

Electricity Networks Association

**SUBMISSION FROM
THE ELECTRICITY NETWORKS ASSOCIATION**

ON

**THE MED DISCUSSION PAPER –
REVIEW OF SECTION 62 OF THE ELECTRICITY ACT 1992
“CONTINUANCE OF SUPPLY” (2013 REVIEW)**

28 SEPTEMBER 2007

Introduction

1. This is the submission of the Electricity Networks Association (“**ENA**”) on the Ministry of Economic Development’s (“**MED**”) discussion paper *Review of section 62 of the Electricity Act 1992 “Continuance of Supply” 2013 Review* (“**the discussion paper**”).
2. ENA’s contact person in relation to this submission is:

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3. ENA sets out its general submissions on the discussion paper and recommendations in relation to the review of section 62 of the Electricity Act 1992 (“**the Act**”) below.
4. ENA’s responses to the specific questions posed in the discussion paper are set out in Appendix A.

ENA’s Interest in the Discussion Paper

5. ENA represents the interests of the 28 companies that distribute electricity to consumers throughout New Zealand. These companies range in size from Vector Limited, with about 750,000 customers, down to Buller Electricity Limited, with about 4,000 customers. They are mainly owned by approximately 30 community-based organisations of various types.
6. As the association of electricity lines companies (“**lines companies**”) in New Zealand, ENA represents the interests of one of the key stakeholder groups in the review of section 62, as identified in paragraph 11 of the discussion paper. ENA’s interests in this discussion paper are twofold:
 - (a) ENA’s members are currently directly affected by the obligation of supply in section 62. The operations and financial position of ENA’s members’ will be affected by whether the section 62 obligation continues past 2013, as will the position of the community organisations that own most of the companies.
 - (b) ENA’s members will be the group responsible for implementing whichever option (if any) in the review is recommended to the Minister of Energy. Its members are best placed to understand

the distribution obligations and practicalities of the options presented in the discussion paper.

7. ENA notes that some of its members may also make their own individual submissions on the discussion paper.

Summary

8. ENA is concerned that the discussion paper has not adequately considered the implications of extending the supply obligation in section 62, to the extent that it does not provide sufficient justification for the extension of that obligation, or, at least not without significant conditions. In particular:
 - (a) the discussion paper does not consider the option of simply allowing section 62 to expire in accordance with Parliament's intent, without imposing other statutory obligations. This is surprising, given the purpose of the review was to consider whether or not section 62 should continue;
 - (b) the discussion paper does not fulfil the review's Terms of Reference (Appendix 2 of the paper) ("**ToR**"); and
 - (c) While MED consulted with ENA and its members early in the review process it has not fully engaged in consulting with lines companies on the implications of extending section 62 in advance of the discussion paper. This seemed to be envisaged in the review process and timetable in the ToR.
9. ENA therefore submits that the discussion paper does not provide a strong enough basis for the Government to make a final decision on options regarding the section 62 obligation.
10. ENA believes that the review needs to be continued and to consider the full issues in the ToR and other important concerns which we identify in this submission. In particular, work needs to be done to address the problems of electricity supply to remote consumers positively, rather than simply relying on the extension of section 62. ENA would like MED to form a working group for this purpose, which would include ENA and other public and private stakeholders, including Federated Farmers, to ensure that remote consumers have the most efficient, reliable and environmentally sustainable electricity supply.
11. If the outcome of the working group review is that the section 62 obligation should be extended, ENA believes that it is crucial that the obligation is only extended for a limited time period, and that problems with the implementation of the obligation are addressed. In particular,

ENA believes that any extension should be accompanied by the following conditions:

- (a) that there is a statutory guarantee that any necessary cross-subsidies from urban to rural customers will not be disallowed by (or invoke sanctions from) the Commerce Commission or by any regulatory authority;
 - (b) that a fairer formula is used for determining the asset value of uneconomic lines;
 - (c) a tidying up of access rights for servicing lines;
 - (d) the grandfathering of lines that existed as of 1 April 1993 to avoid a proliferation of challenges as to whether these lines were lawfully installed.
12. ENA has not yet agreed on specific options with its members to give effect to these recommendations, but would be very happy to have these explored in the working group we propose be established.

Background

Distribution Lines

13. The vast majority of electricity lines (“**lines**”) in New Zealand are fixed over or under land or water which does not belong either to the person or entity that owns the line or to the consumers that receive electricity through the line.
14. Lines have been erected on both public and private land, which may have changed in status since the lines were erected, and much of which has changed ownership. The lines have been installed under several statutory regimes and by a number of state sector entities, agencies, lines companies, local co-operatives, and landowners or by their respective predecessors.
15. Existing lines range from the Extra High Voltage (EHV) lines of the National Grid, to the EHV, HV and LV lines of distribution companies, down to LV lines serving a single consumer or even a single installation (such as a farm pump).
16. These lines have been erected and modified over many years (with some in place at least since the mid 1920’s). The vast majority of these lines were erected before 1 April 1993 and are subject to the section 62 “continuance of supply” obligation.

