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SUBMISSION ON DECISION-MAKING AND ECONOMIC FRAMEWORK FOR DISTRIBUTION PRICING METHODOLOGY REVIEW

1 Orion New Zealand Limited (**Orion**) welcomes the opportunity to comment on the "Decision-making and economic framework for distribution pricing methodology review" consultation paper (the **paper**) released by the Authority in May 2012.

2 Our submission is in two parts:

- Comments on key aspects of the paper, and
- Responses to the paper's specific questions as an Appendix.

3 The Electricity Networks Association (ENA) has also submitted on the paper. Orion supports the ENA submission, and in particular the suggestion that the Authority's apparent objectives in this area could be met by simply including a link to the statutory objective in the introduction to the pricing principles.

4 In our submission on the related paper on transmission pricing[1] and in face-to-face meetings with the Authority we expressed a number of concerns about that paper - which still stand - and many of those are repeated in this submission. The Authority has also yet to respond to submissions [2] made in October 2011 on

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[1] Orion New Zealand Limited, "Submission on transmission pricing framework paper", 24 February 2012.

[2] Such as Orion's "Submission on criteria for assessing alignment against information disclosure guidelines and pricing principles", 17 October 2011.

the pricing principles and information disclosure guidelines framework. In our view that was the next logical step in this workstream.

5 Fundamentally, we are of the view that the new framework adds no value, but quite a lot of confusion, to the existing regulatory approach established by the Authority via the pricing principles and disclosure guidelines. We do not see that a problem has been identified let alone a robust solution provided. In our view the Authority should abandon the framework.

What decisions are being made, by whom and when?

6 One piece of the framework that we find it particularly hard to understand is what “decision-making” means in this context? In the transmission context the decisions seem most likely to relate to those made by the Authority about proposed changes to the TPM. Whether or not that is useful, it is at least clear who is doing the deciding. In the case of distribution pricing we are, by comparison, unsure what decisions are being referred to, who is making the decisions, or when?

7 Based on para 30 of the executive summary of the paper, the framework is directed at distributors’ decisions about “which pricing approach should be preferred”. However, it is unclear what the range of pricing approaches supposedly under consideration is? The paper could helpfully have provided more detail in this area.

8 Distribution pricing – as in the overall approach and the supporting structure – changes infrequently. This is a good thing, particularly from a long term consumer perspective, as consumers’ investments (for example: investment by homeowners in particular types of water heating; investment by larger consumers in building control systems, dual-fuel capability and generation capability) often reflect distribution pricing signals. As such “decisions” as to the pricing approach and structure are unlikely to be required often, and going through the same high-level “decision” process every year would be both pointless and wasteful.

9 Alternatively the framework could be seen as aiding the Authority in its consideration of appropriate regulation of distribution pricing. In this case the arguments in sections 5.2 and 5.3 are instructive. In our view these establish quite clearly, and correctly, that market-based approaches are generally impractical and, where not impractical, largely irrelevant.

10 The two examples given are nodal pricing and long term contracting. Nodal pricing is rapidly dispatched (although the paper does not include the - we would say very important - observation that wholesale market nodal pricing is *not* in fact part of the TPM; it is part of the wholesale market and affects the energy price).

Long-term contracting is given a little more credence but then "limited to large customers only" (para 5.3.7). See paras 27 to 29 below for more discussion of long term contracting.

11 Having established the irrelevance of market-based approaches, there is no point in having them in the framework. The only thing that is left is administrative approaches, but then we are left where we started in terms of regulation, with the pricing principles and guidelines. There is no need for and no value in each distributor going through the market-based part of the decision framework when the paper has already demonstrated its lack of relevance.

12 In this regard we find the distinction in the framework – within the broad set of "market-based" approaches – between the sub-categories of "market" and "market-like" to be confusing. We are not sure if the two examples discussed (see above) are "market" or "market-like", since both are discussed in the context of "market-based" approaches in section 5. This leaves open the possibility that the paper does not actually consider "market-like" approaches at all. It seems to us that the existing pricing principles could easily and correctly be interpreted as a "market-like" approach within the proposed framework, which would mean there was no need to proceed further down the hierarchy. And even if the paper means to include the existing approach as being an "administrative" one, it could still reasonably rank it above the other administrative approaches considered.

