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Dear Kate

Dual Submission: Managing Locational Price Risk: Options & Transmission Pricing Review: High Level Options

Business New Zealand is pleased to have the opportunity to provide a dual submission to the Electricity Commission on its two consultation documents entitled 'Managing Locational Price Risk: Options' and Transmission Pricing Review: High-Level Options', both dated October 2009.[1]

Business New Zealand has provided the Electricity Commission with a dual submission on these papers in light of the obvious linkages between them.

Summary

Business New Zealand supports exploring ways to manage locational risk. New Zealand businesses need efficient electricity prices. This requires:

1. competitive retail—with pressure on retail profit margins and on retailers' costs-to-serve;

2. competitive wholesale—in contract prices or generator-retailers' internal transfer prices; and

3. least-cost supply—including efficient dispatch and efficient locational choices.

[1] Background information on Business New Zealand is attached in Appendix One.

But in seeking to reach a set of options – both with regard to transmission risk management and pricing - we consider that major features of the policy analysis are missing, or only dealt with tangentially. These omissions mean that we are not able to make an informed choice of the appropriate options. For example, in relation to the locational hedging proposal:

1. the analysis assumes—without reference to industry—that all options will remove enough locational risk to make regional retail fully competitive and produce a valuable reduction in all retailers' costs-to-serve;

2. dispatch distortions seem to be a feature of all options but are not quantified;

3. the analysis omits potentially the largest dynamic efficiency effects in the generation market. On one side, generator-retailers may be able to follow least cost expansion paths more closely. On the other, the loss of nodal price signals within zones may lead to investment inefficiencies, but these effects are not mentioned; and

4. short run demand-side responses to transmission constraints are potentially valuable but alternative ways of securing responses without nodal prices are not examined and the associated costs are not estimated.

Business New Zealand's submission is as follows - engage more with industry participants to understand whether the removal of locational price risk will make an appreciable difference to retail competition (this presumably being the primary objective for the management of locational price risk). If its removal does make an appreciable difference to retail competition (and it is our contention that this will be the case), it will then be possible to assess what refinements are feasible while still preserving intense widespread retail competition. If necessary, use the transmission pricing review to replace locational investment signals if deemed sufficiently valuable.

Business New Zealand considers that the nature of some of the options currently on the table place the New Zealand electricity market at a cross-roads. For example, departures from nodal pricing if pursued would be a major change for the New Zealand market and these should be well understood by all stakeholders. Business New Zealand requests that at the next analytical stage, the Electricity Commission holds a conference and allows cross submissions in the ensuing debate.

Locational Price Risk and Transmission Pricing

Business New Zealand agrees that retail competition would be enhanced by enabling wholesale purchasers to manage locational risks. But we are concerned that a huge amount of effort has gone into refining the detailed options, while little progress has been made in establishing that any option will actually improve retail competition significantly and produce benefits that outweigh costs.

In our view, the analysis should start by establishing whether completely removing locational risk (using one New Zealand zone—as in each Australian State) would increase retail competition significantly and produce benefits that outweigh costs.

If, for example, zonal pricing clearly increases retail competition, then one could fine-tune, asking how will more complex arrangements lessen the increase in retail competition and how much will more complex arrangements improve efficiency through locational signals, short-run demand-response, and dispatch. Of course, if removing all locational risks is not seen as likely to improve retail competition appreciably, then there is no reason to change nodal pricing.

The first step therefore is to verify that removing locational risk will make a difference to retail competition:

1. ask retailers why they aren't retailing everywhere; and[2]

2. ask retailers what it would take to get them to compete in more regions.

If it seems likely that complete removal of locational risk will actually increase retail competition, what efficiency gains are plausible?

1. retail margins may decrease in some regions—producing small allocative efficiency gains (a reduction in deadweight loss);

2. stronger competition may reduce retailers' costs-to-serve—a productive efficiency gain (the Electricity Commission's assumed 18% reduction from the whole MDR is unexplained and seems heroic);

3. maybe some gain in the efficiency of investment is possible if generator-retailers no longer have to prefer generation options close to their customer base;[3]

4. the Electricity Commission estimates welfare gains from the reduction of locational risk itself and from an associated increase in hedge market liquidity, but this analysis seems very light.[4]

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[2] …meaning work with retailers to understand their commercial incentives, not just a questionnaire.