Regulatory and Policy Changes Affecting the Electricity Industry Since 1993

17. Since the section 62 “continuance of supply” obligation came into force on 1 April 1993, there have been significant changes to the regulatory and policy framework that governs electricity distribution.
18. The Electricity Industry Reform Act (“**EIRA**”), which came into force in 1998, requires full ownership separation of lines companies from retail and generation businesses. Moreover, EIRA is currently under review.
19. In August 2001, “targeted” control of lines companies was introduced under Part 4A of the Commerce Act 1986. Under the Act, the Commerce Commission (“**the Commission**”) sets price thresholds for lines companies’ charges. These thresholds are to be reviewed shortly for the period from 1 April 2009 to 31 March 2014.. The Commission is also responsible for assessing lines companies against the set thresholds.
20. In addition to administering the price threshold regime, the Commission has taken over responsibility for the electricity information disclosure regime, and for ensuring that the valuation of lines companies’ system fixed assets reflect the correct application of the ODV method.
21. Part 4A is also under review including the scope of control and agency responsibility for its management.
22. The Government has also introduced a policy, set out in the current Government Policy Statement on Electricity Governance (“GPS”), which requires distribution companies to keep any changes to rural line charges in line with urban line charges.
23. Electricity distributors are now regulated under the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 to assist electricity retailers to deliver low fixed charge tariff options.
24. The Electricity Commission has programmed development of a distribution pricing methodology which aims to deliver a consistent approach to allocation of costs across asset classes and/or consumer groups.

Environmental and Land Use Changes Since 1993

25. The Government now places more emphasis in its energy policies on efficiency, conservation and renewable energy objectives. These include consideration of the efficiency of distribution lines, the use of distributed generation and alternative sustainable technologies in rural areas. A New Zealand Energy Efficiency and Conservation Strategy,

along with a revised New Zealand Energy Strategy, are due to be released in October 2007.

26. Increasingly, rural land is being subdivided for urban or commercial use, and, as this occurs, the lawful installation and ownership of the lines is more often disputed. In some areas, existing lines become more intrusive when the use of that property has changed and the population density has increased. This makes access to the lines for replacement or maintenance increasingly difficult.
27. The vast majority of existing lines were built by state sector entities or by community bodies for community benefit. However, the electricity industry reforms since the early 1990s have affected land owner attitudes to ownership, installation, and maintenance of electricity lines. Where previously landowners may have been willing to allow access or a line upgrade for the benefit of the local community, landowners are now more likely to seek payment for access to a line, or dispute line ownerships.

Insufficient Consideration of Option of Allowing Section 62 to Expire

28. The ToR states that the objective of the review is to examine the purpose behind section 62 when the section was enacted, and to determine whether that purpose is still valid. This examination was to inform the options for amending the section if necessary.
29. Of concern to ENA is that the review does not appear to have considered whether or not the obligation under section 62 should be allowed to expire in 2013 in accordance with the current intent and wording of the Act, except with new statutory obligations.
30. This has meant that the review has not considered the costs of extending section 62 against the benefits that this might bring.

The Substantive Requirements of the ToR Have Not been Fulfilled

31. ENA believes that the discussion paper has not considered many of the matters that it was required to consider by the ToR. As a result, it does not provide sufficient justification for extending section 62, at least not without significant new conditions.
32. The following paragraphs of this section discuss the matters that the review was meant to consider to inform the options for amending, if necessary, section 62.

The Purpose Behind Section 62

33. The ToR states that the review was to examine the purpose behind section 62 when the section was enacted, and to determine whether that purpose is still valid. This is done only in a cursory and incomplete way under section 7.2 of the discussion paper (Appendix 2: Matter 1).
34. The Officials' Report to the Select Committee dated April 1992 on the Energy Sector Reform Bill (which became the Electricity Act 1992) acknowledged that it was the provision and maintenance of lines to remote customers that was costly, not the provision of electricity as such. It stated that the Government's policy on rural supply prices was to require the maintenance of existing lines and to cap the rate of any increase in prices for line services to 15% per annum. The Government did not anticipate that this policy would place excessive pressures on line costs to rural customers because:
- lines were a natural monopoly;
 - lines companies were likely to average prices for broad geographical areas to minimise administrative costs;
 - lines companies were likely to be responsive to local community concerns to avoid undue price impacts on remote consumers;
 - lines companies had the power and the incentives to reduce the cost of maintenance of existing lines by working with local co-operatives to take over the maintenance of lines, lowering the quality of lines, and developing local area supply; and
 - a lines company had the option of writing down the value of remote lines, including negative valuations to reduce its asset base.
35. It is evident that the above considerations behind the original measure relative to outcomes have not been adequately reviewed. The discussion paper should have considered whether the assumptions made by officials at the time on the pressures in line costs to rural customers have proven accurate, and, moreover, if other considerations are now more relevant.
36. ENA believes that some of the underlying assumptions of line cost to rural customers have not eventuated. For example, ENA is not aware of any instances where lines companies have been able to delegate maintenance of remote lines to local co-operatives (by formal agreement under section 62), or where the quality of lines to rural communities has been reduced as a way of reducing the cost of remote lines.

