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2013 Review
Electricity Group
Energy and Communications Branch
Ministry of Economic Development
PO Box 1473
Wellington

By email: electricity@med.govt.nz

SUBMISSION ON THE REVIEW OF SECTION 62 OF THE ELECTRICITY ACT 1992 'CONTINUANCE OF SUPPLY' (2013 REVIEW)

1 Orion welcomes the opportunity to submit on the paper recently released by the Ministry of Economic Development (the *MED*) on the *review of section 62 of the Electricity Act 1992 'continuance of supply' (2013 review)* (the *paper*).

2 Our submission is in three parts:

2.1 Orion's recommendations;

2.2 comments on the paper; and

2.3 our response to the specific questions raised in the paper, which we set out in the schedule to this letter.

ORION'S RECOMMENDATIONS

3 Our submission does not advocate a particular option, however we consider that fundamentally the options comes down to either:

3.1 a mandatory requirement that line companies maintain line function services post 2013; or

3.2 a removal of the obligation to maintain supply post 2013.

4 If the Government proceeds with an option that requires lines companies to maintain supply, we recommend it should:

4.1 provide for this to be maintained either directly by a line or indirectly via an alternative;

4.2 if supply is maintained via a line, make provision for lines companies to require/obtain a capital contribution to renew or rebuild the line when the line needs to be replaced;

4.3 encourage the Commerce Commission to allow a commercial return on the assets employed (lines or alternatives) without expiry. This could be achieved if the Commerce Commission adopted an ODRC approach to asset valuation; and

4.4 remove section 99 of the Government Policy Statement on Electricity Governance (the *GPS*).

5 If the Government proceeds with an option that removes the obligation to supply, we recommend it should:

5.1 provide certainty to customers by requiring line companies to provide a reasonable period of notice (e.g. three years) of their intentions;

5.2 make provision for lines companies to require/obtain a capital contribution to renew or rebuild a line when a line needs to be replaced;

5.3 encourage the Commerce Commission to allow a commercial return on the assets employed (lines or alternatives) without expiry. This could be achieved if the Commerce Commission adopted an ODRC approach to asset valuation; and

5.4 remove section 99 of the GPS.

COMMENTS ON THE PAPER

6 The paper identifies several problems that may arise under the current legislation. These include:

6.1 consumer uncertainty about arrangements for their electricity supply after 2013. Consumers on lines that are considered uneconomic,

such as those to remote rural areas, are most likely to be affected by the expiry of section 62;

6.2 consumers could face higher energy costs and ongoing maintenance requirements, including managing quality and responding to failure, if they have to arrange their own method of electrical supply;

6.3 consumers could be required to contribute to repair/replacement costs in order to maintain line services; and

6.4 lines may not be replaced when maintenance or upgrade costs become too high, or if lines fail after a storm.

7 Orion considers that the paper correctly identifies the potential problems that could face customers connected to a network prior to 1993 if the section 62 obligations are removed in 2013.

8 However, we note that there is no mandatory requirement to maintain line function services to customers connected after 1993. Therefore, removing the section 62 obligations will just put customers connected before 1993 in an equivalent position to those customers connected to a network after 1993. This is acknowledged in paragraph 3 of the paper. While the paper expects that terms and conditions for continued supply to customers connected after 1993 would be part of a contract, we doubt this is provided for explicitly.

9 We note that the paper sets out the MED's assumptions, proposes criteria for evaluating the outcomes of the options identified, and identifies a number of options for 'continuance of supply' after 2013. However, the paper does not evaluate the options proposed against the evaluation criteria developed in the paper. We address these assumptions, evaluation criteria and options in turn.

MED's assumptions

Urban rural cross subsidy

10 A key assumption is that the current Government policy to keep changes to rural line charges in line with urban line charges[1] will continue.

[1] Paragraph 9 of the GPS.

11 While a degree of cross-subsidisation will inevitably exist between urban and rural areas, if this policy is continued it will encourage lines companies to discontinue supply to non-economic customers or not connect them in the first place. It makes alternatives to supply from the network (such as distributed generation) less attractive, as the alternative is unlikely to be cost-effective compared to a subsidised supply from the network.

