**From the Electricity Networks Association**

# Response to the Commerce Commission's Input Methodologies review paper

***Invitation to contribute to problem definition***

21 August 2015

The Electricity Networks Association makes this submission along with the explicit support of its members listed below.

Alpine Energy Ltd
Aurora Energy Ltd
Buller Electricity Ltd
Centralines Ltd
Counties Power Ltd
Eastland Network Ltd
Electra Ltd
EA Networks Ltd
Electricity Invercargill Ltd
Horizon Energy Distribution Ltd
Mainpower NZ Ltd
Marlborough Lines Ltd
Nelson Electricity Ltd
Network Tasman Ltd
Network Waitaki Ltd
Northpower Ltd
Orion New Zealand Ltd
OtagoNet Joint Venture
Powerco Ltd
Scanpower Ltd
The Lines Company Ltd
The Power Company Ltd
Top Energy Ltd
Unison Networks Ltd
Waipa Networks Ltd
WEL Networks Ltd
Wellington Electricity Lines Ltd
Westpower Ltd

# Contents

# 1. Introduction

1. The Electricity Networks Association (ENA) appreciates the opportunity to respond to the Commerce Commission's (the Commission's) consultation paper on the problem definition for the Input Methodologies review[1] (the problem definition paper). The ENA represents the 29 electricity network businesses (ENBs) in New Zealand. This submission is on behalf of all but Vector, which is lodging its own submission.

2. We consider that starting the IM review with a focus on identifying problems that may require amendments to the IMs is a useful step. In this submission we discuss the problems that have been identified, suggest potential solutions in some areas and also consider the optimal process that could be taken for the next phase of the review.

3. This submission discusses the process for the review, the draft decision-making frameworks issued by the Commission and the topics raised in the problem definition paper, except for the topics that relate to Airports only.

## 1.1 Summary

### Process and framework

4. The ENA notes there is plenty of time available in this IM review process for detailed stakeholder engagement and we recommend the Commission uses this time to work with us to ensure the draft decisions are well developed.

5. The best means of progressing through the next phase of the IM review will vary for each issue. Options include:

    a) Working groups of representatives or experts to carry out further analysis of potential problems and develop options and solutions on key topics

    b) Improving the use of experts by all parties, including making terms of reference for experts publicly available and establishing a process where the expert advisors of all parties, including the Commission, come together to identify areas of agreement and disagreement.

6. Our key recommendations in relation to the two draft decision-making frameworks put forward by the Commission include:

    a) The "policy intent" is clearly defined as the core economic principles relied upon by the Commission when the IMs were determined and, in relation to a specific IM under consideration, the reasons in support as set out in the relevant Reasons Paper. The core economic principles should be clearly specified up front by the Commission as part of the IM review.

    b) Any change to an IM should be consistent with the core economic principles.

    c) A change to a core economic principle should require a very high evidentiary and economic threshold (given it reflects the regulatory compact).

    d) Examples of core economic principles include for example (i) the expectation of earning at least normal returns over the life time of an asset (expected NPV=0); and (ii) favouring

[1] Commerce Commission, Input Methodologies review: Invitation to contribute to problem definition, 16 June 2015

outcomes that promote dynamic efficiency where there is a trade-off between dynamic efficiency and allocative efficiency.

*7.* In relation to changes made prior to a price reset, it would be helpful to clarify that these are changes to facilitate implementation / innovations between regulatory periods rather than fundamental changes to the IMs (such as amendments to the weighted average cost of capital (WACC)).

*8.* We also recommend the Commission include a formal cost-benefit analysis step in its processes for reviewing and amending IMs.

## Risk allocation and form of control

*9.* The ENA supports the form of control continuing to be defined in the IMs – this provides helpful certainty for suppliers and consumers. The ENA notes there are a range of options available along the spectrum between a weighted average price cap (WAPC) and a "pure" revenue cap and advantages and disadvantage for each.

*10.* We have not seen any evidential basis for adjusting beta to account for changes to the form of control. If the Commission considers otherwise, this is an issue on which it may be useful for experts to convene. We recommend that the IM Review concentrates on other elements of the IMs.