37. The Officials Report also identifies that officials agreed with submissions by power boards that requested that they be allowed the ability to cross-subsidise the distribution network for as long as the obligation under section 62 was retained. This is clearly at risk under current regulatory control and GPS settings. The intended allowance of 15% annual limit on annual increases in lines charges has been completely suppressed by the subsequent regulatory impositions.
38. Power boards were concerned at the time section 62 was enacted that the obligation had the potential to delay sensible arrangements for supply to remote areas and to encourage prolonged disputes. Other submitters queried the ability of lines companies to continue maintenance over the period on remote lines (see Officials' Report).
39. ENA believes that these concerns have shown themselves to have some basis and that other considerations identified by officials have not materialised or have not been given effect to. ENA also notes its understanding that no prior consents have even been issued by the Minister of Energy or by consumers by formal agreement as anticipated under the provisions of section 62 to overcome the obligation to supply in particular situations. Clearly this has not been an effective transitional mechanism.

Identification of Affected Consumers/Economics of Rural or Remote Lines

40. The ToR states that the review will identify consumers likely to be affected by the expiry of section 62 and the manner in which those consumers will be affected as well as promote an understanding of the economics of rural or remote lines that may be affected (see Appendix 2: Matters 2 and 4).
41. The discussion paper does not describe or identify with sufficient particularity the number of consumers who are connected by lines that may be "uneconomic" and for which maintenance may be discontinued if there were no obligation under section 62. The term "uneconomic lines" is also only defined in the discussion paper as a line which is not commercially viable.
42. ENA believes that, in order to properly assess the number of consumers affected by the expiry of section 62, there would need to be basic information on and consideration of:
 - appropriate ways of distinguishing "uneconomic" lines;
 - the number of lines that are currently "uneconomic" and could potentially not be maintained if there were no section 62 obligation of supply;

- the number of lines that may be "uneconomic" in the future and could potentially not be maintained if there were no section 62 obligation of supply;
 - the number of consumers serviced by those lines;
 - the geographic placement of those consumers; and
 - the community and industry needs those lines served.
43. Until this information is available, stakeholders and the Government will not be able to properly assess the options for supplying affected communities with electricity in the most efficient, environmentally sustainable and cost effective manner. ENA is prepared to work further with officials and other stakeholders to help obtain this basic information and to consider its implications.

Development of New Technologies

44. The ToR states that the discussion paper will examine the development of new technologies for alternative supply options not connected to the distribution network and evaluate the economics of those technologies (see Appendix 2: Matter 3).
45. The discussion paper refers to the Parliamentary Commissioner for the Environment's Study on Micro-generation Potential in New Zealand.
46. The study was commissioned to identify which micro-generation technology could currently be applied in New Zealand and calculate estimates of the potential for micro-generation in the short, medium and long term. The study does not address the feasibility of using micro-generation in remote areas as an alternative to electricity isolated line supply.
47. The study finds that there are a number of barriers to widespread uptake of micro-generation technologies but that a key factor expected to influence uptake of micro-generation technology is the expiry of the section 62 obligation to supply line function services to all existing customers (see paragraph 1.3 of the report).
48. The study recommends that further research should be undertaken on a project basis with various industry associations such as the EECA, Electricity Commission, MED, BRANZ and other parties with an interest in micro-generation technologies. In particular, the study identified that specific further research work should include:
- quantification of the national benefits of micro-generation and how their value compares to the private benefits. This evaluation

should include quantification of benefits to lines companies and the wider community as well as environment benefits;

- investigation of regulatory changes to encourage increased uptake of micro-generation technologies in New Zealand;
 - investigation of methods to build capability and increase understanding of the application and potential of micro-generation technologies in New Zealand; and
 - evaluation of the expected impact of the feed-in tariff to provide a trigger for the uptake of electric micro-generation technologies.
49. The study forms a larger report by the Parliamentary Commissioner for the Environment titled “Get Smart, Think Small – Local Energy Systems for New Zealand”. The report outlines the increased efficiency and environmental benefits of local energy systems.
50. The report summarises the study’s findings on micro-generation potential as *“clearly demonstrating that the cost of buying, installing, and maintaining local energy technologies, combined with the relatively low cost of reticulated electricity, make many local energy options uneconomical”* (our emphasis). The report considers that the true value of local energy systems is not effectively represented in the current market place because energy prices currently do not capture many of the costs imposed on the environment and society.
51. ENA supports the study’s findings that the low cost of reticulated energy makes micro-generation uneconomical in many instances. However, ENA believes that the report fails to recognise that in many situations reticulated energy is cross-subsidised, and believes that the report does not recognise that the current market price of electricity does not reflect the cost of providing that electricity because of the section 62 obligation, and subsequent cross-subsidy.
52. The report notes that local energy systems most often make use of renewable energy sources that are not available to large electricity generating plants and that use of these energy sources, alone or in combination, offsets the need to use fossil fuels in New Zealand and provides the added benefit of reducing greenhouse gas omissions (paragraph 3.12 and paragraph 3.11 of the report). This would be of obvious benefit, and advance Government climate change objectives.
53. The report recommends that the Government develop specific local energy work programmes for New Zealand as part of the New Zealand energy strategy and that the Minister of Energy endorse the concept of local energy. In particular, recommendation 5 of the report recommends that the Ministers of Energy and Commerce identify

barriers in the electricity market that are preventing the uptake of local energy and develop policies to:

- create pricing conditions that reflect the true value of local energy; and
- address the effect of line and connection charges on the financial viability of non-grid local energy systems.

