



TRANSPOWER

*Keeping the energy flowing*

# TRANSMISSION PRICING METHODOLOGY REVIEW

## Beneficiaries-pay working paper

25 March 2014

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## EXECUTIVE SUMMARY

As administrator of the TPM we have a specific role to play in the development and implementation of the TPM. Although TPM design impacts Transpower as it affects our customers and stakeholders we are, broadly speaking, agnostic from a value perspective. Our primary objectives in engaging in the Electricity Authority's TPM review are to assist the Authority and interested parties arrive at a conclusion that best promotes the long-term interests of consumers and ensures efficient utilisation of our assets.

We support the Authority's pursuit of its statutory objective and appreciate that it has a very challenging role to perform. We have reviewed the Authority's Working Paper *Transmission Pricing Methodology review: Beneficiaries-pays* (BPO Working Paper), in light of the consultation the Authority has undertaken on the TPM review to date, and consider the TPM review process is approaching a natural break point. It is important, as the Authority contemplates development of a second Issues Paper, that it pause and reflect on submissions to its original 2012 Issues and Proposal Paper (the first Issues Paper), the suite of working papers, and the procedural, workability and substantive issues that they identify.

We want to help the Authority avoid a repeat of the criticisms from the first Issues Paper; particularly that it had not properly defined a problem with the status quo and had reached a preferred solution, the SPD method, without adequately considering alternative options. It appears that one of the difficulties the Authority is presently facing is that the Decision Making and Economic (DM&E) framework has taken the Authority to a preferred beneficiaries-pay option independently of assessment of any problems that may exist with the status quo.

In our view, the problems with the status quo, if any, are minor and point to less radical and much simpler approach to transmission pricing than the Authority is proposing. In our view that approach should recognise the stability and efficiency benefits of the current TPM and focus on incremental improvements.

### The working paper process has been helpful in testing key concepts

This review, more than most, has introduced many novel ideas with a high degree of complexity.

The working paper process has been useful in testing the case for changing the TPM and the strengths and weaknesses of the different options identified by the Authority. In that sense the process has been extremely valuable. A limitation has been that consideration of earlier working papers has not fed through into the latter papers; particularly in relation to treatment of sunk costs and the problem definition from the CBA Working Paper. The working papers have also been structured around the original TPM Proposals, i.e. working papers on each of the main components of the original proposal including treatment of LCE rentals, SPD charge options (the BPO Working Paper), residual charges and connection charges, which does not lend itself well to consideration of whether or not alternative TPM options should be considered at this stage.

### We acknowledge the Authority's willingness to amend its proposals

We are encouraged that the Authority is prepared to make substantive changes to its initial proposals, in particular to the SPD method. The Authority has made a number of changes to date aimed, we understand, at addressing workability issues raised by submitters. The Authority has, for example, taken on board concerns about volatility and uncertainty and made substantial changes to address these concerns.

Although many submitters, including Transpower, have indicated they are open, in principle, to the concept of beneficiaries-pay it appears few if any welcome the wholesale market linked SPD based approach favoured by the Authority.

For example, our broad support for beneficiaries-pay reflects that there are a number of options which would satisfy beneficiaries-pay, including the status quo; connection assets are charged to the sole beneficiaries (on a causer pays basis<sup>1</sup>), South Island generators are major beneficiaries of the HVDC but, like the Authority's GIT based charge options, not the sole beneficiaries, and smearing interconnection costs across load on a postage stamp basis reflects the large fixed and common costs of the transmission grid, and should result in a situation where no consumer group or region pays more for interconnection than their private benefit.<sup>2</sup>

The BPO Working Paper does not consider the beneficiaries-pay pricing approaches that have been adopted overseas; particularly following the FERC Order 1000 that the Authority referred to in its first Issues Paper.<sup>3</sup> The BPO Working Paper simply consults on variants of the same SPD method proposal, which are just variations on the original SPD proposal.

### Problems with the SPD method run deep

Submitters have identified a number of material workability, conceptual and economic problems with the SPD method. Some of those issues can, as alluded to above, be designed around while others appear more intractable and fundamental in nature.

Based on an extensive number of submissions these include problems with the pricing signals that the SPD method sends about peak/non-peak transmission usage, and the gaming incentives it creates for generators (essentially the same as a "paid-as-offered" wholesale market). It would appear, based on the analysis in the BPO Working Paper, that if the Authority attempts to address the problems with the pricing signals the SPD method sends it will exacerbate gaming incentives and vice-versa.

### The foundations of a robust second Issues Paper

As outlined above, the consultation on the first Issues Paper, the conference, the workshops and the release of a suite of working papers have materially advanced the thinking on transmission pricing. They have tested many assumptions and assertions; have focused minds on the merits of the current TPM and cast doubt on the validity of the flagship SPD proposal.

The great benefit of the consultative process is that it allows ideas and concepts to be scrutinised and stress tested before a decision to proceed with a particular option or design setting. To be effective the consulting party must, obviously, take the time and make the effort to properly understand the views of interested parties.

In our view, before substantive work on the proposed second Issues Paper commences, now is an opportune time to reflect on the process to date and the very strong submissions placed before the Authority. It is evident the working paper process has not permitted the Authority to reflect learnings from the earlier working papers, e.g. the CBA and Sunk Costs Working Papers, in the later working papers, including the BPO Working Paper.

We revisit in this submission, and provide further thoughts on, the key analytical steps that need to be revisited – for example:

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<sup>1</sup> There does not need to be a process of determining the connecting party's private benefit. They will only connect to the transmission grid if their private benefit exceeds the connection costs.

<sup>2</sup> Question 25, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>3</sup> Refer, for example, to the jurisdictions of Pennsylvania-New Jersey, the Midcontinent Independent System Operator and the New York Independent System Operator.

- has the Authority properly applied its statutory objective; including explicit consideration of the reliability and competition limbs of the Authority's statutory objective (in addition to the efficiency limb)
- revisiting the "material change in circumstance", including to consider the intent of this carefully constructed threshold clause
- problem definition: including to address the overwhelming view that the Authority has erred (by defining the problem by reference to its preferred solution) at this foundation stage; and
- options identification: to explore TPM options other than just the SPD method, including to explicitly consider the status quo, and incremental reforms, as genuine options.

### **Selection of Counterparties**

We remain of the view that customers that are physically connected to Transpower's grid are the natural counterparties for transmission services i.e. distributors, direct connect customers and generators should be charged for transmission services but not retailers. We consider this to be consistent with the approach in a workably competitive market.

One of the practical problems with the original SPD proposal was that setting transmission charges on an *ex post* and half-hourly basis meant they would be volatile and difficult to forecast. This could have caused distributors problems in complying with their price-paths under Part 4 of the Commerce Act. The Authority's revised proposal to set the SPD charges on an *ex ante* annualised basis addresses this concern.

