

Information Disclosure Requirements for Electricity Transmission and the System Operator: Transpower New Zealand Limited

Reasons for Draft Decision

Date: 21 October 2013

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Executive summary

- X1 This paper provides our reasons for setting information disclosure (ID) requirements for Transpower and seeks your feedback on the information we consider should be disclosed. Our draft ID requirements are set out in the *Transpower New Zealand Limited Information Disclosure Draft Determination 2014* (the draft ID determination).
- X2 You are invited to provide your views on the proposed requirements.
- X2.1 Submissions are due by 19 December 2013.
- X2.2 Cross-submissions are due by 27 January 2014.
- X3 We expect to reach a final decision by 28 February 2014. The information disclosure requirements will then apply to Transpower for the 2015 disclosure year, ie, the year ending 30 June 2015.

What is information disclosure

- X4 Information disclosure is a form of light handed regulation that provides incentives for organisations to improve their performance such that outcomes are consistent with those found in workably competitive markets. It operates by requiring the regulated organisation to regularly and consistently make information about its business available to people outside the organisation. This creates transparency about how well a supplier is performing.
- X5 This information allows people interested in the organisation to assess its relative performance and performance over time. This could include comparing statements of expected results with the actual outcomes.

Purpose of information disclosure

- X6 We are required under Part 4 of the Commerce Act 1986 (the Act) to set information reporting requirements for Transpower. Information disclosure requirements have already been determined for airports, electricity distribution businesses, gas distribution businesses and gas transmission businesses.
- X7 The purpose of ID is to ensure sufficient information is available for interested persons to assess whether the purpose of Part 4 of the Act is being met. More specifically, Transpower's regulation should promote the long-term benefit of consumers by promoting outcomes that are consistent with outcomes produced in competitive markets such that Transpower:
- X7.1 has incentives to innovate and invest, including in replacement, upgraded and new assets,
- X7.2 has incentives to improve efficiency and provide services at a quality that reflects consumer demands,

- X7.3 shares with consumers the benefits of efficiency gains in the supply of regulated goods or services, including through lower prices, and
- X7.4 is limited in its ability to extract excessive profits.
- X8 The term 'interested persons' is not defined in the Act. We interpret 'interested persons' broadly to include persons who are affected by the way in which regulated services are provided, whether they take an active interest in the performance of Transpower or not. Accordingly, we consider interested persons to include:
- X8.1 Transpower,
- X8.2 regulated suppliers (this includes electricity distribution businesses (EDBs), gas pipeline businesses (GPBs) and airports),
- X8.3 consumers and consumer groups,
- X8.4 electricity retailers, electricity generators, and their representative groups,
- X8.5 central government and regional authorities,
- X8.6 other regulatory agencies, such as the Electricity Authority,
- X8.7 any other stakeholder of the regulated supplier, including investors and their advisors (such as equity analysts and other professional advisors), and owners of regulated suppliers, and
- X8.8 the Commerce Commission.

Process for developing information reporting requirements

- X9 In setting the draft ID determination, we have considered what information is required to assess whether the purpose of Part 4 is being met. We have taken into account several factors including:
- X9.1 the input methodologies that apply to Transpower,¹
- X9.2 Transpower's current information disclosure reporting obligations (the Electricity Distribution (Information Disclosure) Requirements 2008),
- X9.3 the Transpower ID workshop held in September 2012 and views expressed at this workshop,

¹ The Transpower Input Methodologies Determination [2012] NZCC 17 and the Re Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2

- X9.4 Transpower's current compliance reporting requirements in the Individual price-quality path determination (the IPP determination),
 - X9.5 annual information reporting requirements contained in the Capital Expenditure Input Methodology (the Capex IM),
 - X9.6 Transpower's obligation under the Capex IM to produce an Integrated Transmission Plan (ITP),
 - X9.7 additional information Transpower produces, either voluntarily or as required by other regulatory bodies,
 - X9.8 Transpower's current capabilities to produce required information,
 - X9.9 information disclosure requirements in place for EDBs, GPBs and airports,
 - X9.10 the costs to Transpower of complying with the proposed information reporting requirements.
- X10 Our process has been to evaluate the information Transpower is already reporting and to build on this to arrive at a suite of information we consider interested persons need to assess whether the purpose of Part 4 is being met.
- X11 To reach a view on what information should be included, we have developed questions we consider interested persons would ask, and have considered what information they would need to answer these questions. These questions are:
- X11.1 is Transpower operating and investing in its assets efficiently?
 - X11.2 is Transpower innovating where appropriate?
 - X11.3 is Transpower providing services at a quality that reflects consumer demands?
 - X11.4 is Transpower sharing the benefits of efficiency gains with consumers, including through lower prices?
 - X11.5 do the prices charged by Transpower promote efficiency?
 - X11.6 is Transpower earning an appropriate economic return over time?

Proposed information disclosure requirements

- X12 The draft determination requires Transpower to disclose information in the following information categories:
- X12.1 financial information,
 - X12.2 grid management information,
 - X12.3 system operator information.

X13 The information asked for in the information disclosure requirements is to be disclosed by way of templates we have developed. This ensures that the information provided by Transpower is consistent from year to year and disclosed in a format which is easily accessible to interested persons, and can also be used by the Commission to perform its summary and analysis functions.

X14 Table X1 below summarises key features of the draft ID requirements:

Table X1 Summary of information disclosure requirements

Information category	Proposed information requirements	Where the requirements are discussed in this paper
Financial information	ROI, regulatory profit, regulatory asset base, expenditure, revenues, economic value account, pricing, related party transactions	Chapter 4
Grid management information	Quality, asset management information, composition of grid information	Chapter 5
System operator information	ROI, regulatory profit, expenditure, quality	Chapter 6

X15 The draft ID determination requires disclosure of historical financial information. For these disclosures, Generally Accepted Accounting Principles (GAAP) is the starting point but has been modified where necessary for regulatory purposes, including through the application of input methodologies.

X16 Transpower is required to produce and publish an ITP. To avoid unnecessary duplication, the majority of the information contained in the ITP that we consider is needed to satisfy the purpose of ID is not a requirement of the draft ID determination.

X17 Transpower is also required to produce and publish an annual compliance monitoring statement under the IPP determination. We consider that interested persons need this price-quality path compliance information for the purposes of ID. Again, to avoid unnecessary duplication, the draft ID determination does not require this information.

X18 Where we consider that information contained in either the ITP or the annual compliance monitoring statement is needed in a template form as data, we have required this in the draft ID determination. The reasoning for requiring this information in template form is to ensure that the actual data is disclosed and not just a graphical representation of the data; or to ensure consistent disclosure from year to year.

- X19 An Asset Management Maturity Assessment Tool (AMMAT) has been developed to assist Transpower in disclosing on a consistent basis the maturity of its asset management practices. The AMMAT is part of ID requirements for all EDBs and GPBs.
- X20 We propose different audit and director certifications depending upon the nature of the information being disclosed. Audit reports will be required for annual disclosures of historic information. Forecast information is also required to be audited. However, the source data used for forecasts is not required to be audited.

1. Introduction

- 1.1 This introduction outlines the purpose and scope of this reasons paper on the draft information disclosure (ID) requirements for Transpower New Zealand Limited (Transpower). The ID requirements will be set by the Commerce Commission (the Commission) under the Commerce Act 1986 (the Act).²

Purpose of this paper

- 1.2 This paper seeks your feedback on the draft ID requirements we have set for Transpower in the *Transpower New Zealand Limited Information Disclosure Draft Determination 2014* (the draft ID determination), and the Schedules that accompany the draft ID determination.³
- 1.3 The process for providing your feedback, and how we will reach our final decision, is also outlined below.
- 1.4 The remainder of this paper explains why we propose setting ID requirements for Transpower and provides reasons for seeking the information set out in the draft determination.

Consultation to date

- 1.5 In developing the draft ID determination, we sought input from Transpower and other industry participants to help us limit unnecessary additional cost, and enhance the usefulness of the information disclosed by Transpower.
- 1.6 We have also taken account of Transpower's views on various matters, such as the form in which Transpower best meets its existing reporting obligations, and how certain measures are best calculated eg, how return on investment is calculated.
- 1.7 There was also a significant amount of consultation when we developed ID requirements for other regulated sectors. We have taken the views and concerns expressed during these consultation phases into account when developing the draft ID requirements.

Invitation to provide your views

- 1.8 We seek the views of people interested in Transpower's performance, Transpower's price-quality decisions and in assessing if the purpose of Part 4 of the Act is being met for Transpower. This may include the consumers of Transpower's electricity

² The legal framework for the regulation of Transpower and the application of ID is provided in Attachment A.

³ A copy of the draft determination and accompanying schedules is available on our website at <http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-information-disclosure/>

lines service, representatives of these consumers or other organisations that interact with Transpower.

- 1.9 You are invited to provide your views on the proposed ID requirements, any aspect of this paper, or any other issue that you think should be before us in reaching a decision.
- 1.9.1 submissions are due by 19 December 2013.
- 1.9.2 cross-submissions are due by 27 January 2014.
- 1.10 We do not expect to be able to take any material provided outside of the timeframes shown into account.
- 1.11 All submissions and cross-submissions should be sent by email to regulation.branch@comcom.govt.nz. Please title the email '[your organisation name] submission/cross-submission on Transpower Draft ID requirements 2014.'
- 1.12 We intend to publish all submissions and cross-submissions on our website. Please provide your submission in a form that readily enables us to do this, and allows us to copy and paste submissions for our analysis.

Reaching a final decision on Transpower's ID requirements

- 1.13 We expect to finalise the ID requirements for Transpower by 28 February 2014, subject to any issues raised in our consideration of the views expressed by interested persons. These ID requirements will then apply to Transpower and replace the current set of ID reporting requirements.⁴
- 1.14 Once we have set Transpower's ID requirements, we will consider how to consolidate other reporting requirements set as part of the regulation of Transpower under the Act with the ID requirements. This will include compliance information currently contained in the individual price-quality path (IPP) determination with the ID requirements. This consolidation will simplify Transpower's reporting and reduce compliance costs.
- 1.15 Our process is shown in Table 1.1 below:

⁴ Transpower's current information disclosure requirements are set out in the Electricity Information Disclosure Requirements 2004.

Table 1.1 Expected process and dates for setting Transpower's ID requirements

Indicative date	Event
19 December 2013	Submissions due on this paper
27 January 2014	Cross-submissions due on matters raised in submissions on this paper
Early February 2014	Our revised draft determination on Transpower's ID requirements
Mid February 2014	Submissions due on technical and legal drafting
28 February 2014	Our decision on setting Transpower's ID requirements
March 2014	We will start assessing the process for consolidating Transpower's reporting requirements
TBA	Target date for consolidating Transpower's reporting requirements

Structure of this paper

1.16 The structure of the paper is as follows:

- 1.16.1 the purpose and role of information disclosure,
- 1.16.2 implementing the information disclosure determination,
- 1.16.3 financial information disclosures,
- 1.16.4 grid management information disclosures,
- 1.16.5 system operator disclosures.⁵

1.17 Attachments to this paper are included to provide additional information. This information includes:

- 1.17.1 the regulatory framework for Transpower and information disclosure,
- 1.17.2 our approach to ensuring the information disclosure requirements are cost effective,
- 1.17.3 our process and approach to developing information disclosure requirements,
- 1.17.4 assurance requirements,

⁵ Transpower's role as the system operator is considered, by way of s 54B(2) of the Act, to be a regulated service supplied by Transpower. See the discussion on the legal framework for ID requirements in Attachment A.

1.17.5 return on investment (ROI) calculation and cash flow timing assumptions,

1.17.6 calculation of regulatory profit, and

1.17.7 Transpower's current information reporting requirements.

2. The purpose and role of information disclosure

- 2.1 This section discusses:
- 2.1.1 what is information disclosure,
 - 2.1.2 the purpose of information disclosure,
 - 2.1.3 our intent in setting information disclosure requirements for Transpower, and
 - 2.1.4 our approach in setting information disclosure requirements.
- 2.2 In an accompanying attachment we also explain the key performance questions interested persons need to answer to understand whether the overall purpose of Part 4 is being met, and the information we consider they need, to be able to answer these questions.

What is information disclosure

- 2.3 Information disclosure is a form of light handed regulation that provides incentives for organisations to improve their performance such that outcomes are consistent with those found in workably competitive markets. It operates by requiring the regulated organisation to regularly and consistently make information about its business available to people outside the organisation. This creates transparency about how a supplier is performing.
- 2.4 This information allows people interested in the organisation to assess its relative performance and performance over time. This could include comparing statements of expected results with the actual outcomes.
- 2.5 Electricity lines services are subject to information disclosure regulation under section 54F of Part 4 of the Act.
- 2.6 Transpower provides electricity lines services under the Act.⁶ This includes Transpower's provision of system operator services.⁷

The purpose of information disclosure under Part 4

- 2.7 The purpose of information disclosure, under s 53A of the Act, is to ensure that sufficient information is readily available to interested persons to assess whether the Part 4 purpose is being met.⁸

⁶ Commerce Act 1986, s 53C(1).

⁷ Commerce Act 1986, s 54B(2).

⁸ Commerce Act 1986, s 52A(1).

- 2.8 The purpose of Part 4 is to promote the long-term benefit of consumers in markets where there is little or no competition and little or no likelihood of a substantial increase in competition. This is to be done by promoting outcomes that are consistent with outcomes produced in competitive markets, such that suppliers of regulated goods or services:
- 2.8.1 have incentives to innovate and to invest, including in replacement, upgraded, and new assets,
 - 2.8.2 have incentives to improve efficiency and provide services at a quality that reflects consumer demands,
 - 2.8.3 share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices, and
 - 2.8.4 are limited in their ability to extract excessive profits.
- 2.9 To understand whether the relevant outcomes consistent with workably competitive markets are occurring, interested persons should have sufficient information to assess the performance of suppliers.
- 2.10 The Part 4 purpose highlights the importance of incentives: incentives to innovate and to invest (s 52A(1)(a)), and incentives to improve efficiency and provide services at a quality that reflects consumer demands (s 52A(1)(b)).
- 2.11 We consider that the practical test of whether incentives are working is whether suppliers are responding to those incentives. We therefore believe that interested persons can only assess whether these elements of the Part 4 purpose are being met by examining evidence of their performance—both historical performance and expected future performance.