54. ENA supports these objectives and queries whether the extension of the section 62 obligation would be in line with the findings on the viability of local micro generation. ENA believes that the continuance of the section 62 (especially coupled with the EIRA – see paragraphs 62-63 of this submission) could stifle lines companies’ and consumers’ incentives to further innovate and adopt new technologies as an alternative to electricity supply by lines.
55. ENA believes that the study and report demonstrate there is significantly more research and consideration needed of new technologies for alternative supply options for supplying rural customers currently serviced by “uneconomic” lines, before a decision on section 62 is made. The discussion paper insufficiently addresses this issue. The risk is that a decision to extend section 62 is made without knowing the implications of that decision for incentives for investment in new technologies.

Implications for Lines Companies of Review of Section 62

56. The ToR states that the review will examine the implications for lines companies of any options developed as a result of the review of section 62 (see Appendix 2: Matter 5). Part of the review process as set out in the ToR is key stakeholder engagement from November 2006 to February 2007.
57. While officials consulted with ENA and presented specifically on the review of section 62 at an ENA chief executives’ forum, it was clear then that the review was at a very early stage, and that considerable work was needed to understand the implications of any changes to the obligation to supply requirements.
58. Along with insufficient consultation, (and probably contributed to by insufficient consultation) ENA believes that the review has not properly identified the costs for lines companies in extending section 62. These costs include:
- (a) The costs of maintaining any uneconomic supply. The discussion paper notes that no lines companies, in their latest disclosures, have reduced the value of lines under the economic value test in

the ODV Handbook. However, lines companies have made EV adjustments in the past. Furthermore, the installation of many of the uneconomic lines was funded by cross-subsidies. It will only be in the future that the costs of maintaining these lines will fall on lines companies. Also, the ODV Handbook requires an EV test against the cost of alternatives which, as far as we are aware, has so far invariably found that maintaining supply is the cheaper option. However, we recognise that this situation may well change after 2013 as new technologies appear and as the costs of maintaining lines rise;

- (b) Costs in securing access to land to maintain lines. This issue is discussed further below; and
- (c) Costs in resolving disputes over ownership of existing works. This issue is discussed further below.

59. These cost related issues need to be considered in the review.

Legislative, Regulatory and Policy Changes

60. ENA notes that the ToR states that the review will examine how:

- the proposed changes to the EIRA 1998, relaxing restrictions on lines companies generating or selling electricity;
- the regulation of lines companies under Part 4A of the Commerce Act (currently under review);
- the GPS paragraph 99 notifying Government policy that changes in rural line charges are kept in line with urban lines charges; and
- the Electricity Commission's Model Distribution and Pricing Methodology.

will affect the options proposed for the review of section 62 (see Appendix 2: Matter 6).

61. None of the options identified in the discussion paper is informed by any assessment as to how they will be affected by these factors including potentially important legislative changes. ENA is particularly concerned that the reviews of EIRA and Part 4A take account of both the current obligation and any intended extension of the obligation to supply.

62. On 10 August 2007, ENA made a submission to MED setting out its view that the Government's continued retention of restrictions under the EIRA would result in it being disappointed in the level of generation that emerged from lines companies under the modest changes the Government proposed.

http://www.med.govt.nz/templates/StandardSummary_29897.aspx

63. ENA considers that the proposed changes to the EIRA do not go far enough in relaxing the restrictions in that Act on cross-ownership of electricity supply businesses and electricity lines businesses, to address the problems created by that Act in terms of the ability of lines companies to provide alternative generation and supply technologies in rural and remote areas on an efficient basis and to meet the costs of meeting the section 62 obligation.
64. The review should also take into account Government decisions currently being formulated as a result of the consideration of submissions in respect of Part 4A of the Commerce Act. We understand that decisions on the latter, which include agency responsibilities, may be proposed to the Government in about October 2007.
65. ENA has issues over whether the thresholds set under Part 4A of the Commerce Act, any investigations by the Commerce Commission into a breach of those thresholds, and any declaration of control take into account the costs to lines companies of meeting the obligation to supply. Lines companies are concerned that the Commission applies and will continue to apply a strict approach that does not recognise the costs of this obligation and indeed of the 2006 GPS obligation under which the Government expects rural users to be cross-subsidised from different categories of customers.
66. Paragraph 99 of the GPS compounds the risk to lines companies.

