



**PRESENTATION TO
COMMERCE COMMISSION
CONFERENCE**

Draft ODV Handbook

14 April 2004

MARLBOROUGH LINES LIMITED

1. Introduction

- 1.1 Thank you for the opportunity to expand on our submission on the Draft ODV Handbook (the Draft Handbook).
- 1.2 Marlborough Lines Limited (MLL) is party to and fully supports:
 - (i) the submission prepared by PricewaterhouseCoopers (PwC) on behalf of 19 large Electricity Lines Businesses (ELBs); and
 - (ii) the submission of the Electricity Networks Association (ENA).
- 1.3 Our individual submission provided further detail on some aspects of the group submissions and today we would like to further expand on various aspects of both the PricewaterhouseCoopers submission and our individual submission.

2. Background

- 2.1 As detailed in our submission, MLL supplies 21,400 consumers over 3,280km of line located throughout Marlborough. The Marlborough network extends to some very remote areas which can only be reached by boat or helicopter.
- 2.2 48% of our consumer connections are located in Blenheim, a further 18% in smaller townships throughout Marlborough, and the remaining 34% throughout rural and sparsely populated areas such as the Marlborough Sounds and Upper Awatere Valley/Molesworth areas. Overall, 80% of the consumers are supplied from 20% of the network.
- 2.3 MLL has a single point of supply from the Transpower system. The company has a significant 33kV sub-transmission system incorporating 325km of 33kV lines and 13 33/11kV zone substations.

3. Objective of Valuations

- 3.1 Both the PwC and MLL submissions expressed concerns regarding the Commission's purpose for valuations derived from the Handbook.
- 3.2 The historic objective of the ODV Handbook was supposedly to produce valuations that were consistent across companies and to be used for a light-handed Information Disclosure regime. For our part it seemed there was a zeal to minimise the level of the valuations rather than determine a valuation on an objective basis. Inappropriate criteria including inappropriate standard values and asset lives were adopted notwithstanding representations of the industry.

- 3.3 The preparation of an ODV imposes considerable cost on an ELB and if the full value of the exercise is to be gained it should be undertaken in a manner which achieves realistic outcomes.
- 3.4 However an ODV in itself can only be regarded as one element of any regulatory regime. In the absence of information as to the context in which the ODV is intended to be used by the Commission it is difficult to comment comprehensively on the ODV proposals.
- 3.5 In any event it is our firm view that an ODV derived from the Draft Handbook cannot be regarded as the complete value of a network. Aside from some concerns relative to actual valuations arising from the Draft Handbook, the ODV does not include assets which are an integral part of a network company's operations. Indeed a network cannot be operated without these assets.
- 3.6 If it is intended the ODV is to be used in any post-breach investigations of individual line companies, an accurate rather than comparative, valuation should be utilised. Accuracy is in relation to use of standard values applicable to an individual ELB as opposed to standard values derived from some theoretical model and scale of construction.
- 3.7 We are also concerned the Commission is yet to provide information pertaining to the "rules" to be used for a Depreciated Historic Cost (DHC) valuation alternative. Nor have we seen any indication from the Commission as to the timeframe for choosing between the two valuation methodologies from April 2004.
- 3.8 As stated in our submission an ELB's decision relative to valuation cannot be undertaken prudently without the opportunity to properly address all relevant issues. From the shortcomings we have identified in the Draft Handbook it is likely that the two methodologies – ODV and DHC – will produce different levels of accuracy.
- 3.9 Our submission mentioned one example of this potential difference. Other examples include:
- We recently laid 2km of 33kV cable on a major road in suburban Blenheim. The Marlborough District Council and Transit would not agree to more than 50m of trench being open at any one time. Hence the only practical way to lay this cable was to install duct pipes along the full length, then draw the cable through those ducts. We estimate the additional cost of laying the cables in this way, as opposed to opening 300m of trench at one time and laying the cable direct into the ground to be approximately \$40,000 per kilometre.

A DHC valuation would presumably allow inclusion of the cost of ducting. The current Draft Handbook has no provision for this cost to be recognised.

- The load on an isolating substation at the start of a single wire earth return (SWER) line in Port Underwood has reached the 8 amp maximum specified in New Zealand Electrical Code of Practice 41. Hence no new connections can be added to the distribution system in that area until the isolating substation is moved by replacing some of the existing 11kV SWER line with two wire single phase line. Yet the Draft Handbook stipulates the same standard value for single phase or SWER lines.

