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Ms Kami Kaur
General Manager
Australian Energy Regulator
GPO Box 3131
Canberra, ACT, 2601

Via email: AERInquiry@aer.gov.au

Dear Kami,

**Submission on Quantonomics - Report Phase 2 - Electricity Distribution Benchmarking Opex
Model Development**

AusNet appreciates the opportunity to provide feedback on the Quantonomics Phase 2 report on refining the opex cost functions and acknowledges the ongoing efforts to refine benchmarking methodologies.

AusNet supports the AER's continued refinement of the opex benchmarking model and agrees with the central finding of the Quantonomics Phase 2 report that the current assumption of time-invariant inefficiency is overly restrictive and likely contributes to model misspecification.

However, AusNet considers that the report also demonstrates that:

- incremental refinements to the current model are insufficient to address underlying issues;
- not all alternative model specifications deliver improved or reliable outcomes; and
- there remains material uncertainty regarding the appropriate model specification for regulatory use.

Accordingly, AusNet submits that the AER should:

- Incorporate successful time-varying inefficiency models into the cost benchmarking framework and gradually transition away from time-invariant models.
- Reconsider the role of the BRFM framework in light of improved econometric modelling; and
- Undertake further work on operating environment factors (OEFs) and data quality prior to finalising the framework.

Incorporate successful time-varying inefficiency models into the cost benchmarking framework and gradually transition away from time-invariant models.

AusNet supports the AER incorporating the successful time-varying inefficiency model variants identified in the Quantonomics Phase 2 report into the cost benchmarking framework, and progressively transitioning away from the current time-invariant approach.

The Phase 2 analysis demonstrates that a subset of time-varying models materially outperform the existing time-invariant specification. In particular, the report identifies the following as successful and implementable variants:

- BC95-JTT-HN;
- Kumb90-JTT-HN;
- LSE-AJTT and LSE-AJTT-GTC.

AusNet supports the AER incorporating the BC95-JTT-HN and Kumb90-JTT-HN models into the cost-benchmarking framework. However, AusNet notes that the AER should exercise caution in adopting LSE-AJTT and LSE-AJTT-GTC models, as they produce efficiency trajectories that differ materially from both SFA model variants and multilateral TFP trends, raising concerns about the reliability of inferred efficiency change. We support Quantonomics' evaluation criteria of consistency, both across model specifications and modelling approaches.

AusNet supports the AER continuing to adopt a multi-model benchmarking approach rather than relying on any single model, given the ongoing uncertainty surrounding correct model specification. In particular, the AER should avoid placing too much weight on LSE model variants due to the concerns discussed above.

The AER should also gradually retire the existing time-invariant models given the existing issues with such models. The assumption of constant inefficiency over time is no longer appropriate and risks distorting efficiency estimates. However, given the material implications for expenditure assessment, the process of retiring these models should be carefully considered, transparently implemented, and subject to consultation with stakeholders.

Reconsider the role of the Benchmarking Roll-Forward Model (BRFM) framework in light of improved econometric modelling

The Quantonomics Phase 2 report proposes a potential alternative approach to estimating efficient opex in the presence of time-varying inefficiency models. Under this approach, efficient opex would be calculated directly using year-specific efficiency estimates, rather than first estimating period-average efficient opex and projecting it forward using the current Benchmarking Roll-Forward Model (BRFM) approach.

In particular, the report proposes that:

- **Where the base year falls within the benchmarking sample period:** calculate base-year efficient opex directly by multiplying the efficiency score for the base year by the real opex in that same year.
- **Where the base year falls outside the benchmarking sample period:** use the BRFM to bridge the period between the last year of the sample and the base-year used in the reset.

However, the Phase 2 report notes that this alternative approach may be considered in future work. In the interim, it continues to apply the BRFM framework by bridging between the sample-average year and the base year, using sample-average efficiency scores to estimate base-year efficient opex.

In our view, the Phase 2 report presents an opportunity for the AER to reconsider the role of the BRFM framework if time-varying inefficiency models are incorporated into the benchmarking approach.

In particular, retaining the current BRFM framework and applying it using sample-average efficiency scores estimated from time-varying models may introduce systematic bias. For DNSPs exhibiting improving efficiency over time, averaging efficiency scores across the sample period may mask recent performance improvements which are most relevant for regulatory decision making. Conversely, DNSPs whose efficiency has deteriorated

over time may be inadvertently advantaged, as sample-average efficiency scores may be overstated by earlier, less relevant performance levels.

If time-varying inefficiency models are adopted, we strongly encourage the AER to further consider the alternative approach outlined in the Phase 2 report as part of this review of the benchmarking framework. Estimating efficient opex directly using base-year efficiency scores would ensure that the resulting efficiency benchmark reflects firms' most recent performance and avoids the approximation inherent in applying sample-average efficiency measures through the current BRFM framework. Under such an approach, the role of the BRFM could be limited to bridging the period between the final year of the benchmarking sample and the base year, where required. This would minimise the potential distortions associated with averaging efficiency across periods and improve the alignment between estimated efficiency and contemporaneous firm performance.

Proposed enhancements to the benchmarking methodology to better account for terrain, storm risk, bushfire risk, and other factors

AusNet has previously recommended that the AER improve the benchmarking framework by addressing gaps in the treatment of operating environment factors (OEFs). The current OEF adjustments are incomplete and do not fully reflect the cost pressures faced by networks operating in complex environments.

While we support the AER incorporating the successful time-varying inefficiency model variants identified in the Quantonomics Phase 2 report into the cost benchmarking framework, we note that these models primarily account for jurisdictional differences across DNSPs, rather than differences in individual DNSP operating environment factors (OEFs). As a result, DNSP-level heterogeneity may remain uncaptured by these models and could be inadvertently captured within the estimated inefficiency term.

Therefore, AusNet continues to propose enhancements to the benchmarking methodology to better account for terrain, storm risk, bushfire risk, and other factors that materially affect opex. These recommendations aim to improve the accuracy and fairness of benchmarking outcomes and support more informed regulatory decisions. These recommendations include:

- **Introduce a terrain adjustment:**
 - Use average elevation or steepness as a new explanatory variable in benchmarking models.
 - Recognise the cost impact of operating in mountainous and heavily vegetated areas.
- **Develop a Storms Risk OEF:**
 - Collect consistent data on severe storm-related opex through RINs.
 - Account for systematic storm impacts not captured in current models.
- **Update the Bushfire Risk OEF:**
 - Include new bushfire-related costs such as REFCLs and rising insurance premiums.
 - Recognise AusNet's higher exposure to bushfire-prone areas.
- **Correct and update existing OEFs:**
 - Revise the vegetation management responsibility OEF to reflect actual council involvement.
 - Update the taxes and levies OEF using more recent data provided by AusNet.
- **Consider Guaranteed Service Level (GSL) payments:**

- Include GSL payments as both an input and output in benchmarking, treat them as a separate OEF or remove GSLs from benchmarked opex.
- **Undertake a holistic review of the benchmarking framework to ensure it reflects meaningful cost drivers:**
 - Ensure the methodology reflects current and emerging network cost drivers. We do not consider the current benchmarking framework and opex forecasting approach adequately account for new cost drivers associated with the transition¹

Please do not hesitate to contact Frank Hu, Regulatory Economist [REDACTED] about this submission.

Sincerely,

[REDACTED]

Manager, Regulation (Electricity Distribution)
AusNet

¹ See AusNet, *Electricity Distribution Price Review: 2026-31 Revised Regulatory Proposal*, December 2025, pp.183-185 for further discussion