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Submissions  
Electricity Authority  
By email: [submissions@ea.govt.nz](mailto:submissions@ea.govt.nz)

## **Transmission Pricing Methodology Review: LRMC charges**

Meridian welcomes the opportunity to provide feedback on the Electricity Authority's working paper on "Transmission Pricing Methodology Review: LRMC charges" dated 29 July 2014.

Meridian supports the Authority's process to consider LRMC-based pricing as a potential transmission pricing methodology. However, having reviewed the working paper and considered the issues more broadly, Meridian does not support an LRMC approach to transmission pricing in New Zealand for two key reasons:

- Practicalities of LRMC approach would limit durability
- Ineffective investment incentives

We expand on this reasoning below. Given that the options discussed in the working paper are not exhaustive and given the potential interdependence of various aspects of the TPM, this submission does not attempt to comprehensively state Meridian's position.

### **Practicalities of LRMC approach would limit durability**

*LRMC would require too many subjective assumptions to be durable*

Estimating the LRMC for a particular user involves forecasting future demand, predicting future infrastructure investment and calculating load flow. Such a process would necessarily be complex and require the exercise of considerable subjective judgment. This is apparent in the discussions of the approaches in the UK and Australia.

Furthermore, estimating the LRMC for different users/assets would require forecasts extending beyond those currently used for the price control of Transpower (as noted in paragraphs 8.3 and 8.4 of the working paper). Agreement on long-term forecasts will be difficult to reach. For a recent example of this, see the numerous submissions on demand forecasts used as an input to the default price paths for distributors<sup>1</sup>. These forecasts would be subject to change as new information is revealed, for example, in relation to demand and technology. Accordingly, there would be considerable scope for dissatisfaction and dispute about estimated LRMC-based prices.

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<sup>1</sup> <http://www.comcom.govt.nz/regulated-industries/electricity/electricity-default-price-quality-path/default-price-quality-path-from-2015/>

#### *Potential conflict with the Commission's role under Part 4*

Meridian notes that there is a potential issue in terms of the relationship between an LRMC-based allocation methodology and the existing Commerce Commission-determined revenue cap for Transpower. LRMC-based charges conceptually pre-fund investment, whereas the Commission's approach is about recovering the costs of existing assets. Meridian doubts the durability of an approach that estimates the allowed revenue on the basis of existing assets, but allocates that revenue on the basis of future assets.

As recognised in the EA's paper, "pre-funding" of assets using forecast future demand and investment is inherently unstable. For example, if forecast future investment turns out to have been greatly overstated, grid users will have paid in advance for asset that has not eventuated. If this occurs repeatedly it is likely to result in strong pressure for change.

#### *Any shortfall still requires a basis for allocation*

Meridian agrees that it is likely that LRMC-based cost allocation would only cover a modest proportion of Transpower's revenue requirement as determined by the Commerce Commission, particularly in light of recent investment in the transmission grid. The working paper makes this point at para 9.6, and Meridian notes that increases in distributed generation could make this issue even more significant. The Authority suggests that the remaining revenue could be recovered through a combination of beneficiaries-pay charges and residual charges. The Authority would need to be convinced that the end-result of a multi-tiered pricing methodology would be stable and comprehensible for dynamic efficiency benefits to eventuate.

#### **Ineffective investment incentives**

One of the arguments for a beneficiaries-pay approach to transmission pricing is that it would result in efficient incentives to support or oppose transmission investments. In contrast, and as the working paper notes (see paras 8.38 and 9.4(a)), LRMC can lead to perverse incentives on grid users regarding the timing of transmission investment. For example, users might promote the bringing forward of an investment, as once commissioned, there would be no charge for that investment. This is because LRMC pricing would reflect *future* investments, not existing ones. The current TPM has resulted in similar behaviour from participants, as evidenced by the involvement in recent investments by Transpower<sup>2</sup>.

The primary justification for LRMC offered by the working paper and earlier submissions is that it would provide efficient locational investment signals to generation and load. Given that locational signals are already provided by the electricity spot market, which reveals prices at each node reflecting losses and constraints (i.e., the SRMC of transmission), it is unclear why a further mechanism is required.

Efficient investment decisions require an approach to transmission pricing that is both durable and stable given the circumstances that eventuate over the timeframes of those investments i.e., decades. While appealing in concept, Meridian suggests that a TPM with LRMC-based pricing would be unsustainable, and as unsustainable as the status quo (though for different reasons).

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<sup>2</sup> See Appendix C in The Authority's working paper "Problem definition relating to interconnection and HVDC assets" <http://www.ea.govt.nz/development/work-programme/transmission-distribution/transmission-pricing-review/consultations/#c13929>

In Meridian's view, the Authority should not consider an LRMC approach any further. Rather, it should continue to explore workable beneficiaries-pay approaches which keep stability, simplicity, and durability in mind.

Please contact me if you have any questions about this submission.

Yours sincerely,

Dr Andrew Kerr  
Regulatory Affairs Manager

**DDI 04 382 7411**

**Mobile 021 443 059**

**Email [andrew.kerr@meridianenergy.co.nz](mailto:andrew.kerr@meridianenergy.co.nz)**