COMMERCE COMMISSION

Regulation of Electricity Lines Businesses

Information Disclosure Regime

Electricity Information Disclosure Handbook

31 March 2004

(as amended 31 October 2008)



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1 Introduction

1.1 Purpose of this Electricity Information Disclosure Handbook

- 1.1.1 This handbook is issued in conjunction with the following documents published by the Commerce Commission:
 - the Electricity Information Disclosure Requirements issued 31 March 2004, consolidating all amendments to 31 October 2008 (the "Disclosure Requirements"); and
 - the *Electricity Distribution (Information Disclosure) Requirements 2008* (the "Distribution Disclosure Requirements").
- 1.1.2 The Distribution Disclosure Requirements establish the information disclosure requirements for Distribution businesses ("EDBs"). The Disclosure Requirements now primarily apply to Transpower New Zealand Limited ("Transpower"). Parts of the Disclosure Requirements do still apply to EDBs as they have become transitional provisions under requirement 14 of the Distribution Disclosure Requirements.
- 1.1.3 This handbook is referred to in requirements 5(2)(a), 6(2)(a) and 24(3)(c) of the Disclosure Requirements and requirements 7(1)(c) and 8 of the Distribution Disclosure Requirements. Its purpose is to provide Transpower and EDBs with, where applicable:
 - a mandatory business accounting separation and allocation methodology to prepare the relevant disclosures relating to financial information (their "Financial Information Disclosures"), as is required by Schedules FS1, FS2, FS3 and AV1 in the Distribution Disclosure Requirements (for EDBs) and Schedule 1, Part 2 of the Disclosure Requirements (for Transpower);
 - details of transfer payments and other related party transactions that must be disclosed in those Financial Information Disclosures; and
 - details of the asset management plans that must be disclosed.

1.2 Role of the Disclosure Requirements and the Distribution Disclosure Requirements

1.2.1 The Disclosure Requirements and the Distribution Disclosure Requirements were issued by the Commerce Commission under section 57T of subpart 3 of Part 4A of the Commerce Act 1986. The purpose of subpart 3 is to promote the efficient operation of markets directly related to transmission and electricity distribution services by ensuring that Transpower and EDBs make publicly available reliable and timely information about the operation and behaviour of those businesses, so that a wide range of people are informed about such factors as the profits, costs, asset values, price (including terms and conditions of supply), quality, security, and reliability of supply of those businesses.

1.3 Summary of this handbook

1.3.1 This handbook covers the:

- Business Accounting Separation and Allocation Methodology for Preparing Financial Information Disclosures: Chapter 2 sets out the "avoidable cost" allocation methodology (ACAM) for allocating expenses, revenues, assets and liabilities ("financial statement items") amongst the "Line" and "Other" businesses of Transpower and EDBs. ACAM is mandatory for Transpower and all EDBs in preparing their Financial Information Disclosures;
- Disclosure of Transfer Payments and other Related Party Transactions: Chapter 3 sets out the disclosure requirements for transactions between persons in a related party relationship. These are mandatory requirements for Transpower and all EDBs under requirement 8 of the Disclosure Requirements; and
- Disclosure of Asset Management Plans: Chapter 4 sets out the obligations relating to the disclosure requirements for asset management plans established under requirement 7 of the Distribution Disclosure Requirements.

1.4 ODV Handbook

- 1.4.1 The Commerce Commission has issued a separate handbook (the ODV Handbook) describing the methodology for valuing the system fixed assets of Transpower and EDBs. Further, certain schedules to the Distribution Disclosure Requirements (notably AV3 and MP2) are based on the Replacement Cost of System Fixed Assets, which also is determined using the methodology in the ODV Handbook. The ODV Handbook must be followed when undertaking valuations that are required to be undertaken using the ODV methodology.
- 1.4.2 In addition, the Distribution Disclosure Requirements (more particularly, certain aspects of the Schedules and Schedule Definitions in those requirements) also refer to the ODV Handbook. A (non-exhaustive) list of such referrals includes:
 - For valuing vested assets (Schedules FS1 and AV1);
 - For determining certain aspects of depreciation calculations, such as the Total Lives of assets, according to the asset class (Reports FS1 and Report AV1);
 - Definitions relating to the distinction between capital and operational expenditure (Reports FS1, FS2, AV1, AV3);
 - Determining the RAB value of asset adjustments arising from changes in asset register information (Reports AV1, AV3)
 - Specifying the ODV value of assets transferred to another EDB in the course of a merger, acquisition or other transaction (Report AV4)

- Classifications for lines (Report MP1).
- 1.4.3 The ODV Handbook is to be used for these purposes unless or until the Commission advises otherwise, and amends the requirements accordingly.

2 Business Accounting Separation and Allocation Methodology

2.1 Requirements under the Disclosure Requirements and Distribution Disclosure Requirements

- 2.1.1 Requirements 5 and 6 of the Disclosure Requirements and requirements 3 and 4 of the Distribution Disclosure Requirements require Transpower and EDBs to publish and publicly disclose certain financial information (the Financial Information Disclosures). The required information relevant to this chapter is that which is disclosed in accordance with Part 2 of the Disclosure Requirements (for Transpower) and Schedules 2 to 5 of the Distribution Disclosure Requirements (Reports FS1, FS2 and FS3 and the asset valuation schedule AV1) (for EDBs). The relevant EDB requirements require only the specified information; they do not require a full set of GAAP-compliant financial statements.
- 2.1.2 The required financial information is that which applies in respect of line business activities only.
- 2.1.3 Transpower and EDBs must prepare their Financial Information Disclosures using the business accounting separation and allocation methodology specified in this Chapter.
- 2.1.4 Transpower and EDBs are not required to prepare Financial Information Disclosures under the Disclosure Requirements or Distribution Disclosure Requirements for "Other" business activities. Examples of "Other" activities include asset construction and maintenance activities that do not involve the use of their line business resources or assets, and non-electricity related activities.