In our view, if the SPD charges were imposed on retailers, rather than distributors, this would have a number of undesirable impacts, for no real benefit, including: (i) increase in transaction costs for Transpower and retailers, and (ii) loss of pricing signals to distributors (including loss of possible pass-through of those signals to distributed generators).

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## 1. INTRODUCTION

This is Transpower's submission to the Electricity Authority's Working Paper "Transmission pricing methodology review: Beneficiaries-pay options" (the BPO Working Paper), dated 21 January 2014. We welcome the opportunity to comment on the working paper.

This submission should be read alongside our earlier submissions on this review in particular those to the first Issues Paper, the CBA and Sunk Costs Working Papers. We would welcome the opportunity to discuss our submission with the Authority.

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### 1.1. INDEPENDENT ECONOMIC REVIEW

We have commissioned Competition Economics Group (CEG) to provide an independent economic review of the BPO Working Paper. Please find attached the CEG report, *"Economic Review of the EA Beneficiaries-Pay Options Working Paper"*, March 2014.

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## 2. FOUNDATIONS OF A ROBUST SECOND ISSUES PAPER

In this section we reflect on the process to date and consider, in light of that experience, the steps the Authority might take from here to see this process to a satisfactory conclusion.

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### 2.1. NOW IS THE RIGHT TIME TO PAUSE AND TAKE STOCK

The Authority has undertaken a considerable amount of work on the TPM since release of the first Issues Paper. Affected parties have, similarly, undertaken a considerable amount of work to understand the implications of the proposals and to inform and support the Authority's deliberations.

We consider that now is the right time for the Authority to reflect on the learnings from the TPM policy development process to date, and the implications for the next stages in the process, before release of the second Issues Paper.

In considering the BPO Working Paper, and the recent suite of Working Papers, we have reflected on what further work the Authority should undertake as it develops its proposed second Issues Paper. In our view considerable work is required to ensure the Authority's TPM policy development is robust and outcomes are to the long-term benefit of consumers. That is not a criticism<sup>4</sup>, rather, it recognises that transmission pricing is a complex and controversial issue and, in making the case for (any and all) change, the evidence that the long-term benefit of consumers are being served must be robust and objectively justifiable.

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### 2.2. FURTHER WORK IS NEEDED PRIOR TO RELEASE OF THE SECOND ISSUES PAPER

The current timeframe (H2 2014) for a deliver a second Issues Paper appears challenging, particularly if the Authority wishes to address the issues raised in this and other submissions.

The natural desire to make a decision and move must be balanced by the need to reach a robust conclusion. The Authority has extended its original timetable to permit additional consultation. This is the right thing to do. The Authority should continue to take the time needed to reach the right answer and should not truncate analytical or consultative process to meet self-imposed deadlines.

We and others have submitted that critical stages in the analytical process have been inadequate and that this has skewed the subsequent analysis. For example, submissions to date strongly suggest the Authority needs to revisit and consult on the *entry thresholds* to TPM review and the foundation steps in its analysis such as the *problem definition* and *options identification*.

The main areas where we consider further work is needed includes, but are not necessarily limited to:

- whether there has been a material change in circumstances (the entry threshold)
- the correct interpretation of the Authority's statutory objective in context of the TPM

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<sup>4</sup> Although we consider that the Authority has been slow to respond to legitimate concerns which have detracted from the effectiveness of the working papers and submissions.

- whether the decision making and economic (DM&E) framework is being appropriately applied or helping with the Authority's work on the TPM
- the problem the Authority trying to solve with the current TPM, and
- what alternatives to the options put forward by the Authority should be considered in more detail.

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### 2.2.1. HAS THE MATERIAL CHANGE IN CIRCUMSTANCES 'ENTRY THRESHOLD' BEEN MET?

The material change in circumstance (MCIC) test is an 'entry threshold' for review. It is an important safeguard against overly-frequent or vexatious review and is critical to ensuring the TPM is stable and durable. It also recognises that transmission pricing is complex and contentious and, while opinions are aplenty and will continue to evolve, there is unlikely to be a single, practically perfect TPM.

The importance of stability and durability, and having a predictable regulatory environment for price setting, was highlighted quite clearly in the Commerce Commission's recent consultation on whether it should re-open aspects of its cost of capital Input Methodologies, under Part 4 of the Commerce Act, for early review. The first Issues Paper also highlighted the importance the Authority places on stability and durability and a key objective was to reduce disputes e.g. lobbying.

A number of submissions raised questions over whether there had been a MCIC that could justify changes to the TPM; particularly of the magnitude the Authority is proposing. We share this view.<sup>5</sup> It is also unclear that a MCIC should warrant radical reform when, for example, the MCIC might relate to a discrete aspect of the TPM.

It appears that this review is driven by the Authority's view that there are opportunities for improvement in efficiency, rather than a MCIC *per se*.

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### 2.2.2. WHAT IS THE CORRECT INTERPRETATION OF THE AUTHORITY'S STATUTORY OBJECTIVE?

We have previously commented on the Authority's interpretation of its objective, including its wrapping of the competition and reliability limbs into a single efficiency interpretation. Our concern is that, in adopting this stance, the Authority risks underweighting its focus on competition and reliability and failing to see adverse impacts in those areas (for example, a number of submitters express concern that the proposals could harm competition).

The Electricity Authority, under the Electricity Industry Act, and the Commerce Commission, under the Commerce and Telecommunications Acts, have the statutory objective of promotion of the long-term benefit of consumers/end-users. The Commerce Commission has interpreted this objective, when considering whether to recommend regulation of goods or services under either Act, as requiring it to take into account wealth transfers between suppliers and consumers. This interpretation was upheld in the High Court (2006) and Court of Appeal (2008) decisions in the case of *Powerco v. Commerce Commission*.

The Authority has justified adopting a different interpretation, that excludes wealth transfers, on the basis that "the Powerco judgments are based on the specific legislative scheme and purpose of the then Part 4 of the Commerce Act, they do not apply to other Acts of Parliament for which the purpose is other than determining whether price control should be imposed."<sup>6</sup> We are not comfortable that the Authority and Commerce Commission have adopted such different

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<sup>5</sup> Appendix A, Question 1, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>6</sup> Paragraph A.9, Electricity Authority, Interpretation of the Authority's statutory objective, 14 February 2011]



interpretations, or whether the Authority's explanation is well grounded, particularly as the impact of wealth transfers will dominant any efficiency impact of a change in the TPM.

It may be appropriate for the Authority to revisit its interpretation of its statutory objective.

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### 2.2.3. IS THE DM&E FRAMEWORK BEING APPLIED APPROPRIATELY?

A number of submissions have raised issues with the way the Authority has applied its DM&E framework.

A potential issue with application of the DM&E framework is that it divorces identification of problem from determination of solution. This may be reflected in the difficulties the Authority has had in establishing a problem with the status quo and ensuring its proposals are commensurate with and proportionate to the identified problem.

