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## **Cross-submission on the Draft Optimised Deprivation Valuation Handbook**

Submitted to the Commerce Commission by:

**Electricity Networks Association**

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## 1. Introduction

The Electricity Networks Association (ENA) appreciated the opportunity to submit its views on the draft ODV Handbook at the Commission's recent conference.

Having reflected on the material presented at the conference, this cross-submission raises four key issues that ENA considers need to be addressed prior to the Commission finalising the ODV Handbook. These four issues are the need for:

- A wider Valuation Handbook, of which the ODV Handbook would be one part.
- Valuations to be comprehensive.
- Asset values used for the ODV to reflect market prices.
- Planning horizons used for ODV to be consistent with those used for good engineering practice.

This submission does not reiterate the detailed reasons for each issue as they have been presented by the ENA and others in written submissions and at the conference. Rather it aims to draw to the Commission's attention what the ENA considers are key issues.

The submission also responds to the specific question raised by the Commission with ENA as to whether using FRS-3 would ensure that, from a regulatory perspective, reported asset costs are efficient.

### 1.1 Purpose of the valuations

The Commission has stated that it proposes to use ODV valuations for the information disclosure regime, and for any post-breach investigations, where appropriate and relevant.

Another possible purpose of the ODV valuations is that they are used by the Commission in setting the price levels for any goods and services that are controlled, under Part 5 of the Commerce Act.

Given the stated and possible purposes of the ODV valuations, ENA considers the draft ODV Handbook should be assessed as to whether it is fit for the purpose of assessing price levels for the electricity conveyance service provided by lines businesses. The issues discussed below are considered in this context.

### 1.2 Summary of ENA recommendations

ENA recommends the Commission:

- Develop one Valuation Handbook which contains all the Commission's requirements as to how lines businesses are to prepare their valuations, and includes both the ODV and the depreciated historic cost valuation methods.
- Ensure that the ODV Handbook provides for inclusion in the valuation of all assets that are required to provide the electricity conveyance service.
- Clarify the circumstances in which the ODV price schedule applies, and circulate for comment this material and the method used to derive the price schedule, prior to finalising the draft.
- Allow deviations from the price schedule where the lines business and the valuer are able to verify that special circumstances exist, and that the prices used for the special circumstance conform to a test for efficient costs.
- Adopt ODV planning horizons that reflect good engineering practice for each asset category.

## 2. Need for a wider valuation Handbook

The draft ODV Handbook aims to address the valuation of fixed system assets only. It does not cover a range of other issues that need to be included in a valuation that would be fit for the purpose of assessing price levels for the electricity conveyance service. These other issues include:

- Clarifying the manner in which assets that are necessary to provide the electricity conveyance, other than system fixed assets, are to be included in the valuation.
- Setting out how depreciated historic cost valuations are to be undertaken, should a lines business wish to use this option (which the Commission in its draft decision has indicated may be used).
- Clarifying the purpose of the valuations.

In practical and procedural terms there would be significant benefits to the Commission, to those preparing valuations, and to the auditors, from having all these issues addressed in the one Handbook. Further, the process of compiling these issues into one Handbook would help ensure they are addressed in a coherent and consistent manner, and would reduce potential confusion that could arise from these issues being addressed in a number of documents, or not at all.

There does not appear to be any good reason not to consolidate all valuation issues into the one Handbook.

### 2.1 ENA members that raised this issue

ENA members that raised this and related issues in the conference include Marlborough Lines & Nelson Electricity, Orion, PwC (on behalf of 19 lines businesses), and Vector.

### 2.2 Recommendation

ENA recommends that the Commission develop one Valuation Handbook which contains all the Commission's requirements as to how lines businesses are to prepare their valuations, and covers both the ODV and the depreciated historic cost valuation methods.
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### **3. Need for the valuation to include all assets**

The ODV valuation method requires the identification and valuation of all assets required to deliver a particular service. In the case of the draft ODV Handbook the relevant service is the electricity conveyance service provided by lines businesses.

However, the draft ODV Handbook does not cover all assets required to provide this service, and uses criteria inconsistent with the ODV method to omit some assets.

Examples of inappropriately excluded assets are asset management systems (e.g. GIS) and easements. Examples of inconsistent criteria used to exclude assets are that the assets can be shifted geographically (e.g. mobile substations and generators), that the service provided by the asset is contestable (e.g. generators), and that the asset is intangible (e.g. databases and intellectual property).

All such assets should, in terms of the ODV method, be included in the valuation if they are required to deliver the service and are not expensed.