2.2 Mandatory Avoidable Cost Allocation Methodology

2.2.1 The allocation methodology that must be used by Transpower and EDBs in preparing their Financial Information Disclosures is the avoidable cost allocation methodology (ACAM). ACAM assumes that the lines business activities of Transpower and EDBs are undertaken by the Line business, defines the Line business as the "stand-alone" business, and makes an assessment of the expenses, revenues, assets and liabilities (the "financial statement items") that would be avoided by Transpower or an EDB if it did not operate their Other ("incremental") business. The financial statement items (and components of financial statement items) that would not be avoided are allocated to the Line business, and the financial statement items (and components of financial statement items) that would be avoided are allocated to the Other business. Under ACAM, the "stand-alone cost" of a service is the cost that would be incurred if that was the sole service provided. The "incremental cost" of a

service is the cost incurred in supplying that service, excluding all costs which would be incurred if that service were not supplied.

Explanatory note: Conceptually, there are two possible approaches to ACAM:

- (a) the "bottom-up" approach which asks what the Financial Information
 Disclosures of Transpower and EDBs would look like if they only provided
 line business activities; and
- (b) the "top-down" approach which asks what the Financial Information Disclosures of Transpower and EDBs would look like if they ceased operating its Other business (assuming away transitional factors, such as redundancy costs and down-sizing of fixed assets).

With the bracketed assumption in (b), the bottom-up and top-down approaches should provide identical Financial Information Disclosures.

2.3 Avoidable Cost Allocation Methodology Principles

- 2.3.1 ACAM consists of two mandatory principles:
 - (a) Principle I: The stand-alone and incremental businesses are to be defined in such a way that:
 - i. the stand-alone business is confined solely to the provision of natural monopoly line business activities; and
 - ii. all contestable (and potentially contestable) activities and any other activities are provided by the incremental businesses.
 - Explanatory note: Defining the stand-alone and incremental businesses in this way may mean they provide each other with goods and services. Transfer payments are made for any goods and services the businesses provide each other.
 - (b) *Principle II:* The financial statement items (and components of the financial statement items) are allocated to the stand-alone and incremental businesses in such a way that:
 - those financial statement items (and components of the financial statement items) that would not be avoided if Transpower or EDBs did not operate the incremental business are allocated to the standalone business; and
 - ii. those financial statement items (and components of the financial statement items) that would be avoided if Transpower or EDBs did not operate the incremental business are allocated to the incremental business.

Explanatory note: Financial statement items that are directly attributable to one of the stand-alone or incremental businesses must be allocated to those businesses. Financial statement items that are

shared amongst either or both of the businesses must be allocated amongst those businesses, by:

- (a) directly allocating any components of those financial statement items which are directly attributable to one of the businesses; and
- (b) for any components of those financial statement items that are not directly attributable to one of the businesses:
 - (i) by assessing the proportions of those components which are avoidable and non-avoidable; and
 - (ii) allocating those components amongst the businesses on the basis of those proportions.

2.4 Exemption

- 2.4.1 If "Other" activities account in aggregate for less than 5 per cent of an EDB's Regulatory Asset Base <u>and</u> revenues in a particular financial year, these may be accounted for in the Line business or separately at an EDB's discretion for that financial year.
- 2.4.2 If "Other" activities account in aggregate for less than 5 per cent of Transpower's total assets <u>and</u> revenues in a particular financial year, these may be accounted for in the Line business or separately at Transpower's discretion for that financial year.

Explanatory note: Inclusion of "Other" activities in the Line business in these circumstances will have an insignificant impact on the (stand-alone) Line business Financial Information Disclosures.

2.5 Interpretation of the Avoidable Cost Allocation Methodology

2.5.1 This section provides mandatory rules that clarify how ACAM is to be interpreted.

Interpretation of Principle I: Boundary Between the Line Business and Other Business

- 2.5.2 Principle I specifies that the Line business is to be restricted to natural monopoly line business activities, and that contestable (and potentially contestable) activities and any other activities are to be allocated to the Other business. For the avoidance of doubt, Principle I has the following consequences:
 - Consumer disconnection/reconnection services must be allocated to the Other business. Transfer payments may be made from the Line business to the Other business for provision of disconnection/reconnection services by the Other business to the Line business.

Explanatory note: Disconnection/reconnection services are potentially contestable, and need not be provided by the Line business.

- Consumer based load control services must be allocated to the Other business. Transfer payments may be made from the Line business to the Other business for provision of consumer based load control services (including a charge for the provision of equipment) by the Other business to the Line business.
- AC loss rental rebates must be allocated to the Line business. AC loss rental rebates are treated as revenue to the Line business. Payment for transmission charges should be recorded gross of the rebate. If the Line business passes rebates directly on to electricity retailers or customers, this should be recorded as a separate expense item "AC loss-rental rebates (distribution to retailers/customers) expense".1
- Rebates to consumers due to ownership interest must be allocated to the Line business. These rebates are pre-tax rebates paid directly to consumers. They do not include prompt payment discounts, direct debit discounts or any similar discounts arising from some action by the consumer. They arise because the consumer has some sort of ownership interest in the Line business (including equitable ownership interest, e.g. trust beneficiary).
- Supervisory, Control and Data Acquisitions (SCADA) must be allocated to the Line business.

Explanatory note: SCADA equipment is used to enable continuous monitoring of parts of the electricity distribution network. SCADA equipment is an integral part of the network. Transfer payments to the Line business from the Other business should be made for the use of SCADA data.

- Centralised load control equipment must be allocated to the Line business.
 - Explanatory note: Centralised load control equipment is an integral part of the distribution network system.
- Consumer meters, meter reading and provision of meter reading (or processed energy) information must be allocated to the Other business.
 Transfer payments may be made from the Line business to the Other business for provision of metering data and information to the Line business.

Explanatory note: Metering is a contestable activity. While Line businesses may require metering data and information they do not need to provide these themselves.

 Contracting activities (e.g. line maintenance and construction) must be allocated to the Other business. Transfer payments may be made from the

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In this case there will be a revenue item, a transmission charge expense item (gross of rebate) and a separate expense item for the distribution to retailers/customers.