*11.* If the Commission ultimately decides to retain the WAPC for ENBs, we would expect the Commission to consider the following matters:

*a)* Improvements to the energy efficiency allowance mechanism (for example to include tariff-based mechanisms).

*b)* Making the default price-quality path (DPP) revenue forecasting methodology more robust and credible.

*c)* Introduction of a "mini-CPP" or DPP-reopener that ENBs could apply for where the DPP revenue forecast is materially wrong (e.g. greater than 1% of MAR, consistent with other reopener provisions).

*12.* It is appropriate that regulated suppliers expect to be able to recover the cost of their investments in full. This is a core part of the regulatory settings – suppliers expect to earn at least a normal return and expect that NPV=0 at least.

*13.* A problem with the current IMs that means the NPV=0 principle is not met is that catastrophic events create a risk that revenue recovery will not be achieved; this is because there is no *ex ante* or *ex post* allowance in cashflows for this risk. The Commission has not correctly assessed the role of investor diversification in determining the current policy position. Potential solutions are to change the form of control or extend the scope of the catastrophic event reopener or customised price-quality path (CPP) to recover such losses.

*14.* The relationships between WACC, indexation of the asset base, CPI forecasting and DPP price setting are complex and some parties consider the current balance to be inappropriate. It would be useful for the IM review to consider the allocation of risk arising from the current settings.

*15.* A problem with the option to apply for a CPP is that CPPs may not be being applied for when it would be in consumers' long-term interest. This appears to be a result of different perspectives between the Commission and industry regarding the risks and costs involved in a CPP application.

## Interactions between the DPP and CPP

*16.* The ENA supports the fast-track assessment of the alignment between DPP and CPP WACCs. We note there may not be enough time in the fast-track process to fully assess all of the available options

that could improve the alignment. A pragmatic approach could be to set the CPP WACC equal to the DPP WACC and then consider the alternative options as part of the full IM review.

*17.* There is currently a material uncertainty regarding what happens at the end of the CPP, which could be an unnecessary disincentive to apply for a CPP. The IMs could usefully specify the process and circumstances (although not necessarily the methodology) for determining the prices that apply on moving back to a DPP from a CPP.

## Future impact of emerging technologies in the energy sector

*18.* The ENA agrees that emerging technologies and their potential implications for the IMs is a relevant topic for the IM review. The core principle remains the ability to earn at least a normal return, or that expected NPV=0 at least. We therefore do not see any justification for changing the treatment of stranded assets within the current regulatory framework.

*19.* The long-term interests of consumers in terms of efficient overall investment and avoiding cross-subsidies could favour tilting cash-flows to enable increased short-term recovery of investments. This would mitigate the risk that a smaller group of future consumers will be exposed to significantly higher prices.

*20.* The IMs could usefully provide improved incentives for research and development initiatives, or enabling investments in smart grids, where the benefits are realised in the long term through better capacity utilisation and deferral of investment requirements. This is an important area of research that could be considered by a working group. The ENA recommends the Commission consider developing an IM that provides expenditure allowances for smart grid investments, or similar initiatives, in circumstances where specified and measurable outputs or outcomes are delivered.

*21.* Pricing that can signal to consumers the efficiency implications of their use of the network could greatly assist ENBs manage the transition in a least-cost way. Pricing reform will require co-ordination with consumers, ENBs, the Commission, Electricity Authority and the Ministry of Business, Innovation and Employment (MBIE) to ensure workable solutions are delivered.

*22.* The ENA also recommends the Commission review the incremental rolling incentive scheme (IRIS) arrangements and the approaches to setting expenditure forecasts at the next price reset to ensure there are no undue barriers for ENBs to making efficient investments in emerging technologies.

## Issues raised by the High Court on the Cost of Capital

*23.* The ENA considers that there is unlikely to be sufficient new evidence to justify reopening the WACC percentile.

*24.* We consider that there may be value in reviewing the use of the Simplified Brennan-Lally Capital Asset Pricing Model (SBL-CAPM) to test whether a better approach is available.

