

INFORMATION DISCLOSURE

Reasons paper, draft determination and spreadsheet

19 December 2013

Keeping the energy flowing



TRANSPOWER



EXECUTIVE SUMMARY

We have carefully considered the Commerce Commission (Commission) draft proposal for Transpower's information disclosures (ID).

The draft proposal mirrors very closely the ID requirements developed for non-regulated and default price-quality path (DPP) regulated electricity distribution businesses (EDBs). The Commission's reasoning for each regime is also strikingly similar. This similarity strongly suggests to us that more work is required to properly take into account how ID should be designed for a firm with IPP regulation.

Properly addressing the challenge of designing ID for an IPP firm is important not only to ensure ID requirements avoid unnecessary costs and provide new and useful information, but also to ensure that ID requirements do not undermine the effectiveness of IPP regulation.

In our submission, we have set out an alternative proposal which we believe is both more cost-effective and more compatible with individual price-quality path (IPP) regulation.

Our alternative proposal omits very little of the subject matter proposed by the Commission. It adds useful new material that has strong ID value for interested parties and reinforces IPP regulation. This reflects our objective, which is not to avoid disclosure but to ensure disclosure is effective.

IPP regulation already provides rich, high-quality information to interested parties. This includes information that we must provide through the IPP reset process, and the annual disclosures we make in our Annual Regulatory Report (ARR). In many cases, the proposed ID requirements are redundant in light of this existing information.

ID should be designed to recognise that much of the 'heavy lifting' already occurs through the IPP process. During the consultation round on the Commission's draft ID proposal we published our proposal for the next IPP reset. This information, together with information the Commission will publish during its review and in making its final determination, has much more ID value than any information available for non-IPP firms. As we progress through successive IPP resets, interested parties will have continued access to relevant, high-quality, tailored information.

Our proposal is based on adapting primary disclosures rather than creating duplicate disclosures under ID. This significantly reduces the incremental cost of ID. It also ensures that information is provided in a useful context with supporting analysis and explanatory material. In many cases we recommend simply publishing a companion spreadsheet with our primary disclosures where this would enhance accessibility. This approach avoids the costs created by separate publication, often at a different time of the year, and under separate certification. It also avoids the confusion amongst interested parties where there is not a 'single source of the truth'.

To further enhance accessibility, we suggest providing a web-based information portal that, as well as hosting ID, links to primary disclosures with ID value. This is a cost-effective approach to collating information in a way that is accessible to the broadest possible range of interested parties.

To complement our approach, we also propose a stakeholder focussed 'mid-period report' that covers our progress since the last reset and our plans leading into the next reset in developing our asset management capability and engaging with consumers. This ID requirement would reinforce the operation of the IPP, would provide useful additional information, and aligns with emerging international best practice regarding customer engagement in the regulation of network utilities.

Ultimately, there is a more insidious risk from creating a set of ID requirements that are independent of IPP with the risk that the benefits of IPP regulation are undermined. For example, regular disclosure of granular asset condition data in a fixed spreadsheet formula may detract from the incentives IPP regulation provides for continuous business improvement and innovation. The economic cost of creating incentives under ID that stifle innovation and run counter to the primary incentives of IPP go well beyond the administrative costs referred to above.

A corollary of our proposal is that IPP information requirements should precede ID requirements. Accordingly, we recommend that the ID development process is amended so that the IPP determination for our next control period is finalised before the ID determination is completed. Notwithstanding this, we think there would be value in holding a stakeholder conference as a next step in the current ID process. This would allow the Commission to test our proposal with interested parties in a forum that enables useful dialogue.

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1. INTRODUCTION

This is Transpower's submission to the Commerce Commission's draft decision for information disclosure regulation to apply to Transpower. We welcome the opportunity to comment on the draft determination and disclosure spreadsheet and have read closely the reasons and decisions paper that supports it. We agree with many of the principles articulated by the Commission in its draft decision and support its commitment to ensuring information disclosure (ID) is cost effective and that unnecessary duplication is avoided. Ultimately we are of the view that it is in our shareholder, corporate and stakeholder interests to be open and transparent and we have approached this consultation process in such manner.

We have sought independent advice on several aspects of the draft decision to inform our submission. There are three reports, from:

- A legal firm, *Webb Henderson*
- A consulting firm specialising in regulatory economics, *Harding Katz Pty Ltd*
- An engineering firm, *AMCL (Asset Management Consulting Limited)*

Our submission is structured as follows:

- **Section 1:** This introduction outlines the structure of the submission.
- **Section 2:** The context for the consideration of ID. We outline our views on the statutory context and the interplay between the IPP and ID in light of expert advice on the proposed ID framework for Transpower.
- **Section 3:** Proposed refinements – overview. We reviewed each of the Commission's disclosure topics with the objective of suggesting refinements that will enhance the cost-effectiveness of the ID regime.
- **Section 4:** Proposed refinements – analysis. We developed our refined proposal by considering each of the Commission's proposed disclosure topics in turn and considering the ID value in the context of IPP regulation.
- **Section 5:** Comments on the individual disclosures. Contains our comments, on a without prejudice basis, on the proposed disclosure spreadsheet. We conclude more work is required and more bilateral engagement would be beneficial.
- **Section 6:** Other matters. This presents our comment on issues with the information development process, and audit and certification requirements, among others
- **Appendices A- C:** present the independent reports from the three parties identified above, in that order.

2. CONTEXT FOR TRANSPOWER ID DESIGN

We appreciate the Commission's recognition in the reasons paper that, to ensure a cost-effective approach, it should tailor ID to our unique circumstances. There is some evidence of this in the proposal, but the Commission needs to do more to ensure cost-effective ID.

With this in mind, we have proposed refinements to the Commission's proposal that reduce costs, improve the ability of interested parties to assess whether the purposes of Part 4 are being met and enhance compatibility with the individual price-quality path (IPP) regulation that applies to our transmission business.

This chapter introduces the approach that we have taken to develop our refined proposal.

2.1. IPP DEMANDS TAILORED APPROACH TO ID

Most of the ID proposal relates to the part of our business already regulated under individual price quality path (IPP) regulation. This is the first time the Commission has designed ID for a firm with IPP. This task differs from the ID work the Commission has done in other sectors.

IPP and ID are at opposite ends of the spectrum in terms of the forms of economic regulation available under Part 4 of the Commerce Act 1986 (Part 4). The IPP is an orthodox 'full-strength' regulatory approach common for network businesses in other countries, whereas ID is traditionally used as a light-handed alternative (or precursor) to other, more intrusive, forms of economic regulation. Combining IPP and ID regulation is unique in New Zealand and, we understand, unusual internationally. As such, the Commission is exploring new territory through this process, particularly as the IPP is so much more closely tailored to Transpower-specific circumstances than the default price-quality path (DPP) regime.

IPP regulation controls our annual revenue each year using a revenue building-blocks approach, and uses incentive mechanisms to promote the purposes of Part 4. This requires an annual exchange of information between Transpower and the Commission, which we publish in our stakeholder-focussed Annual Regulatory Report (ARR).

The IPP also controls our expenditure through a five-yearly control period process, plus a separate approval process for 'major' projects. These processes are designed to promote the purposes of Part 4 directly by enabling independent *ex ante* scrutiny of the efficiency of our expenditure plans.

These annual, per control period, and per project processes are information intensive. The majority of this information exchange occurs in public documents that we deliberately prepare with stakeholder accessibility in mind.

In addition to the Commission's IPP regulation, the Electricity Authority (Authority) has regulatory oversight of various matters, including our transmission pricing methodology, network access arrangements, the availability of our network to the wholesale electricity market, and various planning and technical standards. These arrangements include significant information disclosure requirements.

2.1.1. COMPATIBILITY WITH IPP

As described above, the IPP is a comprehensive and information intensive approach to promoting Part 4 objectives. The IPP is clearly the primary means of promoting Part 4 objectives, with ID playing a supplementary (and subservient) role. The IPP promotes Part 4 objectives directly by controlling and incentivising behaviour. In the presence of IPP, the role of ID is not to incentivise or regulate but to support the principal regulatory mechanism.

The IPP operates over a five-yearly revenue cycle that aims to exert sustained pressure on Transpower to lift efficiency, innovate, elicit customer preferences and adapt our services to those preferences – in other words, to improve our business. At each reset we must explain our performance to date and justify our plans for the coming period. To operate effectively, this process cannot rely on exchange of spreadsheets. Instead, we have flexibility to analyse, interpret and explain the information we use to demonstrate how we are promoting the Part 4 purposes. Similarly, the Commission has flexibility to request information, to question and challenge us and to seek advice.

In contrast, the DPP regime involves a ‘light-handed’, low-cost and (almost) one-size-fits-all approach to price-quality control that reflects the large number of EDBs in New Zealand. In this context, the incentive properties of price-quality control over individual suppliers are necessarily crude, and there is an important complementary role for information disclosure to sharpen these individual incentives. The large number of comparator firms also means there is validity to domestic benchmarking as an analytical tool of use to interested parties.

The IPP involves much closer control of Transpower’s decision making and investment, and the need for additional incentives from a public disclosure regime in order to promote the purposes of Part 4 are significantly less. The IPP operates over a long timeframe – driving business improvement, and sharing the benefits with consumers over five-to-ten year cycles. In this context, ID must be designed to support the IPP. It must not cut across or pull against the incentives created under the IPP and must be able to evolve in step with the IPP regime. For example, locking in annual (or biennial) disclosure of particular asset health data restricts our flexibility to develop better ways to understand and manage our asset risks under the IPP, i.e. it incentivises us to follow the ID regime rather than innovate under the IPP.

The differences between DPP and IPP regulation imply greater differences between EDB and Transpower ID than is evident in the Commission’s proposal.

2.1.2. ROLE OF ID FOR AN IPP FIRM

It follows from the discussion above, that the IPP and our other regulatory (and voluntary) disclosures already provide interested parties with a rich collection of information regarding our performance. This is reflected in feedback from stakeholders, and in Transpower ID being the last component of the Part 4 regulatory infrastructure to be implemented.

In this context, the role of ID should be characterised as complementing other information disclosures and enhancing accessibility.

2.1.3. COMPLEMENTING THE IPP

We agree with the Commission that a useful approach to identifying information gaps is to work back from the Part 4 objectives and consider what additional information may be needed to help interested parties assess whether those objectives are being promoted.

In doing this the Commission must consider the cost-effectiveness of additional disclosures by examining how much the disclosure would assist interested parties understand a Part 4 objective (i.e. the effectiveness of the disclosure) and how much the disclosure would increase costs. In some areas, the Commission has not given sufficient regard to the costs or to how the information would add value. This is particularly true for the proposed asset management disclosures, where the economic cost arises from ID pulling against the IPP by impairing the flexibility that supports continuous business improvement (and targeted challenge at resets), and the value comes only from having a consistent dataset over time. We have proposed ID refinements that would offer enhanced value at lower economic cost.

In other areas, there is limited supporting rationale in the reasons paper for the link between the proposed additional disclosure and the Part 4 objectives. In some of these cases we cannot discern the link and consider that the cost, even if small, therefore outweighs the value.

2.1.4. ENHANCING ACCESSIBILITY

The Commission recognises that improving accessibility of existing information can be a driver for ID requirements, describing this point as follows:

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 the actual data is disclosed, and not just a graphical representation of the data, or to ensure consistent disclosure from year to year

The proposed ID reflects a conclusion that it is often necessary to create ID requirements to ensure 'actual data' is disclosed, or to ensure consistent disclosure from year to year. In most cases, we think it would be better if we worked with the Commission and interested parties on enhancing accessibility of the primary disclosure, rather than creating duplicate disclosure within ID. For example, it would be a relatively simple matter for us to publish a companion spreadsheet with our ARR and to provide an 'information portal' on our website that gathered together relevant disclosures. The Commission's approach is the reverse of this – to create ID first, and then examine opportunities to consolidate IPP disclosures. This is not a cost-effective approach to ID, and inappropriately demotes the role of IPP regulation.

In some cases, too much weight has been given to the value of consistent data disclosure. Longitudinal data series can be useful in some areas, but often it is more useful to have information that includes tailored analysis and explanatory material or that otherwise goes beyond the data. For example, rather than disclosing a spreadsheet-based self-assessment of asset management maturity, it would be more useful for us to disclose PAS 55 certification material and narrative on our asset management progress and plans.

2.2. ID FOR NON-IPP BUSINESS

For the parts of our business not covered by the IPP, the ID requirements should reflect a different context.

We have unregulated lines of business that do not fall within the scope of Part 4 and should be excluded from ID. The only matter of concern for these activities is that there is not inefficient cross-subsidy with our regulated business. This is addressed by the IPP and is therefore a compliance matter rather than an ID matter.

The remaining lines of business that are outside the IPP, but within scope of ID are our system operator business and our investment contracts. Each of these has a unique context that should inform ID requirements.

2.2.1. SYSTEM OPERATOR

Transpower has a statutory monopoly on electricity system operation, but this service is excluded from the IPP because Part 4 objectives are largely addressed through contractual arrangements with the Authority (the System Operator Service Provider Agreement, or SOSPA) and provisions in the Electricity Industry Participation Code (EIPC). These arrangements involve some information exchange with the Authority and public disclosure of information, but generally involve less transparency than the IPP.

On the whole, we consider the Commission is proposing appropriate ID arrangements for our system operator business that plug existing gaps and will assist interested parties to understand whether Part 4 objectives are being promoted. The only substantive exception is that consulting services we provide to the Authority under our 'technical advisory services contract' (TASC) should be excluded because, unlike activities covered under the SOSPA, these are contestable services.

2.2.2. INVESTMENT CONTRACTS

The Code provides an access framework governing the terms under which Transpower enables new connections to the grid, but the construction of new connection assets is contestable and therefore not subject to IPP regulation. We derive approximately 4% of our transmission revenue from these non-IPP investment contracts.

In the same way that there's not a case for including investment contracts within the IPP, there is not a strong case for including investment contracts within ID. However, we think it would be appropriate to include a record of investment contracts within ID detailing counterparties, execution dates, locations, a description of the works covered and their value. This would be consistent with a focus on regulating access to promote contestability.

3. PROPOSED REFINEMENTS – OVERVIEW

Based on the preceding discussion, we have reviewed each of the Commission’s disclosure topics to develop proposed refinements that enhance the cost-effectiveness of the ID regime. Our proposed refinements would reduce costs, improve the ability of interested parties to assess whether the purposes of Part 4 are being met, and enhance compatibility with IPP regulation.

3.1. PROPOSAL OVERVIEW

The following table summarises our refined proposal.

Our refined proposal reflects a preference for adapting primary disclosures (where necessary) rather than duplicating disclosures in an information disclosure spreadsheet. This avoids the confusion that duplicate disclosure could create, and ensures ID does not impede the ability of the primary disclosures to develop over time. The approach also avoids the costs of duplicating disclosures at a different time, in a different form and under a separate certification.