It appears that the Authority has formed the view that beneficiaries-pay may be the best option, not because it addresses specific problems with the status quo but, rather, because the Authority has formed the view that higher ranked approaches under the DM&E have only limited practical applicability. This has been unhelpful in narrowing the Authority's consideration of TPM options that could potentially better serve the long-term interests of consumers.

One of the issues with the Authority's application of the DM&E framework that the BPO Working Paper appears to attempt to address is the criticism that insufficient consideration has been given to LRMC pricing which, regardless of whether it would be the long-term benefit of consumers, clearly ranks higher in the DM&E framework than beneficiaries-pay.

While we are sceptical about the merit of LRMC pricing, we question whether the BPO Working Paper's reasons for rejecting LRMC are valid. We doubt LRMC pricing would be as complex as SPD method, the difficulties arising from the meshed nature of the interconnection network do not apply to the HVDC link and, regardless, the Authority's zonal SPD pricing option shows how the meshed nature of the interconnection network can be addressed.<sup>7</sup>

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### 2.2.4. WHAT PROBLEM IS THE AUTHORITY TRYING TO SOLVE?

This is an absolutely critical issue in our view.

Unfortunately, we do not think the Authority's attempt to define the problem with the status quo has been well grounded, or provides a robust basis for considering anything other than incremental refinements to the status quo.<sup>8</sup> This is clear from submissions in response to the Authority's definition of the problem in both the first Issues Paper, and the subsequent CBA Working Paper.

The problem definition in the first Issues Paper essentially stated the problem was that current charges did not reflect the preferred beneficiaries-pay option. This confused identification of the problem with the potential solution. It is circular and creates the impression of "a solution looking for a problem".

The CBA Working Paper revisited the problem definition but provided little insight beyond that the Authority considered there were significant efficiency gains to be made from a change to the TPM. It is still not clear what the Authority thought the problems were that gave rise to these potential efficiency gains. The problem definition confused problem with evaluation of alternative (beneficiaries-pay) pricing options.

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<sup>7</sup> The Tilted Postage Stamp also provides an example of how simplified LRMC pricing could be introduced. This suggests that LRMC pricing is probably practical.

<sup>8</sup> Noting that even incremental refinements require the MCIC entry threshold to be satisfied, unless Transpower is the proponent of the change.

We comment further on *problem definition* in section 3.

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### 2.2.5. WHAT ALTERNATIVE TPM OPTIONS SHOULD BE CONSIDERED IN MORE DETAIL?

One of the most substantive process points made in response to the first Issues Paper, including by Transpower, was that the Authority had skipped a number of policy development steps and had gone straight to a preferred alternative TPM, without adequately considering alternative options. The extent to which the suite of Working Papers the Authority has subsequently released addresses this concern is limited.

Just as it is important that we consider alternative grid investment upgrade options, in order to ensure our preferred option ultimately best meets the needs of consumers, proper consideration of a range of TPM options is critical for ensuring the option the Authority ultimately decides on best satisfies its statutory objective and it is to the long-term benefit of consumers.

Rather than just focusing on variations on SPD method, we consider that the Authority should consider a wider range of options including, but not necessarily limited to<sup>9</sup>:

- no change (beyond administrative improvements). The status quo is a legitimate option and, in fact, is the default option if alternatives cannot be proven with confidence to better serve the long-term interests of consumers
- more modest refinements of current TPM e.g. changes to the treatment of loss and constraint rentals, and evolution of the RCPD charges to provide more efficient pricing signals (that avoid potential over-encouragement of distributed generation)<sup>10</sup>
- modification of the HVDC charge only
- introduction of more LRMC-like signals (some options, for which may fit under modest refinements of the current TPM), and
- alternative approaches to beneficiaries-pay i.e. not exclusively versions of the SPD method.<sup>11</sup>

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### 2.2.6. MORE WORK REQUIRED TO ADDRESS THE SUBSTANTIVE PROBLEMS IDENTIFIED WITH THE SPD METHOD

While it is clear the Authority has taken steps to address some of the issues raised by submitters in relation to the SPD method it has omitted to address some of the most substantive issues.

Submitters have identified a number of material workability, conceptual and economic problems with the SPD method. Some of those issues can be designed around while others appear more intractable and fundamental in nature.

Based on an extensive number of the submissions the Authority has received, these include problems with the pricing signals that the SPD method send about peak/non-peak transmission usage, the gaming incentives it creates for generators (essentially the same as a “paid-as-offered” wholesale market), and impact on retail market competition. It would appear, based on the analysis in the BPO Working Paper, that if the Authority attempts to address the problems with the pricing signals the SPD method sends then it will exacerbate gaming incentives and vice-versa.

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<sup>9</sup> Transpower does not necessarily support each of these options, but we recognise that any major review of the TPM should include a range of alternative options.

<sup>10</sup> We discuss the scope for refinement of the TPM in the section “What are the possible problems with the status quo”.

<sup>11</sup> The BPO Working Paper does not consider the beneficiaries-pay pricing approaches that have been adopted overseas; particularly following the FERC Order 1000 that the Authority referred to in its first Issues Paper. Refer, for example, to the jurisdictions of Pennsylvania-New Jersey, the Midcontinent Independent System Operator and the New York Independent System Operator.

These are fundamental issues that go to the very heart of whether beneficiaries-pay or the SPD method would be to the long-term benefit of consumers.

While the Authority has stated that it “is developing its response to submissions and cross submissions in relation to the consultation paper ‘Transmission Pricing Methodology: issues and proposal’ dated 10 October 2012 (October 2012 issues paper) and to points raised in the May 2013 TPM conference”<sup>12</sup> it would have been helpful if responses to these issues had provided prior to or as part of the release of the BPO Working Paper.

It is difficult to fully respond to a paper that implicitly rejects fundamental criticisms raised in previous submissions, without explaining why, and repeating much of the disputed reasoning from the first Issues Paper in support of beneficiaries-pay and the SPD method (or versions thereof).

We comment further on the *beneficiaries-pay options* in section 4.

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<sup>12</sup> Paragraph 1.1, Electricity Authority, BPO Working Paper, 21 January 2014.

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## 3. REVISTING THE “PROBLEM DEFINITION”

The problem definition is the foundation for subsequent analysis and development of policy options.

In this section we share our thoughts on the appropriate approach to problem definition. We also expand briefly on the potential problems with the status quo and, very briefly, on the implications for TPM change.

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### 3.1. HOW SHOULD THE AUTHORITY APPROACH THE PROBLEM DEFINITION?

The purpose of the problem definition analysis is to establish what, if any, problem exists with the current TPM before considering if any change is required. This is the logical first step in the analysis i.e. it should be done before options for change are developed.