The economics of line supply

12 Orion agrees with the paper's reasons as to why lines may be considered uneconomic. Specifically:[2]

> *i. When the revenue generated from the consumers connected to the line is insufficient to meet the costs of maintaining the line, including asset renewal. In a business sense, this means the asset (the line) generates a negative return and network assets used elsewhere must generate a higher return to cover the full cost of supply across the line company's network.*
>
> *ii. When it would be a lower cost to supply the same area by an alternative means (i.e. not by long distribution lines). This concept of 'uneconomic' is used by the Commerce Commission in its direction to lines companies on how to value their network assets.*

13 The second reason above is based on an efficiency argument – economic efficiency requires that we should not supply electricity to an area using higher cost distribution lines when a lower cost method could be used. This concept of 'uneconomic' is consistent with removing the obligation to supply contained in section 62 of the Act. Additionally, any allocative inefficiency that may exist through the inevitable cross subsidies that exist between customers will be exacerbated by the Government's policy to keep changes to rural line charges in line with urban line charges.

14 The paper notes that:[3]

> *This concept of 'uneconomic' is used by the Commerce Commission in its direction to lines companies on how to value their network assets.*

15 In our opinion the Commerce Commission has erred in this approach. We have consistently advocated an ODRC[4] approach to asset valuation rather

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[2] Paragraph 25 of the paper.

[3] Ibid.

than an ODV approach, as the ODRC approach appropriately reflects the principle of the 'averagely efficient hypothetical new entrant'. The use of an EV adjustment is also inconsistent with an obligation to maintain supply.

16 We consider that no EV adjustments should be made in respect to the uneconomic connections that fall within the section 62 criteria, as it is incompatible to be obliged to maintain uneconomic assets, while also being prevented from earning any regulatory return on those assets. We note that most of the assets in our EV adjustment calculation fall within the section 62 criteria as they were built before 1 April 1993. We recommend that these assets be excluded from the EV calculation of the ODV process.

17 If the section 62 obligation was removed, then the logic outlined above does not apply. The lines company must then establish an economic arrangement, which may be to remove the assets. In this situation there is no case for an EV adjustment, as the economic arrangement is likely to include an up-front contribution to make it economic, which is not taken into account in an EV calculation. It has been our policy to require this capital contribution for new connections since April 1993, and we will continue to apply this policy in the future.

18 We therefore recommend that the MED encourage the Commerce Commission to delete the EV calculation from the ODV valuation process. The result would be an ODRC valuation process, rather than an ODV process, as consistently advocated by Orion.

MED's proposed evaluation criteria

19 The following assessment criteria, applied to the consideration of the outcomes for each option, are proposed:

> • *Efficient (e.g. assess whether lines business have incentives to maintain and invest in supply infrastructure; assess whether the resources for maintaining access to electricity are being used in the best way);*

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[4] ODRC is the primary component of the wider asset valuation principle, Optimised Deprival Value (ODV) that entails an additional Economic Value (EV) test. The essential aim of this additional component of ODV is to adjust for circumstances where, given the choice, the assets being valued would either not be replaced, or would be replaced with some alternative means of providing the same service capability. For at least until 1 April 2013, however, neither Orion nor any other lines business has any choice but to continue to supply all customers connected pre 1993, however 'uneconomic'. The EV component of the ODV test is not therefore appropriate at this time.

• Fair (e.g. assess whether remote, rural users will continue to have access to electricity at reasonable prices, comparable with supply to other users);

• Reliable (e.g. assess whether the option leads to enabling sufficient, reliable supply; assess the change in level of involvement required of the consumer);

• Environmentally sustainable (e.g. assess whether the outcome is consistent with climate change considerations).

20 We recommend that:

20.1 the 'efficiency' criteria should explicitly include allocative, productive and dynamic efficiency;

20.2 the 'fair' criteria should be removed. Orion has previously submitted in relation to the GPS that the use of the word "fair":[5]

> *…is highly subjective and can be interpreted in many different ways. In terms of economic or regulatory decision making the use of the word "fair" is always unhelpful because there is no agreed definition of the term. For example does "fair" mean that everyone pays the same no matter the cost, or does it mean that everyone pays the costs imposed by their individual decisions?*

The MED has endeavoured to add some objectivity to the word "fair", however we consider that if it is to be retained as an evaluation criteria, then the criteria should be clarified. It is against alternative forms of supply that any comparison should be made, rather than against what other customers may be paying. This could be clarified as follows:

> *Fair (e.g. assess whether remote, rural users will continue to have access to electricity at reasonable prices, comparable with prices for alternative forms of supply).*

20.3 the evaluation criteria should include the 'certainty' that an option provides, as the paper's purpose is to identify a range of options that could address the problem of uncertainty of supply beyond 2013.

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[5] Orion 'Submission on draft revised government policy statement on electricity governance', 10 October 2003.

