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Electricity Commission
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SUBMISSION ON SCARCITY PRICING AND COMPULSORY CONTRACTING CONSULTATION PAPER

- 1 Orion New Zealand Limited (**Orion**) welcomes the opportunity to comment on the Consultation Paper 'Scarcity pricing and compulsory contracting' (the **paper**) released by the Electricity Commission (the **Commission**) in November 2009.
- 2 Our submission is in two parts:
 - 2.1 General comments on the paper.
 - 2.2 As a schedule, responses to the Commission's specific questions.

Security of supply

- 3 The paper proceeds on the basis that the two options considered in the paper – scarcity pricing (with default buy-back) and compulsory contracting – are the only, or at least the two best options. Even conceding that supply side solutions are preferable to public conservation campaigns, there is a further option that we consider is more targeted and that may be more appropriate.
- 4 Much of the discussion and comment about security of supply relates to the number of hydro 'shortage' or dry year situations that have occurred in recent years: 4 since 2000. There is an expectation, and indeed some form of obligation on the Commission, to ensure that such events happen much less frequently. This discussion appears to be aimed at management of hydro storage, and - necessarily, given its dominance of storage - Meridian's management of it.
- 5 Orion has no basis for criticising Meridian's management of hydro resources. We presume it manages them prudently and in line with its own commercial risk position. The question is, is that management consistent with an acceptable

security standard for New Zealand? By pursuing scarcity pricing, we can only presume that the Commission believes the answer to this question is “no”.

- 6 Given that answer, an option that should be considered is contracting with Meridian to change its behaviour. This very targeted option certainly has an advantage over scarcity pricing in that it does not require rebuilding the market pricing mechanism, imply contractual obligations where they (arguably) do not currently exist or send potentially alarming signals to potential new entrants or other parties who have no influence over hydro storage management.
- 7 We note that other aspects of security of supply are provided via contractual solutions, for example frequency keeping, instantaneous reserve and voltage support, and that the cost of these is, to a considerable extent, ‘socialised’. Admittedly some of these have more potential providers, but Meridian’s dominance of hydro storage is simply a fact that can only be addressed by means other than changing the pricing process.
- 8 At the very least we suggest that this targeted contracting option be seen as a counterfactual to the options currently being considered.

Other general comments

- 9 Given that hydro storage management is a key factor behind the scarcity pricing proposal, it would have been interesting to see an analysis of how different management would have improved the situation in the four ‘shortage’ years since 2000. Or would those events have happened even with more conservative management? Likewise an analysis of the role of the HVDC and its north to south capacity during those years would have been of value. Perhaps transmission or reserve market operation are also important parts of the puzzle?
- 10 Regarding compulsory contracting, we note the observation in paragraph 5.1.4 that “...two further building blocks would be required - namely a means to ensure buyers are fully hedged and procedures to make sure generators limit their hedge sales to no more than firm output.” Presuming that generators are the sole source of hedges, it is not possible to simultaneously achieve both of these objectives, since the first number - “buyer” sales volumes - is by definition bigger than the second¹ - generator “firm output”. Also we presume buyer here means retailer, in which case the discussion is making a presumption about retailers’ fixed price obligations. In any case the upshot of this would be to take away from participants key business choices that they make. While this is not necessarily a bad idea, it is a fairly dramatic regulatory intervention to be conveyed by a short paragraph.

¹ There is also an issue of term. Generators might prefer to contract for a term up to the life of their physical assets, whereas prudent retailers will generally contract for terms related to their customer contract ‘books’ – in most cases a much shorter period.

- 11 Table 2 sets out the relative merits of scarcity pricing and compulsory contracting in terms of s172N of the electricity Act, and more generally. We comment on these assessments as follows:
- 11.1 s172N 2(c): we would argue that scarcity pricing **will**, by increasing the real or perceived riskiness of the wholesale market, increase barriers for new entrant retailers and for non-portfolio generators.
 - 11.2 s172N 2(e): we note that an additional cost, which is not really a production or transportation cost, is being introduced. We also note that whatever is signalled, participants will be likely to at least try and recover the increased cost.
 - 11.3 s172N 2(f): we believe that scarcity pricing **will** increase the average spot price (and forward contract prices), by its effect on the high end of the price distribution, and by its intended consequence of encouraging hydro generators to manage storage more conservatively, which other things equal can only be achieved by offering into the wholesale market at higher prices.
 - 11.4 s172N 2(g): we believe scarcity pricing **will inevitably** increase hydro spill if it has the intended consequence of more conservative management of hydro storage.
 - 11.5 Implementation: we would have thought that implementation would involve significant rule changes, and a complete rewrite of SPD. We presume both of these are major and time-consuming undertakings?
 - 11.6 Transition: Given the likely impact on prices, scarcity pricing is likely to place a number of existing contracts in or out of the money. This is not a problem in itself, but the impact should at least be considered, and it suggests phasing in any changes over an extended period: typical contracts are for a period of three years.