Line business to the Other business for the provision of contracting services to the Line business.

Explanatory note: Contracting activities can be provided to the Line business either externally or internally, and are contestable.

Investments, losses/gains on sale of investments and returns (dividends/interest) on investments (applies to Transpower only). Shortterm investments must be allocated between Line and Other businesses using Principle II of ACAM. Long-term investments must be allocated to the Other business.

Explanatory note: Short-term investments may substitute for holding cash in the bank, and are therefore legitimate for each of the Line business and Other business to hold. Note that these short-term investments and any interest earned from them are not to be included in the calculation of financial performance measures under the Disclosure Requirements or Distribution Disclosure Requirements. Long-term investments are not part of Line business activities.

Interpretation of Principle II: Allocating Financial Statement Items in a Consistent Manner

- 2.5.3 Principle II of ACAM requires that the financial statement items that are common to both the Line business and Other business (i.e. the financial statement items that are not directly allocable to one of the two businesses) should be allocated as if the Line business was a stand-alone business. For the avoidance of doubt, Principle II has the following consequences:
 - Intangible assets must be allocated to the Line business and the Other business in accordance with Principle II. This allocation applies to Transpower only.
 - Explanatory note: Intangible assets (including goodwill) may be common to each of the businesses. Any intangible assets not required for the operation of the distribution network should be allocated to the Other business.
 - Billing system (also used as connection and consumption databases). This asset and the associated costs are common to (or shared by) each of the Line and Other businesses. The asset and costs must be split between the Line business and the Other business using Principle II.
 - Explanatory note: Billing systems may be required for charging purposes for both Line business and Other business activities.
 - Merger and acquisition expenses. Where Transpower or an EDB is attempting to merge or acquire a Line business (with no Other business), allocate all merger or acquisition expenses to the Line business. Where Transpower or an EDB is attempting to merge or acquire an Other business (with no Line business), allocate all merger or acquisition expenses to the Other business. Where Transpower or an EDB is attempting to merge or

acquire a Line business and an Other business, the merger or acquisition expenses are to be treated as a common cost and allocated between the Line and Other businesses using Principle II. The allocation for EDBs is for note disclosure purposes only.

Explanatory note: Any of Transpower's or an EDB's businesses can be expected to potentially derive benefits from a merger or acquisition, and this should be reflected in the allocation.

- Take-over defence expenses must be treated as a common cost and allocated between the Line business and Other business using Principle II.
 - Explanatory note: Take-over defence expenses are the flip-side of mergers and acquisition expenses, and therefore may be allocated to each business.
- Research and development expenses must be allocated between the Line and Other businesses in accordance with Principle II. A Line business may purchase new products/processes developed as a result of any research and development programme of the Other business (transfer payment) or of any non-related party. This will be capital expenditure by the Line business if it is buying the license and operating expenditure if it is a royalty payment.
- Fixed assets and related depreciation must be allocated between the Line business and Other business in a consistent manner. This means that the proportion of depreciation on fixed assets that is allocated to the Line business is to be the same as the proportion of those assets that is allocated to the Line business. The same rule applies to loss on sale of fixed assets; impairment of fixed assets; and devaluation of fixed assets in excess of reserve.
- Capital works under construction must be allocated between the Line business and Other business in the same way as they will be allocated once the capital works have been completed and the resultant assets are operational.
- Short-term investments, bank balances, bank-overdrafts, capital notes, other borrowings and related interest. (Applies to Transpower only). Short-term investments and related interest are to be allocated between the Line business and Other business in a consistent manner. This means that interest allocated to the Line business must be based on the proportion of short-term investments that are allocated to the Line business during the relevant financial year. The same allocation rule applies to bank balances, bank-overdrafts, capital notes and other borrowings (whether current or non-current).
- Income tax. The amount of income tax allocated to the Line business is to be based on the tax liability that would arise from a taxable business earning the same operating surplus before tax as has been earned by the Line business. The allocation of income tax relates only to Transpower.
- Capital contributions and vested assets. Where capital contributions and vested assets comprise System Fixed Assets or other assets used solely by

the lines business, then they will be attributed accordingly. Where a particular capital contribution or asset vesting transaction involves a combination of lines business assets and assets used for Other activities, then their values should be allocated according to the ACAM Principles.

Debt and equity (applies to Transpower only). The allocation of debt and equity items to the Line business should be in accordance with the principles and rules of ACAM. Transpower should consider the hypothetical question: what would its debt:equity ratio be if it only operated the Line business, with no Other business? The allocation of debt and equity items must reflect the commercial reality of that Line business and Transpower would be expected, consistent with generally accepted accounting practice (GAAP), to apply an allocation basis that is consistent from one year to the next, with any change to the allocation methodology being disclosed as a change in accounting policy.

2.6 Statements of Cash Flows and Movements in Equity (applies to Transpower only)

- 2.6.1 In preparing the statement of cash flows, Transpower must follow GAAP.
- 2.6.2 Transpower must apply the same allocation method used for items in the statement of financial performance and the statement of financial position, when preparing disclosures of the corresponding items in the statement of cash flows and the statement of movements in equity.

2.7 Mergers, Acquisitions and Disposals

- 2.7.1 Under requirement 7 of the Disclosure Requirements (Transpower only) or requirements 3 and 4 of the Distribution Disclosure Requirements (for EDBs), where Transpower has acquired a Line business or effected a merger with a Line business during the financial year, Transpower or the EDB at the end of the financial year is required to include (in the Financial Information Disclosures) information in respect of the activities of the acquired or merged Line business from the date of acquisition or merger. Equally if a line business disposes of part of its line business during the financial year it is required to disclose financial information which include information relating to the business disposed of, up until the date of disposal.
- 2.7.2 In the case where Transpower or an EDB disposes of its line business in its entirety, they will have no information disclosure reporting obligations under the Disclosure Requirements or Distribution Disclosure Requirements following the end of the financial year.