If the Authority establishes that there has been a MCIC, it then needs to establish how it will interpret its reliability, competition and efficiency statutory objective in the specific context of transmission pricing.

It then needs to undertake a situation assessment to ensure it has a complete picture of and understanding of the relevant issues and broader context. In the present case that analysis needs to clearly establish how the suite of signals operates together; those signals include:

- the wholesale market (nodal price);
- the TPM (AC connection and interconnection charges and DC charges); and
- the transmission investment approval process (under the Commerce Commission’s Transpower Capital Expenditure Input Methodology (Capex IM)).<sup>13</sup>

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### 3.2. WHAT ARE THE POTENTIAL PROBLEMS WITH THE STATUS QUO?

We would be the first to acknowledge that the TPM is not perfect, no TPM is. But, by the same token, we would caution against letting the perfect be the enemy of the good.

Our view is that the current TPM, coupled with nodal pricing, scores well in terms of static efficiency. CEG have noted that the TPM closely resembles an efficient Ramsey-Boiteux two-part tariff.<sup>14</sup> This ensures efficient utilisation of the existing grid.

This view appears to be supported by the BPO Working Paper which acknowledges that “nodal pricing should provide (approximately) correct signals about the SRMC of transmission through its pricing of losses and constraints on the grid. This means that nodal pricing promotes both: (a) productive efficiency ... [and] (b) allocative efficiency ...”<sup>15</sup>

We consider that, coupled with the nodal price and Capex IM, the current TPM performs fairly well in terms of dynamic efficiency outcomes. (It is not clear at this point that the Authority has fully appreciated the interaction between the TPM, the nodal price and the Capex IM.) The current TPM is broadly understood and stable and is, relative to Authority’s proposals, comparatively simple.

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<sup>13</sup> Question 1, Appendix – Responses to Consultation Questions, Transpower, Decision-making and economic framework for transmission pricing methodology review, 24 February 2012.

<sup>14</sup> Page 2, CEG, Sunk Cost Working Paper, 28 October 2013.

<sup>15</sup> Paragraph 5.6, Electricity Authority, BPO Working Paper, 21 January 2014.

Having said that there are aspects of the status quo that deserve consideration and that may warrant change to the TPM. We discuss the potential problems with the status quo below.

It is important to distinguish between reform drivers and outcomes. The Authority is motivated by and seeks efficiency; it is possible, however, to mistake or conflate efficiency drivers or outcomes with equity drivers and outcomes. This appears to be a risk with both HVAC and HVDC charges.<sup>16</sup>

That is not to say that addressing equity drivers and pursuing equity oriented outcomes are incompatible with the Authority’s objectives simply that they should be addressed discretely and explicitly to ensure transparency and avoid undue confusion.

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### 3.2.1. CONNECTION CHARGES

Under the TPM, the aggregate value of all connection assets is allocated to connected parties based on the types of assets they use. The pool-based approach means that customers’ charges are smoothed over time. For example, if a customer’s fully depreciated asset is replaced with a new asset, then the value of the connection pool is increased but that customer’s share of the pool remains the same.

This approach is consistent with the concept that connection asset customers are purchasing a level of service, rather than a specific set of assets. This approach also supports our ability to optimise capital and operating expenditure across our assets and supports our ability to maintain grid reliability standards (GRS).

We are not aware of evidence that there is a material problem with the connection charges<sup>17</sup> (we are under the impression that the issues raised in the first Issues Paper were satisfactorily addressed by submissions and at the May 2013 TPM conference).

There may be some minor issues with the connection charges. We will address this in response to the Connection Charge Working Paper.

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### 3.2.2. LOSS AND CONSTRAINT EXCESS

The issues in relation to loss and constraint rentals are well canvassed in the Authority’s LCE Working Paper and in submissions, and are relatively non-contentious, so we do not discuss them further here.

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### 3.2.3. INTERCONNECTION CHARGES

The first Issues Paper suggested the current RCPD charges are efficient; with the UNI and USI charges signalling to market participants to reduce peak demand to defer need for future transmission investment. It specifically referred to distributed generation assisting with deferral of the need for further transmission investment,<sup>18</sup> while the LNI and LSI charges are set as unavoidable charges to encourage utilisation of the transmission network where there is plenty of capacity to meet demand.<sup>19</sup>

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<sup>16</sup> Refer to sections 3.2.4 and 3.2.5 below.

<sup>17</sup> Refer to the responses to questions 3 – 6, Appendix A, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>18</sup> Paragraphs 63 – 77, Appendix D, Electricity Authority, Consultation Paper, Transmission Pricing Methodology: issues and proposal, 10 October 2012.

<sup>19</sup> Appendix D, Electricity Authority, Consultation Paper, Transmission Pricing Methodology: issues and proposal, 10 October 2012.

The Authority suggested attempts to avoid the LNI and LSI charges would result in some inefficiency though this would probably be relatively small.<sup>20</sup>

However, there may be scope to refine the current interconnection charges so that the RCPD charges provide better medium to long-term price signals about the need for future transmission investment and the impact of growth in peak demand on capacity. For example there is potential scope for incremental changes to the RCPD charging arrangements which could result in better pricing signals (less avoidable where there is plenty of capacity, and better signalling the cost of future transmission investment requirements in other areas). This could be achieved by:

- adjusting the allocation of the interconnection cost between regions
- “tuning” RCPD (e.g. number of peaks) within each region.

In respect of within-region “tuning” we have previously proposed a mechanism be developed for amending the number of peaks/pricing signal to reflect constraints on capacity growing tighter/being relieved by transmission investment. The key is that the mechanism is transparent and predictable so market participants can have confidence to make investment decisions in response to the signals. (Market participants may be reluctant to make investment, particularly with a long pay-back period, if they are uncertain how long those pricing signals will remain in place.)<sup>21</sup>

We consider further work is warranted on this point and we are available to assist the Authority.

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### 3.2.4. HVDC/HAMI CHARGES

The other area of the TPM where we consider there is potential for incremental refinement is in relation to the HAMI charges for HVDC assets.

We acknowledge the current HAMI charges may have some undesirable impacts on South Island generators withdrawing capacity in order to avoid/reduce their HVDC charges. The first Issues Paper estimated that the current HVDC charges resulted in static inefficiency with an NPV of \$30m.<sup>22</sup> We agree with this assessment and that the inefficiency of the current HVDC charges is likely to be small. We also consider that the problems with the recovery of the cost the HVDC are limited to the HAMI charges.<sup>23</sup>

We consider further work is warranted on whether HAMI settings could be better tuned to avoid inefficient distortions and we are available to assist the Authority.

While it may be possible to address these inefficiencies by refining the current charge we note that this is unlikely to materially alter the incidence of the charge and hence the incentives on South Island generators to lobby the Authority.<sup>24</sup> Pricing of the HVDC assets will remain contentious.