Concluding remarks

- 12 Thank you for the opportunity to make this submission. Orion does not consider that any part of this submission is confidential. If you have any questions please contact Bruce Rogers (Pricing Manager), DDI 03 363 9870, email bruce.rogers@oriongroup.co.nz.

Yours sincerely



Bruce Rogers
Pricing Manager

Schedule: Responses to specific questions

Q No.	Question	Response	General comments in support of response
1	What concerns do you have with regard to security of supply under existing arrangements?		<p>We note that New Zealand has experienced “shortages” under a number of institutional arrangements, which suggests that physical security of supply is actually about the weather, which remains – for the moment - outside the reach of such institutional arrangements. On the other hand we should remember that New Zealand has not, since the 1970’s, resorted to involuntary outages to manage such shortages.</p> <p>It has not been established that public conservation campaigns are a worse solution to shortage situations than the supply side alternatives.</p> <p>As previously recommended by Orion and many others, the cessation of the reserve energy scheme should change the incentives on participants regarding how they manage dry year risk. Scarcity pricing rather implies that this will not happen.</p>
2	What, if any, other underlying issues lead to the potential for cost shifting among market participants?		<p>Cost “shifting” is a feature of all markets. It is about participants choosing product features that meet their needs at a given prices. Much of the scarcity pricing proposal is based on an unstated presumption that physical supply security is or should be guaranteed, and that this is part of what is being paid for. This is something of a rewriting of the implicit or explicit understanding reflected in customer contracts. For example we would presume that most residential customers are on contracts that allow retailers to change prices on 30 days notice. In addition at least one retailer – Meridian – has the contractual right to change prices on 48 hours notice in “constrained supply situations”². Both of these rights could be used by retailers to manage their risk were scarcity pricing to be invoked.</p> <p>Although not directly related to cost shifting, we note the very significant impact that could result from VOLL based scarcity pricing. During the worst month of the last shortage - in winter 2008 – spot prices</p>

² A right which as far as we are aware has never been exercised.

			<p>averaged around \$300/MWh, and the total value of energy bought and sold would have been around \$1billion. At \$5,000/MWh, the value would rise to \$16 billion. It is not conceivable that such a dramatic increase in the worst case (from a purchaser perspective) scenario will not have significant downstream implications. As a minimum it will certainly impact on prudential requirements.</p>
3	<p>What is your assessment of pros and cons of scarcity pricing approaches versus compulsory contracting?</p>		<p>We agree with the Commission that scarcity pricing is superior to compulsory contracting. However we note that some aspects of scarcity pricing impinge on contracting, and that scarcity pricing itself will almost certainly change participants approaches to contracting with respect to such matters as:</p> <ul style="list-style-type: none"> • The volume and term of fixed price contracts offered • The price of fixed price contracts • The nature of contracts and in particular the force majeure type provisions in them <p>The commission may find that some of these commercially sensible responses run counter to its attempts to improve supply security by way of scarcity pricing, and as a result it may find itself being drawn into the area of contracting.</p>
4	<p>What other broad options should be considered to improve security performance?</p>		<p>As noted in the body of our submission, scarcity pricing seems to have developed out of concerns about how well one particular generator, namely Meridian, manages its hydro resources given its central role in overall supply security.³ Since there is no suggestion of either lack of competence or financial prudence on the part of Meridian, there would appear to be some sort of externality preventing Meridian's pivotal supply security role being adequately recognised in a commercial sense, and thus security is "underprovided" by Meridian. In this case a possible option, which has the benefit of being directly targeted, would be to separately contract with Meridian to manage its resources more</p>

³ Although of course supply security might also be threatened by other system events, for example major transmission outages or major generation outages.

			conservatively. This would inevitably place upward pressure on wholesale prices – spot and forward, but then so will scarcity pricing.
5	What approach to scarcity pricing should be preferred?		<p>If scarcity pricing is to be implemented we believe it must be some form of the “modified” version, where there is some impact on price before actual rolling blackouts occur. This price could be linked in some way to the assessed security level, with a “scarcity factor” ranging between 0 and 1 being applied to the scarcity price.</p> <p>(In principle this factor could be applied at all times, with it just happening to be 0 most of the time.)</p>
6	Do you agree with the outlined approach whereby the Commission will progress with a detailed proposal for a scarcity pricing regime and for a default buy-back arrangement? If not, what would be the best approach for moving forward?	Perhaps	<p>However we consider there is considerable work still to be done to establish whether this is an appropriate regulatory response.</p> <p>The detailed proposal should consider such aspects as:</p> <ul style="list-style-type: none"> • Likely impacts on forward prices and other contracting arrangements • Relative cost of public conservation campaigns versus supply side solutions • Impact on potential new entrants, particularly their risk positions and prudential requirements • Impact on innovative retailer offerings, for example Powershop. • How the cessation of the Reserve Energy Scheme might impact on the market and security management. • Whether such a regulatory approach will likely lead to a much wider intervention into the area of participants’ contractual arrangements. • With regard to buy back arrangements, the appropriateness of this applying to all (or indeed any) retailers, when it seems to be aimed at ensuring one generator manages its hydro resources differently. • Counterfactuals, for example the targeted solution mentioned above.