How information disclosure promotes the Part 4 purpose

- 2.12 Information disclosure can directly promote the Part 4 purpose. It provides incentives to achieve outcomes consistent with those found in workably competitive markets by providing transparency about how well a supplier is performing relative to other suppliers and over time. Greater transparency may enhance consumers' countervailing power, provides owners with better information to help them govern their business more effectively, and incentivises management of regulated suppliers to operate in accordance with the outcomes envisaged by the Part 4 purpose.
- 2.13 Better information can allow comparisons with other regulated suppliers that may identify sources of best practice, or innovations that should be adopted. Requirements to disclose information may also generate useful information that would not have been collected in the absence of the disclosure requirements.
- 2.14 Information disclosure also provides an on-going source of information so that performance can be identified and monitored over time, which will allow interested persons to assess whether the Part 4 purpose is being met.

- 2.15 In addition, summary and analysis can encourage Transpower to improve performance by highlighting to both Transpower and interested persons the performance levels and trends in performance over time.

Our intent in setting information disclosure requirements for Transpower

- 2.16 Our intent in setting information disclosure requirements for Transpower is to provide a consistent suite of information so that interested persons can assess if the purpose of Part 4 of the Act is being promoted.
- 2.17 We aim to develop an ID determination that provides information at a level that any interested person can understand. This includes information that is sufficiently disaggregated and information that is available in an accessible format.
- 2.18 By requiring information to be disclosed, we are ensuring that information is consistently available and readily understandable to interested persons. Consistent disclosure is also important to ensure that information is useful in assessing that the price-quality path regulation that applies to Transpower is effective in meeting the purpose of Part 4 of the Act.
- 2.19 Transpower currently discloses a large amount of information under other requirements. Transpower has been innovative in how this information is presented which has improved the ease with which interested persons can understand how Transpower is operating.
- 2.20 The intention of the draft ID determination is not to discourage this innovation but to ensure that all information we think is useful for interested is readily accessible.
- 2.21 We continue to welcome innovation from Transpower on how it discloses information. We welcome Transpower, as well as other parties, to submit its opinion on what impact the proposed ID requirements may have on future information reporting, for example, Transpower's Annual Regulatory Report.⁹
- 2.22 We are also required by s 53B(2) of the Act to publish a summary and analysis of the disclosed information to promote greater understanding of Transpower's performance by interested persons. The ID determination will enable this requirement to be met to enable comparison of Transpower's performance over time and benchmark its performance against similar overseas entities.

Our approach to the information disclosure process

- 2.23 When we finalise Transpower's requirements, a greater amount of information will be available for interested persons to assess Transpower's performance. We intend that Transpower continues to provide information in accessible formats such as its

⁹ <https://www.transpower.co.nz/sites/default/files/publications/resources/annual-regulatory-report-2011-2012.pdf>

current annual regulatory report. This includes narrative which allows Transpower to provide further discussion on aspects of ID, for example, the causes of differences between forecast and actual expenditure.

- 2.24 To ensure consistency amongst regulated suppliers, we have used the electricity distribution business (EDB) ID requirements and, to a lesser degree, the airports ID requirements as a starting point for developing the Transpower ID requirements.¹⁰
- 2.25 Transpower is similar to, but not the same as, an EDB. In adapting the EDB ID requirements to Transpower we are:
- 2.25.1 reducing the cost of developing Transpower's ID requirements,
 - 2.25.2 providing a consistent approach across regulated businesses, and
 - 2.25.3 ensuring that Transpower is not subject to disproportionately higher or lower compliance costs than EDBs.
- 2.26 Transpower does however have key differences to EDBs owing to both its size and the nature of its operations as an electricity transmission service provider. It also has a different regulatory environment as set out in Attachment A.
- 2.27 We have tailored the ID requirements to Transpower's circumstances. To ensure the regime is cost effective we have considered information Transpower is already required to publicly disclose or discloses voluntarily, where appropriate. These information reporting requirements for Transpower are outlined in Attachment G.
- 2.28 Our approach to setting ID requirements for Transpower is discussed in more detail in Attachment C including the questions that interested persons need to ask to assess whether Part 4 is being met and the information disclosures necessary to answer those questions.
- 2.29 We propose that the ID requirements first apply to the 2015 disclosure year (year ending 31 June 2015) and that they supersede the current information disclosure requirements as prescribed by the Electricity Information Disclosure Requirements 2004.

Two stage process

- 2.30 We see developing the information reporting requirements for Transpower as a two stage process.
- 2.30.1 the first stage, as set out in this paper and the draft ID determination, is to produce a set of ID requirements for Transpower that meet the purpose of

¹⁰ <http://www.comcom.govt.nz/regulated-industries/electricity/electricity-information-disclosure/current-electricity-information-disclosure-requirements/>

ID as set out in the Act, when taken together with existing disclosure requirements, and

- 2.30.2 the second stage is to consolidate compliance reporting requirements, and other reporting requirements, with ID requirements to reduce compliance costs and provide one source for all of the Commissions reporting requirements for Transpower. This consolidation will also reduce the use of information gathering notices issued under s 53ZD of the Act.
- 2.31 The phase 2 work will consider the optimal treatment of information which has not been included in the ID determination as disclosure is already required by the IPP determination or the Capex IM. For example, we will consider whether the requirement to produce an Integrated Transmission Plan (ITP) should be included with the consolidated reporting requirements with the Capex IM being amended to exclude this requirement.
- 2.32 We intend to start work on the next phase of rationalising Transpower's information reporting requirements once we have finalised the initial ID requirements and have determined Transpower's price-quality path for the next regulatory period beginning 1 April 2015.
- 2.33 We have not consolidated Transpower's reporting requirements at present owing to the fact that Transpower's individual price-quality path for the next regulatory period has not been determined. Therefore the compliance requirements for this period are not yet finalised.
- 2.34 The phase 2 work will also consider including the information the requirements for information that Transpower must submit to the Commission prior to a regulatory control period. This would provide increased certainty and minimise the use of information gathering notices.
- 2.35 In its submission on the draft EDB ID determination, Transpower stated that it sought to avoid doubling up on current information disclosure requirements under the IPP and the Capex IM. The phase 2 work will seek to further minimise this duplication by further rationalising information reporting requirements.

3. Implementation of the ID requirements

Purpose of this chapter

- 3.1 This chapter sets out our draft decisions on five matters:
 - 3.1.1 when Transpower first needs to disclose information,
 - 3.1.2 when Transpower must disclose different types of information,
 - 3.1.3 how Transpower must publicly disclose information, and
 - 3.1.4 the process by which requirements of the ID determination can be changed.

When Transpower first needs to disclose information

- 3.2 Transpower will be required to make its first disclosure for the year ending 30 June 2015, the 2015 disclosure year. This commencement date is intended to give Transpower a sufficient length of time from publication of the final ID determination to ensure the systems are in place to be able to comply with the disclosure requirements.

When Transpower must disclose different types of information

- 3.3 All information must be disclosed by the Friday of the third complete week of the month of October following the end of each disclosure year. We reason that this provides Transpower with sufficient time to be able to comply with the ID requirements.
- 3.4 We propose that certain historical information only be required to be disclosed biannually. Biannual disclosure is required where we consider the costs of providing the information annually significantly outweigh the benefits.
- 3.5 Table 3.1 below outlines the timing and frequency of the disclosures.

Table 3.1 Timing and frequency of disclosures

Schedule reference	Timing	Frequency
HFP1-9, R1-3, E1-5, CG2-3, AM4-5, Q1-2, SO1	The Friday of the third complete week of the month of October following the end of each disclosure year.	Annually
CG1, AM1-3	The Friday of the third complete week of the month of October following the end of each disclosure year.	Biannually

How Transpower must publicly disclose information

- 3.6 Where Transpower is required to publicly disclose information, it must:
- 3.6.1 disclose the information on the Internet,
 - 3.6.2 make copies of the information available for inspection by any person,
 - 3.6.3 provide a copy of the information to any person on request within 10 working days of being requested to do so,
 - 3.6.4 provide a copy of the information to the Commission within 5 working days of disclosure to the public, and
 - 3.6.5 retain information supporting the disclosures for at least seven years.
- 3.7 The information provided to the Commission must be in an electronic format that:
- 3.7.1 is compatible with Microsoft Excel, for the schedules provided for in the draft ID determination, and
 - 3.7.2 for other information, is compatible with Microsoft Word or Adobe PDF.
- 3.8 Disclosure on Transpower's websites is in line with general practice, and is a cost-effective way of making disclosed information readily available to interested persons. We have decided not to require Transpower to publish a notification in the Gazette to advise that disclosures have been made.
- 3.9 We have developed standardised Microsoft Excel and Microsoft Word schedules for the disclosure of quantitative information and explanatory notes. We propose that Transpower uses these templates to prepare the required reports, and to comply with their obligation to provide us with a copy of disclosed information in a Microsoft Excel or Microsoft Word format, as applicable.

The process by which requirements of the ID determination can be changed

- 3.10 We welcome submissions on whether a formal change process is needed if, for whatever reason, we or Transpower wish a change to the requirements to be made.

This may be due to an error in the requirements or the discovery of a more efficient and useful way of disclosing information.

4. Disclosure of financial information

Purpose of this chapter

- 4.1 This chapter describes the information we consider Transpower should disclose and provides our reasoning for requiring the disclosure of financial information. We also set out the return on investment (ROI) calculation we have used.

Overview of decisions

Table 4.1 Overview of financial performance information

Category of information	Required disclosures	Reference in draft schedules
Return on investment (ROI)	Calculation of vanilla ROI and post-tax ROI	HFP1
Regulatory profit	Calculation of regulatory profit	HFP2
Regulatory tax allowance	Calculation of regulatory tax allowance	HFP3
Pass-through and recoverable costs	Disclosure of pass-through and recoverable costs	HFP4
Term-credit spread differential allowance	Calculation of term-credit spread differential allowance	HFP5
Economic value account	Calculation of economic gain or loss for HVAC and HVDC	HFP6
Related party transactions	Disclosure of related party transaction including related party, type of transaction and value of transaction.	HFP7
Regulatory asset base (RAB)	Information on RAB roll forward	HFP8
Actual vs. forecast expenditure	Calculation of variance between forecast and actual operating and base capital expenditure	HFP9

Table 4.2 Overview of revenue information

Category of information	Required disclosures	Reference in draft schedules
Revenue	Disclosure of regulated transmission revenue by category and disclosure of customer charges	R1
Revenue forecast	Ten year forecast of regulated transmission revenue by category	R2
Customer Investment Contracts	Disclosure of Customer Investment Contract information	R3

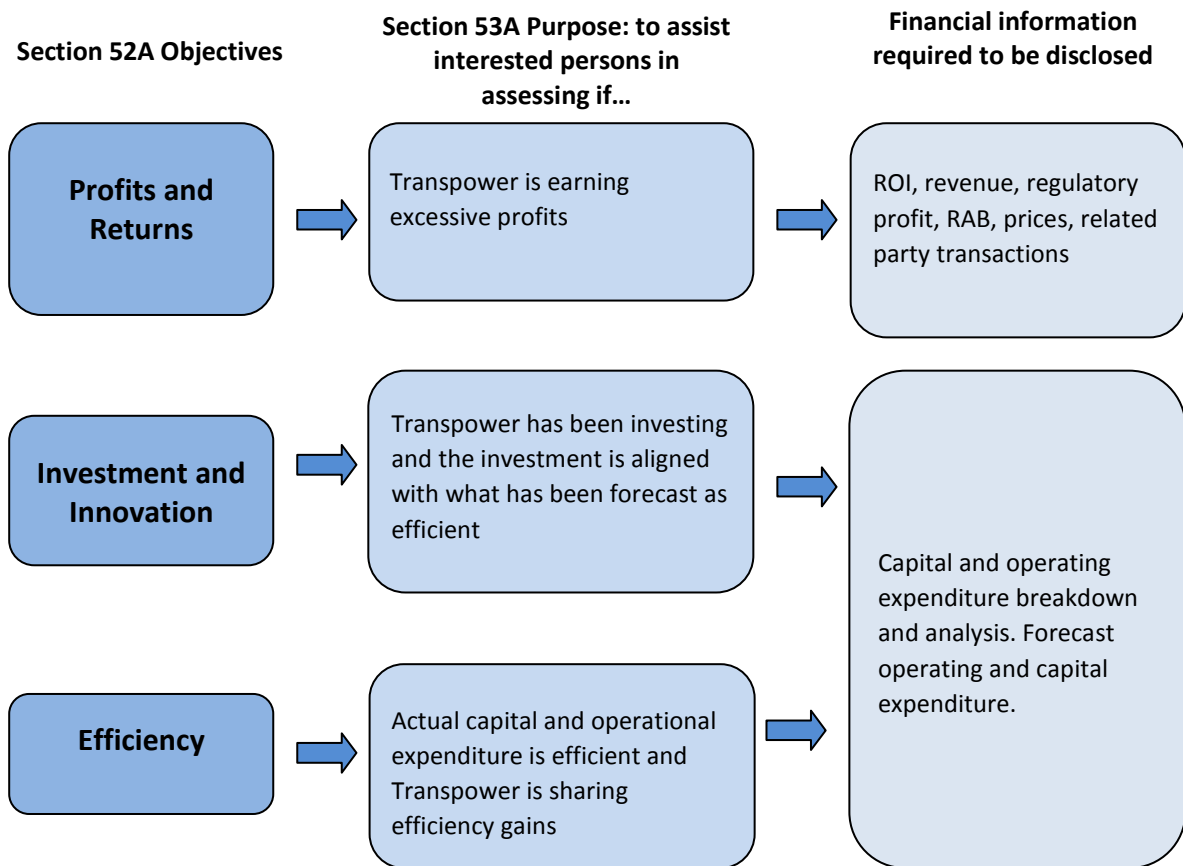
Table 4.3 Overview of expenditure information

Category of information	Required disclosures	Reference in draft schedules
Operating expenditure	Disclosure of operating expenditure by category	E1
Operating expenditure forecast	Ten year forecast of operating expenditure by category	E2
Base capital expenditure	Disclosure of base capital expenditure by category	E3
Base capital expenditure forecast	Ten year forecast of base capital expenditure by category	E4
Major capital expenditure projects	Disclosure of major capital expenditure project information	E5

Our approach to financial information disclosures

4.2 Attachment C poses the questions interested persons would need to ask about Transpower's performance to assess whether the purpose of Part 4 is being met. Our approach with financial information disclosures is to determine which financial information interested persons need in order to be able to determine this. This approach is shown in figure 4.1 below.