Relevance of the Treasury guidelines

13 As we see it the Treasury guidelines were developed to aid government departments in their consideration of who and how they should charge for outputs where they move away from appropriation-based funding. These are by definition situations where we are not normally talking about the core activity of the department. Moreover we would be surprised if there are many government departments for whom those outputs require significant investment in long-life assets and where that investment becomes largely sunk once made. We do not believe the paper explains why the Treasury approach is relevant or useful in the context of distribution pricing.

14 Having said that, the *concepts* underlying the notions of exacerbators and beneficiaries, which are key to the Treasury guidelines, are by no means unknown to network economics. They can as a result be found in existing pricing methodologies: in the explanations of the connection categories that distributors develop; the way cost allocation is carried out; and the way pricing components are established. They can also be found in distributors' capital contribution policies, and in discussions of network investment drivers (and alternatives) in asset management plans. However the words themselves, particularly "exacerbator", are, in our experience, seldom if ever used, and we consider that forcing their use on distributors in the context of their pricing

methodologies and other documents would simply be a triumph of vocabulary over common-sense.

Relevance of other markets

15 The market for distribution services is *not* workably competitive. This is why distributors (at least the non-exempt ones supplying most consumers) are regulated under the Commerce Act. There is no practical point in speculating on how the distribution "market" might work were it other than it is. Nevertheless the paper persists with arguments by analogy to other "markets", so we are compelled to point out their irrelevance.

- *The potato delivery market analogy*: We do not pretend to understand this market in any depth, and nor would we ever feel compelled to offer any advice to it based on electricity networks. However we make the following comments:

  (a) We imagine that potato growers consider a number of different ways to get their product to market, which might include transporting it themselves, paying someone else to transport it, or simply selling at the farm gate so that someone else has the problem.

  (b) We suspect potato growers (and indeed many other users of the transport system) never have to think about the actual roading system used by whatever means of transport they choose, and if faced with a traffic jam would just wait (potatoes being a readily storable product – unlike electricity). We submit that most potato farmers would neither understand nor accept the notion of exacerbation.

  (c) If there is any useful analogy here it is with the roading network itself, not the actions of those whose root vegetables might travel along it. As such there are indeed relevant questions about the timing and nature of roading investment, how one might charge for road use at peak and other times, and how the overall cost of providing the road might be recovered. But since these are just normal questions of network economics it is hard to imagine why the discussion would not most usefully proceed in the context of the specific type of network in question (electricity distribution) rather than another type?

- *The swimming pool analogy*. This analogy purportedly establishes that distribution networks are "rivalrous" because, like a swimming pool on a hot day, things can get a little crowded on the distribution network at peak times. Our observations here are that:

(a) Table 4 of the paper uses public swimming pools as an example of a non-rivalrous club good, so it puzzling that they re-enter as an example of “rivalrous” goods. However, given that they do, we are not sure this helps as we do not observe swimming pool proprietors managing such peak demands via pricing? We suspect non-price rationing is the more common solution.

(b) An analogy is not needed to confirm that distribution networks, like most networks, are not used to full capacity much of the time, but nevertheless must be built to support aggregate maximum demands (with appropriate margins for contingency).

(c) The related concept of excludability is also discussed in this context. On this point, while it is true that distributors can control initial connection to the network, after that exclusion is not generally possible. This is important given that the maximum capacity of upstream network (and indeed the transmission system) is considerably less than the sum of all the individual maximum demands that consumers could (but do not due to diversity) place on the system. It is also generally not possible to exclude particular customers from network-wide levels of, or changes in, quality.

Relevance of the transmission framework

16 As noted above, we have previously submitted that we do not see that the similar framework that is being applied to transmission pricing is a good or useful one in its own right. But even if it is, it is unclear how it can readily be extended to distribution pricing. There are significant differences between the context for transmission pricing and the context for distribution pricing. These include:

- *Nature and number of the contracting parties*: connection to the transmission grid is by small number (maybe 50?) of large, well-resourced and industry savvy organisations with assets that are likely to remain connected for many years. Transmission cost will be a significant proportion of their total costs, and decisions about transmission pricing will have a significant impact on them. Were one to embark on a search for exacerbators amongst this group, or possible new members of the group, it could be conducted quickly.