The Authority could address this issue by reallocating part or all of the current HVDC charges to consumers. The problem the Authority would need to address is that the efficiency impact it has identified from the current HVDC charges are very modest, with an NPV of \$30 million, compared to the wealth transfers from consumers to South Island generators.

The Authority would need to satisfy itself that reallocation the cost of the HVDC would be to the long-term benefits of consumers.

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<sup>20</sup> Electricity Authority, paragraphs 83 – 85, Appendix D, Consultation Paper, Transmission Pricing Methodology: issues and proposal, 10 October 2012.

<sup>21</sup> Response to Question 30, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>23</sup> Responses to Questions 10 and 11, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>24</sup> Refer to section 3.4.1 for further discussion on this point.

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### 3.2.5. NORTH ISLAND GRID UPGRADES

Another pressure point on the TPM could be that Transpower is currently undertaking a substantial amount of transmission investment, which is predominantly to serve the upper North Island, but these cost increases are being recovered from all consumers. For example, Network Waitaki has argued that “Transpower’s 23.4% increase in transmission charges to Network Waitaki is largely to pay for upgrades into the Auckland region.”<sup>25</sup>

There are any number of ways of allocating fixed and common costs, while broadly ensuring they are subsidy free (incremental cost or above) and no consumer groups or regions are being over-charged (prices equal to or below stand-alone cost).

If it is considered that the current postage stamp violates the principle that prices should be between incremental and stand-alone cost, or it results in an unfair or disproportionate amount of costs being allocated to certain consumer groups or regions, e.g. regions below Auckland, then a move to greater user (exacerbator) pays or a form of beneficiaries-pay are options that could be considered for reallocating costs.

However, the transmission grid has evolved and developed over a very long period of time and taking a ‘snap shot’ of accounting book values at a particular point in time could create a misleading impression about the fairness and incidence of transmission charges.

While a large amount of current transmission investment is predominantly to meet demand in Auckland and Northland at other times the opposite has been the case. Consumers south of Auckland who are now incurring additional costs due to investment in the Upper North Island have benefited from the contributions that consumers in the Upper North Island have made, and continue to make, in their regions. That suggests a longer run view of cost might be more appropriate than current book value, for example, replacement value.

While there may be more efficient ways to allocate cost between regions we would caution against *arbitrary* change based on current accounting book values that may advantage certain regions of the country compared to others.

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## 3.3. THE TRANSMISSION INVESTMENT FRAMEWORK

It is clear from both the original Issues Paper, and the BPO Working Paper, that the Authority believes that some of the problems its beneficiaries-pay proposals could address are not actually problems with the TPM *per se*.

The Authority appears to consider that the SPD method would address information asymmetry problems the Authority perceives that the Commerce Commission faces when making decisions on whether to approve a transmission upgrade proposal. The Authority argues market participants would be better incentivised to make submissions in relation to potential upgrades that better reflected whether the investment would be more efficient (rather than simply reflecting self-interest).<sup>26</sup>

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<sup>25</sup> <http://www.odt.co.nz/regions/north-otago/196304/falling-power-price-trend-likely-short-lived>

<sup>26</sup> The Authority has also suggested information from application of the SPD method would provide better information for the Commerce Commission to make better investment approval decisions. We don’t discuss this point further as it does not require a change in the TPM, only application of the SPD method. Furthermore, if information from the SPD method was helpful, to investment approval decisions, it would be better if it wasn’t part of the TPM. Gaming incentives could mean the results of the SPD method are muddled or skewed if the method was part of the TPM.

There has been widespread scepticism about whether that the SPD method would result in better investment approval decisions by the Commerce Commission.<sup>27</sup>

Based on our experience with the Commerce Commission, we consider the Commission’s decision-making process for investment approval is rigorous and appropriate. While no investment approval process can be perfect, it is after all based on *forecasts* of the future use of the grid, we do not have cause to believe that market participants could be revealing or submitting better information to the Commission that would result in better investment approval decisions or improved dynamic-efficiency.

If information asymmetry is a strong driver of the case for change to the TPM then the Authority needs to produce strong evidence that this is a problem.

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### 3.3.1. LINK BETWEEN INVESTMENT CYCLE AND PRICING SIGNALS

The benefits of dynamically-efficient pricing are at their greatest when there has been substantial under-investment or there is a high expected need for substantial transmission investment to meet future demand growth. However, this does not reflect current conditions, in particular because Transpower has almost completed an investment programme which will increase our regulatory asset base (RAB) from \$2 billion in 2008 to \$4.6 billion in 2015. There is not expected to be further significant expansion of interconnected grid capacity in the foreseeable future.

Given this new investment is now effectively sunk the most efficient approach to transmission pricing is likely to be to focus on static efficiency and optimal utilisation of the existing grid (rather than be dedicated to avoidance of the need for further investment). This is supported by the various quantitative analyses of the impact of locational/LRMC pricing.<sup>28</sup>

The combination of the TPM (specifically, current HVDC and RCPD charges), nodal pricing, and application of the GIT provide pricing signals in relation to both capacity and location, albeit weaker than the signals that might be expected from full LRMC pricing.

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<sup>27</sup> Refer, for example, to CEG, Economic Review of EA Beneficiaries-Pay Options Working Paper, March 2014.

<sup>28</sup> Appendix C: Validating the stage 2 conclusions on the benefits of location-based price signals for economic transmission investment, TPAG, Transmission pricing discussion paper, 7 June 2011.



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## 4. COMMENTS ON BENEFICIARIES-PAY OPTIONS

In this section we comment briefly on the SPD options described in the BPO Working Paper. Recognising the views we express elsewhere our comments in this section are necessarily made on a *without prejudice* basis.

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### 4.1. IMPROVING THE CALCULATION OF PRIVATE BENEFIT

The BPO Working Paper highlights that there are a substantial number of issues and choices to be made in relation to design of the SPD method. While we do not support adoption of a SPD type beneficiaries-pay methodology, we have the following comments on its design.

- We consider the simplified SPD method to be superior to the other options. (The zonal SPD pricing option appears to be better suited for application of LRMC pricing, rather than beneficiaries-pay.)
- We support the Authority's proposal<sup>29</sup> not to set SPD charges on an *ex post* and half-hourly basis.<sup>30,31</sup> It was clear from submissions on the first Issues Paper that there was little support for *ex post* charges set on a half-hourly basis, and market participants were concerned about volatility and problems with forecasting transmission charges.
- There are various other refinements the Authority is proposing that should improve the accuracy of the private benefit calculation<sup>32</sup> e.g. use of a demand elasticity based on empirical estimation rather than assuming demand is perfectly inelastic and acknowledgement that "The cost that should apply for non-supply is the LRMC of the transmission alternative that would have been built if the transmission investment in question had not been built".<sup>33</sup>
- If adopted, the SPD method should not be applied retrospectively to assets that are already sunk or committed. The SPD method should only be applied *prospectively* to a limited number of the largest transmission investments. It was clear from submissions on the first Issues Paper that there was little support or rationale for applying the SPD to assets built or approved prior to the introduction of the SPD method. In our view, the Sunk Costs Working Paper has not done anything to change this position.<sup>34</sup>
- Pole 2 and Pole 3 of the HVDC should not be treated as two discrete assets, reflecting that they are complementary in nature.<sup>35</sup>

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<sup>29</sup> Table 2, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>30</sup> Paragraph 7.88, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>31</sup> Refer to Question 23, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

<sup>32</sup> Although they will also increase the complexity of the private benefit determination and the scope for disputes.