Figure 4.1 Our approach to financial information disclosure



Application of input methodologies and GAAP

- 4.3 Generally accepted accounting principles (GAAP) is a cost effective means of reporting financial information. It is well understood and is reflected in business systems and processes.
- 4.4 The historical financial performance reporting requirements have been designed in line with GAAP to allow Transpower to use existing reporting systems.
- 4.5 GAAP has been modified where necessary through the application of input methodologies. This is because the purpose of regulatory accounting is different from the purposes of other forms of external reporting. Therefore, where GAAP is not sufficient to meet the purpose of Part 4, input methodologies are applied.
- 4.6 Consequently, the historical financial performance reporting required by the draft ID determination has many similarities with statutory financial reports but differs due to the nature of regulatory reporting. These differences, which arise due to the application of input methodologies, are necessary for interested persons to be able to assess Transpower's historical financial performance.
- 4.7 The cost allocation input methodology also requires a distinct split between Transpower's transmission services and its system operator services. System operator disclosures are discussed in Chapter 6.

Relationship with other information reporting requirements

- 4.8 As identified earlier in this paper, Transpower is already required to disclose a certain amount of financial information. See attachment G for a full discussion on information disclosures satisfied by other requirements.
- 4.9 Where existing reporting requirements for financial information are sufficient to meet the purpose of ID, this is not a requirement of the draft ID determination and therefore not outlined above.
- 4.10 While these information disclosure requirements are generally not repeated in the draft ID determination, they should be considered together with the requirements in the draft ID determination when assessing whether the purpose of Part 4 is being met.
- 4.11 This approach ensures there are no unnecessary compliance costs placed on Transpower by requiring the same information to be disclosed more than once.

Why interested persons need financial performance information to assess Transpower's performance

- 4.12 Financial performance information helps interested persons assess whether the Part 4 purpose is being met, in particular whether Transpower is earning an appropriate economic return over time.
- 4.13 The return on investment (ROI) is a key measure of profitability. Requiring Transpower to disclose an ROI enables interested persons to compare this figure against returns that a similar business could earn in a workably competitive market to judge whether Transpower is earning an appropriate economic return.
- 4.14 Interested persons can also compare the ROI calculated by Transpower in its information disclosure to Transpower's weighted average cost of capital (WACC) as determined by the Commission. The WACC rate is used in Transpower's price-quality path to determine the maximum amount of revenue Transpower may earn during a pricing year.
- 4.15 To assess the profitability of Transpower, interested persons must have sufficient information to understand Transpower's ROI, and changes in the ROI over time. In addition to the overall performance indicators, interested persons therefore need supporting information on key determinants of regulatory profit and the value of the regulatory asset base (RAB).
- 4.16 We have developed requirements around the disclosure of related party transactions. Related parties are any business units of Transpower that supply

services other than electricity lines services and any party considered under GAPP to be a related party.¹¹

- 4.17 Disclosure of related party transactions is important so that interested persons can be assured that there is no cross-subsidisation amongst related parties and therefore, that the information Transpower discloses can be relied upon.

Why interested persons need revenue information

- 4.18 Revenue information is necessary to aid interested persons in assessing whether the revenues Transpower is earning are in line with the maximum revenue allowed under its price-quality path.
- 4.19 It also enables interested persons to determine Transpower's revenue streams and whether these are appropriate. For example, disclosure of revenue information, broken down by revenue category, can be used to assess whether there is any cross-subsidisation of revenues on the part of Transpower between high voltage alternating current (HVAC) and high voltage direct current (HVDC).
- 4.20 Information on Customer Investment Contracts is required for interested persons to ensure that these contracts are in the long term benefit of consumers and reflect what would be expected to be observed in a workably competitive market. We propose that CIC disclosures apply to new CICs entered into by Transpower in the disclosure year.
- 4.21 Although Transpower is regulated by the Commission by way of a revenue cap, interested persons, including the Commission, need information on customer charges to assess Transpower's performance. This includes assessing whether Transpower is sharing the benefits of efficiency gains with consumers through lower prices.
- 4.22 Disclosure of customer charges enables comparison of Transpower's charges for different customer groups eg, between HVAC and HVDC customers or between EDBs. This information is helpful to interested persons, alongside the TPM, in understanding whether Transpower's pricing methodology promotes efficiency (ie, allocative and dynamic efficiencies).

Why interested persons need expenditure information

- 4.23 Operating and capital expenditure, in that it affects the value of the RAB, are also key determinants of regulatory profit and ROI. Disclosure of information on capital expenditure enables interested persons to assess the efficiency of Transpower's investments and whether these investments are to the long-term benefit of consumers.

¹¹ The Transpower Input Methodologies Determination [2012] NZCC 17.

- 4.24 The disclosure of actual and forecast capital expenditure will help interested persons compare planned expenditure with actual outcomes. This enables a greater understanding of whether innovation and efficiency are being realised by Transpower's investments over time.
- 4.25 Major capex information disclosure is important as it allows interested persons to compare major capex project outcomes with what actually happened. In this way, interested persons can determine the cause of differences and consequently determine if Transpower is investing efficiently.
- 4.26 Information disclosed on opex assists interested persons to assess whether any efficiency gains have been achieved, and whether any efficiency gains have been forecast. The incremental rolling incentive scheme (IRIS) disclosure aids in highlighting what efficiency gains have been shared with consumers.
- 4.27 Research and development (R&D) expenditure can be a useful indicator of innovation. The draft ID determination requires disclosure of actual and forecast R&D expenditure so that Transpower's commitment to innovation can be gauged.

Calculation of the ROI

- 4.28 The draft ID determination requires Transpower to calculate both a vanilla and post-tax ROI.
- 4.29 We have introduced modified cash-flow timing assumptions for Transpower. These timing assumptions more accurately reflect when Transpower receives and pays cash and therefore better account for the time value of money. This provides a more accurate ROI calculation.
- 4.30 These cash flow timing assumptions also better align the calculation of the ROI with Transpower's individual price-quality path.
- 4.31 Attachment E outlines the ROI formula and provides our reasoning for the cash-flow timing assumptions used in the formula.
- 4.32 The draft ROI schedule incorporates the timing factors by including them in the cells. For example, the cell for revenue will not be equal to revenue in the revenue schedule due to a timing factor being applied to it. This may present confusion as these formulas are 'hidden' in the cells.
- 4.33 We welcome feedback on the best way to present the ROI schedule. It could be a matter of better displaying the formulas, using an IRR instead or it may be that 'hidden' formulas do not present an issue.
- 4.34 The EDB ROI schedule also included a year-end ROI calculation which can be compared with the mid-year ROI. This was included as it was reasoned some interested persons would prefer a year-end ROI calculation. We have not included a year-end ROI in the draft ROI schedule as we consider it is not necessary.

- 4.35 We welcome submissions on whether it is desirable to include a year–end ROI in addition to the intra-year calculation.

Calculation of regulatory profit

- 4.36 The draft ID determination sets out the requirements for calculating regulatory profit. The regulatory profit calculation has several inputs which also require calculation.
- 4.37 Calculation of regulatory profit is essential in calculating the ROI, which can then be used by interested persons to confirm that Transpower's return is appropriate and in line with the WACC rate set by the Commission.
- 4.38 Our approach in calculating regulatory profit is consistent with that for EDBs, with modifications being made to take account of Transpower's operations, structure as an electricity transmission provider, and regulatory regime.
- 4.39 Attachment F provides our reasoning in relation to the calculation of regulatory profit.

Regulatory asset base information disclosures

- 4.40 Disclosure of the RAB is important as it is a major component of the ROI calculation. It is also the base from which Transpower's return on and return of capital is calculated. It directly determines the maximum amount of revenue Transpower is allowed to earn in a given pricing year. Its makeup and how it is rolled forward is therefore of crucial importance for interested persons.
- 4.41 The RAB is calculated and rolled forward in accordance with Transpower's asset valuation IM. The schedule in the draft ID determination reflects these IMs and requires both disclosures of aggregated and disaggregated data.

Aggregated RAB information

- 4.42 Aggregated RAB information provides a useful picture of overall changes in the RAB. The aggregated view shows changes in RAB owing to depreciation, commissioning of assets, disposal of assets, and lost and found assets.

Disaggregated RAB information

- 4.43 Information is disaggregated in several ways in the RAB schedule. The different break-downs serve different purposes.
- 4.44 The draft RAB schedule allows for disaggregation of RAB by asset class. For example, interested persons can see changes in depreciation by asset class to ascertain how Transpower's RAB is changing.
- 4.45 The asset classes in the draft RAB schedule have been determined by taking into account what a useful breakdown of assets would be for interested persons. This breakdown is in line with how Transpower's assets are commonly broken down both internally and in proposals to the Commission.

- 4.46 The draft RAB schedule also disaggregates disposed assets and commissioned assets by month. Both are required to be disclosed monthly for the purposes of calculating an accurate ROI.
- 4.47 Finally, disclosure of core and non-core information enables comparison and benchmarking of Transpower to comparable overseas electricity transmission firms.¹² This further enables interested persons to assess Transpower's performance, although this must be done with care due to inherent differences between transmission entities.

Disclosure of pricing and related Information

- 4.48 The Act provides for the disclosure of prices, terms and conditions relating to prices, pricing methodologies, and contracts. Pricing disclosures can reduce the information asymmetry consumers face in markets for services without workable competition and enable consumers to engage in an informed way with Transpower on the prices for regulated services.

General approach to the disclosure of pricing information

- 4.49 Transpower receives income from several sources for which prices are set. These income sources include:
- 4.49.1 charges for the provision of transmission services, and
 - 4.49.2 Customer Investment Contracts.
- 4.50 Pricing disclosures provide information to interested persons on the income Transpower receive from prices, and the also the transmission charges at connection points.

Role of the Electricity Authority and pricing principles

- 4.51 Pricing methodologies describes the methodology Transpower uses to set prices for its services. Disclosure of pricing methodologies assists interested persons to understand how prices are set.
- 4.52 The pricing methodology requirements are contained in Subpart 4 of part 12 of the Electricity Participation Code 2010. The TPM has been developed by Transpower but reviewed and approved by the Electricity Authority.
- 4.53 Due to the fact that Transpower is already required to disclose the TPM under the Code, the draft ID determination does not require pricing methodology disclosure.

¹² The core grid is defined in Schedule 12.3 of Part 12 of the Electricity Industry Participation Code (2010).

Pricing information disclosures

- 4.54 The draft ID determination requires Transpower to disclose the connection charges, interconnection charges, and total charges for each connection point. At each connection point, the customer name and whether it is off take or injection must also be disclosed.
- 4.55 Where there are multiple customers at a connection point the charges will need to be listed separately by customer.
- 4.56 The aim of these disclosures is to increase transparency around how Transpower allocates its revenue requirement, building on disclosures Transpower is required to make by the Electricity Authority.

Disclosures of Customer Investment Contract charges

- 4.57 Transpower provides assets and services to connected parties for new connections or to improve an existing connection. These are funded by via individual connection investment contracts (Customer Investment Contracts).
- 4.58 Details of the individual connection investment contracts entered into during the disclosure year rule must be supplied as a part of the ID requirements.
- 4.59 The connection charges for each exit/injection point must include all charges to connected parties, including connection investments contract charges.
- 4.60 Disclosure of Customer Investment Contract information again increases transparency of these contacts and enables interested persons to assess whether these investments are efficient and to the long term benefit of consumers.

Approach to related party transactions disclosure

- 4.61 The draft ID determination requires related party transactions to be valued based on, or linked to, specified objective and verifiable information. The terms (especially price) and conditions agreed between the related parties can influence the information disclosed by the regulated entity, which can in turn hinder interested persons' ability to assess profitability.
- 4.62 For this reason, different considerations apply to the disclosure of related party transactions, as compared to other transaction values, so it can be clearly demonstrated that the transaction prices approximate what could be expected in arm's length transactions. As a result, the disclosed transaction value may differ from the actual transaction value.
- 4.63 It is anticipated that Transpower will have fewer related party transactions than EDBs; however, to be consistent across all the regulated parties we will be applying the same requirements to Transpower.
- 4.64 When a regulated entity undertakes transactions with a related party, interested persons need to understand whether and how the information which has been

disclosed may be affected by related party dealings. In particular, interested persons should have information which discloses:

- 4.64.1 the existence and extent of related party transactions,
 - 4.64.2 what the related party transactions relates to,
 - 4.64.3 whether the price is the same or similar to the price which would be expected in an equivalent arm's length transaction (and if not, what adjustment is required to make it similar to an arm's length price), and
 - 4.64.4 whether the price is based on objective, verifiable, information.
- 4.65 Of these issues, establishing whether the price is equivalent to an arm's length price is the most difficult. There are two broad approaches to this issue.
- 4.66 Firstly, Transpower could demonstrate that the relationship between the parties has not affected the terms of the transaction, eg, price has been determined on a demonstrably arm's length basis.
- 4.67 Secondly, if the price cannot be shown to reflect an arm's length price, sufficient information could be disclosed so interested persons knows the size of the impact from the parties' status as related parties, enabling them to make an adjustment to offset this impact and to approximate a price which is representative of an arms' length transaction.
- 4.68 There was considerable discussion around what is the most appropriate way of establishing what a reasonable arm length price is during the consultation on the EDB ID determination. The outcome we have determined is that there are a number of methods that can be used.¹³
- 4.69 As it is anticipated that there will be a reasonably small number of transactions for relatively small values compared to Transpower's revenue, we propose that Transpower can decide on the form of verification that it will use for establishing that the price in a related party transaction is equivalent to an arms' length price.

¹³ Information Disclosure Requirements for Electricity Distribution Businesses and Gas Pipeline Businesses Draft Reasons Paper, pg, 112.

5. Disclosure of grid management information

Purpose of this chapter

5.1 This chapter provides our reasoning for requiring the disclosure of grid management information and our approach, including taking into account grid management information that Transpower already reports. Grid management information that we propose Transpower should disclose includes:

- 5.1.1 Information on the composition of the grid,
- 5.1.2 Information on asset management, and
- 5.1.3 Information on quality.

