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Ministry of Economic Development
PO Box 1473
WELLINGTON

Attention: Electricity Group
Energy and Communications Branch

Submission on 2013 Review

Network Waitaki Ltd. (NWL) makes the following submissions with regard to the Ministry of Economic Development's (MED) discussion document titled: Review of Section 62 of the Electricity Act 1992 "Continuance of Supply Obligation" (2013 Review). Number references refer to the above papers paragraph and question numbering.

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Submission

Section 1.1

The existing legislation has never been an effective control on whether line companies or remote consumers choose to retain an existing connection. It largely exists for political comfort with no practical application.

Under existing legislation line companies only have an obligation to provide Line Function Services up to the consumers Point of Supply (POS). The consumer is responsible for the service line they own between the POS and their installation. This can represent a substantial amount of asset. If there is an issue of economics then it is the service line that will be biggest driver of any decision by the consumer to continue taking supply.

Service lines are more likely to be built to lower design standards (because they don't affect network performance measures), and be in worst condition (because their maintenance is 100% consumer funded). If major expenditure is required then consumer is faced with making their own decision about the value of the supply and affordability.

Further there are a number of mechanisms a line company can use to encourage voluntary disconnection without resorting to unilateral action:

- If a line company is dissatisfied with the condition of service lines connected to its network it can issue a notice requiring them to be restored to a satisfactory standard and it can disconnect if it believes the condition is unsafe and/or illegal.
- The provision Line Function Service obligations only extends as far the POS. Under the Electricity Regulations all HV assets must be operated, maintained and managed by competent HV operators. The line company has no obligation to provide these services for HV service lines beyond the POS and can withdraw these services it is providing gratis at any time. This is sometimes used when faced with disputes over access or a compliance issue (trees trimming for example) as it is unreasonable for a line company to assume responsibility for operating and then be obstructed in undertaking those duties.
- When a line company is not the operator of a service line then other compliance issues also have practical effects. Regulation cannot enforce responsibility on a line company for asset they do not own and aren't empowered to control. For example, the line company is no longer managing fault protection covering the consumer's assets and so the consumer may need to install their own dedicated protection systems. These can be very expensive and force a consumer to make an economic decision to disconnect.
- Retailers do not have an obligation to supply. Line companies procure their rights and terms of supply through their contracts with retailers.

Where a line company no longer wishes to own a line it can, under existing legislation, follow a process of handing that asset over to consumers i.e. it can retrench the POS gifting the network asset to consumers.

NWL therefore maintains that for practical purposes "Continuance of Supply" means so long as the consumer wants the supply and is prepared to pay the economic cost. The requirement is a "smoke and mirror" political ruse.

By 2013 this situation will have been the case for 20 years and there has not been widespread disconnection of uneconomic supply. When a line is in need of major replacement (and the service lines will always come up first) consumers are given appropriate advice and they decide whether or not they will continue with supply. Because the line company knows what condition a line is in, it will give a consumer plenty of notice to minimise upset and will try to give advice when the issue can be managed at least cost. There is no upside for line companies in aggravating consumers in the way it manages assets.

In general line companies make their living by providing line assets for which they are permitted to fully recover costs and charge a reasonable rate of return. Their charges are averaged across a large asset base and a large consumer base. In this regard there are no uneconomic assets and there is no requirement on line companies for their pricing to reflect economic efficiency principles.

In these circumstances why would a line company want to reduce quantity of assets and number of consumers it services?

Networks were reticulated in an era when there were subsidies, lower consenting and easement costs, etc. This established position is not given away lightly. Any lines that still cannot currently be justified on a marginal cost basis should never have been built and it doesn't make economic sense to protect these supplies.

Section 1.2

This section might better ask "Is there a problem?"

When a storm event currently occurs line companies have an incentive via performance measures and price/quality thresholds to restore supply as quickly as possible. Having restored supply they will then take the time to analyse what is the optimum level of rebuilding and reinforcement that is warranted. This considers the affects on future performance and costs and is assessed against the network as a whole. The process can take several years and therefore no consumers are simply abandoned at the time of the storm event.

Service lines however are a different issue. Line companies will not restore these unless the consumer (owner) gives permission to so and agrees to pay the costs that line company may pass on. Line companies may also hold monopoly control over contracting resources i.e. they will have a contracted position to ensure their network is attended to first and prioritise the supplies that are attended to first (e.g. a school before a woolshed, etc.).