[3] This effect may be an important part of the competitive gains from stronger transmission capacity, a consideration recommended by the Ministerial Review for inclusion in the Grid Investment Test.

[4] To our knowledge, this is the first time that an Electricity Commission cost-benefit study has associated welfare gains with changes in price volatility and market liquidity. Such an innovation needs to be discussed more widely and based on more than a reference to one consultant's marketing report.

It is recognised that this first-step scenario would not be without costs:

1. presumably the averaging out of all nodal prices would entail some loss of dynamic efficiency. After all, the reviews of Transpower's transmission pricing methodology (TPM) are motivated by the concern that nodal prices may not produce enough locational signals for generation and load. Business New Zealand is surprised that neither the transmission price options paper nor the locational price risk paper attempted to quantify this effect.

   It is also possible that the dynamic efficiency losses (if any) from the muting of nodal price signals would apply nationally while the benefits of increased retail competition would only be found in some areas as the locational price risk problem does not arise everywhere;[5]

2. the averaging out of nodal prices would also remove incentives for major users to respond directly to transmission constraints in the short-run. This loss is noted as a reason why LRA repayments could be based on historical loads in unconstrained periods (rather than actual loads) but again, no attempt has apparently been made to quantify the cost of losing this demand response;

3. implementation costs of an Australian-style one-zone solution seem likely to be very low; and

4. zonal pricing probably leads to some dispatch inefficiencies as generator-retailers try to deal with possibly being constrained off without compensation. However, LRA options could also lead to some distortions to dispatch. The order of magnitude of this dispatch inefficiency has not been estimated.

Clearly the critical issue in this analysis is the likely response of retailers to the removal of the locational risks resulting from constraints and whether the single zone solution will enhance regional retail competition enough to produce a net benefit.

Business New Zealand recognises that the analysis may not show this, and acknowledges that there are a variety of strongly views held by market participants on the investigation of zonal pricing, some of whom do not support further investigation of it. If and only if this first step analysis shows that the single zone solution will enhance regional retail competition enough to produce a net benefit, should the industry then proceed to explore fine-tuning the redesign, for example:

1. test whether improving on the one-zone approach—say to two zones

[5] It may also be that the loss of nodal price signals produces no dynamic efficiency loss because the relevant long-run signal can be easily and more effectively provided by "tilting" the interconnection charge. The paper prepared for the Electricity Commission by EGR Consulting Limited dated 29 September 2009 entitled 'Locational Hedging Options for New Zealand: Issues and Options', says "Thus we consider it legitimate to contemplate changes which would reduce locational signals coming from the spot market, on the grounds that these could be compensated for by changes which increased locational signaling in transmission pricing, if that is considered worthwhile."

plus inter-island FTRs—would improve locational signals significantly and raise dynamic efficiency. Would the two-zone model involve enough locational risk to prevent the outbreak of widespread retail competition that was possible in the one-zone approach? Ask the retailers.

2. test whether sharing rentals on the basis of historical loads in unconstrained periods produces a valuable efficiency gain through major users responding to transmission constraints in the short-run. Would this reduction in the completeness of the locational risk hedge restrict the outbreak of widespread retail competition in the first-step scenario? Ask the retailers.

Some Specific Comments on Transmission Pricing

In addition to the 'framework' comments above, Business New Zealand has a couple of more specific comments with regard to transmission pricing. These relate to the commencement of the Electricity Commission's review, the consideration of additional options, and the treatment of transmission alternatives.

The Circumstances of the Review

With respect to the review *per se*, Business New Zealand notes that there are actually two transmission pricing reviews underway. While this duplication is sufficient to elicit any number of comments, Business New Zealand simply notes that consumers are paying twice for the privilege at a time they can least afford it. In the absence of any clear explanation as to the linkages between these reviews and the value that both are delivering for consumers, Business New Zealand wonders whether a more sophisticated level of co-ordination could have occurred.