Other Infrastructure Service to Remote Communities

67. The ToR states that the review will examine how other infrastructure services (telecommunications, postal services) to remote communities are provided and whether there are applications to the provision of electricity (Appendix 2: Matter 7).
68. There are no comments in the discussion paper concerning this part of the ToR. It is important for MED to provide this analysis and especially analysis as to the extent (if any) of other statutory obligations to service "remote communities" or to provide uneconomic services, as well as different Government solutions to each of these situations. It would seem appropriate, for the purposes of the Government's infrastructure investment policy, for the electricity lines sector to be treated neutrally, even if in a different way, in relation to other infrastructure sectors.

Other Issues that Need to be Considered

69. In addition to ENA's concern with the discussion paper not adequately addressing the ToR, there are a number of other issues that have not been, but ought to be, addressed.

Cross-subsidy of Section 62 Cost

70. Currently, the cost of providing “uneconomic” lines is not borne by those who are supplied by those lines. Rural and urban electricity line charges are largely similar, despite the disparities in the costs of providing these services. This policy is in line with the current Government Policy Statement on Electricity Governance.
71. Lines companies factor in the GPS requirement to provide service to “uneconomic lines” on the same cost level as economic lines by setting the price for all electricity line services at a higher level. This means that mostly urban customers subsidise the cost of providing uneconomic lines.
72. If the section 62 obligation continues, the costs borne by these customers will increase. As noted in the discussion paper, as the assets deteriorate, they will need to be replaced, potentially at considerable cost. Furthermore, the problems outlined under the following three headings mean that the necessary repair and maintenance work will be more difficult and expensive because of inconsistencies and ambiguities in the current legislation.
73. The issue of whether this re-distribution of costs should occur needs to be considered.
74. Another issue that needs consideration is the ability of favoured larger customers to avoid the cross-subsidy by connecting directly to Transpower’s grid at one or more of its grid exit points. As the costs of maintaining ageing remote lines rises, pressures to do this could well increase, leaving relatively fewer urban customers to carry the rising costs of the cross-subsidy.

Financial Risk for Lines Companies from Separation of Lines and Retail/Generation

75. When section 62 was enacted it applied to existing electricity distributors. At this time, electricity distributors included the supply and retail distribution of electricity. Therefore, the burden of supplying “uneconomic” line services was borne by both the distribution and the retail sector.
76. In 1998, the EIRA was passed which separated electricity distribution from generation and retail. As a result, lines companies must alone fund the section 62 supply obligation from lines charges, and not also from revenue from selling electricity.
77. This has increased financial risk for lines companies, and is a factor that should be considered before deciding to extend section 62.

78. Furthermore, the burden of uneconomic lines falls unevenly on lines companies in different areas, as not all lines companies have the same proportion of uneconomic lines to asset base. For example, the proportion of uneconomic lines varies significantly between urban Auckland and rural Wanganui.

Fair Formula for Valuing Uneconomic Lines

79. Lines companies have been required since 1994 to provide regular standardised asset valuations using the “optimised deprival value” (“**ODV**”) methodology to calculate the value of assets. Paragraph 26 of the discussion paper notes that one part of this methodology requires a lines company to evaluate whether for each segment of its network it is possible to provide the same service, at lower cost to users by an alternative means. If so, the portion of that network is deemed uneconomic (economic valuation test (“**EV**”)).
80. ENA submits that this valuation methodology is unfair especially while section 62 remains because in most cases, the identified costs of alternatives will always be greater than the cost of supply by way of uneconomic lines. The true cost of uneconomic lines may be significantly in excess of 1% of the total value of the lines companies assets, yet, because the cost of supply by alternatives is more expensive than continued supply by uneconomic lines, that portion of the network does not qualify for an EV adjustment.
81. ENA favours an alternative approach such as the deprival value to the consumer(s) they serve, maybe based around a simple range of options depending on the load, account location, consumer density and cost of alternatives. Such an approach would have several advantages:
- First, it would create a fairer regulatory (and comparative) asset valuation base for lines companies, basing the implied return on assets on the actual costs of supplying each company’s individual mix of urban and remote consumers;
 - Second, it would provide a yardstick against which consumers and lines companies could measure the costs of alternatives to reticulated supply; and
 - Third, it would have the potential to correct anomalies in accounting (e.g. in depreciation) that complicate commercial decisions on remote line maintenance and upgrades.
82. In the case of the thresholds, the price/quality trade-off and associated consumer engagement requirements are integral to continuance of supply or choice of alternatives. For example, replacing a remote 3 phase supply with a cheaper SWER option is generally not considered

sensible where remote user's energy usage is likely to creep up (the technical limit on SWER is 8 amps). Instead the thresholds need to account for step change costs where the best long term solution is a conversion to an alternative technology which will result in lower costs over time.

Grandfathering of Existing Lines

83. Section 22 of the Act provides:

“any existing works, lawfully fixed to or lawfully installed over or under any land that is not owned by the person who owns the works, shall continue to be fixed or installed until the owner of the works otherwise decides, and no person other than the owner of the works shall have any interest in any such works by reason only of having an interest in the land.”

84. The general intent of section 62 is that lines in place prior to the commencement of the Act were to be “grandparented”. However, it is not always clear that lines have been installed lawfully and consequently, their ownership can be disputed.