This approach is complemented by a proposal for a web-based information portal that achieves the accessibility objectives of spreadsheet consolidation, but in a more cost-effective way and without losing supporting analysis that enhances the ID value of the primary disclosures.

In addition, we propose that ID should include a new requirement for a mid-period report focussed on asset management maturity and customer engagement. This aligns with emerging international good practice for network utilities regulation.

Table 1 Refined Proposal

Vehicle	Content	Description
Annual IPP requirements in ARR	<ul style="list-style-type: none"> MAR building blocks, and regulatory profit Pass-through and Recoverable costs RAB wash-up Annual expenditure variance analysis Revenue by IPP line of business Revenue recovery wash-up MAR wash-up Revenue forecast updates EV account Major project progress and close-out reports Network performance against targets 	<p>We have developed the Annual Regulatory Report (ARR) as our primary stakeholder communication on performance of our IPP business.</p> <p>It would be a simple matter to publish a companion spreadsheet if that would materially enhance accessibility for interested parties wishing to manipulate disclosed data.</p>
	<ul style="list-style-type: none"> RCP deliverables RCP expenditure variance Analysis of network performance drivers 	<p>The ARR preceding a reset proposal includes an overview of opex, capex and deliverables for the control period and analysis of network performance drivers¹.</p>

¹ See chapters 7, A.8 and A.9 of the Annual Regulatory Report 2012/13.

Vehicle	Content	Description
IPP reset	<ul style="list-style-type: none"> Base capex forecast by portfolio Major capex forecast Asset statistics Fleet and lifecycle strategies Asset management certification information (e.g. PAS 55) Network performance measures and targets and links to expenditure and revenue RAB forecast RCP revenue forecast 	<p>The IPP reset proposal provides detailed information and analysis to support our opex, capex and network performance targets and plans.</p> <p>The Commission's decision on the reset provides analysis to support an assessment of our performance under the IPP.</p>
ITP	<ul style="list-style-type: none"> 10-year IPP opex forecast by category 10-year base capex forecast by category 	Our Integrated Transmission Plan (ITP), which is a Capex IM requirement, provides regular updates on long-term IPP expenditure plans.
APR	<ul style="list-style-type: none"> Enhancement capex forecasts Demand, injection, and power factor forecasts GXP and regional capacity limits 	<p>Our Annual Planning Report (APR), which is an EIPC requirement, provides detailed information relevant to network development plans.</p> <p>It would be a simple matter to publish a companion spreadsheet if that would materially enhance accessibility for interested parties.</p>
Transpower ID	<ul style="list-style-type: none"> Investment contracts summary 'Mid-period report' on asset management capability and customer engagement progress and plans 	<p>A summary of investment contracts would have some ID value and is not otherwise required to be regularly disclosed.</p> <p>A stakeholder-focussed report published in the middle year of a control period could provide information that has ID value and complements the IPP.</p> <p>This would be a narrative-based report on progress since the last reset and plans leading into the next reset regarding asset management capability and customer engagement. This aligns with emerging good regulatory practice in other jurisdictions</p>
Transpower ID by reference to ARR	<ul style="list-style-type: none"> ROI for IPP and SOSPA businesses SOSPA revenue, RAB and opex 	These metrics have ID value and are not otherwise required to be disclosed. We have established the ARR as a suitable vehicle for SO regulatory information of this nature. The ARR can include analysis explaining drivers over time, which enhances the ID value of this information.
EDB ID	<ul style="list-style-type: none"> Transmission charges by distributor 	Distribution networks provide information on their TPM charges, investment contract payments and 'avoided cost of transmission' charges. We cannot provide all of this information.
EIPC	<ul style="list-style-type: none"> Forward-looking movement in TPM charges by distributor GXP Grid demand, injection, flows, and losses Interconnection asset report SOSPA monthly performance report and annual assessment 	<p>The Electricity Industry Participation Code (EIPC), which is governed by the Electricity Authority, includes these disclosure obligations relevant to the Commission's ID proposal.</p> <p>It would be a simple matter to publish a companion spreadsheet for the interconnection asset report, if that would materially enhance accessibility for interested parties.</p>

Vehicle	Content	Description
Website	<ul style="list-style-type: none"> Information portal 	<p>Information accessibility could be enhanced by providing a website that facilitates access to relevant disclosures.</p> <p>This is a more effective and lower-cost approach than consolidating disclosures into an ID spreadsheet. It enables supporting context information while avoiding the cost and potential for confusion arising from duplicating source disclosures at a different time, in a different format and under a different certification.</p>

For completeness, we note that our proposed refinements omit the following items that are in the Commission's proposal:

- detailed information on related party transactions²
- System Operator TASC revenue, and SOSPA regulatory profit
- IPP tax asset base roll-forward
- RAB composition
- length of cable at voltages less than 66kV
- generator and direct-connect transmission charges
- 'core' vs. 'non-core' split
- three novel network performance measures³.

Our refined proposal provides interested parties with useful information in a form that avoids unnecessary costs, enhances ID value and reinforces IPP regulation.

3.2. SIDE-BY-SIDE COMPARISON

This section compares the Commission's proposed ID with our proposed refinements. This is presented in table form, with a row per ID topic and a table per subject area. For each topic we have summarised the Commission's proposal, our current disclosures, our recommendations and our rationale.

All of this material is covered in more depth in Chapter 4.

Table 2 Historical Financial Performance

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
HFP1 Return on Investment	Transmission (incl. IPP) and SO in separate ID tabs	IPP business only in ARR with supporting analysis	IPP and SO businesses in ARR with supporting narrative ID by reference to ARR	ROI useful for assessing Part 4 objectives (b), (c) and (d) if supported by analysis and explanation of drivers for outcomes. ROI not otherwise required under IPP or other regulation. ARR more accessible than spreadsheet,

² Information on material transactions is included in our Annual Report.

³ Discussed under section five

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
				and accommodates supporting analysis (i.e. enhances effectiveness).
HFP2 Profit/(Loss) from Electricity Transmission Services	Calculation in ID tab using slightly different method to IPP	Part of IPP calculation of regulatory tax allowance	Retain ARR disclosure under IPP Exclude from ID	Information necessary for IPP operation (and so readily available) on annual and per-period basis. Not necessary (or even helpful) for assessing Part 4 objectives.
HFP3 Regulatory Tax Allowance	Calculation of regulatory tax allowance and tax asset base roll-forward in ID tab	Part of IPP MAR calculation	Retain ARR disclosure of MAR under IPP	Information necessary for IPP operation (and so readily available) on annual and per-period basis. Not necessary (or even helpful) for assessing Part 4 objectives.
HFP4 Pass-Through Costs and Recoverable Costs	Breakdown, wash-up information (forecast vs. actual) and IRIS calculation in ID tab	Part of IPP total revenue calculation, plus analysis and explanatory text in ARR.	Retain ARR disclosure under IPP	Information necessary for IPP operation (and so readily available) on annual and per-period basis. Not necessary (or even helpful) for assessing Part 4 objectives.
HFP5 Term-Credit Spread Differential	Details of qualifying debt, attribution calculation and TCSD allowance in ID tab	Part of IPP MAR calculation	Retain ARR disclosure of MAR under IPP	Information necessary for IPP operation (and so readily available) on annual and per-period basis. Not necessary (or even helpful) for assessing Part 4 objectives.
HFP6 EV account and ex post economic gain or loss	EV account reconciliation, and MAR wash-up calculation in ID tab	Part of IPP MAR update calculation	Retain ARR disclosure of MAR wash-up and EV account balance under IPP	Information necessary for IPP operation (and so readily available) on annual and per-period basis. Not necessary (or even helpful) for assessing Part 4 objectives.
HFP7 Related Party Transactions	Details of related party entities and transactions in ID tab	Material transactions in company Annual Report	nil	Related party transaction accounting controlled under IPP and GAAP. Information used for IPP compliance, but not necessary (or even helpful) for assessing Part 4 objectives.
HFP8 Value of the RAB	Commissioned value (by month) and closing RAB composition in ID tab.	Part of IPP MAR and MAR update calculations	Retain ARR disclosure of MAR and MAR wash-up under IPP	Commissioning information necessary for IPP operation (and so readily available) on annual and per-period basis.
HFP9 Actuals vs. Forecast	Actual vs. forecast revenue, opex and base capex in ID tab	Revenue variance part of IPP MAR wash-up Expenditure variances in ARR under IPP	Retain ARR disclosure of expenditure variances and IPP MAR wash-up	Revenue variance necessary for IPP, but has no identified ID value. Expenditure variance useful for IPP. Must be provided per period for IPP and annual ARR disclosure useful for IPP but has no identified ID value.

Table 3 Revenue

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
R1 Revenues	IPP revenue (by line of business, by region, by customer and GXP) in ID tab	By line of business in IPP By customer under EIPC Total transmission in EDB ID	Retain ARR disclosure of revenue by line of business Continue by GXP for distributors under EIPC Retain total transmission in EDB ID	By line of business revenue build-up necessary for IPP, but has no ID value. By GXP useful for Authority, and commercially interesting, but has no ID value. Revenue by region has no identified ID value.
R2 Revenue Forecast	10-year forecast of IPP revenue by line of business in ID tab	RCP forecast of IPP revenue in reset proposal 10-year expenditure in ITP Annual updates of IPP revenue in ARR	Retain reset disclosure of initial IPP path, and ARR disclosure of annual updates	RCP forecast and update necessary for IPP, but 10-year forecast has limited ID value.
R3 Investment Contracts	List of contracts with counterparty, date, capacity, build cost and payment basis in ID tab	Payment totals in EDB ID	As per Commission proposal, except payment basis	Proposed ID supports contestability.

Table 4 Expenditure

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
E1 Opex Actual	IPP opex by category, and by line of business, and by core vs. non-core in ID tab	IPP by category, with explanations of material variances in ARR	Retain ARR disclosure by category, with explanations for material variances	Expenditure variance by category useful for IPP. Must be provided per period for IPP, and annual ARR disclosure useful. Variance by line of business needed for IPP operation, but has no identified ID value. Core vs. non-core not currently recorded. Would be high cost and of no identified ID value.
E2 Opex Forecast	10-year IPP opex forecast by category in ID tab	10-year IPP opex forecast by category in ITP	ITP	Replicating ITP disclosure with separate document, timing and certification raises cost without benefit.

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
E3 Base Capex Actual	IPP base capex commissioned value by category, line of business, core vs. non-core, and portfolio in ID tab	IPP by category with explanation of material variances in ARR Control period deliverables in ARR	Retain annual ARR disclosure by category, with explanation for material variances. Retain deliverables reporting (once per period) in ARR Report by portfolio at reset under IPP	Expenditure variance by category useful for IPP. Must be provided per period for IPP, and annual ARR disclosure useful. Variance by line of business needed for IPP operation, but has no identified ID value. Core vs. non-core not currently recorded. Would be high cost and of no identified ID value. Portfolio level able to be produced readily and useful for IPP reset but has no identified ID value but would incur additional audit cost.
E4 Base Capex Forecast	10-year IPP base capex forecast by category in ID tab	10-year IPP base capex forecast by category in ITP	ITP	Replicating ITP disclosure with separate document, timing and certification raises cost without benefit.
E5 Major Capex Projects	Summary of approval parameters for in-progress projects, expenditure and benefits detail for in-progress projects, future projects listing, values and approval parameters for completed projects in ID tab	Progress and close-out reports in ARR RCP forecast in reset proposal Project details in MCA documentation Future projects in APR, with engineering analysis and summary of cost and timing	Continue annual disclosures in ARR, and RCP within reset proposal Review format of APR forecast information, and consider publishing spreadsheet companion to APR	Close-out and in-progress information necessary for IPP operation (and so readily available) on annual basis. RCP forecast fits with RCP process. Replicating APR disclosure with separate document, timing and certification raises costs without benefit.

Table 5 Composition of the Grid

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
CG1 Asset Age and Value	Number and value of IPP assets (by category, voltage, class and sub-class) in five-year age buckets in ID tab	Number by age included in reset proposal, along with fleet strategies and portfolio overviews	Continue to disclose relevant asset information through reset process	Age information may be useful for IPP resets, as part of comprehensive asset management information. Annual disclosure at disaggregated level has high cost and no identified ID value.

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
CG2 Network Changes	Forecast and actual IPP asset disposals, replacements and divestment in ID tab	<p>Fleet strategies published through reset process</p> <p>Control period deliverables in ARR</p> <p>Half-hourly grid offer to System Operator</p> <p>Customer assets confirmed with customers through pricing process</p>	<p>Continue to provide fleet information through reset process</p> <p>Retain deliverables reporting (once per period) in ARR</p>	<p>Planned network changes with context on drivers and asset management approach useful for IPP resets.</p> <p>Annual disclosure at disaggregated level has high cost, limited stability and no identified ID value.</p>
CG3 Circuits	Circuit length by voltage and type, by terrain, and by corrosion zone	Fleet strategies published through reset process	Continue to provide relevant asset statistics through reset process	<p>Network information, with context on expenditure plans and drivers, useful for IPP resets.</p> <p>Annual disclosure has no identified ID value.</p>

Table 6 Asset Management

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
AM1 Asset Health	Number of IPP assets (by category, voltage, class and sub-class) in five-year remaining life buckets, or by asset health index bands in ID tab	Fleet strategies published through reset process include asset health information (where available), asset age information and other useful condition information	<p>Continue to provide fleet information through IPP reset process</p> <p>Introduce new mid-period ID report that includes information on asset management capability progress and plans</p>	<p>Our asset health model is at an early stage, and codifying detailed reporting risks locking in an immature framework.</p> <p>We cannot provide asset health information at the extremely granular reporting level proposed.</p> <p>Asset health may help an interested person understand the present state of the grid, but it has no identified ID value.</p> <p>A stakeholder-focussed report on asset management capability progress and plans, published half-way through each control period would have greater ID value and would be more compatible with IPP regulation.</p>