3.10 Use of Valuer

- 3.10.1 The Draft Handbook does not define the role of the Valuer, and nor does it contain a provision similar to clause B.5 of the existing Handbook, which states:

Where the nature of an asset in service differs from any in the tables, an engineering assessment of the replacement cost can be made, subject to the approval of the Valuer. Before such an assessment is made, the Valuer must be satisfied that there is justification for not selecting an MEA listed in the tables. This assessment must be recorded in the valuation report.

- 3.10.2 We suggest that the role of the Valuer should be defined in the Handbook, and that the Valuer be given the discretion to authorise use of different replacement costs, different standard and remaining lives and interpretation of modern equivalent assets (MEAs) where there are good reasons for doing so.

3.11 Asset Values

- 3.11.1 The rationale behind the provision in clause A.29 whereby easement rights obtained and registered against a land title can be valued at purchase cost “...provided that the sum paid has not already been expensed.”, has to be questioned.
- 3.11.2 As outlined in our submission, we do not consider the accounting treatment of expenditure on easements should be used in deciding whether or not the value of those easements should be included in the ODV. We submit easements are tangible assets, are clearly a cost faced by an ELB, and therefore should be included in the asset value of that ELB.

- 3.11.3 Increasingly we are experiencing difficulty in obtaining easements and we wish to signal to the Commission these costs are likely to markedly increase. By way of example Transpower has advised that easements for a new 110kV circuit on existing towers to supply Marlborough may approximate to 33% of the actual cost of construction.

3.12 Standard Values

- 3.12.1 Some of the standard costs contained within the Draft Handbook are inappropriate and the table in Appendix A provides some examples of comparison between standard and actual costs for underground cable work undertaken on a competitive basis within the city of Nelson.
- 3.12.2 The Commission has not made available information regarding the source of the various per unit replacement costs included in the Draft Handbook. We submit the Commission should make such information publicly available to achieve transparency and enable more informed comment as to the basis used in arriving at the standard values.
- 3.12.3 Clause 2.13 requires replacement cost to be determined on a “brownfields” basis. However, note k to table A.1, referring to underground LV lines, states these “values are based on costs for suburban subdivisions.”.
- 3.12.4 In Marlborough at least, power cables are generally laid before any other services, since the power cables are generally the deepest, ie. a “greenfields” situation. If the estimates of costs have been based on suburban subdivision cabling installed prior to other services, then additional costs should be allowed for cables laid in a less than greenfields situation.
- 3.12.5 Further information regarding the basis of the Commission’s replacement cost estimates would be of assistance in making an informed decision relative to clause 2.13 and the note to table A.1.
- 3.12.6 We have a further concern with clause 2.13, related to the scale of construction used in deriving the standard replacement costs.
- 3.12.7 We suggest the definition of “significant scale” contained in the Draft Handbook, ie. a “circuit or feeder is constructed as a single project”, is inconsistent with practice. We suggest in our submission it would be more appropriate to use a 1km length as a definition of significant scale.

3.13 Cables and Cable Trenches

- 3.13.1 Clause 2.13 suggests replacement costs shall be determined on a “brownfields” basis. A brief description of brownfields has been provided, which suggests that “construction occurs around all existing infrastructure and

development (other than the asset being valued).” We submit this definition is at odds with the requirements in Appendix B that “cables running close together, or on the same side of any road or street must be optimised to a single trench except where this would not meet the ELB’s quality of supply requirements.” Surely if a sensible approach is to be taken, then all existing infrastructure assets – including existing cables – should be treated as being in place. Therefore the cost of trenching to install a new cable on that same side of the street should be allowed as part of the cost of installing that cable.

- 3.13.2 In our written submission we expressed concern regarding this aspect as it would relate to the comparisons between ODV based and DHC based valuation methodologies. Whilst the Commission has not produced any information regarding the DHC basis of valuation, we presume the Commission will not seek to require companies adopting the DHC method to remove the cost of trenching from the historic cost when installing such cables. Similarly it is therefore inconsistent to require deletion of properly incurred costs in the adoption of the ODV methodology.

3.14 Optimisation of Distribution Transformers

- 3.14.1 Our submission outlined our concerns regarding the proposal to continue with the 30% total distribution transformer capacity utilisation requirement and thus disregard the value of some installed transformers.
- 3.14.2 In the Kenepuru Sound section of the Marlborough Sounds reticulation, we have a total of 8,450kVA of distribution transformer capacity. The maximum demand on that section of the network over 2004 Easter (traditionally a time of higher load in that area but not on the whole network), was 3,530kVA, giving an overall distribution transformer capacity utilisation of 41.8%.
- 3.14.3 However, the demand on that section of the network at the time of maximum overall system demand in winter 2003 was 758kVA. Thus, when related to the overall network system maximum demand, capacity utilisation on this section of the network would be 9.4%. Irrespective all transformers are essential given the location of consumers. Hence it is nonsensical to seek to artificially reduce the transformer capacity through the application of inappropriate criteria.
- 3.14.4 Similarly irrigation is another area where the proposal for optimisation causes difficulty. By its very nature irrigation is a summer only load. Thus any company with a winter system maximum demand and significant levels of transformer capacity required for irrigation loads will be significantly disadvantaged by any requirement to consider transformer capacity relative to network maximum demand.