Overview of decisions

Table 5.1 Overview of composition of grid information

Category of information	Required disclosures	Reference in draft schedules
Asset age and value	Disclosure of age of assets by asset category.	CG1
Network changes	Disclosure of asset replacements, additions disposals and divestments by asset category.	CG2
Circuits	Disclosure of length of circuits.	CG3

Table 5.2 Overview of asset management information

Category of information	Required disclosures	Reference in draft schedules
Asset health	Disclosure of asset condition/health by category on an index of 1 to 10.	AM1
AMMAT	Disclosure of asset management maturity using the asset management maturity assessment tool (AMMAT).	AM2-3
Grid demand and injection	Disclosure of grid demand	AM4
GXP capacity and demand	Disclosure of GXP capacities	AM5

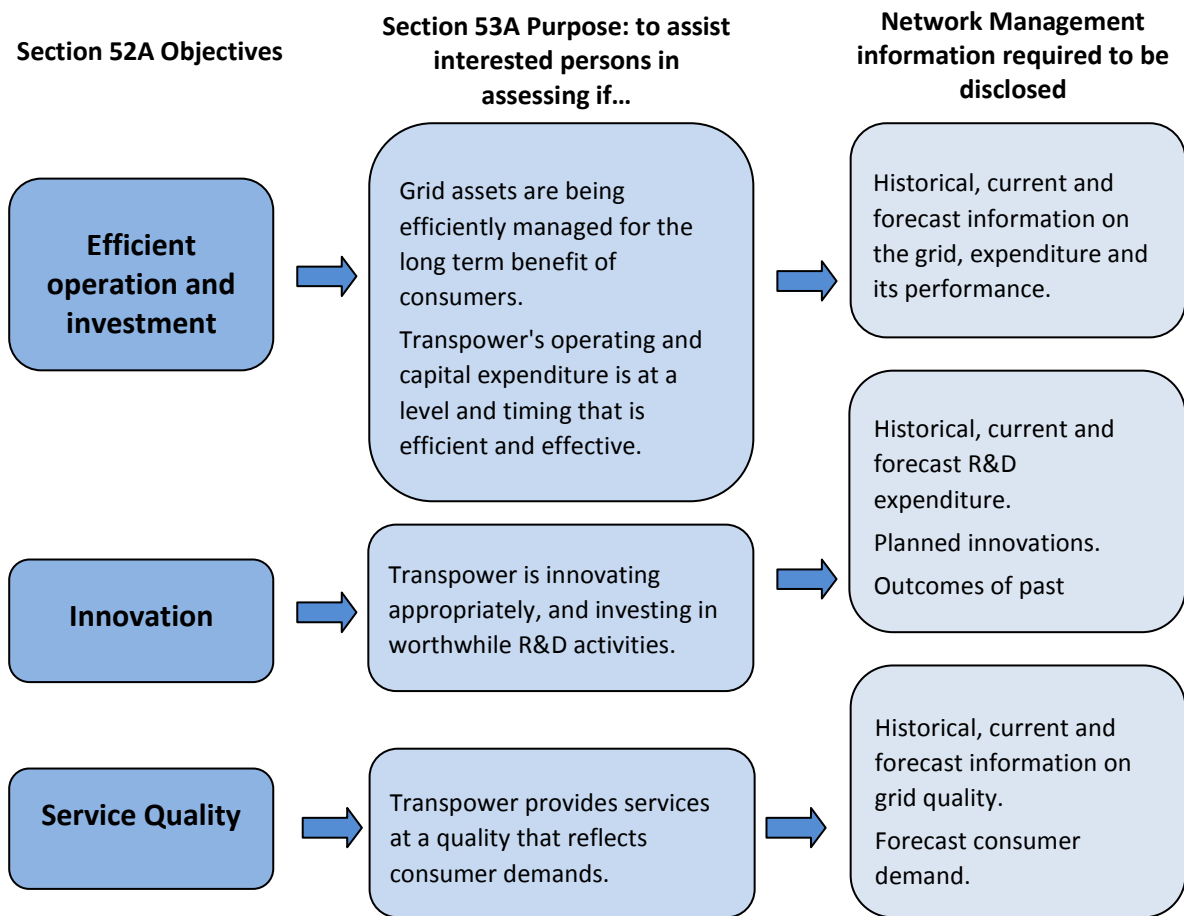
Table 5.3 Overview of quality information

Category of information	Required disclosures	Reference in draft schedules
Grid quality	Disclosure of quality measures and targets and additional performance measures	Q1
Interconnection quality	Disclosure of interconnection quality	Q2

Our approach to grid management information disclosure

- 5.2 Our approach with grid management disclosures is to determine which grid management information interested persons need in order to be able to determine this. We can then look at the information Transpower currently provides under existing requirements and identify the gaps.
- 5.3 Specifically, information on grid management is needed to determine whether:
- 5.3.1 Transpower is operating and investing in its assets efficiently, including renewing, upgrading and replacing assets,
 - 5.3.2 Transpower is innovating where appropriate, and
 - 5.3.3 Transpower is providing services at a quality that reflects consumer expectations.
- 5.4 This approach is shown in Figure 5.1 below.

Figure 5.1 Our approach to grid management information disclosure



Is Transpower operating and investing in their assets efficiently?

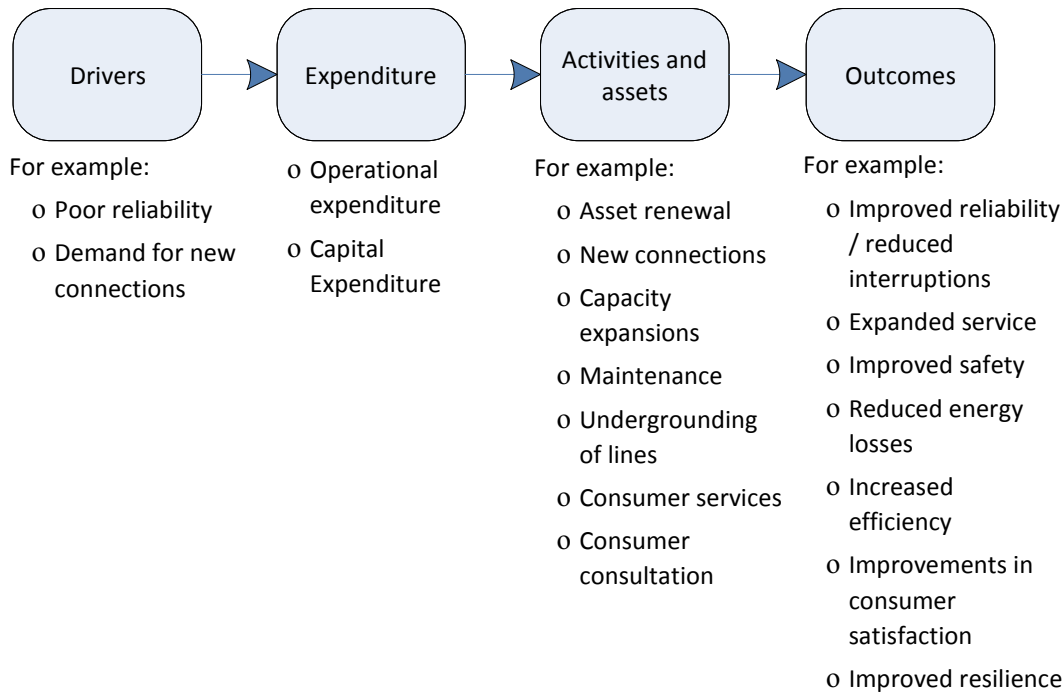
5.5 To assess whether Transpower is operating and investing in its assets efficiently, it is helpful to consider the following four elements of grid management:

- 5.5.1 **Drivers:** what is the reason for this expenditure? A range of factors drives expenditure, including consumer requirements, consumer growth and the location, and condition of the Transpower's assets.
- 5.5.2 **Expenditure:** what is Transpower's historical, current and planned level of expenditure? This element is more fully discussed in the financial information section.
- 5.5.3 **Activities and assets:** what activities and assets is Transpower spending its money on? How does Transpower decide what activities it should carry out and which assets to invest in?
- 5.5.4 **Planned outcomes:** what is Transpower's intention in spending the money? What are the outcomes Transpower expects or achieves? How does this compare to consumer expectations?

5.6 Sufficient information on each of these elements is necessary to assess whether Transpower is managing its assets efficiently.

5.7 This approach to assessing efficiency is set out diagrammatically in Figure 5.2 below:

Figure 5.2 Assessing expenditure, activities and assets, and planned outcomes



Is Transpower innovating where appropriate?

5.8 In terms of grid management information, to assess whether Transpower is innovating where appropriate, interested persons require information on the impact of innovation on grid investment, as well as any evidence of innovation. This may include innovation in the area of energy efficiency, including demand-side management and cost efficiencies attained when inspecting and maintaining the grid and delivering projects.

Is Transpower providing services at a quality that reflects consumer expectations?

5.9 To assess whether Transpower is providing services at a quality that reflects consumer demands, interested persons need to understand the level of quality being delivered, how this compares to consumers' expectations, what Transpower is planning to do about any gaps between the quality being delivered and consumer expectations, and how this impacts on planned expenditure. This should include past, current, and forecast performance.

5.10 The information on quality must be sufficiently disaggregated to:

5.10.1 determine the extent to which interruptions are due to factors that may be outside Transpower's control, and

5.10.2 assess linkages between current performance and planned expenditure.

Our process in setting the requirements

5.11 This section discusses the process we used to determining the grid management information disclosure requirements included in the draft ID determination. We conducted a review of the information currently publicly disclosed by Transpower, highlighted the gaps in that information as compared to what we consider is needed to meet the purpose of ID, and determined the additional information required to close the gaps or receive data in a more useable format.

Review of the information on grid management currently disclosed

5.12 In designing the proposed grid management information requirements, we reviewed the grid management information currently disclosed by Transpower. This is in the form of the annual compliance monitoring statement, the annual information requirements as per the Capex IM and the information that Transpower is required to submit in the ITP prior to the start of each regulatory period. The first ITP will be disclosed by 2 December 2013.

5.13 The annual information requirements in the Capex IM are currently requested by way of information gathering notices. The draft ID determination will eliminate the need for this annual information to be collected by way of information gathering notices. Relating to grid management, currently these notices request major capex information from Transpower. These information requirements are further discussed in Attachment C.

5.14 At the moment, base capex information is requested as part of the annual compliance monitoring statement, though this will not be the case from 2015 onwards. Base capex annual information requirements are outlined in the Capex IM and required to be included in the draft ID determination.

5.15 The annual compliance monitoring statement requires information on Transpower's quality measures. The quality measures and targets that will form part of Transpower's individual price-quality path for 2015-20 will differ from those set for 2011-15. In particular, some of the measures will be revenue linked meaning Transpower will have financial incentives to outperform the targets.

5.16 The ITP narrative and supporting documents provide qualitative and quantitative information, including information on the existing network, quality measures and targets, policies and processes for managing and developing the grid, service levels, planned investments, and risk management. These documents are therefore an important source of information for assessing Transpower's performance against the Part 4 purpose.

5.17 See Attachment G for a detailed overview of grid management information currently disclosed by Transpower.

Gaps in the current grid management information disclosed by Transpower

- 5.18 While a significant amount of grid management information is already publicly disclosed by Transpower under existing requirements, there are still additional grid management disclosures which are necessary to meet the purpose of ID.
- 5.19 Firstly, some of the information provided in Transpower's ITP and supporting documents may vary over time as the focus of the ITP and supporting documents changes. Specific information can be difficult to find, or may not be consistently included. Quantitative information may also not be in a readily accessible format, eg, demand forecasts may be graphically displayed which limits the ability to analyse this data.
- 5.20 Secondly, in some cases, information provided in the ITP may not be amenable to trending, and summary and analysis. For example, asset age and condition information will be spread between the different sections of the asset management plan (AMP) for different asset classes. The schedules in the draft ID determination require disclosure of this information in a consolidated format which is more usable to interested persons, including the Commission. More specifically, there is an asset age schedule which requires disclosure of asset age for all asset classes in a single schedule. We consider that these disclosures would be useful to ensure data is sufficiently broken down and we welcome submissions on this.
- 5.21 Similarly, information may not be sufficiently broken down. For example, quality information (eg, interruption data) is currently not disaggregated (eg, by network component). As a result, interested persons are unable to assess patterns in interruptions and the corresponding need for investment.
- 5.22 Thirdly, there is additional grid, quality, forecast, and asset management maturity information that is either not currently disclosed by Transpower or is disclosed only when prompted by way of an information gathering notice. This information is required to enable interested parties to assess whether the purpose of Part 4 is being met.
- 5.23 In summary, while a significant amount of the information necessary to assess grid management performance is currently disclosed, this information is not sufficiently available, standardised or disaggregated to enable informed analysis. Additional information is required to ensure interested parties are able to assess whether the purpose of Part 4 is being met.

Information required to ensure that interested parties are able to assess whether the purpose of Part 4 is being met

Information on quality

- 5.24 Transpower is proposing a suite of quality measures for RCP2 (2015-20). These will be different to the measures contained in the IPP for RCP1 (2011-15). The RCP2 measures will be revenue linked whereas the RCP1 quality measures are hypothetically revenue linked.

- 5.25 Disclosure of the RCP2 quality measures and the resulting revenue adjustments will be done by way of the annual compliance monitoring statement.
- 5.26 The draft ID determination requires continuing disclosure of the quality measures that Transpower are required to report on from 2011-15. The rationale for this is that it will provide a large data set that interested persons will be able to use to determine trends in Transpower's performance with regard to quality. Interested person will then be able to see whether Transpower's investment results in better quality outcomes over time.
- 5.27 In addition to these quality measures, additional performance measures are included:
- 5.27.1 the number of momentary outages,
 - 5.27.2 the percentage of momentary outages caused by lightening, and
 - 5.27.3 the percentage of unplanned interruptions that result in a complaint being made per GXP.
- 5.28 Some customers have requested performance measures of this nature and we consider that it is reasonable for Transpower to disclose these measures. We welcome submissions on these additional performance measures.
- 5.29 We will separately consult on grid output measures that will form part of Transpower's price-quality path for 2015-20. We expect to publish our consultation dates and process for setting Transpower's revenue and quality standards in late November 2013.
- 5.30 Transpower already discloses various quality measures per GXP. However, this is not a legal requirement. The inclusion of this information in the draft schedules is to ensure this information is continually disclosed by Transpower. We view this quality information as important as it provides information for specific customers of Transpower's.
- 5.31 The quality information for interconnection assets is currently reported by the Electricity Authority. We have included this requirement in the draft ID determination to ensure this information is reported in a consistent format conducive to analysis by interested persons.
- 5.32 The report on output and performance objectives, as required by the ITP, provides interested persons with a longer term view of grid outputs and how Transpower's investment is likely to impact quality and performance. We consider this information to be important to meet the purpose of ID, though as it is already disclosed, the draft ID determination does not require this disclosure.

Information about asset management

- 5.33 The ITP requirements satisfy a significant proportion of asset management information interested persons require to assess how Transpower intends to manage its assets.
- 5.34 Demand and capacity information have been included in the draft ID determination so that this information is submitted in a standardised format and is sufficiently disaggregated. We are requesting this information to be disaggregated by GXP. Receiving this information in this form will enable better analysis by interested persons.
- 5.35 In response to concerns around the management of infrastructural assets internationally, asset managers and their advisers have undertaken a number of initiatives to improve the management of assets. One such measure has been the development of more rigorous standards of what constitutes good asset management (such as PAS 55). Transpower is currently working towards PAS 55 certification.¹⁴
- 5.36 We do not consider that it is appropriate or necessary for us to specify comprehensive standards on asset management, as Transpower should adopt whatever standard or approach it considers is most appropriate for it. However, given the importance of asset management to the quality and the cost of services that consumers receive over time, interested persons should understand whether Transpower is reviewing its asset management practices in an on-going manner, and whether this has identified areas where improvements in the management of assets are possible.
- 5.37 We propose that Transpower should complete and disclose the results of the AMMAT. The AMMAT seeks to identify the gaps between the current asset management practices Transpower uses and best practice asset management. This is a requirement for EDBs and GPBs.
- 5.38 Disclosure of the AMMAT will enable more transparent disclosure of how well assets are being managed against an objective standard.
- 5.39 Completing the AMMAT requires Transpower to identify references to its own documents that support its assessment of its maturity rating. This allows the possibility that we could commission an independent audit of the responses in the AMMAT disclosures.