  By contrast, connection to distribution networks is by around 2 million parties, ranging from the private streetlight to the very large industrial plant, with decision horizons of a few up to many years (although even at the long end only a handful would have horizons anything like the life of the electrical assets supplying them), and for most of whom electricity costs - let alone electricity distribution cost - will be a very small component of their total expenditure. Few would have thought about exacerbation at all (or perhaps even know the word) let alone grasp the economics.

- *Nature and number of investment decisions*: if investment in the transmission grid is characterised as large and lumpy, then investment in distribution networks is generally much smaller and more dispersed. Most increments (at least by number of connections) are residential or commercial sub-divisions where the local distribution assets are actually constructed by the developer and bought by the distributor. Distributors plan in a general sense for such developments based on wider city and town planning, and in a specific sense based on interactions with developers. But a big single investment by Orion would be $10 million and would support many thousands of eventual connections.

  Moreover the major transmission investment decisions are actually separately regulated according to a process separate to the TPM and administered by the Commerce Commission, not the Electricity Authority. And once approved investments occur, the recovery of the associated costs is assured by the TPM and Transpower's individual price path regulation. There is no strong analogy to these processes for distribution investment.

Relevance of other regulation

17 Consistent with our submission on the transmission framework, we consider it to be very odd to have a framework paper that does not specifically address the impact of existing regulation on distribution pricing and distribution businesses more generally. Relevant legislation and regulation includes the Commerce Act, the Electricity Industry Act and associated Participation Code, particularly the distributed generation regulations, and low fixed charge regulations.

18 Regarding the Commerce Act, the paper sees this regulation as being largely about overall price level or revenue regulation. This is certainly an important aspect. But the regulation also applies to reliability measures, and more broadly is required to align with the purpose of the Act. For example it must incentivise, and not disincentivise, innovation and investment, and it must promote efficiency. Whether the Commission's current approach and methodologies currently meet the purpose of the Act is an open question and well beyond the scope of this submission. What is important here is that the paper does not discuss how its proposed new framework fits with it, or how existing Commission regulation might constrain or support it.

19 At a more straightforward level, Commerce Act regulation is based on a presumption - with which we agree - that distributors are not operating in workably competitive markets. The regulation inevitably influences decisions and behaviour: for example a distributor, in entering into a "market-based" arrangement with a large connecting customer, does so in the expectation that any unusually high or low returns associated with the particular connection will not change the distributor's returns overall (at least in the medium term).

20 Likewise the Code, distributed generation regulations and low fixed charge regulations control, and where they do not control, strongly influence, distributor pricing, and in ways that are in our view clearly not consistent with the proposed new or existing distribution pricing regulatory approaches. Again we are not going to repeat the arguments here, but the point is that the paper does not adequately recognise these elements, and our view is that it should have.

Relevance of industry structure

21 For better or worse the electricity industry in New Zealand is largely based on a model where the retailer determines the offering to the customer. These offerings are likely to reflect distributors' pricing, but that is generally not necessary or required, and nor should it be. As such the retailer is the recipient of the distributor price signals despite not (usually) being a connecting party, user, beneficiary, exacerbator or investor.

22 The paper in discussing the economics of the situation rightly identifies users of the network as (largely) being the parties for whom price signals are intended. But inevitably these signals will in most cases have to go via retailers. We are thus confused by the statement (at 11(c) of the Executive Summary and again at 5.4.8(c)) that "a related party that is not an exacerbator or beneficiary (eg the retailer rather than the consumer) should only be targeted when it is clear that it will pass the economic impact on to exacerbators or beneficiaries, as the case may require."

23 This could be interpreted as meaning that retailers should never be exposed to any pricing signals, and in particular a retailer should not be when it is not "clear" that it will pass on price signals. We could find no rationale in the paper for the statement so it is not possible to tell what is actually intended. However, as written we believe this makes *any* form of cost-reflective pricing inadmissible when retailers are interposed. We cannot see how this is consistent with the long term benefit of consumers, but more importantly we cannot see how it is consistent with the framework. To be blunt this is just plain wrong.