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
AM2&3 AMMAT Tool	Asset management maturity self-assessment survey in ID tab	Asset management documents published through reset process, plus external reports such as PAS 55 gap analysis, maturity assessment and roadmap, competence framework advice, and asset health model review	Continue to provide asset management information through IPP reset process Introduce new mid-period ID report that includes information on asset management capability progress and plans	<p>AMMAT was developed for EDBs that either are either exempt or have DPP regulation. It is not a good fit for Transpower.</p> <p>We provide considerable evidence of asset management maturity through the IPP reset process, and this is readily available.</p> <p>We expect to achieve PAS 55 accreditation before RCP2, which provides more effective evidence of asset management maturity than a 31 question self-assessment.</p> <p>A stakeholder-focussed report on asset management capability progress and plans, published half-way through each control period would have greater ID value and would be more compatible with IPP regulation.</p>
AM4 Grid Demand and Injection	Annual generation injection volume and peak, and demand (by customer type) volume and peak, and HVDC flows, and HVDC and HVAC losses in ID tab	<p>Electricity Authority disseminates this information and more through its <i>centralised data set</i> (CDS) and web tools</p> <p>MBIE publishes some of this information</p> <p>APR includes peak demand and power factor information</p>	<p>Continue to disclose information through Authority's CDS</p> <p>Consider publishing spreadsheet companion to APR</p>	<p>The CDS provides comprehensive information (at a higher granularity than proposed) through a readily accessible web interface, and as a database file.</p> <p>APR provides more useful information on regional drivers of investment need than can be provided by the proposed data disclosures.</p> <p>Replicating APR and CDS disclosure with separate document, timing and certification raises costs without benefit.</p>
AM5 GXP Capacity and Forecast Demand	GXP and regional peak capacity and 10-year forecasts of demand in ID tab	APR provides detailed information on enhancement investment drivers	<p>Continue to disclose through APR</p> <p>Consider publishing spreadsheet companion to APR</p>	<p>The APR provides comprehensive and accessible information on regional drivers of investment, including narrative and data.</p> <p>Replicating APR disclosure with separate document, timing and certification raises costs without benefit.</p>

Table 7 Quality

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
Q1 Grid Outputs and Performance Measures	Historic and forecast performance against legacy measures, hypothetical revenue adjustments, outages caused by lightning, number of interruptions by supply point, system minutes by cause in ID tab	Legacy measures and hypothetical information in ARR RCP2 measures will be in ARR Narrative on significant events in ARR Analysis of drivers once per period in ARR	Continue annual ARR disclosure of network performance and revenue adjustment under IPP Continue to provide network performance information as part of IPP reset process Introduce new mid-period ID report that includes information on customer engagement progress and plans	Network performance is an integral part of the IPP. We are enhancing network performance measures through IPP process based on customer engagement. Replicating APR disclosure under ID with separate document, timing and certification raises costs without benefit. A stakeholder-focussed report on customer engagement progress and plans, published half-way through each control period would have greater ID value and would be more compatible with IPP regulation.
Q2 Interconnection and Core Grid Assets	Interruption, unavailability and unserved energy data by circuit in ID tab	Published on website as 'interconnection asset report' under EIPC	Continue to publish interconnection asset report Include companion spreadsheet version	Replicating existing disclosure under ID with separate document, timing and certification raises costs without benefit.

Table 8 System Operator

Proposed ID	Commission proposal	Current disclosure	Refined Proposal	Rationale
SO1 System Operator	ROI, regulatory profit, revenue, expenditure, asset commissioning and RAB movement in ID tab	Monthly operation performance report and annual self-assessment under EIPC Joint SO-EA capital planning consultation EA levy consultation SO chapter in ARR	Continue existing disclosures, including RAB and revenue information in ARR under ID Add ROI and opex to ARR under ID Exclude TASC revenue from ID	Existing required disclosures provide richer information on performance and capital planning than spreadsheet data. ROI and total opex information have ID value for Part 4 objectives (b), (c) and (d) and are not currently disclosed. Other proposed disclosures do not have identified ID value.

4. PROPOSED REFINEMENTS – ANALYSIS

This chapter provides more information on the supporting rationale for the refined proposal summarised in Chapter 3.

We have developed our refined proposal by considering each of the Commission's proposed disclosure topics in turn and considering the ID value in the context of IPP regulation.

Below we describe the current state of our disclosure for each item, set out our recommended approach and provide supporting rationale.

4.1. FINANCIAL PERFORMANCE

The Commission proposes that we populate worksheets covering:

- return on investment (ROI)
- regulatory profit
- regulatory tax allowance
- pass-through and recoverable costs
- term-credit spread differential
- EV account
- related-party transactions
- regulatory asset base (RAB) value
- actual versus forecast revenue, operating expenditure and base capex commissioning.

4.1.1. RETURN ON INVESTMENT (ROI)

Current Disclosure

We first reported ROI for our regulated transmission business on a voluntary basis in a dedicated chapter of our 2012/13 ARR⁴. We used the ROI calculation method developed by the Commission for electricity distribution business (EDB) disclosures, and provided:

- introductory text explaining our method and providing context
- a reconciliation from the assessed ROI to our regulatory cost of capital
- comparison with the 2011/12 year (the first year of IPP regulation)
- an explanation for the drivers of our result.

Our annual statement of corporate intent (SCI), which is tabled in Parliament each year and reviewed by a Parliamentary select committee, also provides information on the performance of our total business⁵. This includes return on capital employed, return on equity and estimated economic value added for the current year and the following three years.

⁴ <https://www.transpower.co.nz/resources/annual-regulatory-report-201213>

⁵ <https://www.transpower.co.nz/resources/statement-corporate-intent-201314>

We do not provide analysis of the standalone financial performance of our SOSPA business, customer investment contracts⁶ or other unregulated business.

Our Recommendation

Our recommendation is:

- we continue to disclose ROI for our IPP business in our ARR, and add ROI for our SOSPA business
- ROI for our IPP business and SOSPA business is included under ID by referencing our ARR
- financial performance of our unregulated business (including TASC) is not included in ID.

Rationale

We have developed the ARR as the primary source of information for stakeholders on the performance of our IPP business. Our aim with the report is to fulfil regulatory disclosure obligations in an accessible and informative document that assists stakeholders to understand our performance and our prices.

This approach allows us to include explanatory material and analysis that is more useful than setting out ROI calculations in a spreadsheet. This is helpful from an accessibility point of view (in that it broadens the audience that can understand our financial performance) but also important from an information point of view in light of the way the IPP operates.

As Harding Katz discuss, the uncertainty of annual *ex post* reviews through information disclosure risks incompatibility with an IPP regime designed around providing confidence and certainty through successive five-yearly regulatory periods. For ROI disclosures, this risk is moderated by disclosing ROI figures in conjunction with explanatory material. The IPP mechanisms mean that the ROI in any single year has practically no information value in terms of understanding our financial performance. Even a time series of ROI outcomes has limited value if there is no supporting analysis of the underlying drivers.

The ARR approach allows us to:

- compare the 'raw' ROI with an ROI figure adjusted for the impact of economically neutral inter-year wash-ups and pricing adjustments
- explain the drivers for the observed ROI figures
- present and explain ROI performance over a regulatory cycle, and between cycles.

The 2012/13 ARR was our first ROI disclosure for our IPP business. We expect that we will enhance our approach over time, and will explore methods of analysing and presenting ROI trends as we develop a longer historical time series.

We have not previously disclosed ROI for our SOSPA business, but agree with the Commission that this is a suitable item to include in ID – it is not otherwise readily available and it is useful information to help interested parties understand whether the SOSPA business is 'limited in its ability to extract excess profits'⁷. As with our IPP business, we consider that this information would be more accessible and informative if included in our ARR rather than disclosed as a spreadsheet calculation. System Operator ROI should include revenue derived from under the SOSPA as this is the part of the business with strong monopoly characteristics. Services provided under the TASC are contestable. We comment further on System Operator matters in Section 4.7.

⁶ Customer investment contracts are not included in IPP regulation due to contestability considerations.

⁷ Commerce Act 1986, s52A(1)(d).

It is not necessary to disclose ROI information in spreadsheet form to ensure that it is readily available to interested persons⁸. The ROI itself is a single figure per year, so it is not onerous for an interested person to hand copy ROI data from the Annual Regulatory Report to a spreadsheet should they wish (or to ask us for the information).

Disclosure of return on investment for investment contracts should not be required under information disclosure. Investment contracts are excluded from the IPP on the basis that they are contestable, and do not meet the test of being in a market ‘...where there is little or no competition and little or no likelihood of a substantial increase in competition’⁹. This same rationale supports their exclusion from information disclosure. We comment further on investment contracts in Section 4.2.3.

4.1.2. REGULATORY PROFIT, REGULATORY TAX ALLOWANCE, PASS-THROUGH AND RECOVERABLE COSTS, TERM-CREDIT SPREAD DIFFERENTIAL, EV ACCOUNT AND RAB VALUE

Current Disclosure

All of these items are required inputs for calculating IPP revenue and wash-ups. We disclosed forecasts of these amounts in our initial calculation of the RCP1 price path, and disclose actual amounts and updated forecasts in our ARR. In our 2012/13 Annual Regulatory Report we developed new ways to enhance the accessibility and relevance of this information for our stakeholders. This built on lessons we took from our engagement with stakeholders following our first ARR.

We also included information on these elements of the IPP in a series of presentations we provided to interested persons over the last 12 months, including the Electricity Authority, the Electricity Networks Association and each of the largest four generator-retailers¹⁰. We have offered the same presentation to the Major Electricity Users’ Group.

We do not disclose information on the value of transmission assets funded through investment contracts, but we do publish income from these contracts in our ARR, Annual Report¹¹ and quarterly operational and financial reports¹².

We discuss disclosure of these items for our system operator business in section 4.7.

Our Recommendation

Our recommendation is:

- we continue to disclose revenue building block information in our ARR for our IPP business and this is not duplicated under ID.

Rationale

This information is necessary for operation of the IPP and so is already readily available, both on an annual basis and on a per control period basis.

In addition, most of the identified items are not necessary (or even useful) for helping interested parties to understand whether the purpose of Part 4 is being achieved. For example:

⁸ *ibid*, s53A ‘The purpose of information disclosure regulation is to ensure that sufficient information is readily available to interested persons to assess whether the purpose of this Part is being met.’

⁹ Commerce Act 1986, s52G.

¹⁰ We also provided a copy of the presentation to Commission staff.

¹¹ <https://www.transpower.co.nz/resources/annual-report-201213>

¹² <https://www.transpower.co.nz/news/transpower%E2%80%99s-q1-operational-and-financial-report-201314>

- the only value in disclosing regulatory profit would be to indicate that the IPP is providing for continued profitability (and hence maintaining “...incentives to...invest, including in replacement, upgraded, and new assets”¹³). However, information on capital investment, RAB movement or revenue forecasts would also be sufficient to enable interested parties to assess whether we have incentives to invest.
- the TCSD is immaterial (less than 0.2% of 2012/13 *ex post* MAR) and disclosure of its composition is more likely to confuse interested parties (or cost them unproductive time) than to assist them to understand whether the purposes of Part 4 are being met.
- wash-up information (i.e. EV account entries) gives no indication of whether the purpose of Part 4 is being met. For example, a wash-up in favour of customers could arise because we have spent less on a project due to efficiency gains, avoided incurring contingencies, over-estimated costs, delayed commissioning due to efficient allocation of resources, delayed commissioning due to inefficient allocation of resources, delayed commissioning due to technical reasons, commissioned projects on aggregate later than the mid-year weighting implied by the IPP MAR forecast formula, or simply because CPI was lower than the Reserve Bank had forecast several years earlier.

Given the absence of any identified ID value, there is no benefit to incurring the costs associated with duplicate disclosure. In this case, the costs to us include preparation and obtaining separate certification.

4.1.3. RELATED-PARTY TRANSACTIONS

Current Disclosure

We identify related parties in our Annual Report, and provide information on material transactions. Our most material related party is our captive insurance company, Risk Reinsurance Limited.

Our Recommendation

Our recommendation is:

- information on related party transactions is not included in ID.

Rationale

Information on related party transactions does not have any value in assessing whether the purpose of Part 4 is being achieved.

The following rationale is provided in the reasons paper:

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.¹⁴

This may be the case if we did not have IPP regulation that controls cost allocation. As it stands, cost allocation to related parties is an IPP compliance matter and further information does not have any ID value for interested parties.

¹³ Commerce Act 1986, s52A(1)(a).

¹⁴ Paragraph 4.17 of the reasons paper.

4.1.4. ACTUAL VERSUS FORECAST REVENUE

Current Disclosure

This information is necessary for operation of the IPP and so is already readily available. At the beginning of each control period, we forecast revenue for each year of the period. We then annually compare forecast with actual revenue to assess a revenue wash-up amount, which is combined with the MAR wash-up to update the MAR for the next available pricing year.

We include the annual IPP wash-up calculations and revenue updates in our ARR. In the 2012/13 ARR we added similar information for our system operator business. We also developed a wash-up presentation that compares *ex ante* and *ex post* revenue amounts for each revenue building block, and compares the total with our operating revenue received. This presentation highlights the revenue wash-up component of the MAR update.

On Monday, 9 December, we published a detailed note for stakeholders on forecast transmission revenue for RCP2¹⁵. This complements the revenue forecast information we are required to publish with our reset proposal. We intend to update this control-period revenue forecast through the year. This follows the practice we have developed under the IPP of providing customers with updated revenue forecasts several times during the year. We will be required to publish a full IPP revenue calculation at the end of the reset process.

Our Recommendation

Our recommendation is:

- we continue to disclose revenue wash-up information in our ARR
- revenue forecast information remains an IPP requirement and is not duplicated in ID.

Rationale

This information is necessary for operation of the IPP and so is already readily available, both on an annual basis and on a control period basis.

In addition, this information is not necessary (or even useful) for helping interested parties to understand whether the purpose of Part 4 is being achieved, and there is no supporting rationale provided in the reasons paper.

Unlike distribution businesses, we have an annual revenue cap and we allocate our permissible revenue using charges that are not volume-linked within the charging year. This means that we typically recover an amount very close to our permissible revenue each year¹⁶. Any divergence is then washed-up into the next available pricing year using a WACC-based interest adjustment and, as such, does not impact on our incentives to invest or our ability to extract excess profits¹⁷.

4.1.5. ACTUAL VERSUS FORECAST OPEX AND BASE CAPEX COMMISSIONING

Current Disclosure

This information is necessary for operation of the IPP and so is already readily available. At the beginning of each control period we forecast opex and base capex commissioning for each year of the period. We then annually:

¹⁵ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/rcp2-revenue-initial-forecast-information.pdf

¹⁶ In 2012/13 the divergence was \$0.1m, or 0.013% of the permissible revenue.

¹⁷ Commerce Act 1986, s52A(1)(a) and (d).

- compare our opex allowance (adjusted for actual CPI) with actual opex to determine whether any credits are generated under the incremental rolling incentive scheme (IRIS);
- compare our base capex commissioning forecast with actual base capex commissioning (timing and value) to determine the amount of any capital charge wash-up; and
- compare our base capex allowance (adjusted for CPI) with actual base capex to verify whether any incentive adjustments are required.

In RCP2 we will also adjust the base capex allowance for any disparity between forecast and actual foreign exchange rates.

All of this information is included in our Annual Regulatory Report, together with a category-level breakdown of forecast vs. actual expenditure and commissioning, and supporting narrative on material variances. In our 2012/13 ARR we also provided data and supporting narrative for:

- forecast vs. actual total opex for RCP1
- forecast vs. actual capex for RCP1
- forecast vs. actual deliverables (i.e. the assets constructed) for RCP1.

