

## **SUBMISSION ON THE HIGH-LEVEL REVIEW OF TRANSMISSION PRICING**

This is the submission of Counties Power Limited (CP) on the Electricity Commission's Consultation Paper of October 2009 titled "Transmission Pricing Review: High-level options".

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Insofar as existing load is concerned, there is much in favour of the present Transmission Pricing Methodology. It is simple, it is stable and it permits recovery of sunk costs in a manner which minimises distortionary impact on customers' production, consumption and investment decisions. It is certainly much better than the load-flow based cost apportionment system which preceded it. It would be most regrettable if the commission's review were to restart the previous lengthy and ultimately pointless arguments between customers at the centre and at the periphery of the grid about who should bear what proportion of the sunk costs.

At the same time it is difficult to escape the feeling that the electricity industry and market as presently structured have not delivered optimal solutions in terms of location of new generation; the limited amount of new generation and / or energy efficiency efforts in and north of Auckland, the special treatment of Top Energy in respect of Ngawha, and the timing of Transpower's new 400kV line into Auckland are obvious examples of this.

It would, of course, be beyond the scope of this investigation to consider whether a command-control industry structure or a significant change in asset ownership might give better results. This being the case, the commission needs to focus on the interplay between nodal energy pricing, the GIT and the TPM, just as it has done in this consultation paper.

In our submission the commission should focus on means to strengthen the location signals for significant new generation and load while being careful not to jeopardise the benefits of the present TPM for existing load. Considering the options discussed:

### Option 1: Status Quo

As noted above, in our view the status quo works well for existing load but not for significant new load and generation. The one obvious change which should be considered is whether the cost of grid augmentation can somehow be sheeted home to those who cause it. With significant new load that should be easy; the challenge for the commission is to find a way of causing generators to pay for augmentation if they don't build new generation in the "right" place!

### Option 2: "Tilted" Postage Stamp

While there may be some logic in a two island approach to recovering sunk costs, it would be necessary to take into account that the transmission costs presently facing South Island generators (including the HVDC) were taken into account in the valuation and capitalisation decisions when the generation companies were established. In any case this approach seems to us to be unlikely to resolve the issue of new generator location. Its most likely chance of success would seem to be with very small zones, which would effectively merge this approach into Option 4, with the same issues as outlined below.

### Option 3: Augmented Nodal Pricing

This appears to us to be a fine example of an academic theory which is likely to prove to be far too complex for practical use, and liable to deliver unsatisfactory unintended consequences such as gross under-investment. If the commission does decide to explore this approach further then it should be sure to test the consequences of a range of values of unserved energy (since \$20k / MWh may prove to be far too low when we actually face prolonged black-outs), and also of apparently irrational behaviour on the part of participants (since the assumed uniform economic rationality rarely occurs in practice).

#### Option 4: Load Flow Pricing

We counsel strongly against this approach. It is complex, the details are contentious, the resulting prices are potentially unstable (both because of changes in load flows and because of arguments about methodology), and it has perverse and damaging consequences; e.g. the major industry in a small town closes down and everyone who remains is hit with an electricity price increase just at a time when they are struggling with other impacts from the closure.

#### PJM Deep Connection

This may be worth pursuing; it certainly seems likely to deal with significant new load. The question is whether it can also signal generators to build where needed.

In summary, it is difficult to avoid the cliché “please don’t throw the baby out with the bath-water”, but that about sums up our view. The TPM works reasonably well; generators don’t seem to be getting the right locational signals for new plant; the commission needs to find a way to address the latter without undermining the present TPM treatment of sunk costs.

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