24 Moreover electricity retailers can and do influence distribution costs and investment. For example retailers who offer dual-fuel options, or those that promote alternative forms of water heating or distributed generation. These

choices should be taken in the context of the actual costs and benefits of the action. If they are not, the costs and benefits are socialised, and the decisions will be sub-optimal.

Not all the limbs need to be met by every intervention

25 The Authority has developed three "limbs" to aid it in meeting its statutory objective. These are competition, reliability and efficiency. The Authority, at least in this paper, seems to take the view that every intervention needs to be relevant to each limb. We disagree, and moreover we think structuring the arguments in this way leads to somewhat contorted thinking.

26 We consider that the limb most relevant to distribution is reliability, and that efficiency is next. Competition is, in our view, of only marginal relevance given that distribution is acknowledged as being (naturally) not workably competitive. If we needed to encapsulate the objective of the distribution sector in terms of the statutory objective we would say something like: to invest efficiently to provide reliable supply.

Long term contracting

27 The paper presents long-term contracting as an example of a market-based mechanism that is used for or in distribution pricing (from page 22). We agree that long-term contracting is sometimes used between distributors and (large) connecting parties, and we agree that this is very rare.[3] However that does not make it a market-based approach in the sense that it might of itself lead to a superior outcome for the consumer. It is still true that the distributor (in nearly all cases) has a natural cost advantage in connecting customers via its network, and that while the large connecting customer may be the most likely to have a viable by-pass option, this will itself be with respect to its discussions with another natural monopoly - most likely Transpower. Either way, in the absence of regulation, distributors would still be incentivised (at least theoretically) to push the pricing for all consumers up towards standalone cost, which, for most, would be very high indeed.

28 Much more practically, the main driver *for Orion* in seeking long term contracts is to help manage the stranding risk associated with our investment in very specific assets.

29 In the exceedingly rare cases where new connection arrangements come close to being genuinely market-based – in the sense that the connecting customer really does have a meaningful choice of provider – we cannot see the framework

[3] In Orion's case we have two such contracts in place. The revenue associated with those contracts is currently around 1% of our total annual delivery revenue.

being relevant at all, since surely the existence of customer choice obviates the need for regulatory interest.

Exacerbation by inaction

30 We do not understand the notion that exacerbation might occur via *inaction* (see section 5.5 of the paper). Leaving aside likely difficulties in identifying inaction, or more accurately distinguishing exacerbating inaction from more general inaction, we are very unsure on what contractual basis we would attempt to recover costs from the inactive party.

Efficiency and investment

31 Dynamic efficiency in electricity distribution is largely about investment – the right amount in the right place at the right time. Distributors set out their investment intentions and associated decision-making frameworks in their AMPs, which are very detailed and long-term focussed documents. By their nature they consider a range of drivers and alternatives. They are themselves subject to their own regulatory framework, and are the subject of increasing scrutiny from the Commerce Commission. Pricing should certainly be consistent with investment planning, but by its nature it cannot be a substitute for it.

32 The range of allocative efficiency is very wide – greater than marginal cost and less than standalone cost. Add in inelastic demand and the efficiency consequences of pricing outside this range – unlikely as that is - may still be small. We submit that this makes allocative efficiency very much a second order consideration when compared with dynamic efficiency.

Other issues

33 The paper at a number of points confuses costs, charges and prices. For example in the discussion of competition in Table 3 is the statement: “The allocation of distribution costs should support workable competition.” Cost allocation is a rather technical step along the way to setting prices, and it is prices that we believe might influence behaviour. Furthermore the examples given do not relate to the point:

- Distribution *charges* falling to a greater or lesser extent on various parties of itself is meaningless, since this is an inevitable result of any pricing arrangement, and of itself does not tell us anything about efficiency.

- Distribution pricing having the potential to favour particular technologies could well be true. But the paper does not say how it is relevant, or whether it is good or bad?

- Distribution pricing providing incentives to disconnect from the network? Well it might, but whether that is good, bad or indifferent is of itself indeterminate and not addressed by the framework. Were we faced with what we took to be a credible by-pass threat from an existing consumer, and it was one where we felt we would be better off discounting to counter it, we would do so. On the other hand, as a legacy of previous regulatory approaches we are required to maintain supply to some connections even though they can never be profitable and it would be better (absent the regulatory obligation) to price to ensure that they disconnect – or more likely meet their electricity needs from means other than network connection.