- 3.14.5 As outlined in our submission, we believe it would be appropriate to include a provision for flexibility to accommodate lower capacity utilisation where such can be justified.

3.15 Provision of “Non-Standard” Assets

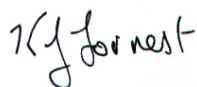
- 3.15.1 The Draft Handbook makes no provision for the valuation of “non-standard” assets utilised within the electricity network and it is advocated such be included within any comprehensive asset valuation. By way of example the company has many kilometres of line in areas where the possum density is high. The standard possum guards have proven to be ineffective and longer length guards have been installed to eliminate momentary fluctuations and reduce the potential for fire. The retrofitted guards have incurred costs of \$650,000 to date and are continuing to be fitted to satisfy consumer expectations. Notwithstanding their installation will have no impact on the publicly disclosed reliability statistics required by legislation.
- 3.15.2 Similarly bird spikes have been installed to eliminate momentary fluctuations. It is incongruous items installed to benefit consumers cannot be included within the valuation. If the situation remains unaltered there is no incentive for innovation if the value of such is to be disregarded.

3.16 Long Life Assets

- 3.16.1 An electricity network comprises a combination of assets many of which have relatively long lives. Similarly planning must be long-term. Accordingly it is short-sighted and detrimental to consumer, public and company interests for the Draft Handbook to impose short-term planning horizons as detailed in section 2.28. It is inevitable the implementation of such requirements will result in higher long-term costs.
- 3.16.2 Prudence and commercial sense dictates that the planning horizon should properly be dictated by practical local circumstances. Not theoretical models which may achieve short-term savings at the inevitable expense of higher future costs. Any network savings gained from inadequate longer-term planning will be temporary.
- 3.16.3 Reasonably projected future loadings must be an integral part of any growing network’s plans. Equally practicalities often dictate that assets or land be purchased or capital expenditure undertaken to significantly reduce future costs.

4. Conclusions

- 4.1 The purpose of establishing an ODV must be taken in the context of the overall regulatory environment. And the purpose for which ODV is to be utilised has to be clearly articulated by the Commission.
- 4.2 The undertaking of an ODV will incur an ELB in considerable cost. There is little point in subjecting companies to costs unless the ODV is accurate and can be usefully utilised as part of the determination of a commercially acceptable return.
- 4.3 Adoption of ODV criteria based on unrealistic values, or exclusion of items necessary for the operation of an ELB will certainly curtail expenditure which would otherwise improve reliability and security of supply.
- 4.4 If an ELB is inhibited from investment in the network as a result of inappropriate ODV criteria this will ultimately be to the detriment of the national economy.



KJ Forrest
Managing Director

Appendix A: Nelson Electricity Underground Cable Cost Comparisons

Project	HV/LV	Cable Size	Road or Footpath per metre	Trench Rate per metre	Cable Rate per metre	Total Rate per metre	Draft ODV Handbook 31/03/04	ODV Handbook - Asset Description
Actual Cost Examples								
GPO-Collingwood Br (2003)	11,000V	300mm Al	Road	\$147	\$62	\$209	\$120*	11 KV U/G Heavy
Hastings St (2003)	11,000V	300mm Al	Footpath	\$139	\$62	\$201	\$120	11 KV U/G Heavy
Sussex St (2003)	400V	300mm Al	Road	\$133	\$38	\$171	\$55	Underground - LV Only
Poynters Cres - Wakefield Quay	11,000V	300mm Al	Trenching in Road	\$130	\$54	\$184	\$120	11 KV U/G Heavy
Collingwood St Bridge - North Rd	11,000V	300mm Al	Directional Drilling	\$160	\$54	\$214	\$120*	11 KV U/G Heavy
Haven Rd - Port 1 Sub	11,000V	300mmAl	Directional Drilling	\$160	\$54	\$214	\$120*	11 KV U/G Heavy

Note: * Where there is an existing 11kV cable along same route the value of this cable could be reduced to \$50per metre based on the 11kV U/G DCct Heavy.