¹⁴ PAS 55 is the British Standards Institution's (BSI) specification for the optimised management of physical assets. See: <http://pas55.net/>

Information about the grid

- 5.40 The draft ID determination includes information on the composition of the grid. The rationale for requiring this information is so that interested persons can assess whether Transpower is operating the grid efficiently and how the current state of the grid will affect future investment decisions and performance.
- 5.41 The schedules included in the draft ID determination standardise asset register information and provide it in formats intended to identify cost drivers. To minimise costs for Transpower, we have aligned these schedules as much as possible with Transpower's existing practices and reporting capabilities.
- 5.42 Asset health is a key indicator of the present state of the grid. The draft schedules require Transpower to disclose the health of its asset by replacement priority measured in years. This is consistent with how asset health will be presented in Transpower's RCP2 proposal document due 2 December 2013.
- 5.43 The asset areas are sufficiently broken down by category to enable interested persons to ascertain whether particular classes of assets have a lower health rating, and therefore will require additional investment, than others.
- 5.44 The asset age schedule requires Transpower to disclose the age of each class of asset within an asset category as well as the accuracy of that data. It is expected that Transpower will have high data accuracy. If an asset's age is unknown, this must also be disclosed.
- 5.45 Asset age information is important for interested persons to assess the age structure of certain asset classes so that they may be guided in their assessment of the state of the grid and the investment that may be required in the future.
- 5.46 Circuit information again provides information on the drivers for costs for Transpower. It identifies the length of line for each voltage, and the length of lines which cover certain types of terrain. The length of line for each voltage is further disaggregated to enable more specific assessment of the composition of Transpower's grid.
- 5.47 We welcome submissions on the value of the terrain categories and whether the level of disaggregation provides useful information to interested persons on the composition of Transpower's network. For example, the length of line in high corrosion zones may be of more use as a dataset.
- 5.48 The grid changes schedule enables interested persons to assess how Transpower's grid is changing over time and the reasons for these changes, eg, asset disposals or divestments.

Forecast information

- 5.49 Information disclosures in several areas of grid management information require forecasts. Historic forecasts are useful to compare with actuals to assess

performance and current forecasts are useful in explaining plans, as set out in the ITP.

- 5.50 The length of the forecast varies based on the ability to accurately forecast the data in question. We consider we have proposed appropriate forecast lengths but welcome submissions on this topic.

6. Disclosure of system operator information

Purpose of this chapter

- 6.1 The purpose of this chapter is to present our reasoning for requiring the disclosure of system operator information.

Overview of decisions

Table 6.1 Overview of system operator information

Category of information	Required disclosures	Reference in draft schedules
Financial performance	Return on investment, regulatory profit	SO1
Expenditure	Operating and capital expenditure	SO1

Why interested persons need system operator information to assess performance

- 6.2 Transpower, in its capacity as system operator, manages the real time flow of electricity in the national grid.
- 6.3 Transpower's system operator activities are regulated under Part 4 of the Act as they fall under the definition of lines services.
- 6.4 Transpower's activities as system operator are not currently subject to price-quality path regulation due to the existence of an arm's length contract with the Electricity Authority. The disclosure of system operator information is useful for interested persons in assessing whether the contract with the Electricity Authority is producing outcomes consistent with those that would be observed in a workably competitive market and therefore that the purpose of Part 4 is being met.

Information required

- 6.5 Disclosure of financial performance information enables interested persons to assess the performance of Transpower's system operator activities. This is important as the rationale for the Commission not subjecting the system operator to price-quality path regulation is the perceived arm's length nature of the contract between the Electricity Authority and Transpower.
- 6.6 A key indicator of financial performance is the ROI. This measure enables interested persons to compare the returns Transpower is earning as system operator to those that could be expected to be earned in a workably competitive market to assess whether Transpower is earning an appropriate economic return. As the system operator is less capital intensive, it is not expected that the system operator's ROI will be comparable to Transpower's transmission ROI.
- 6.7 We have used a mid-year timing assumption for all system operator cash-flows. We consider that this is an appropriate assumption and will result in an accurate ROI.

- 6.8 To calculate the ROI, it is necessary to calculate regulatory profit. Therefore, Transpower is required to disclose information necessary to calculate the regulatory profit. This includes revenues, operating expenditure, tax and depreciation.
- 6.9 Capital expenditure information is also an important disclosure as it provides interested persons with information to assess whether Transpower is investing efficiently in its capacity as system operator.
- 6.10 Operating expenditure information disclosure is important in aiding interested persons in understanding whether the system operator is operating efficiently.
- 6.11 Transpower is already required to disclose a large amount of information on the system operator's performance. The system operator is required to provide monthly performance reports which are published on Transpower's website. Consequently, the draft ID determination does not include non-financial performance information.
- 6.12 We welcome submissions on whether the proposed system operator disclosures are appropriate and whether there is any additional information that will be of use to interested persons, for example, forecast information.

Attachment A: The regulatory framework for Transpower and information disclosure

Purpose of this attachment

- A1 This attachment sets out the regulatory framework under which we are setting information disclosure requirements for Transpower.

Transpower is regulated under the Commerce Act

- A2 Transpower is the State Owned Enterprise responsible for electricity transmission services in New Zealand. It performs two main operations in the New Zealand electricity market. Firstly, as grid owner, it owns and operates the infrastructure which makes up the national grid. Secondly, as system operator, it provides real time services to co-ordinate electricity generation, transmission and demand.
- A3 As a supplier of regulated services (services that face little or no competition), Transpower is subject to regulation from regulatory bodies including the Commission. Transpower is regulated by the Commission under Part 4 of the Act.
- A4 Under Part 4 of the Act Transpower is subject to information disclosure and price-quality path regulation.
- A5 Transpower's role as system operator is subject to information disclosure regulation, but is not currently subject to price-quality path regulation due to an agreed arm's length contract between the Electricity Authority and Transpower. We consider that this contract produces outcomes consistent with a workably competitive market.
- A6 Transpower's transmission operations are subject to Individual Price-Quality Path determination (IPP). This determination provides for the Commission to set Transpower's Maximum Allowable Revenue (MAR), the maximum amount of revenue Transpower can earn in a given year from regulated transmission services.
- A7 The MAR is set using a building blocks approach meaning the revenue Transpower is allowed to earn in a pricing year is built up from its asset base, operating expenditure, tax, depreciation and return on capital.
- A8 The Act requires us to set input methodologies for regulated suppliers. Input methodologies provide the principles and rules that underpin our regulatory instruments and cover such things as asset valuation, cost allocation and taxation.
- A9 We have set IMs for Transpower for information disclosure, its individual price-quality path¹⁵ and for capital expenditure.¹⁶

¹⁵ *The Transpower Input Methodologies Determination [2012] NZCC 17.*

We must determine information disclosure requirements for Transpower

- A10 Transparent disclosure of information provides incentives to move outcomes towards those observed in workably competitive markets. Transpower is subject to ID requirements for any regulated line services it supplies. This includes both transmission line services and system operator services.¹⁷
- A11 The purpose of ID, as set out in s 53A of the Act, is to ensure that sufficient information is available to interested persons to allow them to assess whether Part 4 of the Act is being met.
- A12 The purpose of Part 4 is to promote the long-term benefit of consumers in markets where there is little or no competition such as the markets for Transmission and system operator services where Transpower operates. This is to be done by promoting outcomes that are consistent with outcomes produced in competitive markets, such that Transpower:
- A12.1 has incentives to innovate and to invest, including in replacement, upgraded, and new assets,
 - A12.2 has incentives to improve efficiency and provide services at a quality that reflects consumer demands,
 - A12.3 shares with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices, and
 - A12.4 is limited in its ability to extract excessive profits.

Transpower's current requirements to disclose information

- A13 Currently, the IPP determination, the Capex IM, and the Electricity Information Disclosure Regulations 2004 prescribe annual information disclosure from Transpower. In addition, we issue information gathering notices to seek information used in setting and updating Transpower's Maximum Allowable Revenue (MAR).
- A14 Under the existing Electricity Information Disclosure Regulations 2004, Transpower prepares and presents a set of audited regulatory financial statements with note disclosures. This is published as Transpower's Information for Disclosure report as a supplement to the NZ Gazette. Transpower will be required to publish this disclosure will continue until the ID determination is set.
- A15 Under Part 5 of the IPP determination, Transpower is required to provide an annual compliance monitoring statement. We use this to monitor Transpower's compliance

¹⁶ *Re Transpower Capital Expenditure Input Methodologies Determination [2012] NZCC 2.*

¹⁷ Electricity Industry Act 2010 s150 (1)

with its IPP. This information is also audited and is included in Transpower's Annual Regulatory Report.

- A16 The Capex IM requires Transpower to disclose information necessary to perform annual revenue adjustments as well as to publish asset management information and quality outcomes.
- A17 Transpower also supplies information in response to information gathering notices that we issue. Previous notices have been issued to determine Transpower's annual revenue updates.
- A18 See attachment G for a full discussion on Transpower current information reporting requirements.

Attachment B: We aim to ensure that information disclosure requirements are cost-effective

- B1 The Act specifies that the Commission must determine information disclosure requirements to ensure that sufficient information is readily available to interested persons to assess whether the purpose of Part 4 is being met.
- B2 We consider that attempting to undertake a cost-benefit analysis of the requirements to issue an ID determination could potentially detract from the fact that it is a statutory requirement. Our concern, therefore, is the development of information disclosure requirements for Transpower that meet the purpose of Part 4.
- B3 However, we recognise that providing the information required by the determination comes at a cost. To attempt to minimise the cost of compliance that Transpower faces we have:
- B3.1 taken into account Transpower's practices and capabilities,
 - B3.2 aligned the proposed requirements with Transpower's other regulatory requirements,
 - B3.3 required disaggregated information only where it is necessary and provides clear benefits,
 - B3.4 limited the ID requirements to reduce compliance costs, and
 - B3.5 sought input from Transpower in relation to the proposed requirements.

Taking into account Transpower's existing practices and capabilities

- B4 Where possible we have aligned the ID requirements with Transpower's existing business practices and their existing capability, including by:
- B4.1 relying on existing information gathering practices and readily available data formats,
 - B4.2 providing Transpower with flexibility, where appropriate, to present information in a manner which reflects how they manage its businesses, for example, there is no set format for information contained in the asset management plans,
 - B4.3 requiring disclosure of information that is useful for Transpower in running its business. For example, grid management requirements seek information that we consider a company applying good industry practise would have available, or would seek to have available, to ensure its asset management practices are effective, and

- B4.4 allowing Transpower to disclose estimated values for some types of grid information, tagged with an accuracy assessment. As a result, Transpower will be able to make disclosures based on readily available information or estimates. This applies to information on the asset register, asset age profile, and asset condition.

Aligning with Transpower's other regulatory requirements

- B5 ID is a specific form of regulation under Part 4, with its own clearly defined purpose, and is independent of other regulatory instruments. However, in determining ID requirements we have been conscious that ID is also part of a wider package of regulation under Part 4 and that Transpower is subject to other reporting requirements.
- B6 To promote the long-term interests of consumers, and maximise the cost-effectiveness of regulation under Part 4, we have sought to align ID requirements with other parts of the Part 4 regulatory regime, where appropriate. For example:
- B6.1 we have specified ID requirements so that we can use information disclosed in accordance with the ID determinations, where appropriate, in setting Transpower's price-quality paths, and
- B6.2 we have taken into account the information already required to be disclosed by other requirements.

Requiring disaggregated information only where necessary

- B7 We have carefully considered the appropriate level of disaggregation for the information required to be disclosed by Transpower.
- B8 We have based the ID requirements on the principle that disaggregated information should be required only where it is necessary to:
- B8.1 identify the drivers of expenditure,
- B8.2 provide information which would not otherwise be disclosed on a significant sub-item, and
- B8.3 inform the assessment of Transpower's performance over time.
- B9 Disaggregation should be based, wherever possible, on a consistent hierarchy to ensure that disclosed information can be compared. We have endeavoured to achieve this objective by consistently breaking down assets into certain asset classes that Transpower uses.
- B10 We consider we have reached a pragmatic balance between the extent of disaggregated information interested persons need to answer the questions outlined in Attachment C, and the costs to Transpower.

Limiting ID requirements to reduce compliance costs

B11 In addition to taking into account Transpower's existing practices and capabilities, aligning ID with other regulatory requirements, and requiring disaggregated information only where necessary, we have limited the compliance costs of ID by:

B11.1 requiring certain information less frequently than annually. For example, we have required the asset age register to be completed biannually as we view the costs of requiring this to be completed annually outweigh the benefits, and

Sought input from Transpower and other industry participants

B12 In developing the draft ID determination, we sought input from Transpower and other industry participants to help us limit unnecessary additional cost, and enhance the usefulness of the information disclosed by Transpower.

B13 We have also taken account of Transpower's views on various matters, such as the form in which Transpower best meets its existing reporting obligations, and how certain measures are best calculated eg, how return on investment is calculated.

B14 There was also a significant amount of consultation when we developed ID requirements for other regulated sectors. We have taken the views and concerns expressed during these consultation phases into account when developing the draft ID requirements.

Attachment C: Our process and approach to developing information disclosure requirements

- C1 This attachment details our process and approach to developing ID requirements for Transpower.
- C2 In developing ID requirements we first considered the questions interested persons need to ask to assess whether the Part 4 purpose is being met and the information we consider they need to answer these questions.
- C3 Before we do so, it is helpful to outline our interpretation of the key terms in the purpose of information disclosure. Below, we discuss who ‘interested persons’ are, and what we mean by ‘sufficient’ and ‘readily available’.

Interpretation of key terms in s 53A

- C4 To develop ID requirements for Transpower, an understanding of what key terms in the s 53A of the Act was required. Below is how we interpret these terms.