The draft ODV Handbook would result in incomplete valuations. If these incomplete valuations were used to assess price levels, they would result in lower price levels than are required to provide an adequate return on investment. In anticipation of this potential outcome, investment patterns of lines business would be biased toward investing in assets that are covered in the Handbook in preference to those that are not (where possible), or under-investing.

Such an outcome is inconsistent with the purpose of the targeted control regime, as allocative, productive and dynamic efficiency would be potentially compromised.

This issue of valuation completeness can be addressed now, and need not and should not be deferred to some later stage, such as part of an investigation into a particular lines business.

#### **3.1 ENA members that raised this issue**

ENA members that raised this issue in the conference include Counties Power, Marlborough Lines & Nelson Electricity, Orion, Powerco, PwC (on behalf of 19 lines businesses), Unison, WEL Networks, and Vector.

#### **3.2 Recommendation**

ENA recommends the Commission ensure that the ODV Handbook provides for inclusion in the valuation of all assets that are required to provide the electricity conveyance service.
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## 4. Asset values used for ODV need to reflect market prices

The ODV valuation method aims to estimate the cost to provide the electricity conveyance service by estimating the cost to replace the existing network with modern equivalent assets (MEA). The draft ODV Handbook approaches this task by specifying maximum values for a large number of commonly used assets.

ENA has two primary concerns with the approach taken in draft ODV Handbook:

- First, ENA members have tested the draft values and in many cases have not been able to access the draft prices in practice, and have provided the Commission evidence of this. The Commission however has not disclosed the method its advisers used to arrive at the draft prices, the assumed circumstances in which they would apply, or their sources.
- Second, particular circumstances give rise to costs being much higher in some cases. ENA members have provided examples. The prescriptive approach to setting maximum values has its limits in such circumstances as it is not practical to list in advance prices for all (or even many) such circumstances. Nevertheless, in order to provide service the lines business needs at times to incur these higher costs.

To address these two issues ENA submitted at the conference, and in previous written submissions, that the Commission should be more transparent in the way its advisers developed the price schedule, and that it allow for deviations from the price schedule subject to appropriate tests being met.

The Commission has a well-earned reputation for subjecting its and submitters' work to scrutiny and debate, prior to the Commission placing reliance on such work. The non-transparent approach to the development of the price schedule for the draft ODV Handbook is aberrant in this regard, and the ENA urges the Commission to employ its usual processes prior to finalising the draft. ENA suggests the Commission:

- Document the circumstances (e.g. large or small projects, what type of soil conditions, nature of traffic management, etc. ) in which the prices apply and include this as part of the schedule.
- Document the method used to assemble the prices (e.g. how prices were sourced, where the point estimate was drawn from in the distribution of prices, etc).
- Circulate the above for comment, prior to finalising the price schedules.

In order to provide for deviations from the price schedule, ENA suggests the Commission place the burden of proof on lines businesses and their valuers to verify that:

- The particular circumstance of the assets in question differs significantly from the circumstance for which the price schedule was developed.
- The prices used for the particular circumstance reflect efficient costs to provide the service in that circumstance.

This approach, in ENA's view, would provide an appropriate balance between the desire on the part of the Commission to have valuations draw off the same price schedule, with the practical reality that some circumstances differ from the norm and that these differences should and can be reflected in ODV valuations.

ENA notes that, to the Commission's credit, it has designed the thresholds regime such that lines businesses retain financial incentives to minimise costs, as reduced costs do not lead as a matter of course to an equal reduction in price. Thus it is in the commercial

interests of a lines business to use lowest cost approaches to providing the electricity conveyance service. The presence of such incentives should provide the Commission with additional comfort that the suggested approach to deviations from the price schedule can be relied on to approximate efficient costs.

#### **4.1 ENA members that raised this issue**

ENA members that raised this issue in the conference include Counties Power, Marlborough Lines & Nelson Electricity, Orion, Powerco, PwC (on behalf of 19 lines businesses), Unison, WEL Networks, and Vector.

#### **4.2 Recommendation**

ENA recommends the Commission:

- Clarify the circumstances in which the ODV price schedule applies, and circulate for comment this material and the method used to derive the price schedule, prior to finalising the draft.
- Allow deviations from the price schedule where the lines business and the valuer are able to verify that special circumstances exist, and that the prices used for the special circumstances conform to a test for efficient costs.

### **5. Align planning horizons with good engineering practice**

The draft ODV Handbook persists with planning horizons from the previous ODV Handbook that are widely considered to be much shorter than the planning horizons used in practice to minimise whole-of-life costs.