*25.* We agree it is reasonable to compensate suppliers for taking on longer term debt, which the term credit spread differential (TCSD) allowance seeks to do. However, if a longer debt term was adopted for the industry-wide cost of debt, the TCSD allowance may no longer be necessary.

*26.* We support the view that a split cost of capital is not desirable due to its potential to distort investment, increase the risk of under-investment and increase administration costs. We recommend that the IM Review does not devote significant effort to considering this approach.

*27.* We would support one or more expert groups being established to consider the WACC issues raised by the High Court, updates to the WACC parameters and any other changes to the WACC IM. This would enable early identification of the areas in which there is a consensus and a clear focus on the evidence and analysis that underpin any divergence of views.

## Cost effectiveness of the rules and processes for CPP applications

*28.* We believe improvements can be made to the requirements for CPP applications that will eliminate unnecessary costs and complexity and reduce uncertainty without impeding the Commission's ability to scrutinise CPP applications.

*29.* We suggest the objective of the clauses that set out what a CPP application must contain should be to "ensure information is relevant to the applicant and stakeholders, including the Commission". We consider the level of prescription can be significantly reduced.

*30.* We suggest the objective of the post-application CPP review process should be to "ensure the process reviews the proposal in a way that is transparent, targeted, cost effective and robust". The Orion CPP experience suggests there is room for improvement in this process.

*31.* We also recommend the Commission consider quality-only CPP applications with a focus on the quality-related information and without requesting unnecessary expenditure-related information that is not directly relevant to a quality-only CPP.

*32.* Where one or two (non-quality) aspects of the DPP are unsuitable, a full CPP application may well be more costly and time consuming for all parties than is necessary. We support a "mini-CPP" (or DPP reopener) to address a few particular items within a DPP that are unsuitable for a supplier.

*33.* We agree with the Commission's initial view that the IMs that were in force at the time the application was made should apply to the CPP, although there may need to be a buffer period where IM changes made immediately before a CPP application is submitted do not need to be applied to the CPP. Any amended IMs could still apply to the CPP where both the Commission and applicant agree.

## Reducing complexity and compliance costs

*34.* The ENA agrees that finding opportunities to reduce the complexity and compliance costs of the IMs is an appropriate focus of the IM review. However, some level of complexity is unavoidable, particularly given the challenges inherent in delivering the policy intent behind the IMs. We caution against making unnecessary changes to the IMs.

*35.* The focus of the compliance costs and complexity part of the IM review could usefully be to:

*a)* Remove ambiguity and address any unintended consequences of the drafting of the current IMs (e.g. related party transactions).

*b)* Remove complexity where that disrupts the policy intent (e.g. the IRIS mechanism).

*c)* Reduce compliance costs.

*36.* It is important that the Commission's process for the IM review ensures the final IMs are as well-developed and error-free as possible. We would support the establishment of working groups to consider the detail of proposals and an independent Quality Assurance process to review the draft determination to ensure it is workable.

*37.* We provide more detailed comments on these points in the main section of our submission.

*38.* The ENA's contact person for this submission is:

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# 2. Process and framework

## 2.1 Process for the review

*39.* The ENA has found the problem definition paper to be a helpful statement of the key issues that have been raised to date and the Commission's current perspectives on those issues. We also found the IM Review Forum on 29-30 July to be useful as it gave stakeholders and the Commission scope to express their views in a less formal way and there was some scope for discussion. We would support similar forums being held in future, preferably with more time for panel and audience discussions.

*40.* The ENA and its members are keen to work with the Commission to help solve the problems that have been identified in the problem definition phase of the IM review and we support the Commission's intention to have further engagement with stakeholders between this phase and the draft decision.[2] This section of the submission sets out our recommendations for the next phase of the review, up to the release of the draft decision.

*41.* The objectives of the next phase of the review should be to work with stakeholders to:

*a)* Refine and define the problem definition with reference to the IMs and submissions received; this would include confirming the scope of the IM review and the topics the Commission intends to review in more detail.

*b)* Finalise the decision-making framework.