2.8 Comparatives

2.8.1 Comparatives are only necessary where there is a specific requirement. For example, for EDBs, comparative information is required in the Schedule that

contains Report MP2. Some prior year data is required to be disclosed - for example in Report AV1, MP1 and AM1. For the disclosure of prior year figures, in relation to Financial Information Disclosures, or performance measures and statistics prepared under the Disclosure Requirements and Distribution Disclosure Requirements (to the extent that these are required), the following rules must be observed:

- (a) For the preparation of Financial Information Disclosures, Transpower and EDBs must use the comparative figures relating to the "Line business" disclosed in the preceding year's Financial Information Disclosures. Where previous years' figures are based on a cost allocation methodology different from the mandatory ACAM methodology used for the current year, the prior year's figures do not need to be recalculated.
- (b) Where this requirement results in a departure from GAAP, it is nonetheless recommended to minimise compliance costs. Audit reports required under requirement 30 of the Disclosure Requirements may need to be qualified if a departure from GAAP occurs where disclosure is required in accordance with GAAP. Form 1 in Schedule 3 of the Disclosure Requirements contains alternative wording for the auditor's report, including a requirement that the nature of the qualification be disclosed. The requirement in this paragraph relates to Transpower only.
- (c) Where any information is disclosed for the first time with respect to the current disclosure year, comparative figures are not required to be disclosed. Such first time disclosures may occur:
 - (i) in relation to items required to be disclosed as a result of new or amended disclosure requirements; and/or
 - (ii) where Transpower or an EDB had no disclosure obligations in earlier years.
- (d) For the preparation of performance measures and statistics, Transpower and EDBs must include performance measures relating to the financial years preceding the current disclosure year (see requirements 14(2)(b), 20(2) and 21(3) of the Disclosure Requirements and requirement 6(1) of the Distribution Disclosure Requirements). The comparative information required by requirement 14(2)(b) of the Disclosure Requirements and requirement 6(1) of the Distribution Disclosure Requirements must be adjusted (if and as required) so as to be consistent with regulatory disclosure accounting policies applied during the current financial year. However, adjustments are not required merely because of changes to the Disclosure Requirements. In particular, adjustments are not necessary as a result of a change to the methodology in the Disclosure Requirements for calculating the performance measures and statistics.

2.9 Separate Disclosure of Line Business Financial Statement Items

2.9.1 Under requirements 5 and 6 of the Disclosure Requirements and requirement 3 of Distribution Disclosure Requirements, Transpower and EDBs must

separately identify in their Financial Information Disclosures the monetary amount of those items specified in Part 2 of Schedule 1 of the Disclosure Requirements and each of the line items in Schedules 2 to 4 of the Distribution Disclosure Requirements. Those items must be separately identified even where the monetary amount associated with them is nil.

- 2.9.2 Transpower must also separately disclose any financial statement items (assets, liabilities, revenue and expenses) not separately itemised in Part 2 of Schedule 1 of the Disclosure Requirements that comprise a material proportion of the revenue, cost, asset, or liability category in which they are classified. When disclosing these financial statement items, they should be listed under the category in which they are classified.
- 2.9.3 Transpower and EDBs must also separately disclose all items of a size, nature, or incidence where their disclosure is necessary for an understanding of the business to which the disclosure relates.

3 Disclosure of Transfer Payments and Other Related Party Disclosures

- 3.1 Requirements under the Disclosure Requirements and Distribution Disclosure Requirements
- 3.1.1 Requirement 8 of the Disclosure Requirements requires Transpower and EDBs, to disclose information relating to transfer payments and other related party transactions (both income and expenditure, including certain capital expenditure) made between the Line business and the Other business or between the Line Business and any other party in a "related party" relationship. Related party transactions are to be included in the Financial Information Disclosures, which are to be prepared as if the Line and Other businesses were operated at arm's length. In the case of Transpower, related party transactions are to be disclosed as notes to the Financial Information Disclosures required under Requirement 5 of the Disclosure Requirements. In the case of EDBs the related party transactions are to be disclosed as notes to the Financial Information Disclosures required under requirement 3 of the Distribution Disclosure Requirements, pursuant to clause 14(2) of the Distribution Disclosure Requirements.
- 3.1.2 The rationale for such disclosures is to make transparent the pricing of transfers between contestable and non-contestable business activities and thus highlight any abuse of market power.
- 3.1.3 Essentially, requirement 8 requires disclosure of details of transfers between the Line business and the Other businesses with which they are in a related party relationship for example, between a Line business and its asset construction and maintenance businesses.
- 3.1.4 The disclosure of related party transactions under the Disclosure Requirements involves disclosure of the information specified in the requirements. In particular, the following information relating to transactions (both revenue and expenditure, including certain capital expenditure) between related parties is required:
 - the identity of each related party involved and the nature of the relationships; and
 - a detailed description of the good or service provided or received; and
 - the unit price, quantity and recorded income and expenditure values as appropriate, of the transactions with each related party, expressed in dollar terms of each type of good or service; and
 - the period during which the good or service was supplied; and

- the total outstanding balances arising from related party transactions for each related party together with an indication of the terms of settlement for these balances; and
- total debts with each related party that have been written off or forgiven during the financial year; and
- where transactions take place at nil or nominal value, a brief description of these transactions and the fact that no charge has been made, or if made at nominal value, details of that nominal value.
- 3.1.5 Furthermore, to enable scrutiny of the appropriateness of transfer payments for asset construction activities, Line businesses that are EDBs are required to disclose disaggregated details, in the following categories (as outlined in the ODV Handbook):
 - subtransmission assets;
 - zone substations:
 - distribution and LV lines
 - distribution and LV cables;
 - distribution substations and transformers;
 - distribution switchgear; and
 - other system fixed assets, as categorised in standard asset tables in the ODV Handbook.
- 3.1.6 Transfer payments relating to maintenance expenditure on system fixed assets are also required, but there is no need for them to be disaggregated as above. It is sufficient to disclose the total of such payments.
- 3.1.7 Transfer payments relating to consumer connections and disconnections are also specifically required to be disclosed.
- 3.1.8 It is mandatory for Transpower and all EDBs to disclose the above information, which must be included within the notes to the Financial Information Disclosures.
- 3.1.9 Transpower and EDBs applying the exemption referred to in Chapter 2 (paragraph 2.4.1) must eliminate from their Financial Information Disclosures any transfer payments that were made during the financial year, so as to reflect that no transfer payments took place. No disclosure of transfer payments would be required under requirement 8 of the Disclosure Requirements.