MED's proposed options

21 In the following paragraphs we consider the proposed options in terms of the evaluation criteria.

(a) Continuance of obligation to maintain line function services with no expiry date

22 *Efficient*: we consider this to be the least efficient of the proposed options because:

22.1 assets which did not create a commercial return will continue to be used;

22.2 alternative solutions are unlikely to be competitive, and therefore are unlikely to be implemented. Even if the costs of alternative supply are lower than the true costs of line supply, customers are unlikely to switch to alternatives if line prices are held at artificially low levels, as they would likely face cost increases; and

22.3 the pool of customers that would supply any cross-subsidy would be limited, as those customers able to consider bypass would have superior bargaining power (usually larger industrial customers).

23 *Reliable:* Lines companies are limited in their ability to alter quality/reliability of supply without potentially breaching thresholds set under Part 4A of the Commerce Act. Between the Part 4A requirements, and the GPS limitations on pricing, it is difficult to see how lines companies could improve the economics of supply through a price/quality trade-off as suggested in paragraph 47 of the paper. We have observed that our rural customers increasingly rely on quality electricity supply for farming technology with sophisticated electronics, which is used to control and monitor farm production and irrigation systems.

24 *Environmentally sustainable:* We consider that supply via a distribution network will, in many cases, be more environmentally friendly and environmentally sustainable (e.g. wooden poles, energy supply derived from predominantly renewable energy sources). In comparison, some alternatives may require large quantities of batteries made up of heavy metals.

25 *Certainty*: This option, on the face of it, appears to provide the greatest level of certainty for continued supply to consumers connected prior to 1993. However, the option does not provide certainty over future

Government policy on rural/urban pricing. We consider that pressure will remain to achieve an economic outcome, in one form or another (for example, by way of a capital contribution to a rebuild).

26 We **recommend** that if this option is implemented, the ability should exist for the customer to pay more for supply from the network. This could either be by way of a capital contribution when a line needs replacing (in the same way that a new customer would make a capital contribution) or by way of increased delivery prices. We note that this option does not guarantee continued supply, as the line could be disconnected with Ministerial approval and there is the probability that the lines company would have to propose an alternative method of supply.

(b) Continuance of obligation to maintain supply, using lines or alternatives, with no expiry date

27 This option has similar issues to option (a) but provides potential for improvement in efficiency.

28 *Efficient*: The lines company has an option to provide supply via an alternative if it is more economic. Further:

28.1 the paper implies that lines companies will not be able to recover the full cost of an alternative. This limits the economic efficiency of this proposal;

28.2 if the costs of alternative supply are lower than the true costs of line supply, then a switch to an alternative by the lines company would at least reduce the level of cross-subsidy required;

28.3 the lines company may not be the best party to supply alternatives. This should be a competitive market with the lines company just one possible supplier of an alternative. But why would a customer switch from the lines company and potentially pay a non-regulated supplier more?;

28.4 the pool of customers that would supply any cross subsidy would be limited, as those customers able to consider bypass would have superior bargaining power (usually larger industrials); and

28.5 it could provide the customer with the option to pay more, either as an upfront capital contribution, or in higher line charges to retain the line.

29 *Reliable:* The comments on reliability relating to option (a) apply equally to this option. However, it is unclear if a lines company was required to supply an alternative, whether the alternative would be covered by Part 4A of the Act, or if the lines company could operate the alternative at a level of capacity or reliability lower than that provided by a line.

30 *Environmentally sustainable:* We consider that supply via a distribution network will, in many cases, be more environmentally friendly and environmentally sustainable (e.g. wooden poles, energy supply derived from predominantly renewable energy sources). In comparison, some alternatives may require large quantities of batteries made up of heavy metals.

31 *Certainty*: Certainty of continuation of supply for consumers connected prior to 1993 is similar to that provided by option (a). However, in this case the customer may prefer to be supplied by the network, particularly if the alternative has noise or visual pollution issues.

32 We **recommend** that if this option is implemented, the ability should exist for the customer to pay more for supply from the network. This could either be by a capital contribution when a line needs replacing (in the same way that a new customer would make a capital contribution) or by way of increased delivery prices.

(c) Continuance of obligation to maintain line function services expires but lines companies provide information on intentions in advance

33 The option provides certainty to customers by ensuring they have a period of notice (e.g. 3 years) of the line companies' intentions. This option also provides the customer with the greatest choice for their future energy supply. However, they are likely to face a rate shock due to the cost of an alternative compared to a subsidised line price.

34 *Efficient*: The customer has the certainty of a definite period of notice within which to make alternative arrangements. Further:

34.1 if the costs of alternative supply are lower than the true costs of line supply, then the most economic solution is a switch to an alternative;

34.2 any cross subsidy would be removed; and

34.3 while it is not explicitly stated in the paper, this could provide the customer with the option to pay for the line via an upfront capital

contribution on replacement (as with a new connection) if they chose to carry on taking supply from the network rather than move to an alternative.