<sup>33</sup> Paragraph 7.73, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>34</sup> The BPO Working Paper states that the simplified SPD charge would apply to (a) Pole 2; (b) investments with a cost of more than \$50 million added to Transpower's regulatory asset base (RAB) between 28 May 2004 and 10 October 2012; and (c) investments added with a cost of more than \$20 million from 10 October 2012 (paragraph 7.4), and goes into some detail about why the Authority proposes to include these assets (paragraphs 7.5 – 7.9), but also states that "This paper does not examine whether beneficiaries-pay options should be applied to new investments only" and that "The Authority's approach to charging for historical investments will be informed by the sunk costs working paper and submissions in response to it" (paragraph 1.13).

<sup>35</sup> Refer to Questions 7 and 8, Transpower, Submission on Issues and Proposals Consultation, 1 March 2013.

- All transmission charges, including SPD charges, should continue to be applied directly to parties that are physically connected to the transmission grid i.e. distributors and direct connects (and not to retailers).<sup>36</sup>

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#### 4.1.1. DEFINING AND CALCULATING PRIVATE BENEFIT

A key design issue for SPD is how to produce the most accurate estimate of private benefits.

The significance of this is highlighted by the impact changes in assumptions used in the SPD method can have on the calculation of private benefit, and by how different the calculation of private benefit is under the four SPD options presented in the BPO working paper.

We believe further work is needed to confirm the most appropriate interpretation of private benefit that should be applied if Transpower is directed to operationalise and implement the Authority's SPD proposals; specifically, in places, the BPO working paper appears to adopt an approach to beneficiaries pay which:

- puts greater weight on revenue recovery than accuracy of calculation of private benefit; and
- prefers charging the primary beneficiaries of particular assets over charging all beneficiaries.

#### Greater revenue recovery should not be confused with better application of beneficiaries-pay

The BPO Working Paper states, for example, that using a daily, weekly, or monthly share of annualised costs for the capping period would be "[m]ore consistent with beneficiaries-pay" than a half-hourly cap "as increasing the capping period means more costs are recovered from beneficiaries than through the residual charge" (emphasis added).<sup>37</sup>

Likewise, the BPO Working Paper suggests "the GIT-based charge fully recovers the costs of the investments to which that charge would currently apply. This means that the GIT-based charge would imply full beneficiaries-pay for these investments. This is, of course, a logical consequence of the fact that the charge is fully applied to the parties that receive the reliability benefits of the investment."<sup>38</sup>

If the Authority was trying to adopt causer (exacerbator) pays charges then full cost recovery would be an appropriate test. Our interpretation of the beneficiaries-pay approach is that it should ensure charges are no more than private benefit (with revenue shortfall recovered through the residual charge). If one option recovers more revenue than another option it would be undesirable if it resulted in overstatement of private benefits, and vice versa.

#### It is unclear why charging principal beneficiaries rather than all beneficiaries would be a superior application of beneficiaries-pay

It is not clear from the BPO Working Paper why charging a subset of "primary" beneficiaries would be superior to charging all parties that benefit from an investment.

The Authority, for example, describes the GIT-based charge proposal as "full beneficiaries-pay" even though not all beneficiaries would contribute to the cost of the assets. Likewise, the Authority rejects "a less complex SPD method that, rather than calculating benefits separately for each asset, would calculate benefits from the grid as a whole" and "an import- and export-based approach"<sup>39</sup> on

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<sup>36</sup> Refer to the section 5 of this submission "Selection of Counter-party" for further discussion on this point.

<sup>37</sup> Page 20, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>38</sup> Paragraph 8.20, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>39</sup> Paragraph 1.11, Electricity Authority, BPO Working Paper, 21 January 2014.

the basis that “they spread the costs of a new investment across the entire grid rather than to the parties primarily benefiting from the investment”.<sup>40</sup>

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## 4.2. ASSESSMENT OF THE SPD OPTIONS

There appear to be a number of issues with each of the SPD options contained in the BPO Working Paper.

- It is not clear that all the substantive issues raised with the SPD method, in submissions on the first Issues Paper and at the TPM conference, have been addressed. CEG has advised that “there are material problems with all four of the new options” and “[m]any of these problems are the same or similar in nature to those we identified with the EA’s original proposal.”<sup>41</sup> For example, CEG and others suggest the SPD method could send pricing signals that are the opposite of dynamically efficient pricing e.g. the SPD price average cost cap could limit the amount of revenue recovered during peak usage periods.<sup>42</sup>
- Submissions previously questioned why “charging according to benefit would incentivise consumers to make broadly efficient decisions, as prices will incentivise them to consume no more of a service than their private benefit”.<sup>43</sup> It would not matter to the consumer whether the actual (marginal) cost of consuming more of the service was more than their private benefit because they would not be paying the full (marginal) cost, they would only be paying up to their private benefit.
- The BPO Working Paper continues to argue that the SPD method would result in improved transmission investment decision making by the Commerce Commission, but hasn’t addressed how this would occur or the widespread opposition to this view by submitters.<sup>44</sup>
- We also note that the evaluation of the options appears to be against both the status quo (or the original TPM proposal?) and LRMC pricing. This would appear to explain why allocative and dynamic efficiency impacts are treated as both an advantage of the each of the options (compared against the status quo) and also a disadvantage of each of the options (compared against LRMC pricing).

The CEG report assessed the likelihood of the SPD options improving efficiency, and concluded they would not, as follows.

- The quantification of a large number of parameters used to estimate each party’s private benefit greatly increases the likelihood of ongoing disputes over transmission charges. There is also potential for allocative inefficiencies to arise if the methodology fails to accurately estimate private benefits, e.g. by overstating the cost of non-supply, and causes them to reduce demand.
- The time profile of SPD-based charges would cause further inefficiencies. In the early years of an asset’s life the charge would seek to recover the greatest amount of revenue from the fewest number of customers. As the asset ages, the methodology would seek to recover less and less revenue from more and more customers – encouraging them to make even greater use of already capacity-constrained infrastructure. This profile of cost recovery is the antithesis of efficient transmission pricing.