4 Disclosure of Line Business Asset Management Plans

Amendments to this chapter of the Handbook dated 31 March 2008 apply in respect of the financial year beginning 1 April 2009 and subsequent financial years.

4.1 Disclosure Requirements for Asset Management Plans

- 4.1.1 Under requirement 7 of the Distribution Disclosure Requirements, every EDB is required to disclose an asset management plan (AMP) in relation to their works.
- 4.1.2 Disclosure of AMPs is consistent with the information disclosure regime's objective of promoting the efficient operation of markets directly related to electricity distribution services. It does this by:
 - a) simulating the efficiency drivers of a competitive environment by allowing both external and internal stakeholders to compare the performance of an EDB against its peers; and
 - b) encouraging EDBs to improve the efficiency and effectiveness of their operations by adopting best practice asset management processes.
- 4.1.3 This chapter sets out the mandatory disclosure requirements with respect to AMPs and provides a commentary on those requirements. The purpose of the commentary is to provide guidance on the expected content of disclosed AMPs. It has been prepared on the basis that EDBs will implement best practice asset management processes.
- 4.1.4 Disclosure of an AMP entails:
 - a) making copies available for inspection at the principal office of the EDB;
 - b) providing a copy (by post or for collection) to any person who requests it;
 - c) publishing the AMP on the Internet at the EDB's normal publicly accessible website address (Uniform Resource Locator URL); and
 - sending copies of all publicly disclosed information (including AMPs and URLs) to the Commerce Commission within five working days of disclosure.

4.2 Core Elements of Asset Management

- 4.2.1 A number of approaches can be taken to the development of AMPs. Best practice calls for AMPs that:
 - a) focus on performance measurement, monitoring and continuous improvement;
 - b) are closely aligned with corporate vision and strategy:

- c) are driven by business objectives and service level targets;
- d) clearly assign responsibilities and accountabilities for asset management;
- e) emphasise knowledge of what assets are owned and why, the location of the assets and the condition of the assets:
- f) emphasise optimising asset utilisation and performance;
- g) encourage the use of "non-network" solutions and demand management techniques as alternatives to asset acquisition; and
- h) take a total life cycle approach.

4.3 Disclosure Criteria

- 4.3.1 AMP disclosure should provide sufficient assurance of the suitability of network assets for meeting future and current service targets in a cost-effective manner. It should also provide a sound basis for the ongoing assessment of asset-related risks, particularly high impact asset-related risks.
- 4.3.2 Disclosure requirements for AMPs include what may be regarded as "core" and "non-core" elements of asset management and are designed to produce AMPs that:
 - a) are based on, but not limited to, the core elements of asset management identified in clause 4.2.1;
 - b) explicitly support service level objectives;
 - c) ensure unambiguous and consistent definitions of asset management processes, promote best practice, and maximise comparability; and
 - d) keep compliance costs to a minimum.
- 4.3.3 AMP disclosure does not prevent EDBs from having AMPs for their own use in a different format or comprising a different set of data. However where a different format is used, all the information required under the Handbook must still be included in the disclosed AMP. In addition, this information must be easy to locate and extract from the disclosed AMP.
- 4.3.4 The disclosure of an AMP does not constrain an EDB from managing their assets in a way that differs from the plan if circumstances change after preparation of the plan, or if improved asset management practices are adopted.
- 4.3.5 Every AMP must be approved by the Board of Directors of that EDB. The date of approval shall be clearly stated in the AMP.

4.4 Asset Management Plans

- 4.4.1 Distribution businesses must disclose a current AMP in accordance with requirement 7 of the Distribution Disclosure Requirements.
- 4.4.2 AMPs must be disclosed by the start of each financial year.

Explanation: AMPs are dynamic documents that are normally updated annually. AMPs will support performance measure disclosures and performance assessment.

4.4.3 AMPs must include a summary.

Explanation: The inclusion of a summary aids understanding and readability, and also provides an opportunity for EDBs to emphasise important content.

4.4.4 Disclosed AMPs must consist of a single document containing all information necessary to allow the document to be fully understood by a reader with a reasonable understanding of the management of electricity distribution assets.

Explanation: Disclosure of AMPs as a single document will prevent disclosure of disjointed, poorly coordinated material that is difficult to understand. In some cases EDBs may choose to include other documents in their disclosed AMP for example, separate network development plans. This does not necessarily require integration of separate plans into a single framework if the linkages between parts of the plan are made and indexed.

4.4.5 The disclosed AMP must:

- a) enable the suitability of asset management practice and assets for current and future service:
- b) specifically support the achievement of disclosed service level targets; and
- c) provide a sound basis for ongoing risk assessment.

Explanation: Disclosed AMPs must be presented in a manner that meets the needs of external users.

- 4.4.6 Disclosed AMPs must clearly identify limitations in availability or completeness of information, and include:
 - a) details of the basis for asset management planning, including assessment of the methodologies used;
 - b) the information required by Requirement 7(2); and

c) details of plans for improvement in information quality.

Explanation: The detail and accuracy of information available will vary. Information gaps should be specifically addressed to enhance the transparency of disclosure, place emphasis on identifying deficiencies and promote improvement.

4.5 Content of Disclosed Asset Management Plans

4.5.1 Summary of the Asset Management Plan

The AMP is to include a summary that provides a brief overview of the contents of the plan and highlights information that the EDB considers significant.