35 *Reliable:* The level of reliability of an alternative may not be as high as that of a line but this will come down to an efficiency price/quality trade-off.

36 We **recommend** that should a customer wish to pay for the increased reliability that a line may offer, via an upfront capital contribution on replacement (as with new connection), they should be able to chose to carry on taking supply from the network rather than move to an alternative.

37 *Environmentally sustainable:* As for option (a) and (b), we consider that supply via a distribution network will, in many cases, be more environmentally friendly and environmentally sustainable (e.g. wooden poles, energy supply derived from predominantly renewable energy sources). In comparison, some alternatives may require large quantities of batteries made up of heavy metals.

38 *Certainty*: The option provides certainty to customers by ensuring they have a period of notice (e.g. 3 years) of the line companies' intentions. The customer has a definite timeframe in which to arrange an alternative. The customer may prefer to be supplied by the network for a number of reasons, such as

38.1 if the alternative is more expensive that a replacement line;

38.2 if their reliability requirements are better met by supply via a line; and

38.3 if issues such as noise or visual pollution are a problem.

39 We **recommend** that if this option is implemented, the ability should exist for the customer to pay more (a price that provides an appropriate return) for supply from the network. This could either be by a capital contribution when a line needs replacing (in the same way that a new customer would make a capital contribution) or by way of increased delivery prices.

(d) Continuance of obligation to maintain line function services expires but lines companies assist transition from lines supply to alternatives

40 This option is similar to option (c), but has an additional obligation for lines companies to assist customers in a transition to alternatives where they

propose changes to supply arrangements to customers connected on 1 April 1993.

41 The paper suggests that potential obligations could include:

> • ***Brokering / advisory function between consumers and alternative suppliers****: Lines companies broker solutions / advise solutions between consumers and alternative suppliers.*
>
> • ***Installation of alternatives****: Lines companies take an active role to ensure alternatives are installed, either by taking responsibility for installation, or by contracting for another supplier to install alternatives for consumers.*

42 We consider that these services are best left to the competitive market. Those lines companies that have the expertise to provide this advice or service should compete with other contractors or suppliers. This is a competitive area that should not be limited by legislation.

43 *Efficient:* This option has the same efficiency issues as option (c).

44 *Reliable:* This option has the same reliability issues as option (c).

45 *Environmentally sustainable:* This option has the same environmental sustainability issues as options (b) and (c).

46 *Certainty*: This has the same level of certainty as issues as option (c)

(e) Continuance of obligation to maintain supply, using lines or alternatives, for a limited time beyond 2013

47 The paper proposes this option on the basis that an additional five to ten year transition may allow further time for development of alternative technologies to lines at a lower cost than currently, and time for consumers to prepare for change. Costs of alternatives may decrease relative to the cost of supply by lines, especially if lines require investment.

48 We do not consider that this option provides any further certainty; rather it just means a repeat of this debate will occur in the future. The paper has not addressed how many lines will have to be replaced before the expiry of this extended transition period, which may lock in uneconomic solutions for an additional 40 years.

49 *Efficient:* This option has the same efficiency issues as option (b).

50 *Reliable:* This option has the same reliability issues as option (b).

51 *Environmentally sustainable:* This option has the same environmental sustainability issues as option (b).

52 *Certainty*: This option has less certainty than option (b), as it is unclear what will happen in the future.

(f) Continuance of obligation to maintain supply, using lines or alternatives, with no expiry date but subsidised by all electricity users.

53 A stated purpose of the Electricity Act 1992 was to phase out the subsidies offered by the RERC. It required that the RERC be wound up and it repealed its system of industry levies. We note that option (f) would require that a quasi-governmental agency (possibly the Electricity Commission) run the scheme, with the inevitable costs of this being passed through to customers. None of the potential economic efficiencies would be captured.

54 *Efficient:* This option has the same efficiency issues as option (a).

55 *Reliable:* This option has the same reliability issues as option (a).

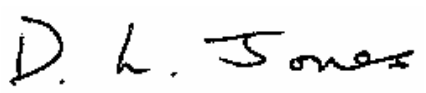
56 *Environmentally sustainable:* This option has the same environmental sustainability issues as option (a).

57 *Certainty*: This option has the same certainty issues as option (a).

CONCLUDING REMARKS

58 Thank you for the opportunity to make this submission. If you have any questions, please contact Dennis Jones (Industry developments Manager) DDI 03 363 9526, email dennis.jones@oriongroup.co.nz.