This was included in the ARR to satisfy RCP2 information requirements in a useful format for interested parties. Our RCP2 proposal also provides an overview of RCP1 expenditure performance, extensive information on forecast expenditure for RCP2, and a high-level forecast for RCP3.

Our Recommendation

Our recommendation is:

- we continue to disclose this information under IPP, including through our ARR and do not duplicate disclosure under ID.

Rationale

This information is necessary for operation of the IPP and so is already readily available, both on an annual basis and on a control period basis. The reasons paper provides the following rationale for inclusion of this information within ID:

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.

...

4.26 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.

The ID value of these disclosures as described is trivial compared to the insight interested parties can gain through the normal operation of the IPP. Without supporting analysis and interpretation, and without domestic comparators, data on forecast and actual expenditure has very limited information value. In contrast, the ARR and the reset process provide interested parties with rich information on innovation and efficiency. The value of this IPP information will be enhanced over time by information on IPP ROI and drivers, but would not be enhanced by data.

The reasons paper also observes that this information will be available within our ITP, but provides the following rationale for duplication within ID:

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. 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.

If the Commission believes this information has ID value, and that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion with the relevant primary disclosures. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary. These include preparation, assurance and certification costs.

4.2. REVENUE

The Commission proposes that we populate worksheets covering:

- Transmission Revenue (Actual Totals and Detail)
- Forecast Transmission Revenue
- New Investment Contracts

4.2.1. TRANSMISSION REVENUE (ACTUAL TOTALS AND DETAIL)

Current Disclosure

Our IPP revenue is allocated to transmission customers using a transmission pricing methodology governed by the Electricity Authority. Each year we are required under the EIPC to publish a 'year-specific pricing data' document that provides a graphical presentation of how we have translated revenue and capacity inputs into charging rates for the coming year¹⁸. The document also provides information on charging rates for the previous six years. For example, the 2014/15 year-specific pricing data report covers pricing from 1 April 2008 to 31 March 2015.

The EIPC also requires us to publish transmission agreement information, including annual charge schedules. In consultation with the Authority on our EIPC obligations, we published a spreadsheet this year that sets out transmission charges for all of our distributor customers¹⁹. The spreadsheet sets out connection, interconnection and HVDC charges for each grid exit point (GXP). It is published in December and shows the movement in charges from the current pricing year to the coming pricing year. The data is accompanied by explanatory text that assists interested parties to interpret the information, and to understand its limitations.

The 'actuals' information in the spreadsheet is based on actual charges to November, plus a forecast to year-end based on November invoices. The year-ahead forecast is based on charges determined based on a 30 June pricing grid, adjusted for committed configuration changes known at December. This approach, and the timing of the publication, is designed to make the information commercially useful to retailers in determining their pricing strategies.

Our ARR wash-up calculations disclose total transmission revenue for the previous pricing year (1 April to 31 March) and our Annual Report discloses total group revenue for the previous financial year.

Distributors disclose information on their transmission charges, including investment contract charges and 'avoided cost of transmission' (ACOT) payments in their annual information disclosures.

¹⁸ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/year-specific-data-2013-14.pdf

¹⁹ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/distributor-charges-by-gxp.xlsx

We recycle residual transmission rentals from the wholesale electricity market to transmission customers monthly. This offsets transmission charges to some extent and is allocated based on a method that mimics our transmission pricing allocation. We publish a spreadsheet that sets out monthly connection, interconnection and HVDC residuals dating from April 1999²⁰. We have recently been asked to enhance this publication to provide more information of use to interested parties and are working through the best way to achieve this.

Our Recommendation

Our recommendation is:

- we continue to disclose information on IPP revenue for the current control period in our ARR
- information on MAR and pass-through and recoverable charges remains an IPP requirement and is not duplicated in ID
- we continue to disclose transmission charges for distributors (at GXP level) in spreadsheet format to satisfy EIPC requirements, and do not duplicate granular pricing information in ID
- we continue to disclose annual investment contract revenue in our ARR under the IPP and this is not duplicated in ID.

Rationale

Pricing information does not have any value in assessing whether the purposes of Part 4 are being achieved given that revenues are controlled under the IPP.

The IPP is carefully designed to ensure that we ‘...share with consumers the benefits of efficiency gains ...through lower prices’²¹ over the course of successive regulatory periods, and it does this through controlling our total transmission revenue (not our prices). The Electricity Authority governs our pricing methodology, which is essentially an allocation methodology given that our revenue is fixed by the Commission. Information on the transmission charges paid by individual distributors is commercially helpful for retailers, but does not provide any insights as to the sharing of efficiency gains.

The reasons paper argues that:

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)²².

The reasons paper does not provide any supporting logic for the link between the purpose of ID, and the need to understand whether our pricing methodology promotes efficiency. It is clear that the IPP is designed to achieve sharing of our efficiency gains through lower prices, but it is not clear that ID should be concerned with the efficiency effects of our pricing methodology.

Setting this point aside for a moment, the efficiency impacts of transmission pricing clearly are of interest to the Electricity Authority in its role governing our pricing methodology, and this has been (and continues to be) the subject of numerous consultation rounds, working paper, and industry conferences. Throughout the Authority's latest round of reviewing our pricing methodology we have made considerable information available to the Authority to assist its work. This process has demonstrated for us that the Authority, as an interested party, obtains more relevant and useful information when we are able to work together to understand the Authority's information

²⁰ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/Historic-LCE-breakdown.xlsx

²¹ Commerce Act 1986, s52A(1)(c).

²² Paragraph 4.22.

requirements. The Authority has wide information gathering powers that it could use (but hasn't needed to) to gather any information it requires to pursue its objectives.

Similarly, we have also made information publicly available to assist other stakeholders considering transmission pricing methodology proposals²³. Through this process we have also found that we can provide useful information if we have flexibility to determine a suitable analytical approach. For example, we prepared analysis that enabled parties to understand the relationship between various asset value thresholds and associated revenue²⁴. This was useful in the context of the specific pricing proposal, but would not generally be of use on an ongoing basis.

We discuss investment contracts further in section 4.2.3.

4.2.2. FORECAST TRANSMISSION REVENUE

Current Disclosure

Our ARR provides updated forecasts annually of our revenue for the remainder of the control period. The report includes the MAR, total IPP revenue, EV account balances, wash-up amounts, pricing-level revenue adjustments (e.g. our 2014/15 NIGU rebate), and information on the drivers of the annual wash-up and the forecast year-on-year movement. In all cases, we present HVAC, HVDC and total revenue amounts.

Our second Annual Regulatory Report significantly enhanced the way we present this information, building on the lessons from our first report. For example, we provided waterfall presentations of year-on-year movements, and a wash-up presentation highlighting building-block level differences between *ex ante* and *ex post* values.

This month we published a document as a companion to our RCP2 expenditure proposals that provides detailed information on forecast revenue for the RCP2 period. This includes total IPP revenue, pricing adjustments, HVAC and HVDC breakdown, interconnection rate, HVDC rate, nominal and constant 2014/15 prices. We also published a breakdown that analyses the contribution of operating expenditure, RCP1 closing RAB and regulatory adjustments, RCP2 base capex and new major projects to RCP2 revenue. We will update this forecast over the year for any significant changes to the underpinning assumptions. This complements the forecast we are required to including in our RCP2 proposal.

We will publish detailed information on the build-up of the RCP2 price path when the Commission makes a final determination on our RCP2 IPP.

Our Recommendation

Our recommendation is:

- we continue to disclose control period IPP revenue and annual revenue forecast updates under IPP and do not duplicate under ID.

Rationale

Our rationale is the same as that described in section 4.2.1 (transmission revenue). In addition, revenue forecasts beyond the two- to seven-year horizon provided under the IPP has less ID value than the revenue information provided through the IPP.

²³ <https://www.transpower.co.nz/about-us/industry-information/tpm-development-2012-electricity-authority-proposal>

²⁴ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/spd-pricing-asset-groups.xlsx

4.2.3. NEW INVESTMENT CONTRACTS

Current Disclosure

The ARR includes 'customer projects and new investment revenue' as a line item in the IPP revenue wash-up calculations.

Our Recommendation

Our recommendation is:

- ID includes requirement to list investment contracts details of counterparty, date, capacity and build cost.

Rationale

The Code provides an access framework governing the terms under which Transpower enables new connections to the grid, but the construction of new connection assets is contestable and therefore not subject to IPP regulation. We derive approximately 4% of our transmission revenue from these non-IPP investment contracts.

In the same way that there's not a case for including investment contracts within the IPP, there is not a strong case for including investment contracts within ID. However, we think it would be appropriate to include a record of investment contracts within ID detailing counterparties, execution dates, locations, a description of the works covered and their value. This would be consistent with a focus on regulating access to promote contestability.

We do not think it would be appropriate to include payment basis, as this an economically neutral commercial detail with no identified ID value.

4.3. EXPENDITURE

The Commission proposes that we populate worksheets covering:

- Operating Expenditure (Opex): Actuals
- Operating Expenditure (Opex): Forecast
- Base Capital Expenditure (Base Capex): Commissioned
- Base Capital Expenditure (Base Capex): Forecast Commissioning
- Major Capital Expenditure (Major Capex)

4.3.1. OPERATING EXPENDITURE (OPEX): ACTUALS

Current Disclosure

Refer section 4.1.5.

Our Recommendation

Our recommendation is:

- we continue to disclose annual information and control period overview under the IPP, including through our ARR, and do not duplicate under ID.

Rationale

Total opex information is necessary for IPP operation, and more detailed information is required to support the reset process. Break down by line of business (i.e. HVAC and HVDC) is necessary for IPP operation and transmission pricing, but does not have any identified ID value.

The Commission proposes a 'core' vs. 'non-core' split, however this categorisation is not tracked in our systems and would be extremely costly to implement. In addition, the core grid is not a static classification. The listing in the EIPC is out of date given grid additions and changes have occurred since it was developed, and the Electricity Authority is able to revisit the definition if it wishes.

The reasons paper asserts that a core vs. non-core split has ID value because it will enable benchmarking with international comparators. There are several problems with this approach:

- benchmarking could be useful tool for targeted application within the IPP reset proposal, where it may add value as one of a suite of tools used to scrutinise and challenge the efficiency of expenditure proposals. The IPP enables more sophisticated benchmarking than can be facilitated through data disclosure alone.
- given the role of benchmarking within the IPP, it is not clear that there is material additional ID value from disclosing data that may possibly be able to be used by interested parties to perform very primitive benchmarking.
- in addition to scrutiny of expenditure proposals, the IPP includes various incentive mechanisms designed to encourage a supplier to continuously improve efficiency. It is these incentive effects, which play out over five- to ten-year cycles that most directly address the statutory objective expressed in s52A(1)(b) (i.e. to promote incentives to improve efficiency).
- there is no analysis to support the proposition that a core vs. non-core split would actually facilitate credible international benchmarking. Aside from the point that benchmarking from a raw dataset can only be primitive in comparison to the approaches facilitated through the IPP process, the core grid definition is idiosyncratic to New Zealand.

If the Commission believes data on actual opex by category has ID value, and that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion to the ARR with this information. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary.

4.3.2. OPERATING EXPENDITURE (OPEX): FORECAST

Current Disclosure

Considerable information on forecast opex is provided through the IPP reset information. This includes detailed analysis of forecast opex levels and drivers for the subject period, and higher level forecast for the remaining years out to a 10-year horizon.

The ARR provides an annual update on forecast total opex for the current period. Each period, the ARR provides an overview of total opex for the period, which includes forecast information.

The ITP is also required to provide a biennial update of the 10-year opex forecast prepared during the reset process.

Our Recommendation

Our recommendation is:

- we continue to disclose 10-year forecast opex in the ITP and do not duplicate under ID.

Rationale

Opex forecast information is necessary for IPP operation, and is required to be disclosed through the ITP. Forecast opex may have some ID value, so it would be appropriate and low-cost to incorporate the ITP forecast into ID by reference.

If the Commission believes that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion to the ITP. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary.

Opex forecast information also continually changes as the business absorbs and responds to new information, so that duplicating disclosure at a different time would be likely to produce slightly different information. This loss of a 'single view of the truth' would be more likely to confuse interested parties than to assist them to understand whether the purposes or Part 4 are being achieved. This cost to interested parties should also be taken into account in designing ID requirements.

4.3.3. BASE CAPITAL EXPENDITURE (BASE CAPEX): COMMISSIONED

Current Disclosure

Refer section 4.1.5.

Our Recommendation

Our recommendation is:

- we continue to disclose annual information and control period overview under the IPP, including through our ARR, and do not duplicate under ID.

Rationale

Total base capex information is necessary for IPP operation, and more detailed information is required to support the reset process. Break down by line of business (i.e. HVAC and HVDC) is necessary for IPP operation and transmission pricing, but does not have any identified ID value.

The Commission proposes a 'core' vs. 'non-core' split, however this categorisation is not tracked in our systems and would be extremely costly to implement. In addition, the core grid is not a static classification. The listing in the EIPC is out of date given grid additions and changes have occurred since it was developed, and the Electricity Authority is able to revisit the definition if it wishes. The Commission has not identified the ID value of this split. Refer to Section 4.3.1 for further discussion on core vs. non-core and its usefulness for benchmarking in an IPP context.

If the Commission believes data on actual base capex by category has ID value, and that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion to the ARR with this information. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary, and would include preparation and additional assurance and certification costs.

4.3.4. BASE CAPITAL EXPENDITURE (BASE CAPEX): FORECAST COMMISSIONING

Current Disclosure

Considerable information on forecast base capex is provided through the IPP reset information. This includes detailed analysis of forecast capex levels and drivers for the subject period, and higher level forecast for the remaining years out to a 10-year horizon. It also includes information on a spend basis.

The ARR provides an annual update on forecast total commissioned base capex for the current period. Each period, the ARR provides an overview of total base capex and base capex deliverables for the period, which includes forecast information.

The ITP is also required to provide a biennial update of the 10-year capex forecast prepared during the reset process.

Our Recommendation

Our recommendation is:

- we continue to disclose 10-year forecast opex in the ITP and do not duplicate under ID
- deliverables reporting and per-period commissioned value forecasts are disclosed in the ARR under IPP requirements and not duplicated in ID
- forecast information by portfolio is disclosed through the reset process under IPP requirements and not duplicated in ID.

Rationale

Forecast information on base capex commissioned value is necessary for IPP operation, and is required to be disclosed through the ITP. Forecast capex commissioning may have some ID value, so it would be appropriate and low-cost to incorporate the ITP forecast into ID by reference.

If the Commission believes that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion to the ITP. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary, and would include preparation and additional assurance and certification costs.