4.5.2 Background and Objectives

The AMP must include details of the asset management plan background and the objectives of the EDB's asset management and planning processes including:

a) the purpose of the plan;

Explanation: For some EDBs the disclosed AMP is also a key internal planning document. Other EDBs base their asset management processes around other planning documents and produce the disclosed AMP purely to meet regulatory requirements. The purpose statement should clearly state the intention of the business in preparing the disclosed document. If the AMP is intended to describe asset management processes documented elsewhere in order to meet information disclosure requirements, this should be stated; otherwise the wider purpose of the document and the manner in which it is used by the EDB should be described. It should be noted that the objective of the AMP disclosure requirement is to encourage the development of best practice asset management processes. Therefore the disclosed AMP must contain sufficient information to allow stakeholders to make an informed judgement as to the extent that an EDB's asset management processes meet best practice criteria.

The purpose statement should also state the objectives of the EDBs asset management and planning processes. These should be consistent with the EDB's vision and mission statements, and show a clear recognition of stakeholder interest.

 a description of the interaction between those objectives and other corporate goals, business planning processes, and plans; Explanation: Best practice asset management and planning processes are integrated with other business plans and goals. The AMP should describe this relationship. In particular, it should:

- state the high level corporate mission or vision as it relates to asset management;
- (ii) identify the documented plans produced as outputs of the annual business planning process adopted by the EDB; and
- (iii) describe how the different documented plans relate to one another, with particular reference to any plans specifically dealing with asset management.
- c) the period covered by the plan, and the date the plan was approved by the board of directors of the EDB;

Explanation: The AMP must cover at least a projected ten year asset management planning period. Good asset management practice recognises the greater accuracy of short-to-medium term planning, and will allow for this in the AMP. Hence the asset management plans for the second five years of the asset management planning period need not be presented in the same detail as the near term plans.

d) a description of stakeholder interests (owners, consumers etc);

Explanation: Recognising and accommodating stakeholder interests are key parts of the AMP. AMPs should therefore identify important stakeholders and indicate:

- (i) how the interests of stakeholders are identified;
- (ii) what these interests are:
- (iii) how these interests are accommodated in asset management practices; and
- (iv) how conflicting interests are managed.
- e) a description of the accountabilities and responsibilities for asset management within the EDB; and

Explanation: An AMP should consider the accountability and responsibility for asset management on at least three levels:

- (i) governance;
- (ii) executive; and
- (iii) field operations.

At the governance level, the AMP should describe the extent of Board approval required for key asset management plans and decisions and the extent to which asset management outcomes are regularly reported to the Board.

At the executive level the AMP should provide an indication of how the inhouse asset management and planning organisation is structured.

At the field operations level it should comment on how field operations are managed, the extent to which field work is undertaken in-house and the areas where outsourced contractors are used.

f) details of asset management systems and processes, including asset management systems/software and information flows.

Explanation: The key systems used to hold asset data used in the asset management process should be identified, with the data held in each system and what it is used for. Good asset management practice requires that all assets are identified and the asset type, capacity and condition recorded. The AMP should identify areas where asset data is incomplete or inaccurate, and should disclose any initiatives to improve the quality of this data.

The processes used within the business for:

- (i) managing routine asset inspections and network maintenance;
- (ii) planning and implementation of network development projects; and
- (iii) measuring network performance for disclosure purposes should be described.

4.5.3 Assets Covered

The AMP shall include details of the assets covered including:

a) a high-level description of the distribution area;

Explanation: The AMP should describe at a high level the distribution areas covered by the EDB and the degree to which these are interlinked. The description should include:

- (i) the distribution area(s) covered;
- (ii) identification of large consumers that have a significant impact on network operations or asset management priorities;
- (iii) description of the load characteristics for different parts of the network; and
- (iv) the peak demand and total electricity delivered in the previous year, broken down by geographically non-contiguous network, if any.
- b) a description of the network configuration;

Explanation: The AMP should include a description of the network configuration that should include:

(i) identification of bulk electricity supply points and any embedded generation with a capacity greater than 1 MW. The existing firm supply capacity and current peak load of each bulk supply point should be stated;

- (ii) a description of the sub-transmission system fed from the bulk supply points, including identification and capacity of zone substations and the voltage of the sub-transmission network. The AMP should identify the extent to which individual zone substations have n-x subtransmission security;
- (iii) a description of the distribution system, including the extent to which it is underground;
- (iv) a brief description of the network's distribution substation arrangements;
- (v) a description of the low voltage network including the extent to which it is underground; and
- (vi) an overview of secondary assets such as ripple injection systems, SCADA and telecommunications systems.

If non-contiguous networks exist, these should be noted and treated as separate distribution areas.

c) a description of the network assets by category, including age profiles and condition assessment; and

Explanation: Each asset category used in the network should be discussed, providing at least the following information for each category:

- (i) voltage levels;
- (ii) description and quantity of assets;
- (iii) age profiles;
- (iv) value of the assets in the category (which can be drawn from the ODV disclosure or other record bases kept by an EDB); and
- (v) a discussion of the condition of the assets, further broken down as appropriate. Systemic issues leading to the premature replacement of assets or parts of assets should be discussed.

The asset categories discussed should include at least the following:

- (i) assets owned by the EDB but installed at bulk supply points owned by others;
- (ii) sub-transmission network including power transformers;
- (iii) distribution network including distribution transformers;
- (iv) switchgear;
- (v) low voltage distribution network; and description of supporting or secondary systems including:
 - ripple injection plant;
 - SCADA:
 - communications equipment;
 - metering systems;
 - power factor correction plant;

- EDB owned mobile substations and generators whose function is to increase supply reliability or reduce peak demand; and
- other generation plant owned by an EDB.

While asset quantities must be presented in a way that fairly describes the size of the asset base, detailed schedules similar to those presented in an optimised deprival valuation are not necessary. However, where disclosed quantities or other asset related information is based on estimates, this should be explicitly stated.

d) the justification for the assets.