85. Section 23(2) provides for a certificate signed by the owner of any existing works containing a statement that the works were constructed in whole or in part before 1 January 1988 (in relation to works owned by the corporation) or before 1 January 1993 (in the case of works owned by any other person).

86. The intention of the certificate was to settle disputes as to ownership of existing works to allow the owners of those works to inspect, maintain or operate the works (section 23(1) of the Act). However, the certificate only establishes when the work was installed or fixed, and may not satisfactorily establish the lawfulness of the installation.

87. If a landowner disputes that lines were lawfully installed or fixed, the lines will not be existing works as defined in section 22, and lines companies will not be able to use the rights of entry in respect of existing works for inspection, maintenance or operating the works (a curse for owners of existing works).

88. As noted above, the cost to lines companies of a continuing obligation under section 62 to supply to remote rural areas includes costs associated with determining ownership of the lines.

89. Further, if lines companies are in dispute with the owners of the land over which existing works have been fixed, it can be difficult to obtain access to the lines and undertake necessary repair or maintenance work. This could result in supply not being provided.

90. It is not clear what proportion of "uneconomic" lines cross private property but ENA considers that the proportion is likely to be higher for "uneconomic" lines than other lines because these lines service rural areas. Further, it seems that issues over existing works are being increasingly raised by landowners. This is therefore a serious issue that needs to be resolved if section 62 is to be extended.

Privately Owned Lines

91. Another important issue that should be considered in reviewing the section 62 requirement is the maintenance of lines that ceased to be the responsibility of lines companies when legislative changes moved the point of supply to property boundaries. There are a large number of so-called 'customer poles' in many parts of New Zealand where future maintenance will become a public safety issue over time.

ENA's Preferred Approach: Continuing Review of Section 62 with Working Group of Key Stakeholders

92. Although ENA acknowledges the importance of certainty of supply for both consumers and lines companies, the expiry for section 62 on 31 March 2013 is still more than five years away. ENA's much preferred option is for more work to be done on investigating whether section 62 should be extended. This would include consideration of all the matters required by the ToR. In particular, it would include investigation of alternatives to electricity from line supply that are more economic, reliable, and environmentally sustainable.
93. ENA also believes that this would also allow lines companies and other stakeholders to consider the section 62 obligation when the reviews of Part 4A of the Commerce Act and EIRA have been completed.
94. If the Government wishes to extend section 62 for a limited period ENA strongly believes that it should only be extended for another limited time period and on the following conditions:
- (a) that there is a statutory guarantee that any necessary cross-subsidies from urban to rural customers will not be disallowed by (or invoke sanctions from) the Commerce Commission;
 - (b) that a fairer formula is used for determining the asset value of uneconomic lines;
 - (c) a tidying up of access rights for servicing lines;
 - (d) grandfathering of lines that existed as of 1 April 1993 to avoid a proliferation of challenges as to whether these lines were lawfully installed.

95. These measures would address some of the issues relating to section 62 we have discussed above. The condition (a) in the above paragraph should be addressed in the review of Part 4A before decisions are made by the Government on that review.
96. ENA has not yet agreed on specific options with its members to give effect to these recommendations, but would be very happy to have these matters considered as part of the agenda of the working group that we propose be established.

Any extension must have an early sunset provision and conditions

97. Additionally, ENA considers that the reasons given in the discussion paper (paragraph 111) for the inclusion of the original sunset provision are equally valid to the consideration of any proposal to extend the section 62 obligation beyond 2013. These reasons are set out below:

Difficulty in Valuing an Obligation in Perpetuity

98. The sunset provision was included because Parliament considered that an obligation in perpetuity to continue supply would make it difficult for lines companies to accurately calculate the cost of that obligation. Any in perpetuity extension of the section 62 obligation after 2013 would create the same difficulties for lines companies.
99. The valuation of lines companies' assets is an important part of the Commerce Commission's requirements under Part 4A of the Commerce Act. ENA believes it would be unfair to impose an unlimited statutory obligation for the continuance of supply where that obligation would mean that lines companies would have severe difficulty meeting the asset valuation requirements under the Commerce Act.

Prospect of New Technologies

100. The section 62 sunset provision was also included because Parliament considered that new technologies for local generation would be developed that could substitute for electricity supply by lines and a perpetual obligation to continue supply by lines to remote rural areas would restrict the environment for change.
101. ENA believes that there has been increasing development of new local generation methods that could in the future substitute electricity supplied by lines, but further research needs to be undertaken on the feasibility and economics of these options before their suitability for all rural communities can be assessed. ENA believes that if the obligation in section 62 was set in perpetuity there would be no incentive to continue research into alternative electricity supply methods.