*c)* Develop emerging views and potential solutions to the problems that have been identified.

*42.* We consider that there is plenty of time available for detailed stakeholder engagement in this phase to ensure issues are fully explored and solutions are well developed. We recommend the Commission uses this time to work with us to ensure the draft decisions are robust. In the 2014 process to reset the electricity DPP some aspects of the draft decision were problematic, creating the need for detailed changes late in the process. It would be useful to work with stakeholders on solutions early in this process to avoid a repeat of that experience.

*43.* The best means of progressing through the next phase will vary for each issue. Options include:

*a)* Working groups of representatives or experts to carry out further analysis of potential problems and develop options and solutions on key topics.

*b)* Improving the use of experts by all parties, including making terms of reference for experts publicly available and establishing a process where the expert advisors of all parties, including the Commission, come together to identify areas of agreement and disagreement. Where there is disagreement, each expert should identify at an early stage the evidence or analysis underpinning their position.

*c)* Targeted, relatively short, emerging views consultation papers.

*d)* Modelling or research, supported by working group or expert input where appropriate.

*44.* The areas that are most likely to benefit from stakeholder or expert working groups are: cost of capital issues, risk allocation and form of control, emerging technologies and reducing complexity and compliance costs.

[2] Commerce Commission letter to Powerco and ENA, Powerco and ENA comment on IM review process, 23 July 2015, page 2.

*45.* Rules and processes for CPP applications would also benefit from a working group review, but the timeframe for the fast-track review process may not allow for this. We submit that, despite the fast-track process, the CPP IMs should also be included in the full IM review process, to ensure nothing is missed. This full review of the CPP IMs could include a working group review stage.

*46.* We also note the IM review does not need to proceed at the same pace for all sectors. For example, the Airports issues are, in many ways, stand-alone and have a well-developed problem definition. The review of these items could be concluded earlier than electricity-specific topics such as the impact of emerging technologies, where more time to assess the impact would be helpful.

# 2.2 Framework for reviewing the IMs

*47.* As discussed in our submission on the IM review open letter, the ENA considers that it is most important to determine a clear framework and process for the IM review at an early stage. The primary purpose of this framework should be to set out clearly how decisions will be made in regard to changing an IM. We therefore welcome the Commission's publication of a draft decision-making framework to guide the current IM review and a draft decision-making framework for considering changes to the IMs more generally.

*48.* We consider that the draft frameworks are a good basis for developing clear and robust frameworks that give confidence to parties that they can reasonably predict when changes to the IMs are likely to be made. We welcome the opportunity to provide suggestions on how the frameworks may be improved.

## 2.2.1 Summary of RMV advice

*49.* With the New Zealand Airports Association, we have invited Russell McVeagh to respond to the legal questions asked by the Commission and provide comments on the decision-making frameworks. Their paper is attached (RMV advice). We refer to and endorse the conclusions and suggestions made in that advice. The key points from the RMV advice is summarised below.

*50.* In relation to the legal questions:

*a)* The absence of an explicit statutory threshold for amendment or review does not mean there is no statutory threshold. The frameworks agree that the IMs are the starting point for considering any amendment and then set out principles and questions as a threshold for change. The advice suggests minimum principles to be included within the decision-making framework consistent with the purpose statements.

*b)* An initial response to the "new matter" question is provided in the RMV advice, which considers that the Commission can introduce new subject matters as part of a review (or amendment) process. Overall, it is unclear what precisely the Commission means by "new matter". It would be helpful to be provided with specific examples and legal analysis which underpin the Commission's view and to receive a further opportunity to respond at that point.

*51.* Key recommendations in relation to the framework include:

*a)* The "policy intent" be clearly defined as:

i. the core economic principles relied upon by the Commission when the IMs were determined (the foundations for the regulatory compact) – these should be clearly specified by the Commission up front as part of the IM review; and

ii. in relation to a specific IM under consideration, the reasons in support as set out in the 2010 IM Reasons Paper / IM consultation process.

*b)* Any change to an IM should be consistent with the core economic principles.