This approach introduces an unnecessary and distorting tension in the planning process. A lines business is often faced with either building in an efficient manner and running the risk of having some aspects of that investment optimised out in the early years of its use, or investing in a manner that avoids the optimisation risk but raises whole-of-life costs.

The reason behind preferring shorter ODV planning periods appears to be to gain greater comfort that the forecasts related to those periods are more reliable. While this may be true in the abstract sense that the forecast period extends less into the future than otherwise, in practice a key function of a lines business is to forecast aggregate demand in its network footprint over the medium to long-term and to build to that forecast. ODV rules need to be designed with this wider objective in mind.

The relative economic costs of over or under-building are unlikely to be symmetrical:

- If the network is over-built, additional resources will have been consumed to provide the service. In a growing economy this over-build will, in general, be required, but at a later point in time. In practice over-build may give rise to a slightly higher price than optimal, leading to some (probably) minimal price response from consumers.

- In contrast, if the network is under-built, service quality is likely to fall, and could lead in some cases to firms locating elsewhere (away from unreliable electricity supply areas), rather than in the area most preferred from an economic perspective. The lines business may also need to upgrade the network more frequently than would have been the case under a more efficient approach. The economic costs of these outcomes are likely to far outweigh those of over-build.

The above suggests the Commission should design regulatory rules that err, where uncertainty is present, toward allowing over-build. The unrealistically short planning horizons in the draft ODV Handbook do the opposite – they potentially penalise efficient investments, and prompt lines businesses to err toward under-building.

As noted above, the thresholds regime provides financial incentives on lines businesses to minimise costs. Thus it is not in their commercial interests to over-build. The presence of such incentives should provide the Commission with additional comfort that lengthening the ODV planning horizons to align with good engineering practice will not risk material over-build.

ENA recommends the ODV planning periods be replaced with those that reflect good engineering practice for the relevant asset categories. ENA members have provided examples of what these periods should be.

## 5.1 ENA members that raised this issue

ENA members that raised this issue in the conference include Counties Power, Marlborough Lines & Nelson Electricity, Orion, Powerco, PwC (on behalf of 19 lines businesses), WEL Networks, and Vector.

## 5.2 Recommendation

ENA recommends the Commission adopt ODV planning horizons that reflect good engineering practice for each asset category.
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## 6. FRS-3 and efficient costs

The Commission asked ENA to respond to the following query:

*“Please provide an explanation of how using FRS-3 would help to meet the purpose statement in subpart 1 of Part 4A of the Commerce Act. How would using FRS-3 ensure that, from a regulatory perspective, asset costs are efficient?”*

An expert view on this issue from Professor Tony van Zijl is appended. He concludes that under FRS-3 if an entity chooses to use:

- historical cost, then the amount at initial recognition would be expected to be the efficient cost but at subsequent reporting dates the amount reported would be likely to have low correspondence with efficient cost.
- fair value, then the amount reported would at all dates be close to efficient cost.

This conclusion is subject to the assumption that the entity chooses to operate at least cost production. If there was concern that entities did not choose to operate at least cost production then, for regulatory purposes, it might be useful to require entities to disclose any valued surplus capacity component in reported fair values.

## Appendix – Professor Tony van Zijl on FRS-3

This expert view was provided by Professor Tony van Zijl, Professor of Accounting & Financial Management at Victoria University and a Director of LECG. He is a past member of the Accounting Standards Review Board and past chairman of the Financial Reporting Standards Board of the Institute of Chartered Accountants of New Zealand.

It is in response to the Commerce Commission’s question to ENA, as follows:

*“Please provide an explanation of how using FRS-3 would help to meet the purpose statement in subpart 1 of Part 4A of the Commerce Act. How would using FRS-3 ensure that, from a regulatory perspective, asset costs are efficient?”*

### Expert view from Professor Tony van Zijl

FRS-3: Accounting for Property, Plant and Equipment (“FRS-3”) requires property plant and equipment assets to be reported on initial recognition at the cost of acquisition and at subsequent dates either at historical cost or at fair value.

#### Historical cost basis

Under the historical cost basis, an asset is reported, at dates subsequent to initial recognition, at the cost of acquisition less accumulated depreciation and any allowances for impairment. If it is reasonable to assume that the reporting entity would aim to minimise the cost of production, then the cost initially recognised should reflect efficient cost. However, given the somewhat arbitrary nature of schemes for depreciation and the likelihood of changes in markets and technology, it is likely that at subsequent reporting dates there would be a low degree of correspondence between reported amounts and efficient costs.