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<sup>40</sup> Paragraph 1.12, Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>41</sup> Paragraph 2, CEG, Economic Review of EA Beneficiaries-Pay Options Working Paper, March 2014.

<sup>42</sup> This is highlighted, for example, in CEG’s report accompanying this submission and also by the stylised example Vector used in its Submission to the Electricity Authority on Transmission Pricing Methodology: Issues and proposals, 1 March 2013.

<sup>43</sup> Paragraph 1.7, Electricity Authority, BPO working paper, 21 January 2014.

<sup>44</sup> Refer to Section 3.1, No Material Assistance to the Commission, CEG, Economic Review of EA Beneficiaries-Pay Options Working Paper, March 2014.

- The GIT based charges may cause further problems. It should not necessarily be assumed the quantum of private benefits for these assets exceed the investment cost. Assigning the cost of reliability investments to load might result in them paying charges that exceed their private benefits.
- Generators may seek to reduce the extent to which they are perceived to benefit from transmission assets by increasing their bids above SRMC – something that they have little (if any) incentive to do under the current TPM.

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## 5. SELECTION OF COUNTERPARTY

In this section we discuss the Authority's proposal that Transpower's TPM counterparties should be wholesale market purchasers (in addition to generators and distributors).

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### 5.1. RETAILERS AS COUNTERPARTY UNNECESSARY AND RISKY

We do not support imposing a requirement that Transpower charge retailers directly for transmission services, or any aspects of transmission services.

- *Transmission cost uncertainty can be readily addressed:* the principal reason for charging retailers originally was that distributors would have problems managing the volatility and uncertainty of the SPD charges, and remaining compliant with their Part 4 default price-quality paths e.g. they could breach the price path if they over-estimated transmission charges. This was a genuine concern raised by distributors in response to the first Issues Paper. The Authority's shift away for *ex post* half-hourly SPD charges in the BPO Working Paper largely negates this concern, and the Authority does not include the concern in its assessment of whether retailers or distributors should pay directly for SPD charges in the BPO Working Paper. If there still remains concern about how well distributors can forecast transmission charges under the SPD options, the most appropriate solution would be to alter the SPD options such that the charges are more predictable, not to change from charging distributors to charging retailers.<sup>45</sup>
- *Consistency with workably competitive markets:* the service that distributors provide to retailers is delivered energy to the customers' premises. Transport of electricity from GXPs to customer premises is not possible without transport of electricity from generation plant to GXPs. This is consistent with the outcomes in a workably competitive market, and therefore consistent with a market-based or market-like approach.

By way of analogy consider a customer purchasing a Sony television from Harvey Norman. The customer would not be expected to arrange with Sony directly for the delivery of the television from Sony to Harvey Norman. The customer would expect Harvey Norman to arrange this as part of the service necessary to sell televisions. The suggestion that retailers should contract to Transpower for transmission services is directly comparable to Harvey Norman requiring the customer to arrange with Sony for delivery. In reality, in a competitive market situation, Harvey Norman would find that it would struggle to make any sales under such arrangements.

- *Increased transaction costs:* we are puzzled why the BPO Working Paper suggests making distributors subject to the SPD charge "would involve higher transaction costs as most would pass charges on to retailers for mass market consumers anyway".<sup>46</sup> If retailers are not charged directly by Transpower, as is the case currently, then the transaction costs will be limited to

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<sup>45</sup> Alternatively, any problems distributors face over uncertainty about the amount of transmission charges could be readily addressed by the Commerce Commission introducing a wash-up mechanism as part of the Default Price-Quality Path (DPP) and Customised Price-Quality Path arrangements. This may be a matter that the Authority should liaise with the Commerce Commission over, as part of its April 2015 DPP reset process.

This option would have the advantage of avoiding the need for retailers to add a risk premium to their retail charges to compensate for uncertainty over transmission charges. (See, for example, paragraphs 55 – 58, Genesis Energy, Transmission Pricing Methodology: Issues and Proposal, 1 March 2013.)

<sup>46</sup> Paragraphs 7.123(c) and 7.124(c), Electricity Authority, BPO Working Paper, 21 January 2014.

Transpower charging distributors and distributors on-charging retailers (with related contractual arrangements). This is not a change from the status quo.

If Transpower was required to charge both distributors and retailers, the pre-existing transaction costs would remain<sup>47</sup>, but there would also be additional transaction costs from Transpower charging retailers directly (with additional contractual and billing arrangements needed).

This would substantially raise transaction costs for both Transpower and retailers. Retailers would have to have contractual (and billing and prudential) arrangements with both distributors and Transpower which would raise their costs. The latter would add an additional barrier to entry to potential new retailers and may lessen competition. Transaction costs in relation to distributors would not change, only the quantum of the TPM charges they incur.

- *Potential increased need for regulation:* we assume that if the Authority required Transpower to contract directly with retailers it would need to consider whether it was necessary to introduce access regulation, paralleling the regulation that presently exists for transmission access arrangements with distributors, and distribution access arrangements between distributors and retailers e.g. regulation of prudential requirements Transpower could place on retailers to manage default risk. We would also note that existing contractual arrangements reflect that our customers only include parties with physical connection to the grid. This contractual framework may not be appropriate for non-grid connected parties. The contracts with these new parties would only cover our pricing relationship. We would have no other commercial interactions. There is also no way we could withdraw supply to non-paying customers that do not have a physical grid connection.<sup>48</sup>
- *Incentives to engage in Part 4 processes unchanged:* charging retailers directly, rather than indirectly via distributors, would have no impact on retailers', and/or distributors', incentives to scrutinise transmission charges,<sup>49</sup> or engage in consultation of transmission price setting or transmission investment approval. CEG address this point in some detail in their report. In essence, it does not matter whether retailers pay for transmission services directly or indirectly, the cost they incur will be the same, and, consequently, so will their incentives to engage in Commerce Commission consultation processes, or not.  
  
We would speculate, also, that if distributors' "mandated ability to pass through transmission costs" meant they "lack incentives to scrutinise transmission charges"<sup>50</sup> then the Authority would not be facing universal opposition to its TPM proposals from distributors.
- *Retailer familiarity with wholesale market is irrelevant:* the suggestion that retailers should be charged directly rather than distributors for SPD charges on the basis that distributors "are less likely to be familiar with the wholesale market so are not well placed to deal with the SPD method and SPD charges"<sup>51</sup> is spurious. Distributors do not need to know how the SPD or wholesale market works. They just, as discussed above, need a reasonable degree of certainty about what their transmission costs will be.
- *Preserving transmission pricing signals:* transmission pricing signals are targeted at distributors, as well as retailers and consumers. Distributors can change their behaviour by responding to pricing signals in order to reduce their transmission costs (and, ultimately, transmission investment requirements). Likewise, they are a conduit for ensuring distributed generators receive pricing signals for avoided transmission. (Transpower's view is that the issue with ACOT

<sup>47</sup> The quantum of revenue charged by Transpower to distributors, which distributors would then pass on to retailers, would reduce but this would not impact on transaction costs.