Base capex commissioning forecast information also continually changes as the business absorbs and responds to new information, so that duplicating disclosure at a different time would be likely to produce slightly different information. This loss of a 'single view of the truth' would be more likely to confuse interested parties than to assist them to understand whether the purposes or Part 4 are being achieved. This cost to interested parties should also be taken into account in designing ID requirements.

4.3.5. MAJOR CAPITAL EXPENDITURE (MAJOR CAPEX)

Current Disclosure

Potential major projects are identified in the APR, along within information engineering analysis, and cost and timing forecasts.

Each major project must go through an individual approval process that involves provision on detailed information on the need case, technical options, project economics, and cost forecast information. This information progresses through multiple rounds of consultation, and scrutiny by the Commission.

The ARR must include a 'progress report' on committed projects that includes information on capitalisation, and forecasts time and cost. The ARR must also include a 'close out' report on completed projects that includes information on approval parameters, project performance and delivered outputs.

Projects that exceed their regulatory allowance progress through a regulatory process under the Capex IM that examines whether the costs incurred were efficient. Projects that deliver materially different outputs from those approved also progress through a regulatory process to approve the revised outputs.

Forecast information on major project commissioning values is required to be provided through the IPP reset process.

Our Recommendation

Our recommendation is:

- we continue to disclose information through the APR, ARR, IPP reset and Capex IM approval processes and do not duplicate under ID.

Rationale

Considerable information on major projects is already required to be provided through appropriate disclosure documents and processes. If the Commission believes that spreadsheet presentation would materially enhance accessibility, then it would be a simple matter to publish a spreadsheet companion to the primary disclosures where necessary. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary.

Major capex forecast information also continually changes as the business absorbs and responds to new information, so that duplicating disclosure at a different time would be likely to produce slightly different information. This loss of a 'single view of the truth' would be more likely to confuse interested parties than to assist them to understand whether the purposes or Part 4 are being achieved. This cost to interested parties should also be taken into account in designing ID requirements.

4.4. GRID COMPOSITION

The Commission proposes that we populate worksheets covering:

- asset age and value
- network changes
- circuits

4.4.1. ASSET AGE AND VALUE

Current Disclosure

We provide detailed asset management information, including fleet strategies with relevant asset statistics, through the IPP reset process.

The IPP MAR calculation process is based on detailed asset value information. We do not publish this, but do provide information on the composition of our MAR. For RCP2 we have prepared a MAR analysis that shows the proportion of the forecast MAR attributable to assets forecast to be in place at the end of RCP1.

As a one-off exercise, we provided information to stakeholders last year on the value of asset groupings relevant to consultation on TPM changes²⁵. Preparing this information required several weeks of analyst resource and is not of any particular value outside the TPM review process.

²⁵ <https://www.transpower.co.nz/about-us/industry-information/tpm-development-2012-electricity-authority-proposal#assets>

Our Recommendation

Our recommendation is:

- continue to provide fleet information through the IPP process and do not duplicate under ID.

Rationale

Asset age and value (overall) does not change materially from one year to the next.

Cutting our assets into age groupings is an outdated approach to analysing the health or condition of our asset base. That is because, while age is a relevant indicator of condition for some assets (for example protection relays), in most cases age is one of several inputs to a more sophisticated assessment of asset condition and therefore likely replacement timing. For example, local environmental conditions are a key driver of asset life, as are the availability of life-extending interventions, such as replacement of significant components. Towers are a practical example where a tower could last anywhere from 40 to potentially hundreds of years (given painting and maintenance) depending on a variety of factors (make, model, environmental conditions, historic maintenance, etc.).

A more informative view of the condition of the grid and likely replacement timeframes is provided by understanding asset management practices and through asset health indices which we discuss later in this submission. This more informed view of asset condition mitigates the risk that a one dimensional view of asset age may result in interested parties reaching incorrect conclusions.

At a practical level, preparing asset age information for the RCP2 proposal was a resource intensive and time consuming activity requiring significant manual intervention²⁶. While the costs of producing asset age information may be justified in the context of the IPP reset process it is difficult to see how this could be the case for an ID given there is no identified ID value to the information.

Asset value information is not currently disclosed in anything approaching the form or granularity proposed including for the comprehensive IPP reset process. That is because there is little if any benefit in disclosing this information, but there are real workability challenges. If the Commission has a particular objective in mind for asset value information then we would be happy to help establish what the specific information required is and how we can best meet the need.

4.4.2. NETWORK CHANGES

Current Disclosure

Our IPP reset submission incorporates planned changes in assets (additions, replacements, disposals and divestments) and the effects of those changes on capex and opex requirements, to the extent that this can be defined with sufficient resolution at the time of the submission.

Each period, the ARR provides an overview of total base capex and base capex deliverables for the period, which includes actual and forecast information on asset replacements and additions. Large enhancement projects are covered by individual approval and disclosure process under the Capex IM.

Depreciation and write-offs are disclosed in the ARR as a line item for the IPP MAR wash-up.

We are required to provide a half-hourly grid offer to facilitate operation of the wholesale electricity market. This is closely watched by interested parties, and reflected in prices discovered in the

²⁶ This is driven by the size of the asset base (circa 300,000 assets) and the age of many of those assets (e.g. some are older than 80 years and many have zero residual book value)

market, the value of the settlement excess residual and the value of financial transmission rights and various derivatives. Historic information is gathered and disseminated through the Electricity Authority's Centralised Data Set and through services such as em6 and WITS.

We confirm connection asset configurations with transmission customers annually as part of the TPM process. This process reconciles the information we hold at a point in time with the information and expectations of our customers.

Our Recommendation

Our recommendation is:

- continue to disclose network changes as part of the five yearly IPP reset, Capex IM processes, ARR, TPM, and wholesale market operation and do not duplicate under ID.

Rationale

While it is relevant to understand network changes in the IPP reset process, it is not clear what value providing this data on a more frequent basis could provide to interested parties in assessing whether the purpose of Part 4 is being met. As with asset age and value data (see 2.4.1) the cost of producing and certifying this information is not trivial.

Some of the limitations we would face in attempting to accurately and consistently disclose highly detailed registers of forecast asset changes, such as proposed in the ID spreadsheet tab, include:

- some network changes arise as a result of bilateral contract agreements with connected parties. These customer-driven projects are often undertaken with relatively short lead times, significantly less than the five year forecast period shown in the ID tab. It is not realistic to forecast such network changes with a five year horizon.
- some of the larger projects identified in the IPP submission are “bundled”, and incorporate multiple asset types, covering many rows in the proposed ID spreadsheet. Given that some of these projects are at a relatively early stage of planning, detailed design will not yet have been completed. It is unproductive and inefficient to attempt to breakdown such projects into a detailed set of assets, when detailed design has in fact not yet been completed.
- major grid enhancement projects are subject to individual regulatory approval. There is inevitably some uncertainty about the outcome of the approval process for these major projects, leading to uncertainty in forecasts of asset changes (in addition to the uncertainty associated with forecasting the need case).

One of the points of detail in the ID tab that would cause difficulty is the classification of painted and unpainted towers in separate rows. The on-going painting programme would have the effect of transferring assets between rows of the spreadsheet, making any forecasts by row invalid.

Another point of detail is the proposal to disclose forecasts for individual protection relays. Our asset management planning for protection systems is generally on the basis of schemes, rather than by individual relay. For instance an older style of protection scheme may include several electromechanical relays. In general, we do not replace individual relays – rather we replace entire schemes. The design of a modern replacement protection scheme is likely to involve a different number of relays than the original, but the quantity of relays in the scheme is of limited relevance on its own. Therefore, while data about individual relays in the existing fleet is available, forecasting the future population of individual relays, including replacements, disposals and divestments is of limited value.

The reasons paper implies that it expects interested parties would use detailed asset information to analyse whether Transpower is operating the grid efficiently, to identify cost drivers, etc. In practice, disaggregated information of the nature requested has no ID value in this regard given the

information already required to be made available through the IPP. For example, the fleet strategy and portfolio overview information we provide, together with the Commission's assessment and decision, provide a much richer and more accessible basis on which to understand Part 4 objectives than a spreadsheet of data. More information is not necessarily better information.

4.4.3. CIRCUITS

Current Disclosure

We currently disclose information each year about system length in our annual Quality Performance Report²⁷. The information is the same as that specified in the Electricity Information Disclosure Requirements issued 31 March 2004, as amended by the Electricity Information Disclosure Amendment Requirements 2004, 2006, 2007, 2008, 2008 (No2), and 2008 (No3).

However, there are some differences in scope with what is proposed in the spreadsheet CG3 Circuits:

- we do not currently split the reported information between “core” and “non-core” grid cables and lines.
- we do not currently publish information about circuit lengths for cables less than 66 kV or publish the distribution of overhead circuit length by terrain or by corrosion zone
- we do not publish information about the lengths of overhead circuits requiring vegetation management

We provide asset statistics and analysis through for the IPP reset process, for example in our fleet strategies²⁸. This provides a clear and accessible view of the link between relevant asset statistics, and consequences for performance and expenditure.

Our Recommendation

Our recommendation is:

- continue to disclose asset statistics and analysis through the IPP reset process and do not duplicate under ID.

Rationale

The Commission has not clearly established the ID value of this disclosure in context of the information we are required to provide via the IPP reset process²⁹. If the Commission can demonstrate ID value of regularly disclosing this information, then it would be a simple matter to add circuit length statistics to our ARR.

We do not currently distinguish between ‘core grid’ and ‘non-core’ in our asset and financial management systems (and have no obvious or simple way to systematically differentiate between core and non-core assets). Refer to Section 4.3.1 for further discussion on core vs. non-core and its usefulness for benchmarking in an IPP context.

²⁷ <https://www.transpower.co.nz/resources/quality-performance-report-201213>

²⁸ For example, refer Section 2.2 of our “TL conductors and insulators” fleet strategy https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/Fleet%20Strategy%20-%20TL%20Conductors%20and%20Insulators.pdf

²⁹ This is perhaps unsurprising given release of the ID reasons paper preceded submission and publication of our RCP2 proposal (which is also our first ITP).

We do not currently gather detailed information on vegetation management (refer Section 5.6.3 for further discussion). There is no identified ID value for this information (refer also comments on benchmarking at Section 4.3.1).

4.5. ASSET MANAGEMENT

The Commission proposes that we populate worksheets covering:

- asset health
- asset management maturity assessment tool (AMMAT)
- AMMAT results summary
- grid demand and injection
- grid exit point (GXP connection capacity and demand (actual and forecast))

4.5.1. ASSET HEALTH

Current Disclosure

The proposed disclosure is based on the asset health template required to be provided as part of our RCP2 proposal. This is one component of a rich set of asset management information provided through the IPP reset process. This includes 14 fleet strategies, which each include relevant asset condition information and analysis. In addition, various supporting documents are provided in the RCP2 proposal documents, including external reports and our asset health approach and our asset management capability more broadly.

We have developed and applied asset health metrics for three fleets as part of the RCP2 process. The IPP process encourages ongoing development and refinement of our asset management capability such that our asset management capability will have evolved by the time we submit our RCP3 proposals.

Our Recommendation

Our recommendation is:

- we continue to provide relevant asset condition information through the IPP reset process
- a new mid-period report is introduced under ID that includes updates on asset management capability progress and plans

Rationale

We agree that asset health is a *key indicator of the present state of the grid*³⁰. We are focussed on enhancing and expanding the scope of our current asset health indices, and expect significant growth / improvement in this area over the remainder of RCP1, RCP2, and beyond.

Our development of asset health models is still at an early stage, and most of the current models could best be described as working prototypes. Considerable change and development must be expected as we gain more experience. Future changes to the models may have a significant effect on the current and forecast distribution of asset health for particular fleets.

While the Commission is correct to state that the draft disclosure spreadsheet is consistent with how asset health is presented in our RCP2 proposal document³¹, this statement potentially gives a false

³⁰ Refer Paragraph 5.42

³¹ Ibid

confidence. That is because the asset health indices presented in our RCP2 proposal, while being a significant step forward in their own right, are almost certain to evolve as our asset health sophistication and experience increases.

One key issue is that we have only developed asset health models for the asset categories of transmission lines, power transformers and outdoor circuit breakers. These asset health models are referenced in our RCP2 submission and can be provided to the Commission. (There is also a prioritisation framework for outdoor 33 kV switchyard conversion projects that incorporates some asset health considerations). We do not have an asset health model as yet for other asset classes, and so therefore it would not be possible to provide data for a considerable proportion of the draft ID spreadsheet.

Regular disclosure of asset condition data under ID would conflict with promotion through the IPP of ongoing efforts to adapt and mature our asset management capability. As such, the Commission's proposal is likely to undermine rather than promote the purposes of Part 4, longer term.

In light of this, we propose that ID should instead include an obligation to provide a mid-period report that updates stakeholders on our asset management capability and consumer engagement progress and plans. This would have ID value because it would provide evidence to interested parties of our efforts relative to several Part 4 objectives (incentives to innovate, to improve efficiency, and to provide services at a quality that reflects consumer demands). Importantly, disclosure of this type would complement and enhance IPP regulation. We discuss this proposal further at Section 4.7.

4.5.2. ASSET MANAGEMENT MATURITY ASSESSMENT TOOL (AMMAT) AND AMMAT RESULTS

Current Disclosure

We do not currently undertake the AMMAT.

We provide a rich set of asset management information through the IPP reset process. In RCP2 this includes external reports such as a PAS 55 gap analysis, maturity assessment and roadmap, competence framework advice, and asset health model review.

Through RCP1 we also provided regular updates on identified business improvement initiatives, including several directly relevant to the matters covered in AMMAT.

Our Recommendation

Our recommendation is:

- we continue to provide relevant asset condition information through the IPP reset process
- a new mid-period report is introduced under ID that includes updates on asset management capability progress and plans

Rationale

We agree with the Commission that it is important that we review our asset management practices in an on-going manner and identify areas of improvement, and that some form of disclosure of these findings is appropriate. We do not think that it is appropriate to require Transpower to adopt the AMMAT for the reasons discussed below.

The AMMAT (Asset Management Maturity Assessment Tool) was recently introduced by the Commission to assess asset management capability and practices within EDBs. The AMMAT

self-assessment is intended to complement the pre-existing requirement for EDBs to annually disclose an AMP, by providing insight into the quality of asset management planning.

The asset management maturity assessment AMMAT is based on the Institute of Asset Management (IAM) PAS 55 asset management maturity assessment methodology (PAM). PAM enables organisations to undertake a self-assessment and gap analysis of their current asset management practices. It includes a questionnaire containing 121 questions which rate asset management practices according to 5 levels of maturity.

The AMMAT consists of a self-assessment questionnaire containing 31 questions, which are a subset of the PAM questions; designed to cover the full range of asset management system components and activities while having regard to information that is already disclosed in EDB AMPs. The development of the AMMAT tool included consultation with EDBs.