Explanation: The basic justification for an EDB's asset base is that it is the minimum required to provide electricity of sufficient capacity and reliability to all consumers, accommodating reasonable growth forecasts. Network standards could differ between different parts of a network.

The extent that an existing network is over-designed is reflected in the optimisation process completed when undertaking an ODV valuation. An explanation of the network optimisation included in the last ODV report could therefore be provided to satisfy this requirement.

EDBs may choose to include in this section a discussion on assets that are excluded from the ODV valuation in accordance with clause 2.6 of the ODV Handbook. EDBs may also discuss assets they consider to be justified, even though these assets have been optimised out of the ODV valuation on account of the optimisation requirements.

4.5.4 Service Levels

Explanation: Best practice requires that any performance indicators should be objectively measurable and be suitable for applying consistently across the network and over time. All indicators used as the basis for performance targets should be clearly defined in the AMP in order for it to be a self contained document. Targets should be consistent with business strategies and asset management objectives, and be provided for each year of the AMP planning period.

The disclosed AMP must include details of the proposed levels of service including:

a) consumer oriented performance targets;

Explanation: As a minimum, the reliability performance measures used for threshold compliance assessment (SAIDI, SAIFI) should be included. It is preferable for consumer orientated performance targets to differentiate between different parts of the network, such as between urban and rural areas.

b) other targets relating to asset performance, asset efficiency and effectiveness, and the efficiency of the line business activity; and

Explanation: This section should include technical and financial performance indicators related to the efficiency of asset utilisation and operation.

c) the justification for target levels of service based on consumer, legislative, regulatory, stakeholder, and other considerations.

Explanation: The basis on which the target level for each performance indicator was determined should be indicated, even if the justification is that the target is indicative of current performance levels.

Targets should take account of stakeholder requirements and reflect what is practically achievable given current network configuration, condition and planned expenditure levels. It should be demonstrated in the AMP how stakeholder needs were ascertained and, where appropriate, translated into service level targets.

4.5.5 Network Development Planning

Disclosed AMPs must include a detailed description of network development plans, including:

a) a description of the planning criteria and assumptions;

Explanation: Planning criteria for network developments should be described logically and succinctly. Where probabilistic planning techniques are used, this should be indicated and the methodology briefly described.

The AMP should also describe the criteria used for determining the capacity of new equipment for different types of assets or different parts of the network. These relate to the philosophy of the business in the management of planning risk.

b) a description of the prioritisation methodology adopted for development projects;

Explanation: The process and criteria for prioritising network development projects should be described. These should be aligned with the overall corporate goals and vision.

c) details of demand forecasts, the basis on which they are derived, and the specific network locations where constraints are expected due to forecast load increases:

Explanation: The load forecasting methodology used should be explained, indicating all the factors used in preparing the estimates.

Load forecasts should be broken down to at least the zone substation level, covering the whole AMP period. The impact of uncertain, but

substantial individual projects/developments should be discussed and the AMP should make clear the extent to which these uncertain load requirements are reflected in the load forecast.

Load forecasting should take into account the impact of any embedded generation or anticipated levels of distributed generation in a network, and the projected impact of any demand management initiatives.

Network or equipment constraints anticipated due to the anticipated load growth during the AMP should be identified.

d) policies on distributed generation;

Explanation: As increasing number of owners of small generators seek connection to distribution networks, distributed generation is anticipated to have an increasingly important influence on network operation and design. AMPs should describe the policies of an EDB's in relation to the connection of embedded generation. The impact of such generation on network development plans should be stated.

e) policies on non-network solutions;

Explanation: Economically feasible and practical alternatives to conventional network augmentation should be discussed in this section. These are typically approaches that would reduce network demand and/or improve asset utilisation. This section should also include discussion on the potential for distributed generation or other non-network solutions to address network problems or constraints.

- f) analysis of the network development options available and details of the decisions made to satisfy and meet target levels of service; and
- g) a description and identification of the network development programme (including distributed generation and non-network solutions) and actions to be taken, including associated expenditure projections.

Explanation: The network development plan should include:

- (i) a detailed description of the projects currently underway or planned to start in the next twelve months;
- (ii) a summary description of the projects planned for the next four years; and
- (iii) a high level description of the projects being considered for the remainder of the AMP planning period.

For projects where decisions have been made, the reasons for choosing the selected option should be stated. For other projects planned to start in the next five years, alternative options should be discussed, including the potential for non-network approaches to be more cost effective than network augmentations.

Forecast expenditure and reconciliations shall be provided and prepared in

accordance with Appendix A. Capital budgets should be broken down sufficiently to allow an understanding of expenditure on all the main types of development projects. Overhead to underground conversion projects should be separately indicated. Renewal and refurbishment projects should be included in the capital budget, although they are considered maintenance related works. The cost of major development projects should be separately identified in the capital budget.

Minor capital works, or works related to whole categories of assets that have not been previously identified, may be discussed and budgeted in aggregate.

4.5.6 Lifecycle Asset Management Planning (Maintenance and Renewal)

Disclosed AMPs must include a detailed description of lifecycle asset management plans, including:

a) a description of maintenance planning criteria and assumptions;

Explanation: The key drivers for maintenance planning should be described.

b) a description and identification of routine and preventative inspection and maintenance policies, programmes, and actions to be taken for each asset category, including associated expenditure projections;

Explanation: The approach to inspecting and maintaining all asset management categories should be described, including a description of the types of inspections, tests and condition monitoring carried out and the intervals at which this is done.

Systemic problems identified with any particular asset type should be highlighted and the actions to address these should be discussed.

Budgets for maintenance activities broken down by asset category should be provided for the whole AMP period.

- c) a description of asset renewal and refurbishment policies;
- a description and identification of renewal or refurbishment programmes or actions to be taken for each asset category, including associated expenditure projections; and

Explanation: Asset renewal and refurbishment should be separately discussed, - although these are capital expenditure items they are not network development related and are therefore classed under maintenance. The process for deciding when and whether asset should be replaced or refurbished should be explained, as well as the factors on which these decisions are based.