<sup>48</sup> Section 3.3.2, TransPower, Transmission Pricing Methodology: Issues and Proposals Consultation, 1 March 2013.

<sup>49</sup> Paragraphs 7.123(a) and 7.124(b), Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>50</sup> Paragraph 7.123(a), Electricity Authority, BPO Working Paper, 21 January 2014.

<sup>51</sup> Paragraphs 7.123(b) and 7.124(a), Electricity Authority, BPO Working Paper, 21 January 2014.

payment is not that distributed generators shouldn't receive ACOT payments, but more about whether the ACOT payments reflect avoided transmission costs.)

- *Charging retailers does not widen the tax base:* arguments about widening the tax base are not valid. Charging retailers directly, in addition to distributors, will not widen the tax base. All it would do is change the extent to which retailers incur transmission charges directly or indirectly.

Overall, Transpower considers that there are significant efficiency benefits from distributors acting as an intermediary for transmission services. This is consistent with workably competitive market outcomes.

Distributors require physical connection with Transpower and retailers do not. Distributors are the natural counterparties. Questions over the most appropriate counterparty for Transpower have been considered in depth previously – most notably by the Authority's predecessor.<sup>52</sup>

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<sup>52</sup> <http://www.ea.govt.nz/our-work/programmes/transmission-work/development-of-the-benchmark-agreement/contract-structure-and-counterparties-preliminary-decision/submissions-for-preliminary-contract-structure-and-counterparties/>

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## 6. CONCLUDING REMARKS

The submissions we have made during the TPM review process have focussed on helping the Authority to reach a TPM pricing decision which ensures efficient utilisation of transmission assets is practicable and is to the long-term benefit of consumers. We consider stability and durability of the TPM is important, and believe this means that there should be a high hurdle to justify substantial changes to the TPM.

We acknowledge the simplified SPD option contained in the BPO Working Paper is a considerable improvement on the SPD method proposed in the first Issues Paper. The Authority has made a number of revisions to its proposed method which should help improve the accuracy of the calculation of private benefit relative to its initial proposal.

It is positive to see the Authority has addressed concerns about the volatility and uncertainty of the proposed SPD method, despite expressing scepticism about this at its 2013 conference, and is now proposing to set charges on an *ex ante* annualised basis.

This should mean there are no Part 4 difficulties with charging distributors, rather than retailers as proposed in the first Issues Paper. Distributors are the natural counter-parties for transmission services as they are directly connected to the transmission grid. Distributors are also one of the parties able to respond to transmission pricing signals, e.g. through load control, and can pass them on to third parties such as distributed generators (which retailers cannot do).

If retailers were charged directly for SPD charges these pricing signals would be more dispersed, and there would be a substantial increase in transaction costs (for retailers and Transpower), which could harm competition and new entry.

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### 6.1. PROBLEMS PERSIST WITH THE SPD METHOD

While the Authority has improved the workability of its original proposal, we are concerned that a wide range of submitters have raised what appear to be fundamental problems with the SPD method that are yet to be addressed, or fully addressed.

For example, it has been pointed out, by various submitters, that the SPD method would suffer from the same problems as a “paid-as-offered” wholesale market. This could undermine the current efficient operation of the wholesale market and nodal pricing.

It has also been suggested in submissions that the SPD method could send perverse transmission pricing signals detrimental to dynamic efficiency and, which over-time, would create upward pressure on transmission investment requirements.

We are sceptical about whether these issues are resolvable. The Authority, for example, could dampen gaming incentives, but this would worsen issues with the SPD method sending the wrong pricing signals and vice versa.

We also do not believe the SPD method would incentivise engagement in Commerce Commission transmission investment approval process in a way that could improve investment approval decisions, or result in more efficient transmission investment. We are not aware of any particular problems with the Commerce Commission’s investment approval process (which we consider to be fundamentally sound).

If the Authority is correct that the SPD method could provide the Commerce Commission with useful information for its transmission investment decisions the Commission could obtain this information without the SPD method being embedded in the TPM. (Embedding the SPD method in the TPM would be unhelpful as the information on private benefit would be distorted by gaming incentives.)



The Authority has stated that “Based on qualitative cost-benefit analysis, the Authority considers that the Simplified SPD charge [the GIT-plus-DPS option][the SPD-plus-GIT][the zonal SPD option] may better promote its statutory objective of promoting competition in, reliable supply by, and the efficient operation of the electricity industry for the long-term benefit of consumers than maintaining the status quo. Quantitative cost-benefit analysis would be required to confirm this.”<sup>53</sup> With respect, we consider that the Authority has reached this conclusion because its qualitative CBA has not fully taken into account the legitimate criticisms of the SPD method raised in response to the first Issues Paper. The qualitative CBA also needs further work, because it presently compares the benefits of the SPD options against the status quo (or the previous SPD proposal?) but compares the cost against LRMV pricing.

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## **6.2. FURTHER WORK NEEDED PRIOR TO THE SECOND ISSUES PAPER**

While we acknowledge the Authority has undertaken a considerable amount of work subsequent to the release of the first Issues Paper, including workshops, a conference, release of additional information, and consultation on a suite of Working Papers, we believe a significant amount of further work is required to reach a conclusion that best serves the long-term interests of consumers. Most importantly, the Authority should undertake further work to identify what actual problems exist with the status quo.

The Authority’s solution seems to have been driven out of application of the DM&E framework, rather than in response to actual identified problems. This may explain why the Authority has suggested the lack of beneficiaries-pay is a problem (first Issues Paper) and that the problem is that alternative pricing options (beneficiaries-pay) would improve efficiency (CBA Working Paper). This confuses problem definition with identification and evaluation of alternative options.

We consider it premature to lock down preferred alternative pricing options before the problems, if any, with the status quo are properly identified. Failure to do so risks the Authority facing the same criticisms, when it releases the second Issues Paper, it faced in relation to the first Issues Paper.

We suggest the Authority consider undertaking, and consulting on, further analysis of the problem with the status quo, and a range of options (not limited to beneficiaries-pay of the SPD method) commensurate with the problems that it then identifies (if any) with the status quo.

We have undertaken some analysis of potential problems with the status quo in this submission and it suggests that fine-tuning of the TPM, rather than radical changes, may be warranted at most.

Our submission identified the additional work we consider the Authority should undertake as part of its TPM review, to ensure the outcomes of the review are ultimately to the long-term benefit of consumers. This additional work and consultation could be undertaken by way of further Working Papers, prior to development and release of the proposed second Issues Paper.

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<sup>53</sup> Paragraphs 1.17, 1.29, 1.35, and 1.46, Electricity Authority, BPO Working Paper, 21 January 2014.