Transpower has committed to development of its asset management capability within its wider commitment to business improvement. This is consistent with the incentives inherent under IPP regulation. In April 2012, Transpower commissioned³² an independent gap analysis against PAS 55 to measure our overall level of compliance. A second gap analysis was undertaken during November 2013, concentrating on earlier identified 'non-compliant' and 'at risk' clauses from the 2012 findings. It is anticipated that a Certification Audit to PAS 55 will be undertaken in June 2014.

Once achieved, Transpower is committed to sustaining its certification to PAS 55³³. This will involve periodic certification audits.

Self-assessment to AMMAT is a lesser test than either of an independent IAM endorsed gap analysis to PAS 55, or a full certification audit against the requirements of PAS 55. Accordingly, there is no ID value in Transpower performing and disclosing an AMMAT self-assessment when superior information is available through IPP processes.

In light of this, we propose that ID should instead include an obligation to provide a mid-period report that updates stakeholders on our asset management capability and consumer engagement progress and plans. This would have ID value because it would provide evidence to interested parties of our efforts relative to several Part 4 objectives (incentives to innovate, to improve efficiency, and to provide services at a quality that reflects consumer demands). Importantly, disclosure of this type would complement and enhance IPP regulation. We discuss this proposal further at Section 4.7.

4.5.3. GRID DEMAND AND INJECTION

As the Commission identifies at G13, this information is already disclosed in the APR.

Much of this data is also provided to the Electricity Authority and pursuant to its industry and market monitoring duties under section 16(1)(g) of the Electricity Industry Act 2010. While at present the Electricity Authority makes the centralised data set available via DVD (it is a large data set) it has invested heavily in developing its market data and reporting portal³⁴ and the expectation is that this will provide access to a comprehensive data warehouse, "dashboards" and reports.

These cover very similar territory to that required by AM3 and are designed to give interested parties access to data and reports.

³² Undertaken by AMCL in accordance with its Asset Management Excellence Model (AMEM); a methodology which is approved by the IAM for the purposes of PAS 55 gap analysis and certification audits.

³³ Or successor standards such as ISO 55000.

³⁴ Refer to: <http://www.reports.ea.govt.nz/>

Our Recommendation

Our proposed approach is:

- continue to disclose detailed information through the Electricity Authority's centralised data set and market data and reporting portals, which are the primary sources of this type of power system data for interested parties
- continue to make information available via the APR and, if necessary, provide a companion spreadsheet.

Rationale

There is no identified ID value for duplicate spreadsheet disclosure given the detailed information already available via the Electricity Authority, by virtue of the grid providing a market platform and through the APR.

In practice, those with a general interest can obtain what they need from the APR while those with a need for raw data can access this demand and injection data, along with other useful data, from the Electricity Authority's specially designed portal.

If the Commission can identify ID value in providing a spreadsheet of APR data, then it would be a simple matter to provide a companion spreadsheet with the APR. As such, the costs associated with duplicate disclosure within an ID spreadsheet are unnecessary, and would include preparation and additional assurance and certification costs.

Grid demand, injection and flow forecasts would also evolve through the course of the year, so that we would expect an October disclosure under ID would need to reflect different forecast information than is included in the February APR. Any such disparity would be more likely to confuse interested parties than to assist them to understand whether the purposes of Part 4 are being achieved. This cost to interested parties should also be taken into account in designing ID requirements.

4.5.4. GRID EXIT POINT (GXP) CONNECTION CAPACITY AND DEMAND (ACTUAL AND FORECAST)

Current Disclosure

We provide peak demand forecast information over a 15 year planning period in our APR. This is provided at GXP, regional and island level. We consult with all our (load) customers as to their views on peak load growth in their region and this information is accounted for within our forecasts prior to publication. The APR also includes information on GXP capacities and power factors.

The process for approving major projects under the Capex IM requires publication of detailed information on demand forecasts relevant to the investment.

The Ministry of Business, Innovation and Employment (MBIE) publishes information and analysis on electricity demand on a regular basis³⁵. This includes energy demand and generation scenarios (EDGS) in a form accessible for modellers (and with supporting technical information) and energy insight publications that provide accessible information for less technical interested parties. We work with MBIE so that they have access to any information we can provide to assist their work.

³⁵ For example, refer <http://www.mbie.govt.nz/news-and-media/news-from-around-mbie/new-zealands-energy-outlook-electricity-insights>

MBIE also publishes an 'interactive electricity generation cost model' that helps provide insight into injection growth³⁶.

The Electricity Authority publishes demand forecast information targeted at modellers (including spreadsheets with national, regional, and GXP level forecasts) and studies into long-term generation development drivers.

Our Recommendation

Our recommendation is:

- continue to make information available via the APR and, if necessary, provide a companion spreadsheet

Rationale

GXP connection capacity and demand (actual and forecast) data does not have any value in assessing whether the purposes of Part 4 are being achieved given that revenues and expenditure are controlled under the IPP.

We should continue to publish peak demand information as part of the APR (the primary disclosure) and can provide a companion spreadsheet if the Commission considers there is ID value to this disclosure in light of the other information readily available. This would be a cost-effective alternative to duplicating disclosure through ID at a different time of the year, in a different format and with separate certification requirements.

4.6. QUALITY

The Commission proposes that we populate worksheets covering:

- quality of supply: grid outputs and performance measures
- quality of supply interconnection and core grid assets

4.6.1. QUALITY OF SUPPLY: GRID OUTPUTS AND PERFORMANCE MEASURES

Current Disclosure

Performance under the current grid output measures is reported in the ARR under IPP regulation. This includes hypothetical revenue adjustment information.

We have consulted with customers and developed new grid outputs and performance measures as part of the IPP reset process. Our proposal includes detailed information on this engagement and development process. The measures are developed to support the maturing of our asset management capability that is encouraged under IPP regulation, and reflects efforts to ascertain and respond to the quality of service preferences of consumers.

We intend to reflect our new measures in our Statement of Corporate Intent (SCI) and will be required to report against approved IPP performance measures on an annual basis. We also provide a per-period report in our ARR on the drivers of our network performance.

We report on the number of outages of interconnection assets of less than one minute, and the number of interruptions of less than one minute caused by outages of interconnection assets under section 12.127 of the EIPC.

³⁶ <http://www.med.govt.nz/sectors-industries/energy/energy-modelling/modelling/new-zealands-energy-outlook-electricity-insight/interactive-electricity-generation-cost-model>

Our Recommendation

Our recommendation is:

- decisions as to whether legacy grid performance measures required under Part 4 should be retained or dropped and new measures added are made in context of the IPP reset
- we continue to report performance against IPP defined grid output measures (and targets where applicable) in our ARR under IPP requirements
- a new mid-period report is introduced under ID that includes updates on customer engagement progress and plans.

Rationale

The draft determination identifies that Transpower is required under the Capex IM to propose Grid Output Measures for RCP2. It identifies that some of these will be linked to revenue and that reporting will be via the annual compliance monitoring statement (which we incorporate into our ARR).

The draft determination proposes the continued operation of current grid output measures on the basis that this *“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.”* It proposes to introduce three new grid output measures, via the ID regulation, they are (reference 5.27):

1. the number of momentary outages,
2. the percentage of momentary outages caused by lightning, and
3. the percentage of unplanned interruptions that result in a complaint being made per GXP.

The reasons paper explains that *“Some customers have requested performance measures of this nature and we consider that it is reasonable for Transpower to disclosure these measures.”* It also proposes retaining hypothetical revenue adjustments, as performed in RCP1 for current grid output measures.

The requirement to develop new grid output measures is prescribed under IPP regulation as an improvement upon the existing grid output measures. If however the Commission can satisfy itself that the current grid output measures assist it in assessing Transpower’s performance under the IPP then it is unclear why that decision would be made in the context of ID not the IPP.

Requiring Transpower to continue to report on current measures and the measures proposed at 5.27 under ID will, for the avoidance of doubt, impose greater costs than reporting on the identical requirements under the IPP. That is principally but not exclusively due to separate certification requirements.

If the Commission considers that we should introduce entirely new grid output measures that will assist the Commission in assessing Transpower’s performance under the IPP, as is implied at paragraph 5.28 of the reasons paper, then it is equally unclear why these should be introduced through ID not the IPP. The fact that some (unidentified) customers have asked for “performance measures of this nature” does not, of itself, justify their introduction through ID.

In light of these considerations, we propose that ID should instead include an obligation to provide a mid-period report that updates stakeholders on our asset management capability and consumer engagement progress and plans. This would have ID value because it would provide evidence to interested parties of our efforts relative to several Part 4 objectives (incentives to innovate, to improve efficiency, and to provide services at a quality that reflects consumer demands). Importantly, disclosure of this type would complement and enhance IPP regulation. We discuss this proposal further at Section 4.7.

4.6.2. QUALITY OF SUPPLY: INTERCONNECTION AND CORE GRID ASSETS

Current Disclosure

We are required to under EIPC to publish an “Interconnection Asset Report” that covers identical information to that proposed.

Our Recommendation

Our proposed approach is:

- we continue to publish the “Interconnection Asset Report” and add a companion spreadsheet.

Rationale

Providing a companion spreadsheet with our annual Interconnection Asset Report would be a lower cost and more effective way of achieving ID objectives. This avoids the costs of obtaining separate certification, while providing equivalent accessibility to the Commission’s proposal.

4.7. MID-PERIOD REPORT

We propose that ID should include a new obligation to provide a mid-period report that updates stakeholders on our asset management capability and consumer engagement progress and plans.

This would have ID value because it would provide evidence to interested parties of our efforts relative to several Part 4 objectives (incentives to innovate, to improve efficiency, and to provide services at a quality that reflects consumer demands). Importantly, disclosure of this type would complement and enhance IPP regulation.

Preparing the report would reinforce incentives under the IPP to:

- improve efficiency through innovation, with a focus on continuous improvement of asset management capabilities; and
- ascertain and attempt to respond to consumer demands.

This is in contrast to the anchoring effect of the several of the Commission’s proposed ID requirements.

The mid-period report would provide a similar function to the business improvement initiative reporting that we prepared for the Commission through RCP1, but would be a stakeholder-focussed publication rather than a regulator-focussed report. We consider that this proposal would be consistent with the emerging emphasis internationally on elevating the role of customer engagement in regulatory processes for network utilities.

The ID obligation would be most compatible with the objectives of IPP regulation if it did not prescribe detailed requirements for the content of the mid-period report, other than that it must cover asset management capability and customer engagement, and it must report on progress since the last reset and plans for further development leading into the next reset.

4.8. SYSTEM OPERATOR

Current Disclosure

We are required to publish monthly performance reports³⁷ and an annual self-review report³⁸ under EIPC. The Electricity Authority also publishes an annual review and assessment³⁹.

We voluntarily (but in consultation with the Commission) disclosed financial information relating to our System Operator activities in the 2012/13 ARR, together with supporting analysis and narrative.

This year we published a consultation paper on capex plans as part of our joint capex planning with the Electricity Authority⁴⁰. The Electricity Authority also includes information on System Operator costs through its annual appropriations and levy-setting consultation.

Our Recommendation

Our recommendation is:

- we continue existing disclosures under EIPC requirements and SOSPA arrangements
- we continue to report System Operator information in the ARR, with ID requiring the ARR to include information on SOSPA RAB, opex, revenue, and ROI
- TASC is not included under ID.

Rationale

Existing disclosures under EIPC and SOSPA arrangements provide richer information on System Operator performance than would be achieved through the Commission's proposed ID. Our first annual disclosure of SOSPA information in the ARR also enabled us to provide analysis and narrative that enhanced the information value of the data.

We agree that information on ROI and total opex is not readily available, and would have ID value with respect to some relevant Part 4 objectives (incentives to improve efficiency, share benefits of gains with consumers and limit ability to extract excessive profits). Including this information in our ARR would raise the effectiveness of the information by providing supporting context, analysis and interpretation.

Consulting services that the System Operator provides to the Authority under its 'technical advisory services contract' (TASC) should be excluded because, unlike activities covered under the SOSPA, these are contestable services.

³⁷ <https://ea.govt.nz/industry/pso-cq/system-operations/system-operator-reports/system-operator-monthly-reports/>

³⁸ <http://www.systemoperator.co.nz/documents/reports/self-review-reporting>

³⁹ <https://ea.govt.nz/industry/pso-cq/system-operations/system-operator-reports/review-so-performance/>

⁴⁰ <http://www.systemoperator.co.nz/sites/default/files/bulk-upload/documents/20130625%20CAPEX%20Discussion%20Document.pdf>

5. INITIAL REVIEW OF DRAFT DISCLOSURES

Without prejudice to our proposed refinements, this section provides further comment on the workability of the Commission's proposed spreadsheet and suggests some amendments to improve workability.

5.1. INTRODUCTION

We did have an opportunity to comment on the draft ID spreadsheet prior to consultation. In practice this was limited to a 'once over lightly' due to the timeframes afforded us by the Commission and the coincidence of this opportunity with a peak period where key staff were fully committed on other Part 4 matters.

Our comments below are further to our earlier comments, some of which have been reflected in the draft ID spreadsheet, and are made in context of the Commission's statements at B3 of the draft determination. While we have endeavoured to provide constructive feedback in this submission it is clear that considerable further work is required on the draft spreadsheet before it could be applied. That work needs to involve relevant Transpower subject matter experts.

5.2. OVERARCHING COMMENTS

The following comments apply to more than one of the 28 schedules:

1. The treatment of asset disposals should be consistent throughout these sheets and it would be better to stick to the 'depreciation and write-offs' approach used in the MAR-setting process and Annual Regulatory Report.
2. Requiring an assurance report from an independent auditor and director certification for the bulk of the disclosures and director certification of the remainder is costly and cumbersome. It is particularly inefficient where very similar or identical information is already disclosed in a slightly different context, at a slightly different time, with similar audit and disclosure obligations. See Section 6.3 for further comment on assurance requirements.
3. There is a terminology issue that has potential to complicate and confuse the proposed disclosures. The definition of electricity transmission services (and specifically whether this alters the RAB to include investment contracts, properties and third party assets or not, as we are assuming).
4. We do not currently distinguish between "core" and "non-core" assets for asset management purposes. Changing systems and processes to introduce this distinction would be very time consuming and expensive. That is because every project and asset (in the asset register) would need to be marked as core / non-core. We would also have to perform this task in Maximo (to obtain maintenance information).
5. We understand from discussions with Commission staff that we will not be required to populate historic numbers (CY-1, CY-2 etc.). Our comments below reflect this (retrospective disclosure in the format proposed would be difficult and costly and in some cases not possible).
6. We could not identify any clear benefit to using a bespoke approach to calculating ROI. The EDB methodology is more accessible (and therefore transparent) and gives a materially similar result (2012/13 vanilla ROI of 10.11% in our ARR vs. 10.06% using this methodology). The EDB

approach assumes mid-year revenue cash flow timing and does not require a goal seek. The accessibility and transparency afforded by the EDB approach is worth the small compromise in accuracy of 5 basis points (0.05%) of accuracy.