RERC subsidies were a matter of central government social policy. Line companies are not social service providers and are not accountable for the outcome of policy changes.

Paragraph 7 is supposition and unsupported by current practice. Lines are not going to deteriorate and become uneconomic after 2013 at any greater rate than has been the case for the previous 20 years. Lines have a 22 year half life and so the 20 year transition period has ensured that we are in a steady state requirement for renewal.

We are not saving up a backlog deferred maintenance that will result mass disconnection in 2013. To comply with regulation lines are inspected on a 5 year cycle and any defective poles must be remedied within 3 months of inspection.

Line companies do not disconnect after storms and the worse case is their life is shortened which tends to be immaterial over the entire asset base and its life cycle.

Consumers do face higher costs for maintaining their own service line assets now as they don't have a large asset base to average costs over. The assumption that line companies own the lines is not correct. Consumers own between 5 and 15% of the last part of their supply. In NWL's case about 10% of these lines were subsidised by the RERC.

Note that the consumers (not the power company) paid the remainder of the cost of the lines built under RERC scheme. The RERC scheme required a consumption guarantee and was effectively the equivalent of a New Investment Contract with a fixed price and term. The term subsidy is also a bit of a misnomer, as consumers were actually paying the full cost via a mechanism that simply spread cost out over a

number of years by applying a higher fixed charge component for those individual consumers.

If it costs then someone is paying. If it is not subsidised by the tax payer then it is paid by the power consumer (not the line company). If it is not fully user pays then other consumers are subsidising the supply. NWL has an average costing policy because that's the majority preference of its consumers. This does mean that pensioners and low income families are subsidising holiday homes, etc.

Section 2.1

If the MED or the Government has issues over subsidy and fairness of pricing policy then it should prescribe the principles on which pricing methodologies are to be based.

NWL completely average prices between rural and urban consumers. It also makes no distinction between domestic and non-domestic consumption. There is no commercial imperative on NWL to introduce differentials and its consumer trust owners would oppose such a change.

The Commerce Commission's recent ruling with regard to differentials between rural and urban telecommunications pricing is a maximum factor of 2.

As an illustrative example on cross-subsidy consider the following:

A network with 10% remote consumers, 30% rural, and 60% urban and with a 100% average costed revenue of \$650 p.a. per ICP. If revenue neutral differential pricing was introduced such that rural consumers paid twice the line charge as urban and remote consumers paid three times as much as urban then:

- Urban line charges would reduce by \$216 p.a. or 33% or 59c/day
- Rural line charges would increase by \$216 p.a. or 33% or 59c/day.
- Remote line charges would increase by \$650 p.a. or 100% or \$1.78/day.

The conclusion is:

- The differential pricing is more equitable.
- It does not create a significant level of hardship remote consumers.
- But equally it does not create sufficient benefit for urban consumers.
- It is not worth the negative public reaction which will view it as mean and not equitable.

This is not a fight line companies need to have in the pursuit of some one else's political ideology. Without the RERC very few new uneconomic supplies are being built while the older connection base is subject to natural age related attrition. Extremely uneconomic supplies will slowly disconnect as owners of service lines requiring upgrade will make their own economic choice.

The obligation to supply also includes an obligation to connect new supplies. This protection runs counter to the above preferred outcome encouraging connection on the basis that it must be sustained permanently.

The most distorting issue affecting line company pricing is the cap on fixed charges for low consumption supplies. Low consumption supplies are the uneconomic and technically inefficient supplies and these are attracting the biggest cross-subsidies. The number of consumers involved, even though only being domestic connections, exceeds 15% to NWL's connections.

Line company pricing methodology is still based on electricity volume sales which bears no relationship to the cost of supply or the service levels provided. Until this pricing methodology is addressed cross- subsidy, economic efficiency, social equity and commercial fairness issues will remain.

Cross-subsidy is an issue that affects the competitiveness of businesses connected to a network. Significant businesses highly dependent on electricity tend not to be located at the end of uneconomic lines and so can carry a disproportionate level of the burden of cross-subsidy. Those that benefit most are likely to be holiday homes which have low consumption and some farming supplies to remote outbuildings that were installed under the RERC subsidy e.g. woolsheds and musterer's huts which also have low seasonal consumption.

When considering the issue of cross-subsidy, pricing equity must be considered against service equity. Remote connections are unlikely to have the same reliability and security services as a CBD for example. A ski field will have to fund its own backup supply yet will be sharing the cost of securing a hotel in town. Who is subsidising who is matter of opinion. The material gains from being economically pure don't out-weigh the effort in working it out. Whatever pricing signals are created by a line company they are just as quickly destroyed by the retailer's tariffs.