Interested persons

- C5 We interpret ‘interested persons’ broadly to include (among others) persons who are affected by the way in which regulated services are provided, whether they take an active interest in the performance of Transpower or not. Accordingly, we consider interested persons to include:
- C5.1 Transpower,
 - C5.2 regulated suppliers (this includes electricity distribution businesses, gas pipeline businesses and airports),
 - C5.3 consumers and consumer groups,
 - C5.4 electricity retailers, electricity generators, and their representative groups,
 - C5.5 central government and regional authorities,
 - C5.6 other regulatory agencies, such as the Electricity Authority ,
 - C5.7 any other stakeholder of the regulated supplier, including investors and their advisors (such as equity analysts and other professional advisors), and owners of regulated suppliers, and
 - C5.8 the Commerce Commission.
- C6 Interested persons are a diverse group. Their particular information needs will vary depending on their particular areas of interest and available resources. Some interested persons will wish to undertake their own customised analysis of disclosed information, while others may lack the resources or specialist knowledge for this,

and so will prefer information to be summarised and analysed for them (eg, through our summary and analysis).

'Sufficient' information

- C7 The Act requires that the information is sufficient for interested persons to assess whether the Part 4 purpose is being met. Both quantitative and qualitative information is necessary to make this assessment, with quantitative information sufficiently disaggregated to allow interested persons to understand what drives performance.
- C8 For example, to understand whether Transpower investing efficiently in our view, information about asset age, health and capital expenditure is required. Qualitative explanations assist interested persons in interpreting quantitative information.
- C9 In deciding on what is sufficient information, we have been mindful of the cost of disclosure requirements on Transpower. To keep those costs to a minimum, we have considered several factors as outlined in attachment B.

'Readily available'

- C10 The form in which information is disclosed affects interested persons' ability to use that information to assess performance. This information must be readily available to be of maximum use to interested persons. We consider readily available information to be consistent, accessible, and understandable.
- C11 Consistent disclosure of data (ie, disclosure of data in a standardised form that can be compared over time) helps interested persons to assess performance of Transpower, including whether they are managing their assets for the long-term benefit of consumers.
- C12 We have developed Microsoft Excel schedules for quantitative information with the requirement that they are made publicly available along with other information required by the draft ID determination. This ensures the information is accessible.
- C13 Information disclosed by Transpower will also be summarised by us which ensures information is understandable to all interested persons.

Incentives for energy efficiency and demand side management, and reduced energy losses

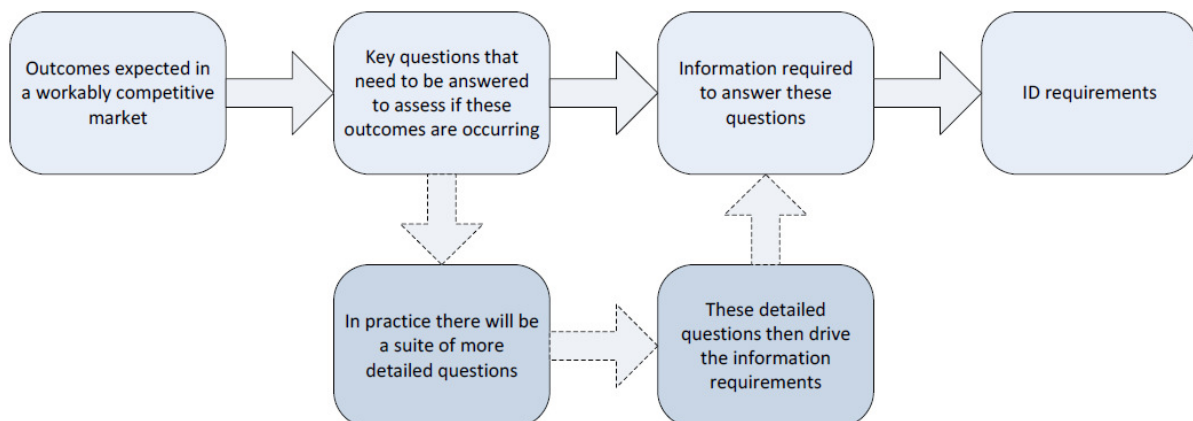
- C14 In determining ID requirements for Transpower, s 54Q of the Act requires us to promote incentives, and avoid imposing disincentives, for Transpower to invest in energy efficiency and demand side management, and to reduce energy losses.
- C15 ID will help to improve understanding of Transpower's performance in these areas. We have considered the draft ID determination for Transpower in light of s 54Q.
- C16 By providing increased transparency about Transpower's capital and operating expenditure, demand, capacity and energy losses, we consider the draft ID determination for Transpower will improve incentives for Transpower in the above areas.

- C17 Transpower's asset management plans are expected to describe strategies or processes that promote the energy efficient operation of the grid, such as network design strategies, demand side management strategies and asset purchasing.
- C18 Transpower's asset management plans are also expected to discuss grid development options, including distributed generation and non-network solutions.
- C19 We do not consider that the draft ID determination for Transpower reduces incentives, as it is limited to requiring Transpower to disclose information about its business.

Information interested persons need to assess whether the Part 4 purpose is being met

- C20 Our key consideration in determining ID requirements is what information interested persons need in order to assess whether the Part 4 purpose is being met. In other words, what information is needed to determine whether the performance of Transpower is consistent with the performance outcomes one would expect to find in a workably competitive market?
- C21 The approach we have taken to determine the necessary information is to:
- C21.1 consider the performance outcomes one would expect to find in a workably competitive market, with reference to the Part 4 purpose
 - C21.2 identify the key questions and hypotheses interested persons need to answer to assess if these outcomes are being promoted
 - C21.3 determine the information interested persons would need to answer those questions.
- C22 Figure C1 illustrates this process. As the figure shows, to be able to answer each of the key performance questions, interested persons will need to consider a number of more detailed sub-questions.

Figure C1 Determining the information needed to assess performance against the Part4 purpose



Performance questions

- C23 We consider that, in order to assess whether the Part 4 purpose is being met, interested persons need to be able to answer several key questions on different aspects of Transpower's performance. These questions relate to historical, current and expected future performance.
- C24 Table C1 sets out these questions and the elements of the Part 4 purpose that each question addresses.

Table C1 Key performance questions to assess if the Part 4 purpose is being met

Key performance questions	Relevance to the Part 4 purpose (s 52A(1))
Is Transpower operating and investing in its assets efficiently?	(a) and (b)
Is Transpower innovating where appropriate?	(a)
Is Transpower providing services at a quality that reflects consumer demands?	(b)
Is Transpower sharing the benefits of efficiency gains with consumers, including through lower prices?	(c)
Do the prices set by Transpower promote efficiency?	(a) and (b)
Is Transpower earning an appropriate economic return over time?	(d)

- C25 The questions in Table C1 address the key areas of performance highlighted by the Part 4 purpose in s 52A(1). The answers to these questions will enable interested persons to assess whether the Part 4 purpose is being met.
- C26 For Transpower, an individual price-quality path is also set in a way that promotes the Part 4 purpose. Over time, the answers to these performance questions will help interested persons to understand whether price-quality regulation is being effective.
- C27 The questions in Table C1 overlap and are interrelated. Interested persons cannot answer some questions without knowing the answer to previous questions. For example, to assess whether Transpower is earning an appropriate economic return over time interested persons need to have formed a view on questions 1 to 5, including whether Transpower is operating and investing efficiently, and providing services at a quality that reflects consumer demands.
- C28 Similarly, to assess whether Transpower is operating and investing in its assets efficiently, interested persons will need to first consider questions 2 and 3. The information required by interested persons must therefore be treated as an integrated package.
- C29 We have identified below some examples of the types of sub-questions interested persons must address in order to answer each of the questions identified in Table C1.

C30 Below, we describe the types of information that we consider interested persons will need to answer the six key performance questions. We provide more detail on the link between the key performance questions, the types of sub-questions that can help to answer them, and the information Transpower will be required to disclose as set out in chapters 4 to 6 of this reasons paper.

Is Transpower operating and investing in its assets efficiently?

C31 This question is central to assessing performance outcomes. We consider that to answer this, interested persons are likely to explore a number of detailed questions, including:

C31.1 what are the reasons for the level of current expenditure?

C31.2 how does current expenditure compare to historical trends?

C31.3 what are the reasons and the intended outcomes for planned operating and capital expenditure?

C31.4 what is the long term plan for the grid?

Is Transpower innovating where appropriate?

C32 Innovation takes many forms and by its nature cannot be anticipated. However, we consider that in assessing whether Transpower is innovating where appropriate, interested persons are likely to examine the following:

C32.1 What is current and forecast expenditure on research and development (R&D), and how does this compare to historical expenditure?

C32.2 What R&D and innovation activities and outcomes has this expenditure funded (or will this expenditure fund)?

C32.3 What demand side management steps is Transpower taking?

C32.4 What cost efficiencies are being made by innovating?

Is Transpower providing services at a quality that reflects consumer demands?

C33 To answer this question, interested persons are likely to consider a variety of qualitative and quantitative information to assess issues, such as:

C33.1 What is the level of quality currently being supplied to consumers?

C33.2 How has the level of quality changed over time, and why?

C33.3 What are the reasons for loss of supply and unavailability events?

C33.4 Is Transpower planning any new investment for the purpose of improving quality, and what impact is that expected to have?

Is Transpower sharing the benefits of efficiency gains with consumers, including through lower prices?

- C34 To answer this, interested persons must first assess what efficiency gains have been achieved historically. They are then likely to explore questions such as: What are current charges paid by customers, how have they changed over time and why and how are they expected to change?
- C35 Transpower's individual price-quality path should encourage it to share efficiency gains with their consumers. ID will shed light on whether the mechanisms to achieve such are operating effectively.

Do the prices charged by Transpower promote efficiency?

- C36 Transpower's prices are legally determined by the transmission pricing methodology (TPM). The TPM sets out the methodology Transpower is to follow when setting prices.
- C37 The TPM is already publicly available and reviewed by the Electricity Authority. The information provided in the TPM will be helpful to interested persons to assess the extent to which Transpower's prices are efficient.
- C38 Disaggregated revenue information collected through the information disclosure requirements will also be helpful in making this assessment by providing more information on the outcomes of the TPM.
- C39 The pricing information needed in the draft ID determination to answer the above question is a breakdown of prices to ensure pricing consistency with the TPM.

Is Transpower earning an appropriate economic return over time?

- C40 In assessing whether Transpower is earning an appropriate economic return over time, it is necessary to consider:
- C40.1 On one hand, is Transpower earning a **sufficient** return?
- C40.2 On the other hand, is Transpower earning **excessive** returns?
- C41 This assessment takes account of Transpower's return on investment (ROI) over time, but must also be informed by the answers to the five questions discussed above.

Overview of information needed to assess whether the Part 4 purpose is being met

- C42 To answer the key performance questions identified above, interested persons need a package of different types of information. In particular, interested persons require information on:
- C42.1 how the grid is being managed, including forward looking information on planned investment, and information on asset management processes;

- C42.2 operational and capital expenditure on different activities, both historic and forecast,
- C42.3 quality outcomes (eg, reliability of electricity transmission network), and
- C42.4 financial performance, in particular ROI and the key determinants of ROI, such as revenue and the regulatory asset base.

Information on how the grid is being managed

- C43 Information on the composition, age, and condition of grid assets will help interested persons to understand the relationship between the current state of the grid, current expenditure and levels of service, and planned expenditure.
- C44 The condition, suitability and performance of Transpower's assets and the way Transpower manages and invests in its assets are critical determinants of the price, cost and quality of services that consumers receive.
- C45 Interested persons will also need information on the key factors that can explain differences in expenditure over time, such as the size of the grid, demand, capacity and the age and condition of the grid. This data, in conjunction with the other data listed above, enables interested persons to assess whether Transpower is managing its assets for the long term and whether the level and timing of expenditure is efficient, such that it benefits consumers in the long term.
- C46 Information that is standardised where possible will enable interested persons to more easily identify patterns and trends over time.
- C47 Information on how the grid is being managed will also include qualitative explanations on the Transpower's approach to asset management, for example:
 - C47.1 the level of grid quality and risk that Transpower is currently operating at, and planning to achieve in the future and how this relates to expenditure,
 - C47.2 whether Transpower is reviewing its asset management practices in an on-going manner, and whether this has identified areas where improvements in the management of assets are possible, and
 - C47.3 qualitative information on business-specific factors that affect the outcomes achieved.

Historical and forecast operational and capital expenditure on different activities

- C48 The disclosure of actual and forecast expenditure will enable interested persons to compare planned and actual outcomes. By reconciling actual to forecast expenditure, interested persons can increase their understanding of whether innovation and efficiency are being realised in Transpower's investments over time.
- C49 This information will also help interested persons to assess the reasonableness of Transpower's forecasts, the appropriateness of investment timing, and the extent to which projects are delivering the expected outcomes.

Information on quality outcomes

- C50 To assess whether Transpower is providing services at a quality that reflects consumer demands, interested persons also need information as to whether Transpower is meeting its quality targets.
- C51 This assessment also requires information on the aspects of quality that are important to consumers; the quality of service currently provided and the link between service levels, planned investment and therefore future quality.

Information on financial performance

- C52 The ROI is an important measure of profitability. To assess whether Transpower is earning an appropriate economic return over time, interested persons need information on key determinants of the ROI and how they change over time.
- C53 The key determinants are regulatory profit and the value of the Regulatory Asset Base (RAB value), including how the RAB value is rolled forward.
- C54 Regulatory profit represents the returns earned by Transpower, assessed against Transpower's investments.
- C55 Interested persons need information on revenue to assess that Transpower is earning returns consistent with a workably competitive market. A breakdown of these revenues is required to assess this and ensure Transpower is not-engaging in cross-subsidisation of services and therefore that Transpower is operating efficiently.
- C56 To assess whether a given level of return is appropriate, it is also necessary to consider other aspects of Transpower's performance. For example, is Transpower investing in and maintaining its network? Is it sharing any efficiency gains with consumers? Any assessment of Transpower's financial performance must therefore take account of the other information identified above.

Information on system operator

- C57 The draft ID determination provides for disclosure of revenue, expenditure and quality information for the system operator. It also requires the calculation of an ROI.
- C58 This information provides interested persons with an overview of Transpower's system operator services. This provides interested persons with information to assess whether the purpose of Part 4 is being met.
- C59 System operator information is not as extensive as that required for Transpower's transmission activities. This is due to the system operator being less capital intensive and contributing a small percentage to Transpower's revenues.