In the interests of brevity we do not repeat these in our comments on individual schedules. We only comment on schedules where we have substantive comments at this stage.

5.3. HISTORICAL FINANCIAL PERFORMANCE

Disclosure schedules HFP1-9 and Chapter 4 of the reasons paper deal with historic financial performance.

5.3.1. HFP1: RETURN ON INVESTMENT: INFORMATION DISCLOSURE BASIS

[Our comments on workability](#)

There are some errors in the spreadsheet (see below).

[Suggestions for improvement](#)

Cell J28 (other regulated income) should link to HFP2!Q11, cell J30 isn't added into cell K35 and there is double counting of gains/losses on disposal.

5.3.2. HFP3: Regulatory Tax Allowance

[Our comments on workability](#)

The disaggregation of tax amounts into the categories in row 30 seems unnecessary and should be removed.

[Suggestions for improvement](#)

Row 15 (depreciation is backed-out) should be consistent with the overall treatment of gains/losses on disposal. As discussed above, the treatment of asset disposals must be consistent throughout these sheets. It would be better to stick to the 'depreciation and write-offs' approach we use in the MAR-setting and Annual Regulatory Report.

The disaggregation of tax amounts into the categories in row 30 seems unnecessary and should be removed.

5.3.3. HFP6: EV Account and Ex-post Economic Gain or Loss

[Our comments on workability](#)

None at this stage.

[Suggestions for improvement](#)

We recommend using the building block-based analysis that we have adopted for the equivalent ARR disclosure.

5.3.4. HFP8: Value of the Regulatory Asset Base (RAB Roll Forward)

Our comments on workability

The categories proposed here are not consistent with Transpower's RAB breakdowns.

There is no obvious or simple way to differentiate between core and non-core or between high-voltage and low-voltage (if the latter is, as we understand, being contemplated). Refer Section 4.3.1 for further discussion. This disclosure would need to be created from scratch, and would be very time consuming and expensive.

Suggestions for improvement

ID categories should be consistent with Transpower's RAB breakdown categories.

We suggest adding Admin (i.e. more closely relate this to the annual report), Right to Use and removing Business Support.

We suggest removing:

- the core/non-core split for the reasons discussed further in Section 4.3.1.
- HVAC cables, HVAC protection, HVDC protection,

5.3.5. HFP9: Actuals v Forecasts (Revenues, Opex and Base Capex Commissioning)

Our comments on workability

None at this stage.

Suggestions for improvement

"=IF(**F11=0,0**, (F11-G11)/G11)" and so on for each variance, should be "=IF(**G11=0,0**, (F11-G11)/G11)" and so on.

5.4. REVENUE

Disclosure schedules R1-3 and Chapter 4 of the reasons paper deal with revenue and pricing.

5.4.1. R1: TRANSMISSION REVENUE (ACTUAL TOTALS AND DETAIL)

Our comments on workability

It is not clear from the spreadsheet whether pricing year or financial year are required. We assume it is *pricing year for revenue* and not financial year (otherwise the calculations won't align with the ARR) however the spreadsheet needs to be clear about that so that interested persons are not confused by the difference.

Pricing year (12 months from 1 April) would align with current disclosures (in the ARR and elsewhere).

We note that some of our customers may have valid objections to publication of this information – particularly non-network customers (i.e. generators and direct connects).

Suggestions for improvement

If the Commission intends this disclosure is to assist retail tariff planning, then next pricing year information should be included in this sheet (specifically at R(i) and R(iii)). This requires clear assumptions to be made to support year-on-year comparison. Information on our approach to this can be found in the 'readme' sheet of our recent distributor GXP charge disclosure⁴¹.

Clarify that the revenue disclosure relates to pricing year (rather than financial year).

The offtake and injection quantities should be moved out to the right hand side and separated from the revenue (\$) amounts. This applies through the sheet but specifically rows 20-26 (total revenue) where offtake and injection amounts are in the middle of some \$ amounts that are part of a summation and are therefore very confusing.

5.4.2. R2: FORECAST TRANSMISSION REVENUE

Our comments on workability

It is not clear what the base year is and whether the *constant prices* section intended to strip out just CPI or CPI and RPE. Put another way, what does "constant prices" mean?

The specification of the current year (CY) numbers indicated by the * and ** footnotes ("forecast ... from prior year disclosure") is counterintuitive and will lead to systematic errors. Lining up the prior year forecast for year CY next to the current forecast for years CY+1 onwards will double count any amounts that have been delayed from year CY to a later year and will completely eliminate any amounts that have been brought forward to year CY from a later year. The CY figures should always be the current year actual results.

HFP9 already does the forecast vs. actual comparison.

Suggestions for improvement

Clarify the meaning of "constant prices" and replace "forecast...from prior year disclosure" with the actual current year numbers (see comments above).

5.4.3. R3: NEW INVESTMENT CONTRACTS

Our comments on workability

At a practical level, we can provide details of customer investment contract (CIC) and new investment contract (NIC) assets and revenue on this sheet. Some customers may object to some of this information being disclosed.

We assume that CIC and NIC assets, revenue (etc.) are not included in the other financial sheets (doing so would unnecessarily muddy the waters and make all that information inconsistent with all existing disclosures).

Suggestions for improvement

Clarify that CIC and NIC assets, revenues (etc.) are not included in other financial sheets (for the reasons outlined above).

⁴¹ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/distributor-charges-by-gxp.xlsx

5.5. EXPENDITURE

Disclosure schedules E1-5 and Chapter 4 of the reasons paper deal with expenditure.

5.5.1. E1: OPERATING EXPENDITURE (OPEX): ACTUALS

Suggestions for improvement

Remove the core/non-core split.

5.5.2. E2: OPERATING EXPENDITURE (OPEX): FORECAST

Our comments on workability

It is not clear what the base year is and whether the constant prices section is intended to strip out just CPI, or CPI and RPE. Put another way, what does “constant prices” mean?

The specification of the current year (CY) numbers indicated by the * and ** footnotes (“forecast ... from prior year disclosure”) is counterintuitive and will lead to systematic errors. Lining up the prior year forecast for year CY next to the current forecast for years CY+1 onwards will double count any amounts that have been delayed from year CY to a later year and will completely eliminate any amounts that have been brought forward to year CY from a later year. The CY figures should always be the current year actual results.

HFP9 already does the forecast vs. actual comparison.

Suggestions for improvement

Clarify the meaning of “constant prices” and replace “forecast...from prior year disclosure” with the actual current year numbers (see comments above).

5.5.3. E3: BASE CAPITAL EXPENDITURE (BASE CAPEX): COMMISSIONED

Our comments on workability

We do not currently distinguish between core and non-core for anything other than network planning purposes.

There is no obvious or simple way to differentiate between core and non-core or between high-voltage and low-voltage (if the latter is, as we understand, being contemplated). Refer Section 4.3.1 for further discussion.

Suggestions for improvement

“Grid R&R: HVDC Stations: HVDC – Synchronous Condensers” should be removed (this portfolio is not included in the RCP2 portfolio list that has been agreed with the Commission).

The Grid E&D list should be left blank for us to insert the relevant projects at the time. These change fairly regularly. For example, the only projects on the current list that will have numbers in 2014/15 are the High Impact Low Probability Mitigation and Remove Branch Component Limits projects.

5.5.4. E4: BASE CAPITAL EXPENDITURE (BASE CAPEX): FORECAST COMMISSIONING

Our comments on workability

It is not clear what the base year is and whether the *constant prices* section is intended to strip out just CPI or CPI and RPE. Put another way, what does “constant prices” mean?

The specification of the current year (CY) numbers indicated by the * and ** footnotes (“forecast ... from prior year disclosure”) is counterintuitive and will lead to systematic errors. Lining up the prior year forecast for year CY next to the current forecast for years CY+1 onwards will double count any amounts that have been delayed from year CY to a later year and will completely eliminate any amounts that have been brought forward to year CY from a later year. The CY figures should always be the current year actual results.

HFP9 already does the forecast vs. actual comparison.

Suggestions for improvement

Clarify the meaning of “constant prices” and replace “forecast...from prior year disclosure” with the actual current year numbers (see comments above).

5.5.5. E5: MAJOR CAPITAL EXPENDITURE (MAJOR CAPEX)

Our comments on workability

‘Approved MCP Outputs’ is unlikely to fit easily into a single Excel cell for any MCP. We suggest linking to the relevant MCP page rather than attempting to replicate all this information in a spreadsheet.

When this sheet refers to “expenditure”, does it mean expenditure or commissioning?

Suggestions for improvement

‘Approved MCP Outputs’ is unlikely to fit easily into a single Excel cell for any MCP.

We suggest linking to the relevant Transpower or Commission MCP page or the ARR rather than attempting to replicate all this information in a spreadsheet.

5.6. COMPOSITION OF THE GRID

Disclosure schedules CG1-3 and Chapter 5 of the reasons paper deal with composition of the Grid.

5.6.1. CG1: ASSET AGE AND VALUE

Our comments on workability

We do not hold this information in a form or within a system that would allow us to meet the proposed disclosure without incurring significant additional costs. A significant effort would be required even to develop a reliable estimate of the cost.

Specifically:

- The breakdown from Asset Category, to Asset Class and Asset Class 2 is more detailed than currently held in the FMIS (financial management information system) Asset Register. To complete this every year would require costly enhancements to the system to hold the information, an incredible amount of analysis and manual work in order to update the existing data (as Transpower’s asset register holds approximately 300,000 assets). As well as

these systems and additional staff costs (engineers and finance staff) the requirement would impose a big increase in the data required for every project we close out. This adds to the current project close process for both the project managers and the finance team in terms of time, resources and costs.

- As discovered when this type of data (population by age) was gathered for the RCP2 submission, there is not a single system with accurate data within Transpower covering all of this schedule. For a lot of the very old assets the operational systems did not hold the data. Although only tested at a sample number of sites/lines there was also a difference between the operational and financial dates in the different systems. For some assets the operations systems use the manufacture date whereas FMIS, and hence the dollar values, would use the commissioning date. This would lead to difficulties in reconciling the number and value disclosures.

Suggestions for improvement

Using 10 year age brackets for historic information will reduce the boundary issue (with regards to the manufacture vs. commission dates) where data loaded in different brackets for the number vs. value. More recent (e.g. the last 15 years) and new assets could be grouped in 5 year brackets.

5.6.2. CG2: NETWORK CHANGES

Our comments on workability

Our earlier comments on this subject are repeated below for ease of reference.

Some of the limitations we would face in attempting to accurately and consistently disclose highly detailed registers of forecast asset changes, such as proposed in the ID spreadsheet tab, include:

- some network changes arise as a result of bilateral contract agreements with connected parties. These customer-driven projects are often undertaken with relatively short lead times, significantly less than the five year forecast period shown in the ID tab. It is not realistic to forecast such network changes with a five year horizon.
- some of the larger projects identified in the IPP submission are “bundled”, and incorporate multiple asset types, covering many rows in the proposed ID spreadsheet. Given that some of these projects are at a relatively early stage of planning, detailed design will not yet have been completed. It is unproductive and inefficient to attempt to breakdown such projects into a detailed set of assets, when detailed design has in fact not yet been completed.
- major grid enhancement projects are subject to individual regulatory approval. There is inevitably some uncertainty about the outcome of the approval process for these major projects, leading to uncertainty in forecasts of asset changes (in addition to the uncertainty associated with forecasting the need case).

One of the points of detail in the ID tab that would cause difficulty is the classification of painted and unpainted towers in separate rows. The on-going painting programme would have the effect of transferring assets between rows of the spreadsheet, making any forecasts by row invalid.

Another point of detail is the proposal to disclose forecasts for individual protection relays. Our asset management planning for protection systems is generally on the basis of schemes, rather than by individual relay. For instance an older style of protection scheme may include several electromechanical relays. In general, we do not replace individual relays – rather we replace entire schemes. The design of a modern replacement protection scheme is likely to involve a different number of relays than the original, but the quantity of relays in the scheme is of limited relevance on its own. Therefore, while data about individual relays in the existing fleet is available, forecasting

the future population of individual relays, including replacements, disposals and divestments is of limited value.

Suggestions for improvement

Reduce the frequency of this requirement to align with the equivalent disclosure in the IPP reset process.

5.6.3. CG3: CIRCUITS

Our comments on workability

We do not currently have complete data for the lengths of 33 kV and 11 kV cables. The cable runs are generally short. We do not routinely require this information and it would be costly to gather.

We currently categorise transmission structures by both corrosion zone and by terrain. In principle, we could use this categorisation to assign these categories to the associated span, and from that point, prepare a distribution of spans (and span lengths) by corrosion zone and terrain.

However, the categories used currently differ from those described in the draft ID spreadsheet; the categories that Transpower uses are:

Table 9 Transpower terrain and corrosion zone categories

Terrain	Corrosion zone
Flat	Extreme
Hilly	Very severe
Mountainous	Severe
Rolling	Moderate
Steep	Low
Urban	Benign

We do not publish information about the lengths of overhead circuits requiring vegetation management.

Our current processes for vegetation management are outsourced to service providers. The service is strongly outcome focussed. Our service providers are responsible for work planning and management, including the identification of risks posed by vegetation, the development and maintenance of vegetation records, applying growth projections, initiation of vegetation management work, and keeping tree trimming records etc.

We therefore do not have direct access to comprehensive and structured information about vegetation under lines. Our service providers have established various information systems for vegetation management, and these have not been designed to readily enable integration of data. It would be costly to integrate these disparate systems to provide a robust and traceable single report of the complete vegetation management process within any given period.

However, the claims for payment from our service providers can be used to identify the overhead circuit spans where vegetation management activity has occurred in a period. In principle, this data could be used to identify the total system length of overhead line spans that have been subject to vegetation management activity in a 12 month period. We note that this report would need to be against “line” not “circuit”, because vegetation management under a double circuit line is attributable to both circuits.

We are uncertain about the value of this information, because the vegetation management activities (and the total lengths of spans where vegetation management has occurred), will vary significantly year-to-year based on numerous factors, including climatic conditions, and agreements with landowners etc. We cannot see how this information would be of value to interested parties.

Suggestions for improvement

Align with Transpower's standard terrain and corrosion zones (above).

Remove:

- the core/non-core split
- circuits and cables below 66kV
- overhead circuits requiring vegetation management

5.7. ASSET MANAGEMENT

Our comments on workability

Development of asset health models is still at an early stage. Consequently, considerable development is expected as we gain more experience. Future changes to the models may have a significant effect on the current and forecast distribution of asset health for particular fleets.