Concluding remarks

34 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

Appendix: Responses to specific questions

	Question	Response
Q1	Do you agree with the Authority's interpretation of its statutory objective with respect to distribution pricing? If you agree, please explain why. If you do not agree, please explain how you consider the statutory objective should be interpreted with respect to distribution pricing and the reasons for your interpretation.	We agree with the interpretation in the general sense that regulation of distribution pricing should be consistent with the statutory objective, but we cannot see how the proposed framework adds any value to the existing regulatory approach in this area. We believe the existing pricing principles-based approach to regulation of distribution pricing is consistent with the statutory objective.
Q2	Do you agree with the above application of the three limbs of the statutory objective to distribution pricing? If not, why not, and are there other examples of how distribution pricing can influence competition, reliability and efficiency?	No. Some of the application is contorted. We do not agree that every consideration of industry regulation needs to provide benefits, or be with respect to, all three limbs, at all or equally. A paper, or at least this framework paper, is not needed to confirm that distribution pricing can influence efficiency (particularly dynamic efficiency), reliability and, to a much lesser extent, competition.
Q3	Do you agree that a market-based distribution pricing methodology would tend to promote efficiency in network use and in investment in distribution networks, generation, demand management and the	Yes but not in any relevant or material way. We also agree with the paper's conclusion that a market-based approach is largely irrelevant and impractical in the real world. Moreover were a market-based approach possible, that is, were a customer to have a real choice of provider, we are unsure why there would be any regulatory interest in the transaction? We note in this regard that distributors are unable to separate out the provision of delivery services priced

	electricity industry more generally? If so, what are your reasons? If you disagree, what are your grounds for disagreeing?	under a “market-based” approach from those that are supplied under administrative approaches. As a result there is no possibility for the distributor to get higher or lower than regulated returns overall (over the medium term) from market-based approaches. If the Authority considers that market-based approaches should permit such an outcome, then we suggest it take this up with the Commission in the context of the MOU. To the extent that we understand the “market-like” approach, we see the existing principles-based approach as being a good example, which means the rest of the hierarchy is not needed? We note that paper is confusing in its discussion of “market-based”, “market” and “market-like” approaches, using terms interchangeably.
Q4	Do you agree that market-based distribution pricing methodologies are likely to be more durable and stable than approaches involving administered charges? If so, what are your reasons? If you disagree, what are your grounds for disagreeing?	Given that market-based approaches are largely irrelevant and impractical, durability is unlikely or simply irrelevant. To the extent that the market-based approach is relevant it is likely that it will be delivered by a long-term contract, but durability and stability will depend on the terms of that contract.
Q5	Do you agree distributors should use pricing methodologies that give preference to market-based approaches to distribution charges wherever such charges will be efficient and implementation will be practicable? If so, what are your reasons? If you disagree, what are your grounds for disagreeing?	No, because market-based approaches are largely irrelevant and impractical. In the very few cases where market-based approaches are truly relevant, they will be driven by the customer, and the outcome will by definition be efficient.

Q6	Do you agree the second, third and fourth ranked preferences should be for administrative approaches to distribution charges of exacerbators pay, beneficiaries pay and other charging options wherever such charges will be efficient and implementation practicable? If so, what are your reasons? If you disagree, what are your grounds for disagreeing?	Consideration of exacerbators and beneficiaries, as *concepts* has some relevance, but we do not understand the ranking or its rationale, and the new language adds plenty of potential for confusion. The pricing principles and guidelines provide an adequate and indeed superior framework. We note that nearly all new distribution investment occurs before the actual exacerbators/beneficiaries are known. The paper provides no rationale for ranking exacerbator pays ahead of beneficiary pays.
Q7	Do you agree these actions can exacerbate investment? Are there other actions and, if so, what are they?	Consumers wanting (in an aggregate sense) to become users of the network can and do drive investment. “Growth” might be a better word than “exacerbation”.
Q8	Do you agree that exacerbators should be identified by determining which party or parties have the ability to act differently, thereby avoiding the need to augment the network? Is there an alternative approach? If so, please provide details.	Generally the parties are not known at the time the investments are made.
Q9	Do you agree with the assessment of the price that should apply to exacerbators? Do you agree with the assessment of how exacerbators pay should apply in	The price or the basis of the pricing?