Obligation to Serve Distant Consumers Difficult to Maintain in the Face of Competition

102. As noted in the discussion paper, the section 62 sunset provision was also included as Parliament considered that the obligation to service distant consumers would be difficult to maintain in the face of competition, when lines companies still had retail interests.
103. However, ENA believes that the regulatory and policy changes to the electricity industry enacted since 1993 meant that the obligation to serve distant consumers is now difficult to maintain, but for different reasons. Part 4A of the Commerce Act, the operation of the present price path thresholds and the Commission's intended review of the thresholds to apply from 2008 mean that lines companies have increasingly less ability to cross subsidise between economic and uneconomic lines services. Furthermore, as ownership of existing works becomes more contentious and access to lines more difficult, the time and cost of conducting the necessary repair and maintenance to uneconomic lines becomes more expensive.
104. To illustrate this problem, lines companies might wish to consider the provision of (say) fuel cell packs to remote users, as an alternative to maintaining uneconomic lines. Here the EIRA restrictions on them entering the energy market would create an immediate disincentive, as would the Part 4A methodology linking revenue with volumes of energy carried on lines. Economies of scale for the fuel cell venture might not be achievable, unless it could also be extended to urban customers (as an alternative to increasing network capacity), compounding these problems.

Guarantee to Necessary Cross-subsidies

105. ENA believes that in order to meet their obligations under section 62, lines companies would need to continue to use urban consumers to subsidise the costs of providing supply to remote rural areas. As the asset base ages, the cost of maintenance and repair of lines will increase, and accordingly ENA believes that the gross subsidy necessary to fund these services will increase.
106. If the obligation were extended, ENA would seek a statutory guarantee that any necessary cross-subsidies from urban to rural customers will not be disallowed by (or invoke sanctions from) the Commerce Commission under Part 4A of the Commerce Act or by any regulatory authority.

Asset Value for Uneconomic Lines

107. ENA believes that a fair formula for evaluating economic lines could be to value them at the deprival value to the consumers they serve. This could be calculated around a simple range of options of alternatives depending on the load of the lines – for example, diesel sets, micro-hydro, or wind.
108. ENA believes that this would more accurately reflect the asset value reduction of supplying uneconomic lines, and would encourage lines companies and consumers to consider alternative supplies of energy.

Tidying Up of Access Rights

109. As noted above, disputes over ownership can limit access rights, making repair and maintenance for uneconomic lines even more expensive. This contributes to the overall burden on lines companies of maintaining uneconomic lines.
110. If the obligation of supply under section 62 is to be continued for a limited time, ENA believes that, where possible, the costs for lines companies in meeting this obligation should be reduced. Allowing lines companies better and more settled access rights would be one way of achieving this.
111. ENA believes that where the ownership of existing works is clear, the present access rights in section 23 of the Act are sufficient. However, where ownership of an existing work is disputed, the current section 23 right of access is not sufficient. An option to address this could be to amend section 23(1) to provide access to any person who owns or has a reasonable claim to owning the works for performance of any act or operation necessary for the purpose of maintaining the works.
112. Furthermore, as 1993 becomes more distant, the establishment of what were “existing works” before 1993 becomes increasingly difficult, especially where maintenance or upgrades have occurred to part of the line. An option to address this could be to amend the definition of “existing works” to include all works which were affixed to the land more than five years previously, provided that the landowner has not disputed the lawfulness of affixing those lines within that time.
113. Furthermore, ENA believes that the presumption should be that all lines affixed prior to 1993 were lawfully installed unless the owner of the land can demonstrate otherwise.

Recommendations

114. ENA recommends that:

- (a) the review needs to be continued and consider all the matters set out in the ToR and other relevant issues;
- (b) more work needs to be done to address the problems of electricity supply to remote rural communities, rather than simply relying on the extension of section 62;
- (c) MED should form a working group, which would include ENA and other public and private stakeholders, including Federated Farmers, to ensure that rural communities had the most efficient, reliable and environmentally sustainable electricity supply;
- (d) If the outcome of the review is that the section 62 obligation should be extended, then it should be extended only on the basis of another limited time period and on the following conditions:
 - a guarantee that any necessary cross-subsidies from urban to rural customers will not be disallowed by (or invoke sanctions from) the Commerce Commission under Part 4A of the Commerce Act or by any regulatory authority;
 - a fair formula is used for determining the asset value of uneconomic lines, such as using the deprival value to the consumer(s) they serve;
 - a tidying up of access rights for servicing lines crossing multiple properties, etc; and
 - the adoption of measures to avoid a proliferation of challenges whether existing works were lawful installed.

APPENDIX A

5.1 and 5.2 Questions (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?*

As discussed in its submission, ENA considers that the discussion paper has not presently established a case to extend section 62, at least not without the conditions proposed by ENA.

Issues that an expiry would raise include:

General impacts

- It would be inequitable to supply for longer than 2013, consumers connected prior to 1 April 1993 on more preferable terms than consumers connected post 1 April 1993. However, this is not an argument for “updating” the obligation.
- It would be incongruous with the Government’s infrastructure investment policy for other infrastructure sectors.

Environmental impacts

- There has been and would remain little incentive for consumers or electricity companies to consider local micro-generation of electricity given section 62 and other regulatory settings, e.g. EIRA.
- The environmental costs of transporting electricity large distances from where it was generated would remain, and the environmental benefits of more sustainable local micro generation would not be utilised.