The discussion of renewal and refurbishment projects should include:

(i) a detailed description of the projects currently underway or planned for the next twelve months:

- (ii) a summary description of the projects planned for the next four years; and
- (iii) a high level description of other work being considered for the remainder of the AMP planning period.

The budget for renewal or refurbishment should be included as part of the capital budget.

Forecast expenditure and reconciliations shall be provided and prepared in accordance with Appendix A.

e) asset replacement and renewal expenditure (which must be separately identified in the capital budget).

Forecast expenditure and reconciliations shall be provided and prepared in accordance with Appendix A.

4.5.7 Risk Management

Disclosed AMPs must include details of risk policies, assessment, and mitigation, including:

- a) methods, details, and conclusions of risk analysis; and
- b) details of emergency response and contingency plans.

Explanation: Asset risk management forms a component of an EDB's overall risk management plan or policy, focusing on the risks to assets and maintaining service levels. AMPs should demonstrate how the EDB identifies and assesses asset related risks and describe the main risks thus identified. The focus should be on credible low-probability, high-impact risks and how they will be managed.

Risk evaluation may highlight the need for specific development projects or maintenance programmes. Where this is the case, the resulting projects or actions should be discussed, linking back to the development plan or maintenance programme.

4.5.8 Evaluation of Performance

Disclosed AMPs must include details of performance measurement, evaluation, and improvement, including:

Explanation: A key outcome of an AMP is the identification of significant asset performance gaps that need to be addressed, or to adjust service level and asset performance targets to more appropriate levels.

a) a review of progress against plan, both physical and financial;

Explanation: Actual capital expenditure should be compared against that planned in the previous AMP and any significant differences discussed. The progress of development projects against plan should be assessed

and reasons for substantial variances highlighted, along with any significant construction or other problems experienced.

Actual maintenance expenditure should be compared against that planned in the previous AMP and reasons for significant differences discussed. Progress against maintenance initiatives and programmes should be assessed and discussed and the effectiveness of these programmes noted.

b) an evaluation and comparison of actual performance against targeted performance objectives; and

Explanation: Service level and asset performance measurement should be carried out for all the targets discussed under the Service Levels section of the AMP. A comparison of actual against target performance for the year preceding the AMP should be provided, with an explanation for any significant variances.

c) a gap analysis and identification of improvement initiatives.

Explanation: Where significant gaps between targeted and actual performance exist, the action to be taken to address the situation (if not caused by one-off factors) should be described.

It is good practice to also review the overall quality of asset management and planning processes and the AMP itself, and to discuss any initiatives for improvement.

4.5.9 Expenditure Forecasts and Reconciliations

Disclosed AMPs must include:

- a) forecasts of capital and operating expenditure for the minimum ten year asset management planning period; and
- b) reconciliations of actual expenditure against forecasts for the most recent financial year for which data is available.

Explanation: Expenditure forecasts and reconciliations shall be prepared in accordance with Appendix A. For the avoidance of doubt, these include forecast expenditure required under subclauses 4.5.5(g), 4.5.6(d) and 4.5.6(e). Sections A and B of the Appendix A report for the Financial year ending 31 March 2008 or 31 March 2009 need include only:

- a. the "Actual for Current Financial Year" for the line items "Subtotal – Capital Expenditure on Asset Management", "Subtotal – Operational Expenditure on Asset Management" and "Total Direct Expenditure on the Distribution Network"; and
- b. in the case of the Appendix A report for the Financial year ending 31 March 2009, all information (including all line

items) for all of the forecast years specified in part A of Appendix A.

It should be noted that asset management expenditure forecasts, *for the first 5 years of the plan*, derived from the most recent Asset Management Plan, are required to be disclosed with other financial statements (i.e Report AM1, Schedule 12 of the Distribution Disclosure Requirements). This report is required to be audited, in accordance with Distribution Disclosure Requirement 10, which refers to Distribution Disclosure Requirement 7(5).

Appendix A – Expenditure Forecasts and Reconciliation Template

	For initial forecast year ending (year 1) Forecast Year ar 5 year 6 year 7 year 8 year 9 year 10				
TION	year1 year2 year3 year4 year5			Actual for forecast for most recent francial Financial Financial Financial Foat wear year of the following the following for the following	
ENDITURE FORECASTS AND RECONCILIA	Actual for most forecast for recent Financial Year - Year - Year of for year ended		emead to Underground Sategories	one than 10%	Explanatory Notes (can be provided in a separate note if necessary):
ASSET MANAGEMENT PLAN REQUIREMENT: EXPENDITURE FORECASTS AND RECONCILIATION	A) Ten Yearly Forecasts of Expenditure Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Reliability. Safety and Emrironment Capital Expenditure: Asset Relocations Sultotal - Capital Expenditure - Asset Relocations	Operational Expenditure: Routine and Preventative Maintenance Operational Expenditure: Refublishment and Renewal Maintenance Operational Expenditure: Fault and Emergency Maintenance Subtotal - Operational Expenditure on Asset Management Total Direct Expenditure on Distribution Network	Overhead to Underground Conversion Expenditure The Electricity Distribution Business is to provide the amount of Overhead to Underground Conversion Expenditure included in each of the above Expenditure Categories (explanatory notes can be provided in a separate note if necessary):	B) Variance between Actual Expenditure and Previous Year Forecasts Capital Expenditure: Customer Connection Capital Expenditure. System Growth Capital Expenditure. System Replacement and Renewal Capital Expenditure. Asset Replacement and Renewal Capital Expenditure. Resiability. Safety and Emironment Capital Expenditure. Reliability. Safety and Emironment Capital Expenditure. Reliability. Safety and Management Operational Expenditure. But and Emergency Maintenance Operational Expenditure. Reliability and Renegancy Maintenance Coperational Expenditure on Distribution Network Explanation of Variance More than 10% Distribution Business must provide a detailed exclanation for any line item variance of more than 10%	Expo
ASSET	<u>\$</u> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	£ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	20 20 20 20 20 20 20 20 20 20 20 20 20 2		