#### Fair value basis

Under the fair value basis, an asset is reported, at dates subsequent to initial recognition, at the fair value determined at the most recent revaluation less accumulated depreciation calculated on the revalued amount (paragraph 8.13 of FRS-3).

Fair value is defined at paragraph 4.23 as:

*“the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arms length transaction.”*

Revaluations are required to be undertaken on a systematic basis, at a minimum every five years, but with sufficient regularity to ensure that an asset is not reported at an amount materially different from its fair value (paragraph 7.1(b)). Entities are encouraged to adopt a system of annual revaluation, especially of land and buildings (paragraph 7.2).

Fair value is required to be determined using market-based evidence of the price in an active market for the same or a similar asset. In the absence of such evidence, fair value may be estimated using other market based evidence on, say, cash flow and discount rates (paragraph 4.26). Where relevant market based evidence is not available, FRS-3 at paragraph 4.26 states:

*“... Where fair value of the asset is not able to be reliably determined using market-based evidence, depreciated replacement cost is considered to be the most appropriate basis for determination of fair value. This situation will usually only arise where an asset is specialised or the only transaction price evidence arises in a monopoly context.”*

Depreciated replacement cost is defined at paragraph 4.10 as:

*“Depreciated replacement cost” is a method of valuation that is based on an estimate of:*

*(a) in the case of property:*

- (i) *the fair value of land; plus*
- (ii) *The current gross replacement costs of improvements less allowances for physical deterioration, and optimising for obsolescence and relevant surplus capacity;*

*(b) in the case of plant and equipment, the current gross replacement cost less allowances for physical deterioration, and optimisation for obsolescence and relevant surplus capacity.”*

Optimisation is described in paragraph 4.13 as:

*“Optimisation refers to the process by which a least cost replacement option is determined for the remaining service potential of an asset. This process recognises that an asset may be technically obsolescent or over-engineered, or the asset may have greater capacity than that required. Hence optimisation minimises, rather than maximises, a resulting valuation where alternative lower cost replacement options are available. In determining depreciated replacement cost, optimisation is applied for obsolescence and relevant surplus capacity.”*

It should be noted that the description of optimisation includes *“the process by which a least cost replacement option is determined”*. “Least cost” in this context is from the perspective of the reporting entity, that is, it is the least cost option available in practice to the reporting entity.

However, in regard to surplus capacity, paragraph 4.16 states that

*“...the extent of any reduction in value for surplus capacity subject to optimisation depends on whether that surplus capacity has an alternative use to the current use of the asset. Where there is no alternative use, the optimised value of the surplus capacity is zero. Where there is an alternative use the optimised value of the surplus capacity is the value of the highest and best alternative use of that capacity.”*

and at paragraph 4.19:

*“...optimisation for obsolescence and relevant surplus capacity is applied only to the extent that it reflects the most probable use of the asset that is physically possible, appropriately justified, legally permissible and financially feasible.”*

These requirements emphasise that the estimate of fair value is indeed intended to proxy for the amount at which the asset would trade in an active market. If there is surplus capacity that could be used in an alternative use then that capacity will be reflected in the estimate of fair value.

It should be noted that in all circumstances the revaluation base is fair value; however, the method of estimation of fair value depends on the evidence available.

From the definition of fair value, it follows that if revaluations are carried out carefully and with appropriate frequency, then reporting under the fair value option should result in reporting of assets at estimated least cost.

This least cost should also be efficient cost if entities choose to operate at least cost production. However, if it is reasonable to assume that the entity acquires assets that facilitate least cost production then it should also be reasonable to assume that the entity would rebalance its asset combination on an ongoing basis to ensure that it operates with the least cost combination. Thus reporting fair value would be expected to result in reporting of assets at efficient cost.

If there was concern that entities did not choose to operate at least cost production then, for regulatory purposes, it might be useful to require entities to disclose any valued surplus capacity component in reported fair values.

**Conclusion**

In response to the Commerce Commission's question relating to the reporting of efficient costs, I conclude that under FRS-3, if an entity chooses to use:

- historical cost, then the amount at initial recognition would be expected to be the efficient cost but at subsequent reporting dates the amount reported would be likely to have low correspondence with efficient cost.
- fair value, then the amount reported would at all dates be close to efficient cost.

This conclusion is subject to the assumption that the entity chooses to operate at least cost production. If there was concern that entities did not choose to operate at least cost production then, for regulatory purposes, it might be useful to require entities to disclose any valued surplus capacity component in reported fair values.