	practice? Do you agree with the proposed approach for identifying the preferred option or options for applying exacerbators pay? Please provide explanations in support of your answers.	
Q10	Do you agree these considerations should be taken into account under an exacerbators pay approach? Please provide an explanation in support of your view.	No comment.
Q11	Do you agree that these ways can be used to identify beneficiaries? Are there others? If so, please provide details.	We do not consider that the discussion of exacerbators and beneficiaries in the paper adds any value. Moreover we consider that the existing principles are adequate. They deal with the underlying concepts, and within a sound framework grounded in network economics.
Q12	Do you agree with the assessment of the price that should apply to beneficiaries? Do you agree with the assessment of how beneficiaries pay should apply in practice? Please provide an explanation in support of your answer.	Presumably this question is about the structure and conceptual nature of the pricing, rather than the actual “price”?
Q13	Are there other alternative pricing options? Do you agree with the assessments of how incentive free and postage stamp pricing should be applied	Alternative to what? Any option that is broadly consistent with the pricing principles is in our view a valid option.

	in practice? Please provide reasoning in support of your answer.	
Q14	Do you agree that the guidelines are consistent with the proposed decision-making and economic framework and therefore do not require any changes? If you agree please explain why and, if not, please explain why not.	We do not think the framework provides any rationale to change from the principles-based / information disclosure guidelines approach to regulation of distribution pricing. Moreover it adds no value. A more explicit link to the Authority's statutory objective could be included in the existing principles and disclosure guidelines.
Q15	Do you consider that the pricing principles and guidelines are consistent with the proposed decision making and economic framework? If you agree, please explain why. If you disagree please explain why not and how the principles should be changed.	We do not think the framework provides any rationale to change from the principles-based / information disclosure guidelines approach to regulation of distribution pricing. Moreover it adds no value. A more explicit link to the Authority's statutory objective could be included in the existing principles and disclosure guidelines.
Q16	Do you agree that pricing principle (b) should be interpreted as implying that where an alternative charging option is required prices should be set in a manner that minimises the impact of the charge on the use of the asset? If you agree please explain why. If you disagree please explain why not and please state how you consider this principle should be	Distribution pricing is seldom about pricing specific assets. We provide a delivery service using assets, but these are nearly always shared. We do not know what "alternative" means in this context. It is the nature of natural monopolies that marginal cost pricing will under-recover "allowed" revenues. We consider that principle (b) already has a well understood meaning aligned with "Ramsey" pricing (although the difficulties in applying Ramsey pricing in practice are also well understood).

	interpreted.	
Q17	Do you agree with the Authority's proposal to use the economic framework for distribution pricing as criteria for assessing distributors' application of the pricing principles? If you agree, please explain why and, if not, please explain why not.	No. We do not see how it sensibly can be, and nor do we think it adds any value to the existing principles and guidelines approach. We suggest instead that the pricing principles be amended to include an explicit link to the Authority's statutory objective.
Q18	Do you have any comments on the proposed process for confirmation of the decision-making and economic framework and the Authority's review of distributors' pricing methodologies?	The paper confirms that administrative approaches (or "market-like" approaches if the existing principle-based approach is actually what is meant by "market-like") are the only relevant and practical means of developing distribution prices. It is not sensible for every distributor to separately reach the same conclusion, presumably every year? The Authority's statutory objective framework is sufficient for considering regulation of distribution pricing. The existing pricing principles and guidelines are a balanced approach developed after extensive consultation over a number of years and which are consistent with the statutory objective.
Q19	Do you have any comments on how the Authority intends to take into account the timing implications of this consultation and the Authority's review of distributors' pricing methodologies?	Since the framework adds no new or relevant information we have no problem with our 2012 pricing methodology being assessed against the principles and guidelines in place in September 2011. If the pricing principles are amended by the end of 2012 to include an explicit reference or link to the statutory objective, we would be able to incorporate comment with respect to that in the pricing methodology that we publish in February 2013.