We are focussed on enhancing and expanding the scope of our current asset health indices, and expect significant growth / improvement in this area over the remainder of RCP1, RCP2, and beyond.

We discussed the policy problems with locking down evolving asset health measures earlier in the submission.

At a practical level we are unable to populate a number of categories within the spreadsheet as they are not within scope of the asset health work we have done to date. This means that, while we can provide estimates of asset health for a limited number of fleets, we cannot currently provide the bulk of the Asset Health information required in the draft spreadsheet.

Suggestions for improvement

Explicitly recognise that the spreadsheet will not be fully populated for some time.

The term biannual appears in the reasons and draft decisions paper and draft determination. We understand from speaking with Commission staff that this is intended to be biennial (i.e. every two years rather than twice per year).

5.7.1. ASSET MANAGEMENT MATURITY ASSESSMENT TOOL (AMMAT)

Our comments on workability

The methodology for the independent gap analysis and audit applied at Transpower is based on the AMCL Asset Management Excellence Model (AMEM), which is fully mapped to the requirements of the PAS 55 and covers everything that the IAM's PAM tool does, but arguably to a greater depth.

The gap analysis process applied at Transpower does not lend itself to direct population of the AMMAT tool. Application of the AMMAT tool at Transpower therefore involves some duplication of gap analysis effort. For consistency, it is likely we would rely on our independent assessors to apply the AMMAT if that were required.

Suggestions for improvement

None at this stage.

5.7.2. AMMAT RESULTS SUMMARY

Our comments on workability

The results summary spreadsheet (AM3) is a spread sheet linked to the primary AMMAT spread sheet (AM2). It simply provides a summary of the maturity ratings entered against each of the 31 questions set out in AMMAT and also provides a graphical representation of those ratings. Accordingly our comments in 3.7.2 above apply.

Suggestions for improvement

None at this stage.

5.7.3. GRID DEMAND AND INJECTION

Our comments on workability

We already disclose similar information to the Electricity Authority for inclusion in the centralised data set (as discussed earlier in this submission). Our assumption is that we would use this same data for injection, demand and losses to avoid confusion.

Suggestions for improvement

None at this stage.

5.7.4. GRID EXIT POINT (GXP) CONNECTION CAPACITY AND DEMAND (ACTUAL AND FORECAST)

Our comments on workability

We already provide peak demand forecast information over a 15 year planning period in our APR. This is provided at GXP, regional and island level. We consult with all our load customers as to their views on peak load growth in their region and this information is accounted for within our forecasts prior to publication. Our assumption is that we would use this same data for injection, demand and losses to avoid confusion.

While we produce energy forecasts to an island level (these are used by MoBIE in the production of the Energy Demand and Generation Scenarios) we do not produce these forecasts at the more granular level proposed in the ID spreadsheet. To produce energy forecasts at a higher level of granularity, for instance at GXP level, will require some modification to our models (and additional resource will be required to produce these on an annual basis).

Suggestions for improvement

None at this stage.

5.8. QUALITY

Disclosure schedules Q1-2 and Chapter 5 of the reasons paper deal with quality.

5.8.1. QUALITY OF SUPPLY: GRID OUTPUTS AND PERFORMANCE MEASURES

Our comments on workability

Providing this information for existing measures will generally be straightforward as we already produce much of this information for meeting RCP1 reporting requirements.

Forecasting our future performance is problematic for unplanned events, given their random, diverse, and sparse nature. It would be possible to extrapolate historical performance although this seems to be of limited value.

Determining historic performance for Q1(iii) is possible (it is actuals) however setting targets for Q1(iii) for the Current Year is problematic because we do not set targets at this (i.e. POS) level. We do not think it is practicable to create targets at this level other than through some form of averaging which would deliver a meaningless result.

The hypothetical revenue adjustment is a transitional tool to indicate in RCP1 how much revenue would be adjusted had revenue been at risk in RCP1. In RCP2, when ID will come into effect, a different set of grid output measures will apply and will be linked to revenue. We assume its inclusion is an error.

Proposed new grid performance measures

- *Momentary outages*

The scope of this measure needs to be defined carefully. For example, is it actually intended to be interruptions instead of outages? If the measure is of momentary outages of equipment, then what assets is this measure intended to cover?

- *The percentage of momentary outages caused by lightning*

Again, if this measure is for outages as opposed to interruptions, then the scope of assets covered needs to be clarified. However, we note that in the draft spreadsheet tab Q1, there is a label in a single row 31 that says: Percentage of total **unplanned interruptions** that are caused by lightning.

Transpower already analyses all unplanned outages and interruptions, and categorises causes and contributory factors where these are known. This process includes identification of lightning as a probable cause, by reference to information from a nationwide lightning detection system.

However, we question the value of the metric proposed. It is unclear how a stakeholder might use this metric, or draw robust conclusions, particularly when the scope of assets covered is unclear.

- *Percentage of unplanned interruptions that result in a complaint being made per GXP*

It is unclear whether this measure is intended to capture complaints only from connected parties, or from end users, or from both. If it is intended that the measure would capture complaints from end users, this is currently not practical. There is no standardised system in place at present for complaints from end users about unplanned interruptions to be formally recorded and reported.

End users generally do not communicate directly with Transpower. Rather, they are usually directed to communicate with their energy retailer. It would be difficult and costly to establish a robust complaints system operating across all energy retailers to capture complaints about unplanned interruptions resulting from the transmission network.

Further, reporting of complaints from end users about unplanned interruptions is likely to be confounded by issues within the distribution network. In particular, any fault, maloperation or performance problem within a distribution network that occurs following even a momentary interruption from the transmission network may lead to an extended interruption for an end user. If a complaint is received in these circumstances, it could be necessary to attempt to allocate

responsibility between Transpower and the distributor. There is currently no process for handling issues of this kind.

Finally, we have not been able to locate a provision in the spreadsheet for reporting this measure.

Suggestions for improvement

We make the following suggestions for improving the proposed disclosures detailed in schedule Q1:

1. Forecast performance under Q1(i) should be removed
2. Q1(ii) should be deleted (as outlined above, this information is an artefact of RCP1)
3. Q1(iii) "CY target" should be deleted as we do not and cannot meaningfully target individual point of service (PoS) and we see no benefit having a nominal statistically derived target for each PoS.
4. Refer to point of service (PoS) as this includes grid exit points and injection points (rather than GXP)
5. Clarify the terminology issues and address the other issues outlined above in relation to new grid performance measures.

5.8.2. QUALITY OF SUPPLY: INTERCONNECTION AND CORE GRID ASSETS

Our comments on workability

It should be acknowledged that this is the same report format and uses the same definitions as the "Interconnection Asset Report" (i.e. it is a carbon copy of what is provided to the Electricity Authority not a variation of that).

As proposed, we would be required to submit this same report at least 5 weeks ahead of our normal schedule. This is problematic and causes scheduling issues at a peak period.

Suggestions for improvement

Explicitly state that this is the exact same information provided to the Electricity Authority in the Interconnection Asset Report.

Align timing with the primary disclosure of this report to the Electricity Authority.

5.9. SYSTEM OPERATOR

Disclosure schedules SO1 and Chapter 6 of the reasons paper deal with the System Operator.

5.9.1. SYSTEM OPERATOR

Our comments on workability

Our earlier comments on the use of 'goal seek' in the ROI calculation also apply to the System Operator ROI calculation.

It is not clear what number should be used for capital revenue – current year funding (based on forecast) or actual capital revenue (i.e. post wash-up revenue). It would be helpful to include a wash up amount in the System Operator schedule.

The disclosure spreadsheet includes a five year revenue and cost forecasts. This is problematic because System Operator revenues are susceptible to fluctuations in capital revenues (which represent approximately one third of total revenue). The higher degree of variability and volatility due to the nature of the System Operator asset base is accentuated in the three plus year horizon by the generally shorter life of System Operator assets (typically IT assets). Any forecast beyond the current three year SOSPA period will be subject to additional variability (especially if the wash-up is disclosed as incurred).

The asset categories in the proposed spreadsheet match those used on the Electricity Authority's Capital plan however do not reflect Transpower's asset categories (i.e. do not reflect our current systems). A manual reconciliation would be required to match actual data to the proposed categories. Asset values will fluctuate between categories for any number of reasons eg. market initiatives may require substitution of spend with another project in another category. Any trend analysis over time would not provide useful insights.

Suggestions for improvement

We suggest the following amendments to the draft disclosure spreadsheet:

1. Cell S20 should be $= (R17 + R18 - R19) / (1 + S26)$ so as to apply the discount to all three components, not just R19.
2. Limit the length of the revenue forecast to three years.
3. Confirm that capital revenue is actual (i.e. post wash-up).
4. We propose two opex cost categories:
 - Departmental (includes investigations and security of supply)
 - IT Operations (includes market system support not separated)
5. Asset categories should reflect Transpower's fixed asset register:
 - software
 - hardware
 - buildings etc.
6. Clarify that, at SO1(v), the *capital expenditure forecast* and *historical forecast capital expenditure* data refer to forecast (not actual) capital expenditure
7. Pricing Manager is currently excluded from the revenue categories but should be included for completeness
8. Technical services advisory contract revenue should be removed from the disclosure.

6. OTHER MATTERS

This chapter discusses matters not otherwise addressed in the remainder of our submission regarding the process the Commission has followed for developing its ID proposal, the value of applying cost-benefit analysis disciplines to ID design, certification requirements, and other more minor points.

6.1. ID DEVELOPMENT PROCESS

Engagement by the Commission with stakeholders and with us has been more sporadic and stilted than described in the reasons paper, with a long delay since the initial workshop in 2012 and the current consultation round. There was no follow up from the initial workshop, and we have had very limited engagement with the Commission on ID regarding the draft reasons, determination and spreadsheets.

Development of Transpower ID arrangements follows from considerable work by the Commission on Part 4 ID for EDBs, gas networks, and airports. The EDB process in particular seems to have involved significantly more engagement by the Commission with the sector and interested parties on policy, design and implementation.

Rather than following a similar process for Transpower ID, the Commission appears to have taken the outcome of the EDB process and made mostly superficial changes to account for our context. This is clear from the striking similarity between the Transpower ID reasons paper and the EDB ID final decision paper. This means that the proposed Transpower ID does not fully address the question of how best to design ID for a firm with IPP regulation and, as a result, the draft proposal is not as cost effective or as aligned with the IPP as it could be.

We recommend that it would be useful for the Commission to hold an industry workshop as the next step in its process, and to allow more time to properly work through how best to design ID that works effectively with IPP regulation.

We also recommend that the ID development process is amended so that the IPP determination for our next control period is finalised before the ID design is completed⁴².

6.2. COST BENEFIT ANALYSIS

The Commission has dismissed the value of cost-benefit analysis for ID development as follows:

“...a cost-benefit analysis of the decision 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”

We agree that the Commission has no choice but to develop ID for Transpower, but this does not detract from the value of cost-benefit analysis as an aid to regulatory decision making. It is clear from the contrast between the Commission’s proposal and our refinements that different approaches to ID can have significantly different cost and benefit impacts.

⁴² We note that much of the IPP information we provide in our ARR is currently requested under annual section 53ZD information notices. We expect that there will be a stronger reliance on the IPP determination providing a standing set of information requirements in the next control period.

As a matter of good practice, the Commission should follow a process that allows stakeholders to understand the link between design choices, cost implications and economic benefits. This need not be an onerous task and in the context of ID could be approached by focussing on the cost-effectiveness of various ID approaches. We have followed this approach in our own analysis by addressing the nature of the costs that arise from various approaches and the nature of the benefits. This has enabled us to arrive at proposed refinements that should enhance cost effectiveness relative to other ID design options.

6.3. ASSURANCE

If the Commission adopts the approach that we propose in this submission then the incremental audit and certification requirements for ID are relatively limited. This is desirable in that it avoids unnecessary costs without any impact on the reliability of the disclosed information.

If the Commission proceeds with the approach outlined in the draft decision then the incremental audit and certification requirements for ID are material. In some cases, for example most of the financial and quality schedules, they require re-audit and re-certification of information that is already audited as a requirement of the IPP. In other cases the only requirement is repeating director certification, although this does drive preparation and assurance costs in itself.

If the Commission presses ahead with requiring significant additional assurance requirements, then it would be useful to develop a framework for assessing the correct assurance approach. For example, there is an increasing cost scale from officer (e.g. CEO) certification, to simply providing evidence of a Board resolution to publish information, to certification by the Board.

In addition, there is an increasing cost scale depending on the precise wording of any certification. For example, certifying that information ‘is derived from and accurately represents, in all material respects, the operation of the business⁴³’ should drive less cost than certifying that information is ‘complete and accurate, free from material misstatements, and has been prepared using robust systems and processes’.

Development of a framework of this nature would assist the Commission to test the required assurance requirements for each ID element.

6.4. OTHER TECHNICAL MATTERS

6.4.1. STARTING DATE

It is not clear from the draft spreadsheet that data is to be provided only from 2014/15 onwards (i.e., that we are not required to populate columns with pre-2014/15 data). Our understanding is that the CY-1, CY-2, etc. cells are intended to be populated only with data from 2014/15, such that the data set would grow over time.

While we understand, from discussions with Commission staff, that this is the case it would be helpful if this were explicitly stated in the determination and reasons paper. It would, as we have explained to Commission staff, be extremely difficult to provide backwards looking data for many of the disclosures and not possible for some.

⁴³ This form of certification was required for our reset proposal.

6.4.2. BUSINESS LINE SCOPE

The financial information sheets are constructed on the basis that the income, expenses and assets are those covered by the IPP – our ‘IPP-regulated business’. This is an appropriate approach because the market and regulatory context differs between our IPP, investment contract, SOSPA and unregulated businesses such that ID value would be impaired if information is aggregated across business lines.

However, this is not reflected in paragraph 9 of the ID Determination, which requires that the spreadsheets are prepared using financial information relating to ‘transmission lines services’. These are defined as ‘electricity lines services’ per the Commerce Act, less system operator (i.e. including customer investment assets, expenditure and revenues).

6.4.3. INFORMATION RETENTION

There is some confusion as to whether supporting information is required to be retained for 7 years. The draft reasons paper suggests that supporting information will need to be retained, but the draft determination only refers to the retention of disclosure information.

While we acknowledge that the Commission does have power to require supporting information to be retained,⁴⁴ this is likely to be a costly exercise with little if any benefit to the wider purpose of Part 4.

⁴⁴ Commerce Act 1986, s 53C(3)(c).

APPENDIX A: LEGAL ADVICE

A report by legal advisers, Webb Henderson (appended separately)

APPENDIX B: REGULATORY ECONOMICS REVIEW

A report by Harding Katz (appended separately)

APPENDIX C: ASSET MANAGEMENT PRACTICE REVIEW

A report by AMCL (appended separately)