

# Response to questions on notice

## *NSW Upper House Inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects*

### What is the meaning of ‘long-term interests of consumers’ and how is this factored into the RIT–T?

#### The ‘long-term interests of consumers’ and the National Energy Objective

The phrase ‘long-term interests of consumers’, is a direct reference to the National Energy Objective (NEO). In relation to electricity, the NEO is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity,<sup>1</sup> with respect to:

- price, quality, safety and reliability and security of supply of electricity; and
- the reliability, safety and security of the national electricity system.

In relation to the question of what ‘long-term interests of consumers’ means, the AEMC has provided guidance on how to interpret the NEO in its publication, ‘*Applying the Energy Market Objectives*’.

This publication states that the NEO is an *economic concept* and is intended to be interpreted as promoting efficiency and the operation of efficient markets, which in turn is in the long-term interests of consumers.

In other words, the reference to the ‘long-term interests of consumers’ is specific and intended to be interpreted in the context of economic efficiency.

#### How ‘long-term interests of consumers’ factor into the RIT–T

The Committee was interested in how, specifically, the ‘long-term interests of consumers’ are considered in the Regulatory Investment Test for Transmission (RIT–T).

The objective of the RIT–T, set by the AEMC via the NER (clause 5.15A.1(c)), is to:

*... identify the credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the market (the preferred option).*

Fulfilling this purpose contributes to achieving the NEO to promote efficient investment in, and efficient operation and use of, electricity services. Allowing for a more efficient functioning of the market typically lowers the costs of supply, and so lowers prices for consumers in the long-term, which is in their long-term interests.

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<sup>1</sup> National Electricity Law, Section 7.

In other words, the 'long-term interests of consumers' is not one factor in the RIT–T assessment, but is the outcome of the the fundamental objective of the NER, which is centred upon the economic concept of efficiency.<sup>2</sup> The RIT–T promotes efficiency (and benefits the long term interests of consumers) by:

- requiring RIT–T proponents to consider all credible options for a project, and to then select the option that maximises the net economic benefit across the market, reducing the risk that consumers will pay for inefficient investments;
- requiring that the most efficient investments go ahead, and in doing so promoting a predictable network development framework around which competitive investments in the National Electricity Market (**NEM**) can be made without unnecessary risks arising from inefficient investment; and
- promoting transparency and accountability in major transmission investment decisions.

We note that while the RIT–T aims to identify the option that maximises the net economic benefit to the market, this does not necessitate that the lowest cost option is chosen. There can potentially be cases in which the preferred option in fact has a net economic cost:<sup>3</sup>

*For the avoidance of doubt, **a preferred option may, in the relevant circumstances, have a negative net economic benefit** (that is a net economic cost) to the extent the identified need is for reliability corrective action or the provision of inertia network services required under clause 5.20B.4 or the provision of system strength services required under clause 5.20C.3. [emphasis added]*

The AER's Application guidelines for the RIT–T contain additional detail on the AER's interpretation of this clause.

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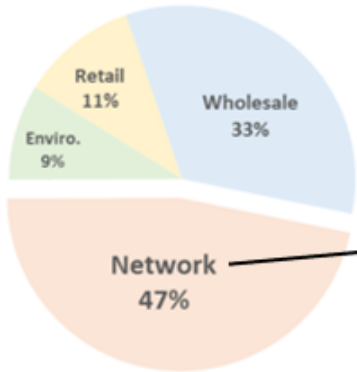
<sup>2</sup> Australian Energy Market Commission, *Applying the Energy Market Objectives*, page 10.

<sup>3</sup> National Electricity Rules, clause 5.15A.1(c).

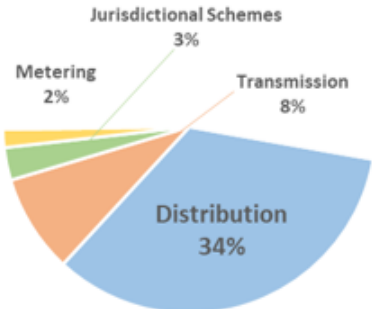
**What is the transmission component of an energy bill (i.e., what percentage of an energy bill’s cost, can be attributed to transmission)?**

Figure 1 below shows the breakdown of a retail bill, while Figure 2 breaks down the network charge further, including a rough approximation of the transmission component (8%).

**Figure 1 - Components of a retail bill**



**Figure 2 - Components of network charges**



Please note that the network proportion of a retail bill (and therefore the transmission component of a retail bill) will vary depending on a number of factors, including which distribution network the customer is connected to and the type of network tariff the customer is assigned to.

Further, transmission costs (as a percentage of the bill) will vary between distribution areas, because distribution charges vary between distributors. Therefore, the above figures and charts are approximations only.

**Have the benefits of Humelink increased as well as its costs, and if so, how?**

The benefits of Humelink would be best assessed by AEMO. AEMO’s Integrated System Plan (**ISP**) establishes a whole-of-system plan for the efficient development of the power system, and incorporates extensive modelling and other inputs available to AEMO due to its expertise in power systems.

Humelink is an actionable project under the ISP, which means that Transgrid (the Transmission Network Service Provider or **TNSP**) was required to assess the actionable components of Humelink via the RIT–T.

The AER’s role in the RIT–T process for ISP projects, as set out in the NER, is to establish and amend the RIT–T test and the cost-benefit analysis guidelines (subject, in both cases, to the framework and requirements specified in the NER). We monitor compliance with the test, the NER process, and the guidelines, and we also provide guidance to AEMO on how to undertake cost-benefit assessments for new transmission investments. However, we generally do not assess which projects are undertaken (this is done by AEMO), meaning that

we generally do not undertake the type of rigorous cost-benefit analysis that AEMO undertakes in developing its ISPs.

We do assess contingent project applications (**CPAs**) when certain conditions are met. One such condition, in relation to an actionable ISP project (or a stage of an actionable ISP project), is 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.

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. Therefore, there is oversight over the cost and benefits of a project's preferred option, to ensure that it remains aligned with the optimal development path.

AEMO is currently consulting on updated inputs, assumptions and scenarios and an updated methodology in preparation for the 2024 ISP. Any feedback loop requests assessed after the release of the 2024 ISP or an ISP update will be based on the inputs and assumptions used to determine the ODP in that ISP or ISP update.

Therefore, the AER would have to defer to AEMO in responding to this question.