Section 2.2

From a line company commercial perspective there is no such thing as uneconomic lines. We fully recover the cost of providing services or would go out of business. We are a cost plus rate of return business. The larger our asset, whether economically efficient or not, the larger our business. There is no business advantage for wholesale disconnection of large numbers of dependent consumers.

The issue is economic efficiency and monopolies are given very weak incentives to address this issue. Price controls, low fixed charges, etc. are all threats to supply in uneconomic areas. The obligation to supply cannot address this issue; a change in pricing methodology and price control practice is required.

The economic argument needs to consider what a consumer has to pay to establish the connection (which supposedly covers at least some of the asset investment cost) and the line charges that are only intended to cover the cost of sustaining that connection. Upgrades in service levels and/or increased usage can be addressed by user specific levies and capital contributions. If the cost replacement at the end of economic service life is addressed in a similar fashion then there is no economic issue for the line company.

Capital investment aside, the differences in cost of providing line function services between consumers is minor over all. Line company cost efficiency is measured by Direct Cost per km which does not vary significantly between rural and urban

consumers and Indirect Cost per connection which is also not that user/location specific.

Section 2.3

Line companies do not value their assets by ODV methodology. They are required by the regulator to prepare this valuation for regulatory purposes only. It has no other practical application. Their business economics and pricing is not based on ODV.

The ODV methodology considers a make believe optimised network using modern equivalent asset in a green field installation scenario. Real investment is significantly different.

The EV valuation is not based on actual revenues derived from actual investment. The methodology considers what could be charged on the basis of the next least cost supply solution. An accurate assessment of the economics of supply in terms of whether the revenue derived from the users of the investment made in supply is more likely to be in the order of 5-15% uneconomic network depending on the networks load demographics. This is far greater than the 1% suggested by EV write-downs of ODRC.

This is the level of cross-subsidy that exists now and there is no reason to believe that this will suddenly become unacceptable in 2013. The low user tariff requirement is having a bigger impact.

Section 2.4

It is noted that the obligation to supply applies only to Line Function Services from the GXP to the consumer point of connection. The cost of Line Function Services represent about 25% of a consumers total electricity supply charges. The alternative supplies considered include the entire supply system not just line function services.

It should not be assumed that local line companies have the expertise to advise on alternative systems or the ability to manage them. This knowledge and skill is often in short supply in regional locations as has proven to be case with Solar Hot Water Systems for example. Other line companies might see this development as a distraction to core business from which they can derive little benefit.

While the supply obligation remains and consumers can benefit from cross-subsidy it is unlikely their investment decisions regarding their supply and the appliances they use will change. Until they are facing at least one full life cycle for the asset and plant they own there isn't any need for them consider change and its associated economic efficiency. Unless pricing signals match cost structure the right investment decisions will not be made.

Rather than stand alone alternative power supplies it is more likely that power systems will develop with mass market distributed micro generation such as PV and CHP systems at household scale. This will use networks to interconnect and will have a major impact on investment and economics of supply. There will be less need for capacity, security, and bulk transmission functions. Line asset can be reduced and economic efficiency improved.

For this to happen the way line function services are charged for will need to change away from an energy volume sale basis.

Section 2.5

There is no definition of Government's objects and a consistent policy framework to drive the tools like pricing methodology that will deliver on the objectives. Without this the assessment criteria are meaningless. We appear to be reverse engineering policy to fit the assessment criteria not using the assessment criteria to show that policy is delivering on objectives.

Section 3

It will not be NWL's policy to disconnect any existing supply where it is still wanted and the consumer is prepared to maintain their connection in a compliant state. We give consumers generous notice where we are aware of a maintenance issue. We do not give advice on how to not use our services. New connections are permitted to connect to NWL assets when they are prepared to meet the cost of doing so. This is a self regulating process that does not change regardless of whether the obligation to supply remains or not.

Section 4

NWL prefers option c: Obligation expires but line companies must give information on intentions in advance. We consider 2 to 5 years notice fair and suggest this be linked with an assessment of the current condition of the network assets involved and the opportunity for consumers to assume responsibility for them.

