Integrated System Plan Feedback Loop Notice – HumeLink (Early Works)



27 January 2022

Where project staging is captured within a single actionable ISP project, the RIT-T proponent must obtain feedback loop confirmation from AEMO for each stage before submitting a contingent project application.⁶ The cost assessed by AEMO in the feedback loop is the cost of the particular stage. However, AEMO must also have regard to the full cost of the project when confirming that the status of the project remains unchanged.

Notice of AEMO confirmation that feedback loop requirements are satisfied

AEMO has applied the feedback loop assessment to the early works stage of the HumeLink project using the most recent ISP (i.e. the Update to the 2020 ISP) and the cost estimate provided in Transgrid's feedback loop request. The staging of the project and estimated costs for both the early works stage and the total project as stated in Transgrid's feedback loop request are consistent with the staging and costs assessed in the Update to the 2020 ISP.

Therefore, AEMO publishes this notice to confirm that:

- the early works stage of the HumeLink project meets the identified need and aligns with the optimal development path specified in the Update to the 2020 ISP; and
- the cost of the early works stage does not change the status of the actionable ISP project as part of the optimal development path specified in the Update to the 2020 ISP.

AEMO also had regard to the total cost of the project and considers that the status of the project as actionable remains unchanged.

⁶ AER, *Cost Benefit Analysis (CBA) Guidelines*, at <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/guidelines-to-make-the-integrated-system-plan-actionable>, p.69.