It is important that information is comparable over time

- C60 We consider that to meet the purpose of ID, information must be available in a form that ensures information is comparable over time and with overseas electricity transmission entities.
- C61 To ensure consistent information over time, the draft ID determination requires Transpower to disclose standardised quantitative information, based on standardised spreadsheet templates.
- C62 To ensure Transpower can be benchmarked with similar entities overseas, specific information is disaggregated by core grid and non-core grid.¹⁸
- C63 The consistent disclosure of data assists interested persons in assessing the performance of Transpower, including whether it is managing its assets for the long-term benefit of consumers. It ensures interested persons can build a full picture of Transpower's performance.
- C64 For example, due to the wash-up mechanisms in Transpower's individual price-quality path, one year's ROI is not a sufficient amount of information to assess Transpower's performance. Interested persons need to look at the ROI over several years to more accurately understand Transpower's performance.
- C65 Grid performance can be affected by a number of factors, including consumer requirements, consumer growth and location. Some of these factors are outside management control and change over time. Sufficient and consistent information is therefore needed to assess Transpower's performance appropriately and fairly.

Submissions on information interested persons need to assess performance: the role of analytical ratios

- C66 Analytical ratios were included in the EDB, GTB and GDB ID determinations at the request of several submitters.
- C67 We consider that analytical ratios have limited analytical value as they cannot capture all relevant aspects of performance.
- C68 We welcome submissions on whether interested persons will find it useful if analytical ratios are included in the Transpower ID determination.

¹⁸ The core grid is defined in Schedule 12.3 of Part 12 of the Electricity Industry Participation Code (2010).

Attachment D: Assurance requirements

Purpose of attachment

- D1 This attachment sets out the audit, certification and assurance requirements included in the draft ID determination.

Our approach to verification

- D2 Section 53C(3) of the Act provides that a s 52P determination may require information to be verified by statutory declaration or audit. Under section 53C(3)(f) we may impose any other requirements that we consider necessary or desirable to promote the purpose of information disclosure regulation. We interpret this provision as enabling us to require other forms of verification, if doing so promotes the purpose of information disclosure.
- D3 Interested persons, including the Commission, need assurance that disclosed information has been prepared in accordance with the determination and the IMs, to have confidence in their assessments of whether the purpose of Part 4 is being met.
- D4 In setting the verification provisions we have sought to balance the need for assurance that the disclosed information complies with the requirements and the IMs, and the costs incurred in providing that assurance.
- D5 We are aware that providing assurance is costly and that the benefits of assurance need to be weighed against such costs. We seek submissions on the most cost-effective way of ensuring that information submitted from Transpower is accurate and can be relied upon when assessing performance.

Types of verification

- D6 There is a range of options available that provide assurance that information is reliable including:
- D6.1 director certifications,
 - D6.2 statutory declarations,
 - D6.3 audit reports,
 - D6.4 expert opinions, and
 - D6.5 Commission review of disclosures.

Director certifications

- D7 Director certification can be a relatively cost-effective means of gaining assurance as it is expected that directors would be able to certify information given their knowledge of the business, and their role.

- D8 We expect that directors will seek whatever advice they consider is needed prior to signing the director certificate, which may include senior executive or external advice.

Statutory declarations

- D9 Statutory declarations are a stronger form of certification owing to the sanctions that apply should a false declaration be given. The draft ID determination does not require statutory declarations but, rather, intends to rely upon the assurance provided by director certifications.

Audit reports

- D10 In certain instances, it is more appropriate to have a third party certify disclosed information. This form of assurance, however, does have its limitations and can be costly. The cost of gaining certification increases with the level of certification required.
- D11 Accordingly, audit opinions are reserved for disclosures upon which we require a high level of assurance.

Expert opinions

- D12 Expert opinions are valuable in seeking independent assurance in areas requiring specific expertise where an auditor may not be qualified. Generally speaking an audit opinion is preferred over an expert opinion due to the reliance that can be placed on the standard to which an audit opinion is provided.
- D13 In some instances auditing standards or the expertise of auditors may limit the ability of an auditor to provide the required assurance on particular information. In such cases it may be necessary for an expert opinion to be required rather than an audit opinion.
- D14 Financial auditors can, however, engage experts to supplement their areas of expertise so that they have the skill set available to complete the audit of disclosures as an alternative to Transpower requiring supplementary expert opinions.
- D15 We do not propose to require expert opinions in the draft ID determination.

Commission review of disclosures

- D16 Section 103 of the Act provides assurance of accurate disclosures by providing for penalties where a party knowingly provides false or misleading information to us.
- D17 Sections 86 and 86B of the Act also provide for penalties for breaching the ID Requirements.
- D18 We have the ability to monitor information under s 53B(2)(a) of the Act and are required to publish a summary and analysis of that information. As part of this process we may seek to further verify any information included in that summary and analysis.

D19 Table D1 below summarises the provisions of the draft ID determination relating to verification of required disclosures. The disclosures are categorised consistent with the nature of their underlying information and summarises the form of assurance required in the draft ID determination.

Table D1 Draft ID determination - summary of assurance provisions

Disclosure category	Schedules	Assurance requirements
Historical financial information	HFP1-9, R1, R3, E1, E3, E5 SO1	Audited Director certified
Forecast financial information	R2, E2, E4	Audited - verified to source data only Director certified
Asset management and quality information	AM1-5, Q1-2	Director certified
Composition of grid information	CG1-3	Director certified

D20 In determining the appropriate level of assurance, we have considered the underlying characteristics of the information, the availability of records, the costs of providing the various forms of assurance and the level of reliance placed on the information.

D21 We welcome submissions on the assurance requirements outlined above.

Information required to be director certified

D22 The draft Transpower ID determination requires disclosed information to be director certified.

D23 Directors must certify that, having made reasonable enquiry, to the best of their knowledge the information complies, in all material respects, with the relevant requirements.

D24 Director certificates must be signed by two directors and attached to the disclosures when disclosure is made, including internet publication.

- D25 We have included the wording 'in all material respects' to the certification of disclosures by directors. This introduces a materiality threshold to the certification recognising that we are primarily concerned with material, not trivial, breaches. This approach is consistent with previous ID determinations for other sectors.

Information subject to audit requirements

- D26 The draft ID determination requires historical financial disclosures to be audited.
- D27 Forecast financial information is required to be audited in the draft ID determination to ensure it is presented on a basis consistent with the regulatory accounting or technical measurement requirements used for disclosures for the current financial year and the immediately preceding financial year. This is the approach taken with the EDB ID requirements.
- D28 The source data used for forecast information is not required to be audited.
- D29 We have taken into account the standard of verification considered appropriate in each case when establishing audit requirements. Further, we understand that an auditor who qualifies as an Independent Auditor (as defined in the draft ID determination) would be qualified to complete all aspects of the audit engagement.

Form of audit reports

- D30 The draft ID determination provides that:
- D30.1 the audit report contain a statement as to whether or not the disclosures comply with the requirements, and
 - D30.2 if the disclosures do not comply with the requirements, the audit report is to explain the respects in which the disclosure does not comply with the requirements.
- D31 We intend these provisions to be flexible enough to allow for changes in the New Zealand Auditing Standards and therefore avoid any conflicts which may arise should New Zealand Auditing Standards be amended.

Auditor qualifications

- D32 The draft ID determination provides that the auditor is required to:
- D32.1 be qualified as an auditor of a company under the Companies Act 1993
 - D32.2 have no relationship that involves, or is likely to involve, a conflict of interest
 - D32.3 not have assisted with the compilation of the information or provided advice or opinions on the methodologies or processes used in compiling the information
 - D32.4 not be associated with any person who has provided assistance, advice or opinions in preparing the disclosures.

D33 We consider that the standards and guidance regarding auditor independence published by the Institute of Chartered Accountants (NZICA) also provides appropriate guidance relating to auditor independence.

Attachment E: Return on investment calculation and cash-flow timing assumptions

Purpose of this attachment

E1 This attachment outlines the calculation for the return on investment (ROI), the cash-flow timing assumptions to apply to that calculation and our reasoning for these.

Overview

E2 For interested persons to assess whether the Part 4 purpose is being met, an indicator of profitability is required. ROI is a commonly used measure of profitability which allows users of financial information to compare the relative performance of similar firms.

E3 For ID purposes, the ROI enables interested persons to compare Transpower's profitability to what an efficient firm would earn in a workably competitive market. More specifically, the vanilla and post-tax ROI can be compared to the vanilla and post-tax WACC used in determining the maximum amount of revenue Transpower can earn in a pricing year.

E4 Revenue is actually received, and expenses are actually paid throughout the year. Consequently, assuming year-end timing of cash-flows results in a less accurate ROI measure. By incorporating intra-year timing assumptions, the ROI measure better reflects the time value of money and is more accurate.

E5 Table E1 outlines the cash-flow timing assumptions used in the calculation of the ROI.

Table E1 Cash-flow timing assumptions

Cash flow	Timing assumption
Revenue	20th of month following supply
Operating expenditure	Evenly throughout the year, mid-year on average
Pass-through and recoverable costs	Evenly throughout the year, mid-year on average
Commissioned assets	Month of commissioning
Disposed assets	Evenly throughout the year, mid-year on average
Tax	Evenly throughout the year, mid-year on average
Term-credit spread differential	Evenly throughout the year, mid-year on average

Calculation of return on investment

E6 The most accurate assessment of return on an investment is a cash-based internal rate of return (IRR) calculation. The IRR is the discount rate that, when applied to a future stream of net cash-flows associated with an investment, equates the present value of those cash flows to the initial cost of the investment.

- E7 By using a cash-based ROI, as opposed to an accounting based approach, a more accurate measure of performance is able to be calculated. Any accounting based approach is likely to be just an approximation of the IRR.
- E8 Over a single year, the IRR can be found by solving for the IRR term in the following expression:

Asset Value at beginning of year

***= Sum of Discounted Net Cash Flows during year
+ Discounted Asset Value at end of year***

$$= \sum_i \frac{NCF_i}{(1 + IRR)^{p_i}} + \frac{AV_1}{1 + IRR}$$

where:

IRR = internal rate of return

NCF_i = *i*th net cash flows during the year

p_i = proportion of year elapsed *i*th net cash flow

AV₁ = asset value at year-end.

- E9 From the above expression it is evident that economic returns can arise from:
- E9.1 the present value of net cash-flows during the year, and/or
- E9.2 capital gains or losses associated with the economic asset value at the end of the year, which in turn represents the present value of subsequently expected net cash-flows.¹⁹
- E10 Incorporating the cash-flow timing assumptions identified above, Transpower's ROI can be calculated by solving for ROI in the formula below:

¹⁹ The present value of any investment is the discounted value of future cash flows

$$\begin{aligned}
& \text{opening RAB} \\
&= \frac{\text{revenue}}{(1 + ROI)^{217/365}} - \sum \frac{\text{Value of commissioned assets}}{\text{assets}} \\
&\quad - \frac{\text{operating expenditure} + \text{disposed assets} - \text{tax} - \text{pass through \& recoverable costs} + \text{TCSD}}{(1 + ROI)^{182/365}} \\
&+ \frac{\text{adjusted closing RAB}}{(1 + ROI)} \\
&\quad \sum \text{Value of commissioned assets} \\
&\quad = \frac{VCAjul}{(1 + ROI)^{16.5/365}} + \frac{VCAJaug}{(1 + ROI)^{47.5/365}} + \frac{VCAsep}{(1 + ROI)^{77.5/365}} \\
&\quad + \frac{VCAoct}{(1 + ROI)^{108.5/365}} + \frac{VCAnov}{(1 + ROI)^{138.5/365}} + \frac{VCAdec}{(1 + ROI)^{169.5/365}} \\
&\quad + \frac{VCAjan}{(1 + ROI)^{200.5/365}} + \frac{VCAfeb}{(1 + ROI)^{228.5/365}} + \frac{VCAmar}{(1 + ROI)^{259.5/365}} \\
&\quad + \frac{VCAapr}{(1 + ROI)^{289.5/365}} + \frac{VCAmay}{(1 + ROI)^{320.5/365}} + \frac{VCAjun}{(1 + ROI)^{350.5/365}}
\end{aligned}$$

- E11 The post-tax ROI, comparable to the post-tax WACC is found by subtracting the interest tax shield (in percentage terms) from the vanilla ROI:

$$ROI_{PT} = ROI_V - k_d T_c L$$

where:

k_d = cost of debt

T_c = corporate tax rate

L = leverage.

Rationale for cash-flow timing assumptions

Revenue

- E12 It is standard industry practise for revenue to be received on the 20th day of the month following supply. We have confirmed that these trade terms are also applicable to Transpower. The timing assumption is equivalent to assuming that revenues are received slightly later than mid-year on average (on the 217th day of the year).

Operating expenditure

- E13 Some operating expenditure is paid on standard commercial terms ie, the 20th of the month following while other operating expenditure, such as wages and salaries, are incurred earlier. A reasonable assumption then is that operating expenditure occurs evenly throughout the year or on average at mid-year.

Pass-through and recoverable costs

- E14 Pass-through and recoverable costs are both an expense for Transpower as well as a revenue item. The revenue side is captured within 'revenue' so is received on the same terms (20th of the month following supply). When Transpower is paying these costs, it would be appropriate to assume that they are occurred evenly throughout the year in the same manner as operating expenditure ie, mid-year on average.

Commissioned assets

- E15 There can be significant seasonality effects in the commissioning of assets. The building blocks for the wash-up in schedule E of the Transpower IPP determination weight the value of commissioned assets taking into account the date they are commissioned. This has practically been interpreted as being weighted by the month in which they were commissioned. The ROI calculation takes this approach, requiring the cash-flows for commissioned assets to be calculated monthly.

Disposed assets

- E16 A mid-year assumption is representative the cash-flows Transpower receives from the disposal of assets as they generally occur evenly throughout the year. Calculating the ROI with a monthly timing for disposed assets would result in an immaterial change in the ROI.

Tax

- E17 Transpower regulatory tax allowance is estimated using a tax payable approach.²⁰ This approach comes closest to approximating the cash flows Transpower would need to meet its obligations to the IRD. Transpower would pay its corporate tax on average slightly later than mid-year. A mid-year timing assumption is however, reasonable and in any case to the benefit of Transpower.

Term-credit spread differential

- E18 The term-credit spread differential (TCSD) can be assumed to occur at mid-year. This is consistent with the assumption that an efficient firm would arrange its debt financing obligations to match its overall net cash flows. Given the current small size of Transpower's TCSD, the difference in amounts with a mid-year and year-end timing factor is largely immaterial in any case.

²⁰ For an explanation of the rationale in applying a tax payable approach to Transpower see the Transpower Input Methodologies Reasons paper, 5.3, p. 65.

Attachment F: Calculation of regulatory profit

Purpose of this attachment

- F1 This attachment provides our reasoning in relation to the calculation of regulatory profit included in the draft ID determination. This includes the calculation of inputs into the regulatory profit calculation.