Economic implications

- The continued cost of providing electricity supply on “uneconomic lines” would have to be cross-subsidised by urban consumers.
- The Commerce Commission’s application of the Part 4A regime could make it increasingly difficult for lines companies to subsidise the cost of providing “uneconomic lines”.

Practical implications

- The existing ambiguity on whether lines were lawfully installed would make maintenance and repair of “uneconomic lines” even more expensive and difficult.

- It would be increasingly difficult to determine what works were existing as at 1 April 1993 and which lines have been installed either by lines companies or private persons since that date.
- The obligation would be difficult for line companies to cost;

(b) *What expectations should there be from consumers around price, quality, reliability and capacity for continuance of supply (either by lines or by alternatives)?*

We assume that this question is a matter for consumer organisations to respond to.

(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?*

While there are other supply technologies above, the section 62 obligation creates an artificial price for lines services to uneconomic customers, making it difficult to prove the economics of line supply to remote rural areas. As submitted above, ENA considers that this issue needs to be considered further.

(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).*

The Government needs to consider this question in consultation with all stakeholders. From the lines companies' perspective, an issue is whether the cross-subsidy would be permitted under Part 4A of the Commerce Act.

(e) *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?*

It is not possible to meet the section 62 obligation of supply without seeking cross subsidies from urban consumers.

(f) *What terms and conditions for continuance of supply do consumers that were connected after 1993 have in their contracts?*

Most line companies have not entered into specific agreements with new consumers post 1 April 1993. In the absence of such agreements, ENA believes that there is no guarantee of continuance of supply or that any lines built after 1 April 1993 are required to be repaired or maintained.

5.3 and 5.4 Questions (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?*

As set out in the discussion paper, lines companies would not immediately discontinue supply to “uneconomic lines” when section 62 expired in 2013. However, if substantial repair or maintenance was needed to those lines, particularly after damage as a result of a natural disaster, supply could be discontinued once the costs of repair and maintenance of the lines had been established as “uneconomic”. Accordingly, it would be difficult to establish an advance notice for discontinuance of supply.

(b) *What other requirements could or should be placed on lines companies if continuance of supply expires?*

At this point, ENA is not sure that there would be a need for other obligations to be placed on companies when the section 62 obligation expires. It is up to Government and other stakeholders to address alternative supply options, including local generation potential for remote rural customers.

The study referred to in the discussion paper notes that approximately 580 GWh of micro generation per annum is possible without electricity demand modifiers (such as solar water heating, passive solar design and energy efficiency), but there is approximately 15,800 GWh of micro generation potential per annum possible with electricity demand modifiers included.

It is clear from the figures above that greater benefits in energy efficiency can be obtained through passive solar design and energy efficiency than from local supply generation itself. These programmes are currently addressed in the National Energy Efficiency and Conservation Strategy and the home energy rating scheme.

The options in the discussion paper which propose that lines companies assist customers in transferring to micro-generation will be difficult to meet as it is clear from the above figures that the generation of electricity itself has a much reduced total than energy conservation. Lines companies would not be able to assist customers transfer from existing lines supply services by passive solar design and assisting energy efficiency.

(c) *What role would you expect the retailer to take as the continuance of supply expires and a change in supply is signalled?*

See response to question (b) above.

(d) *At what point after a lines company has assisted a transition should its responsibility cease?*

See response to question (b) above.

5.5 Questions (Continuance of supply for a limited time beyond 2013)

(a) *Should the transition period be extended?*

As discussed above, ENA considers that the discussion paper has not established a case to extend section 62. Instead, ENA considers that the review needs to be continued and consider all the matters set out in the ToR and the other relevant issues raised in our submission.

(b) *If so, how long should it be extended for and what should happen at the end of the period?*

If ENA's submission is not accepted, and the outcome of the review is that the section 62 obligation should be extended, then it should be extended only on the basis of another limited time period and on the following conditions:

- a guarantee that any necessary cross-subsidies from urban to rural customers will not be disallowed by (or invoke sanctions from) the Commerce Commission under Part 4A of the Electricity Industry Reform Act 1998 or by any regulatory authority;
- a fair formula is used for determining the asset value of uneconomic lines, such as using the deprival value to the consumer(s) they serve;
- a tidying up of access rights for servicing lines crossing multiple properties; and
- the adoption of measures to avoid a proliferation of challenges whether existing works were lawfully installed.

5.6 Questions (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?*

ENA notes, that any “benefits” of section 62 are shared by energy suppliers but the lines companies bear the financial risk and the direct costs since the separation of lines and retail businesses under EIRA.

The proposed option is somewhat like the re-creation of the old Rural Electrification Reticulation Council (“**RERC**”). Arguably the RERC regime contributed significantly to the problem by providing a larger pool for bigger subsidies to remote consumers – which excluded associated costs to maintain.

ENA considers that a similar levy concept for ongoing supply to remote areas will distort the economics of lines supply and remove incentives to include alternatives even though it might help to provide better returns for rural lines companies. However, if the threshold regulatory regime remains in place, a mix of alternatives should be further considered to deal with the effects of any continuation of section 62.