Yours sincerely



Dennis Jones
Industry Developments Manager

SCHEDULE
ANSWERS TO THE MED'S SPECIFIC QUESTIONS

Section	Question	Response
5.1 and 5.2 (Continuance of supply with no expiry date, using lines or alternatives	a) Should access to electricity supply for pre-1993 connections be maintained with no expiry date? What issues could this raise?	If electricity supply for pre-1993 connections is maintained with no expiry date, we consider this should be accompanied by: 1. the ability to maintain supply either by a line or indirectly via an alternative; 2. a provision that when a line needs to be replaced, the lines company may require a capital contribution to renew or rebuild the line; 3. the ability for lines companies to earn a commercial return on the assets employed (lines or alternatives) without expiry. This could be achieved if the Commerce Commission adopts an ODRC approach to asset valuation; 4. the removal of section 99 from the GPS. We note that this option would place customers connected before 1993 in a superior position to those connected after 1993. Those connected after 1993 do not have any certainty that their line function services will be maintained.
	b) What expectations should there be from consumers around price, quality, reliability and capacity for continuance of supply (either by lines or by alternatives)?	Customers should expect to pay a commercial rate for their supply, and they should be prepared to make price/quality trade-offs. If supply is to be maintained via an alternative to the network, then this may well be less reliable.
	c) What scope is there for remote rural consumers to be supplied using alternative supply methods or for example, the method outlined in paragraph 47?	We believe there is very limited scope to supply remote rural consumers using the methods outlined in paragraph 47.

	d) To what extent should there be a subsidy from other network users to those in remote, rural areas (e.g. domestic urban consumers to domestic rural, remote consumers)?	For economic efficiency, there should be no cross-subsidies; however there will inevitably be some level of cross-subsidies between different customers. This is limited for new connections by way of a capital contribution if necessary. A similar solution for rural customers when line replacement is required could be effective. This would also enable economically-efficient comparisons between alternative forms of supply.
	d) If the continuance of supply is by lines or alternatives, should lines companies be able to cross-subsidise alternative-supply customers from lines-connected customers?	Any alternative supply should be able to be supplied via a competitive market. Any customer can choose to have some or all of their supply derived from an alternative source and would not expect a contribution from the lines company. If, however, a lines company was obliged to maintain supply either by use of the network or an alternative and was not able to achieve a commercial rate of return, then some form of subsidy would be required.
	e) What terms and conditions for continuance of supply do consumers that were connected after 1993 have in their contracts?	Orion operates primarily under an interposed Delivery Service Agreement (DSA) with electricity retailers. These retailers then contract with their individual consumers. Our DSA is silent on the question of continuance of supply to consumers. We understand most retailer contracts with consumers are also silent in this regard. We note that the Model Use of System Agreement promulgated by the Electricity Commission also appears to be silent in this regard.

5.3 and 5.4 (Expiry of obligation but with additional requirements on lines companies)	a) If an advance notice period is used, what length of time should it be?	We consider that a three year notice period would be appropriate.
	b) What other requirements could or should be placed on lines companies if continuance of supply expires?	Other than an advance notice period, we do not consider that there is a case for further requirements to be placed on lines companies. However we do consider that it is necessary to: • Encourage the Commerce Commission to allow a commercial return on the assets employed (lines or alternatives) without expiry. This could be achieved by the Commerce Commission adopting an ODRC approach to asset valuation. • Remove section 99 of the GPS.
	c) What role would you expect the retailer to take as the continuance of supply expires and a change in supply is signalled?	We would expect that some retailers and some distributors would develop to be energy retailers. That is, supplying energy in a non-regulated competitive environment.
	d) At what point after a lines company has assisted a transition should its responsibility cease?	We do not consider that the distributor is necessarily the best entity to provide assistance relating to transitions to alternatives. However, if it is ultimately decided that this should be a function imposed on lines companies, the responsibility of the lines company should cease when the alternative supply has been installed and has been proven to meet the agreed performance requirements.

5.5 (Continuance of supply for a limited time beyond 2013)	a) Should the transition period be extended?	We do not believe anything is gained by extending the continuance of supply requirement for a limited time beyond 2013.
	b) If so, how long should it be extended for and what should happen at the end of the period?	Not applicable.
5.6 (Continuance of supply using lines or alternatives with no expiry date subsidised by *all* electricity users)	a) What issues are there with creating and employing a different subsidy mechanism in order to socialise the costs across all electricity users?	We believe the costs and complexities involved in creating and administrating any form of subsidy mechanism, such as that outlined in the paper, would be an economically inefficient way of dealing with the current problem. The cost and potential problems associated with any such proposal would, in our view, far outweigh the benefits.