Section 5.1 and 5.2

a)

There needs to be an expiry date for pre 1993 connections as lines were never designed to last indefinitely and have not managed on that basis. NWL would prefer all supplies were treated equally such that no distinction is made for pre 1993 connections.

b)

Consumers should not have any expectations beyond what they are paying for. Benefiting from subsidy is a privilege not an entitlement and those who are paying the subsidy should have some input on how much they are prepared give.

c)

NWL's network already comprises 30% single phase line construction in terms of system length. Service levels are already constrained by configuration (lack of interconnection) and low capacity. The cost of supply to remote areas is optimised in terms of least cost traditional line construction methods.

To get more optimal supply arrangements will require a shift in the function of network i.e. distributed generation, alternative and diverse energy sources within consumer's installations.

d)

Average costing is appropriate for domestic consumers so long as this definition is restricted to the consumers single principle place of residence. There does not appear to be any desire expressed by NWL's consumer base to see differential pricing between urban and rural consumers. Oamaru is a rural service town.

Line charges for non-domestic supplies should relate to assets and capacity involved and not energy volumes i.e. a 5kVA woolshed connection should generate the same revenue as a 5kVA workshop connection in town with the cost of providing that capacity is average costed.

A small portion of the NWL's business consumer load group would prefer to see cross-subsidy between domestic and non-domestic eliminated and average costing reduced to load group level averaging. This comes mainly from businesses competing in non-local markets. These consumers are a minority voice in the Consumer Trust that owns NWL.

The current argument for energy volume pricing is that variable consumption based pricing encourages lower consumption. However for an under utilised installation like a woolshed, consumption can be lower than the standing losses on the transformer i.e. the installation is a very inefficient load and the cost of this inefficiency is paid for by other consumers.

Pricing principles, objectives and methodology have to be defined before a subsidy and its appropriateness can be assessed.

e)

Lines only provide part of the supply. If consumers paying for line function services are expected to subsidise alternative supplies what contribution will also come from retailers and will the consumers who have alternative supplies be expected to contribute to other average costed parts of the supply like transmission.

One of the principles of the industry reforms has been to minimise the monopoly elements and eliminate transfer payments between sectors. Average costing and non-commercial provision of social services does not fit the reforms.

f)

Consumers do not have a direct contracted position with line companies. Once connected only a retailer can terminate supply. Line companies operate via connection standards procured via retailers. A line company can issue the retailer with a non-compliance notice and if the retailer does not wish to pursue the issue with the consumer they can terminate their contract. The obligation to supply does not apply to retailers yet they are the ones with the contract to supply.

Access and tree control are biggest issues. If line companies are to have responsibility for maintaining supply then the consumer should not be permitted to impede them in their duties.

A legal subtlety is that a lines company can turn off a supply without disconnecting it and this operating action is still classed as a Line Function Service. Further they obligated to disconnect if the supply is in a non-compliant state.

Section 5.3 and 5.4

a)

A 5 year notice period would align with network inspection cycles. This would reduce deferral of rebuilds required after storms as at least a 5 year service life will be needed.

b)

Provision of condition assessments and maintenance recommendations to ensure the remaining service life is reached.

Offering to transfer ownership and/or cost responsibility to a consumer and/or collective of consumers is preferential to physically pulling out assets.

c)

Retailers should have the lead the role in managing a transition from a lines connected supply to an alternative. The alternative is more directly related to their core business, they are resourced to manage a large customer base, and have more capability with respect to giving/access technical advice.

Line companies not structured and sized for and have nothing to offer other than line function services.

d)

Line company involvement automatically ceases as soon as the consumer terminates their contract with their energy retailer.

Section 5.5

a)

No extension to the transition period is needed. There has already been a 20 year period to prepare. Line assets have a half life of 22 years so the industry should already be in a steady state of replacing supplies installed by RERC subsidy. There is no reason to believe the status quo will change in 2013.

b)

Extension could be made until the guarantee period of any RERC subsidy had expired. This would ensure that full payback has been achieved and the subsidised supply has the same economic status as any other supply.

Section 5.6

The issues with subsidised supply are that the users of Line Function Services are subsidising the entire alternative supply.

Subsidies are artificially based on energy volumes not the cost of the services being provided.

There is not a prescribed and consistent pricing methodology that is based on policies and objectives.

Section 6

Indicative unit costs do not identify the line charge component and are not related to line function service cost structures.

Alternatives assume reduced service levels. To make a fair comparison some normalisation is required. This would show that services being provided are well beyond the minimum essential services and that charges are not sufficiently high enough to recover costs i.e. service is under valued and alternatives are unlikely to compete effectively.

Policy objectives like sustainability are not factored into the cost equation.