Calculation of regulatory profit

- F2 Key determinants of regulatory profit include taxation, the impact of any credit spread arising from long term debt, the economic gain or loss arising through the mechanisms in Transpower's price-quality path, pass-through and recoverable costs.
- F3 The value of the RAB is determined by the initial RAB value and how the RAB value is rolled forward, including the calculation of depreciation, commissioned assets, disposed assets and the allocation of assets to the regulated part of the business.
- F4 Regulatory profit is calculated for regulatory transmission activities. System operator activities are disclosed separately. This is to ensure regulatory profit, and the ROI, is comparable to Transpower's price-quality path. This ultimately ensures interested persons have the information necessary to determine whether individual price-quality path regulation is resulting in the purpose of Part 4 is being met.
- F5 The calculation for regulatory profit is:

$$\begin{aligned}
 & \textit{regulatory profit} \\
 & = \textit{total regulated transmission revenues} - \textit{operating expenditure} \\
 & \quad - \textit{passthrough and recoverable costs} - \textit{depreciation} \\
 & \quad - \textit{term credit spread differential} - \textit{regulatory tax allowance}
 \end{aligned}$$

- F6 The following items are included in the calculation of regulatory profit. What they include and our reasons for including them are discussed.

Revenue

- F7 As mentioned above, regulatory profit is calculated for Transpower's regulated transmission revenues. Therefore, system operator revenue is excluded from revenue.
- F8 Customer Investment Contract (CIC) revenue is also excluded from the revenues used to calculate regulatory profit. CICs are capital projects Transpower undertakes with another party for lines services in which the other party provides financing. These assets consequently enter the RAB at nil value meaning they are not taken into account when Transpower's MAR is calculated.
- F9 Including CIC revenue in revenue would therefore decrease the usefulness of the regulatory profit calculation and consequently the ROI measure.

Operating expenditure

- F10 The operating expenditure categories included in the draft schedules are in line with those Transpower uses both internally and for reporting purposes. We have included an R&D category to capture Transpower's commitment to innovation.
- F11 CIC operating costs are included in the operating expenditure figure used in calculating regulatory profit. CIC operating costs are also including in the operating expenditure allowance building block in Schedule D of the IPP which means including them in the calculation of regulatory profit does not reduce the usefulness of the ROI measure.

Term-credit spread differential

- F12 Transpower may incur a credit spread longer than the 5 years assumed in the calculation of the WACC rate that applies to Transpower. Long term debt typically has a higher cost, thus the term-credit spread differential allowance allows Transpower to recognise the extra cost as an expense in regulatory profit.
- F13 Further reasoning for recognising a term-credit spread differential allowance is included in the Transpower IM reasons paper.²¹
- F14 The term-credit spread differential allowance schedule will only be required to be completed if the weighted average original tenor of the debt portfolio is greater than 5 years.
- F15 We welcome feedback on potential confidentiality issues arising from the requirement to disclose individual credit agreement details.

Regulatory tax allowance

- F16 The regulatory tax allowance is a significant component of regulatory profit. Transpower's regulatory tax allowance estimated using a tax payable approach.²²
- F17 The Transpower IMs state that the regulatory tax allowance is to be calculated by applying the tax rules and the corporate tax rate to regulatory profit.²³ However, a tax deduction for interest must be substituted with a tax deduction for notional deductible interest.²⁴ These requirements are reflected in the draft regulatory tax allowance schedule.

²¹ *Transpower Input Methodologies Reasons Paper*, pg, 79.

²² *Transpower Input Methodologies Reasons Paper*, pg, 65.

²³ *The Transpower Input Methodologies Determination [2012] NZCC 17.*

²⁴ *The Transpower Input Methodologies Determination [2012] NZCC 17.*

Depreciation

F18 Depreciation is further disaggregated by asset class as discussed in Chapter 4.

Pass-through and recoverable costs

F19 Pass-through and recoverable costs are required to be disclosed separately from operating expenditure to reflect the fact that these costs are outside the control of management. This also enables interested persons to exclude them if an ROI or regulatory profit measure excluding pass-through and recoverable costs is more meaningful.

Attachment G: Transpower's current information reporting requirements

Purpose of this attachment

- G1 The purpose of this attachment is to outline Transpower's current information reporting requirements.

Avoiding unnecessary duplication

- G2 Certain information required to achieve the purpose of ID is already required to be publicly disclosed by Transpower under other information reporting requirements. Accordingly, these disclosures are not included in the draft ID determination unless they are necessary to ensure that the actual data is disclosed, and not just a graphical representation of the data; or to ensure consistent disclosure from year to year.
- G3 While these information disclosure requirements are not repeated in the ID determination, they should be considered together with the requirements in the ID determination by interested parties when assessing whether the purpose of Part 4 is being met.
- G4 The Capex IM outlines annual information reporting requirements and requires Transpower to produce and publish an ITP.
- G5 The IPP determination requires Transpower to produce and publish an annual compliance monitoring statement.
- G6 This attachment describes what information is contained in each of the above information reporting requirements and how this satisfies the purpose of ID.

Information disclosure requirements included in the Integrated Transmission Plan

- G7 The ITP is composed of narrative information as well as three supporting documents:
- G7.1 asset management plan,
 - G7.2 planning report, and
 - G7.3 report on outputs and performance objectives.

Information disclosure requirements included in narrative information

- G8 The narrative information requirements in the ITP provide for the following:
- G8.1 overview of expenditure needs and outputs,
 - G8.2 forecast opex, base capex and approved major capex ,
 - G8.3 forecast grid output measures,

- G8.4 key assumptions and scenarios used to determine forecast expenditure and grid outputs,
 - G8.5 the uncertainties in these assumptions,
 - G8.6 assessment of the key risks affecting forecast expenditure,
 - G8.7 assessment of how these uncertainties and risks will affect Transpower's ability to deliver forecast grid outputs,
 - G8.8 description of risk mitigation measures,
 - G8.9 description of relationships between projects, programmes, and forecast grid outputs, and
 - G8.10 a summary of major capex projects under development.
- G9 The ITP narrative provides forecast opex, base capex, major capex, and grid output measures required to meet the purpose of ID. In order to get this information in a consistent format capable of detailed analysis, this information is included as templates in the draft ID determination.
- G10 The ITP narrative also provides an opportunity for Transpower to express its overview of risks, uncertainties and Transpower's risk management practices. This enables interested persons to better assess whether the grid management strategies Transpower undertakes are in the long term benefit of consumers.

Information disclosure requirements included in the asset management plan

- G11 The AMP requires the following information:
- G11.1 overall asset management strategy and objectives,
 - G11.2 overall risk management framework, and
 - G11.3 AMPs for each asset class covering the following:
 - G11.3.1 specifications for asset life cycle activities,
 - G11.3.2 general condition of existing assets,
 - G11.3.3 intended programmes of asset management works,
 - G11.3.4 routine maintenance and repair plans for assets, and
 - G11.3.5 programmes for routine maintenance and repair plans.
- G12 An AMP is necessary for ID as information templates cannot cover all topics and provide all information interested persons need to know in order to assess performance. The AMP also allows for a more flexible disclosure.

Information disclosure requirements satisfied by the planning report

- G13 The planning report requires the following:
- G13.1 the capabilities of the existing grid,
 - G13.2 demand and generation forecasts for the next 10 years,
 - G13.3 the grid's ability to meet future generation and demand needs,
 - G13.4 the role of the grid in facilitating generation, and
 - G13.5 grid investment that may be required to meet future needs for the next 10 years and beyond. This includes grid backbone transmission plans for the main North and South Island transmission corridors and for the HVDC link as well as a set of regional plans.
- G14 The planning report provides information on whether Transpower is managing the grid for the long term benefit of consumers and allows interested persons to assess whether planned investment is efficient and effective.
- G15 As per information contained in the ITP narrative, demand and generation have been made required disclosures in template form in order to receive consistent information from year to year to allow us to undertake summary and analysis as required by the Act.

Information disclosure requirements included in the report on output and performance objectives

- G16 The report on output and performance objectives requires the following to be disclosed:
- G16.1 a longer term view of outputs and grid performance that will be economic to achieve taking account of:
 - G16.1.1 performance expectations of end users of electricity,
 - G16.1.2 costs of delivering changes in level of grid outputs,
 - G16.1.3 the impact of committed expenditure on grid outputs, and
 - G16.1.4 any forecast degradation in asset condition or performance that will affect grid outputs.
 - G16.2 a detailed description of the analysis, assumptions and approach used to determine this longer term view, and
 - G16.3 an approach to convert this longer term view into short term objectives
- G17 This report provides information on how Transpower intends to provide a service in line with consumers' expectations and is implementing a strategy to do this.

Information disclosures included in the annual compliance monitoring statement

- G18 The IPP determination requires Transpower to produce and publish an annual compliance monitoring statement. This disclosure is currently included in Transpower's Annual Regulatory Report. The annual compliance monitoring statement requires Transpower to disclose information in relation to compliance with its individual price-quality path. This includes information on revenues, MAR wash-ups, EV accounts, quality measures and base capex.²⁵
- G19 Price-quality path compliance information is necessary to enable interested persons to assess whether the purpose of Part 4 is being met. Interested persons need to understand the mechanics of the revenue setting mechanism.
- G20 Transpower's compliance requirements will change in RCP2. Taking this into account, along with the desire to avoid any unnecessary duplication of information, has resulted in compliance information being excluded from the draft ID determination. The intention is to incorporate compliance information reporting requirements in the phase 2 information reporting requirements.
- G21 Some information contained in the annual compliance monitoring statement is however required to be disclosed in template form. This is to ensure a consistent time-series data set is attained. For example, the EV account and RCP1 quality measures are included in the schedules.

Information disclosure requirements included in the Capex IM annual information requirements

- G22 The Capex IM outlines annual reporting requirements for base capex and major capex. The information specified in the Capex IM is 'activated' by way of information gathering notices or an ID determination. Currently, information gathering notices are used to gather major capex information. The draft ID determination will replace the use of these notices.
- G23 The annual information requirements for base and major capex therefore guide the information required to be disclosed in the draft ID determination.

Base capex

- G24 For 2011-15, base capex information reporting requirements are contained in the annual compliance monitoring statement as prescribed by the IPP determination.
- G25 For 2015-20, the Capex IM specifies the base capex information reporting requirements that are to be included in the ID determination. These are:

²⁵ Base capex information requirements are included in the IPP for RCP1. For RCP2 onwards, base capex information requirements are outlined in the Capex IM.

- G25.1 actual base capex compared against approved base capex by category,
- G25.2 information relevant to any determination of base capex policies and procedures adjustment, including for any base capex projects over \$20 million:
 - G25.2.1 a summary of the cost-benefit analysis undertaken, and evidence of consistency with the investment test under the Capex IM,
 - G25.2.2 a description of the consultation process undertaken in relation to each project, and summary of responses, and
 - G25.2.3 identification of any projects for which a cost-benefit test and consultation consistent with major capex projects was not undertaken.
- G25.3 a list of any capital expenditure projects originally contained in the base capex proposal that are now deemed major capex, and
- G25.4 information relevant to any base capex expenditure adjustment and grid output adjustment including:
 - G25.4.1 the information, values or amounts used to determine the quantum of the adjustment, as specified in the Capex IM,
 - G25.4.2 all calculations and assumptions used to obtain those values or amounts, and
 - G25.4.3 evidence to support the actual FX rates.

Major capex

- G26 Like base capex, the Capex IM sets out major capex information disclosure requirements necessary to achieve the purpose of ID.
- G27 These requirements are therefore the source of the requirements contained in the draft ID determination and accompanying schedules.
- G28 Transpower will be required to report the following information to the Commission:
 - G28.1 information on uncompleted projects, including:
 - G28.1.1 updates as to the expected Major capex project cost (ie, an updated P50) compared against the Major capex allowance (or maximum recoverable cost, in the case of non-transmission solutions), together with explanations for any variance between the updated P50 and the P50 value specified in the Major capex project approval, and

- G28.1.2 forecast commissioning date or completion date, and explanations for any variance from the commissioning date assumption or completion date assumption specified in the Major capex project approval.
- G28.2 information for each commissioned or completed Major capex project, including:
 - G28.2.1 commissioning dates of assets associated with the project, and explanations for variances between the actual commissioning date and any commissioning date assumption specified in the project approval,
 - G28.2.2 in the case of a transmission investment, actual expenditure, and explanations of any variance from P50,
 - G28.2.3 in the case of a non-transmission solution, the actual costs treated as recoverable costs, and explanations of any variance from P50,
 - G28.2.4 the grid outputs achieved by the project and explanations for any variances from the approved outputs,
 - G28.2.5 analysis of lessons learned during and after the project,
 - G28.2.6 an assessment of any cost efficiencies that Transpower considers it has achieved in the course of the project, including descriptions, explanations, and assumptions made,
 - G28.2.7 any required adjustments resulting from project overspend relative to the Major capex allowances, and
 - G28.2.8 any required Major capex adjustments resulting from non-delivery of Major capex project outputs.
- G28.3 information for calculating the Major capex overspend adjustment and the Major capex project output adjustment, including:
 - G28.3.1 the values or amounts for each term used to determine the quantum of the relevant adjustment, as specified in the Capex IM,
 - G28.3.2 all calculations and assumptions used to obtain those values or amounts, and
 - G28.3.3 evidence in support of the actual FX rates.
- G29 Information submitted to the Commission will require appropriate assurance. Assurance requirements are discussed in Attachment D.

Pricing information

- G30 Transpower's draft ID determination includes pricing disclosures. These disclosures are in addition to, the pricing disclosures required by the Electricity Authority.
- G31 Other regulated suppliers to which ID applies are required to disclose details of their pricing methodologies. Disclosure of pricing methodologies assists interested persons to understand how prices are set.
- G32 Transpower's pricing methodology requirements are contained in Subpart 4 or part 12 of the Electricity Participation Code 2010. The Transpower pricing methodology (TPM) has been developed by Transpower but reviewed and approved by the Electricity Authority.²⁶
- G33 As the TPM is publicly available, the draft ID determination does not require Transpower to disclose its pricing methodology.
- G34 Transpower is also required by the Electricity Authority to disclose overall connection and interconnection charges.²⁷
- G35 The draft ID determination requires disclosure of connection charges, interconnection charges and total charges at each grid exit point (GXP). The customer at each connection point, and whether it is off take or injection must also be disclosed. Where there are multiple customers at a connection point the charges will need to be disaggregated by customer.

²⁶ The TPM was recommended to the Minister on 29 June 2007. Pursuant to section 172I of the Electricity Act 1992 (Act), the Minister notified the amendment of the Electricity Governance Rules 2003 (Rules) under section 172H of the Act and were published in the Gazette on 12 July 2007

²⁷ See https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/year-specific-data-april-2013.pdf