This question of co-ordination is compounded by the underlying rationale for the Electricity Commission's review and its effect. While touched on in the analysis above, Business New Zealand had understood that the Electricity Commission's first review was undertaken on the pretext that a review of the efficacy of locational pricing was expected to take too long to complete. But no such review is forthcoming. The questions posed largely assume nodal pricing.

Business New Zealand also questions the extent to which the Electricity Commission considers such a review will 'settle' the issue of transmission pricing. Business New Zealand considers this unlikely, and announcing the review so quickly after its final decisions on the transmission pricing methodology did not, in Business New Zealand's view, signal good regulatory practice.

Alternative Transmission Pricing Options

Three high-level options have been identified by Frontier. Business New

Zealand understands that some further options have been put forward in the context of the industry-led transmission pricing review. These options are a capacity-rights approach, and an ‘arbitrageur’ approach. Business New Zealand considers that these approaches warrant further analysis.

Transmission Alternatives

Much fruitless effort has been expended on the issue of transmission alternatives including what they are and how they ‘fit’ within the market. Business New Zealand wonders why it is so difficult to work out the positive value to consumers where generation defers the need for new transmission.

The search for transmission alternatives is not just a search for generation or demand management projects which may occur in the market place. Rather, the useful question is whether some investments that would be proceeding anyway could be modified at a low cost in such a way as to make them true transmission substitutes. For example, a single-unit gas-fired base-line generation project may not provide sufficient substitution for transmission, because it would not be as reliable, and would result in end-consumers paying higher prices than would have been the case under a competitive market.

However, a multiple-unit power station with certain pricing undertakings may indeed be a transmission alternative. The question that decision-makers need to address is what would be required to modify a commercial energy market project to make it a transmission alternative. Clearly neither the Government Policy Statement, nor the rules have assisted in addressing this question. In the face of being unable to progress this issue to the benefit of consumers, the Electricity Commission should abandon all consideration of transmission alternatives.

Summary

While the Electricity Commission has made much progress in recent months, Business New Zealand does not consider that a clear pathway forward regarding either locational hedging or transmission pricing has been revealed. Much of this, in Business New Zealand’s view, relates to the absence of a clear objective - such as increasing retail competition - and a clear framework for considering how to assess the trade-offs between improved competition and diminished locational price signals.[6]

In Business New Zealand’s view, the Electricity Commission needs to establish a 'clear line of sight' between the objective (retail market competition), the economic value of locational signalling, and the options it chooses. This analysis should be done before we move ahead with substantial market design changes. This analysis may, or may not, reveal that a zonal-based solution will enhance regional retail competition enough to

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[6] For example, Business New Zealand notes that while not labelled as objectives, the Electricity Commission lists six factors (including promoting competition) that the transmission risk management option needs to balance in paragraph 13 of its consultation paper.

produce a net benefit. Either way, this analysis will be informative and lead to the development of a more robust and durable solution. In the absence of this analysis, a choice of preferred options is extremely problematic.

A key issue to emerge from the two papers is how to combine the options in an optimal way. This submission provides a convenient way forward.

Yours sincerely

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Business New Zealand

APPENDIX ONE: ABOUT BUSINESS NEW ZEALAND

Encompassing four regional business organisations (Employers' & Manufacturers' Association (Northern), Employers' & Manufacturers' Association (Central), Canterbury Employers' Chamber of Commerce, and the Otago-Southland Employers' Association), Business New Zealand is New Zealand's largest business advocacy body. Together with its 70-member Affiliated Industries Group (AIG), which comprises most of New Zealand's national industry associations, Business New Zealand is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy.

In addition to advocacy on behalf of enterprise, Business New Zealand contributes to Governmental and tripartite working parties and international bodies including the ILO, the International Organisation of Employers and the Business and Industry Advisory Council to the OECD.

Business New Zealand's key goal is the implementation of policies that would see New Zealand retain a first world national income and regain a place in the top ten of the OECD (a high comparative OECD growth ranking is the most robust indicator of a country's ability to deliver quality health, education, superannuation and other social services). It is widely acknowledged that consistent, sustainable growth well in excess of 4% per capita per year would be required to achieve this goal in the medium term.