*c)* A change to a core economic principle should require a very high evidentiary and economic threshold (given it reflects the regulatory compact).

*d)* Examples of core economic principles include, for example, (i) the expectation of earning at least normal returns over the life time of an asset; and (ii) favouring outcomes that promote dynamic efficiency where there is a trade-off between dynamic efficiency and allocative efficiency.

*e)* The points above could be built into the framework prior to the question "Is the policy intent behind the IM still relevant and appropriate?" under a heading "What is the policy intent?"

*f)* The RMV advice makes other suggestions in relation to the process set out in Appendix A of the framework, including different thresholds that might apply (higher for changes that result in material changes to revenue or departures from principled approaches; lower when making changes to improve workability or reduce complexity).

*g)* A framework to apply to all IMs will necessarily be high level. However, a key objective should be to avoid a framework that is so high level it risks maximising, rather than constraining, the ability to exercise judgement and discretion when changing IMs. In this respect, broad phrases and terminology should be explained and defined as far as possible.

*h)* When proposing or making a change to an IM, the Commission should clearly identify how each of the section 52A objectives (and certainty) will be better promoted for the long term benefit of consumers (rather than relying on broad judgements as to whether the purpose statement is promoted or not).

*i)* Overall, the RMV advice emphasises the importance of recognising the regulatory compact within the decision-making framework (reflecting the Part 4 purposes and best regulatory practice). While the Commission will necessarily exercise judgement, the framework should be clear that judgement will not be exercised without reference to previous decisions and reasoning or in the absence of evidence. Previous decisions reflect the regulatory compact and supplier's expectations when investment decisions in long life assets were made. Certainty in the regime going forward depends on the value placed on principled approaches applied in the past.

*52.* The ENA supports RMV's analysis, and submits that it is essential for the Commission to confirm that it similarly supports this approach, as that would contribute to confidence that over time the IMs will be likely to evolve in a predictable and consistent manner.

*53.* In relation to the categories for change:

*a)* The same factors above should apply to an amendment process under section 52X but with a higher threshold applying for any fundamental change between review cycles.

*b)* In relation to changes made prior to a price reset, it would be helpful to clarify that category 2 covers changes to facilitate implementation / innovations between regulatory periods rather than fundamental changes to the IMs (such as amendments to the WACC).

*54.* RMV recommends and we endorse further engagement by the Commission around the detail of next steps in the process, with a focus on:

*a)* Workshops: these can be an effective way to understand and develop an approach to a particular issue and, accordingly, should be built into the consultation process where appropriate.

*b)* Use of experts: There are a number of options for ensuring experts are more effectively and efficiently used.

### 2.2.2 Use of cost-benefit analysis to assess IM proposals

*55.* Further, we recommend the Commission include a formal cost-benefit analysis step in its processes for reviewing and amending IMs. We submit that it would be good practice for the Commission to undertake formal cost-benefit analyses of the options before making material changes to the IMs, both as part of this IM review and thereafter.

*56.* Carrying out cost-benefit analyses would require clearly defining the status quo, the problem and the potential solution in terms of their value, including the cost of change. This would make it transparent what benefits are to be expected from changes to the IMs and would be consistent with the practice of other regulators such as the Electricity Authority.

## 2.3 Recommendations

*57.* The ENA notes there is plenty of time available in this IM review process for detailed stakeholder engagement and we recommend the Commission uses this time to work with us to ensure the draft decisions are well developed.

*58.* The best means of progressing through the next phase of the IM review will vary for each issue. Options include:

*a)* Working groups of representatives or experts to carry out further analysis of potential problems and develop options and solutions on key topics.

*b)* Improving the use of experts by all parties, including making terms of reference for experts publicly available and establishing a process where the expert advisors of all parties, including the Commission, come together to identify areas of agreement and disagreement.

*59.* Our key recommendations in relation to the two draft decision-making frameworks put forward by the Commission include:

*a)* The "policy intent" is clearly defined as the core economic principles relied upon by the Commission when the IMs were determined and, in relation to a specific IM under consideration, the reasons in support as set out in the relevant Reasons Paper. The core economic principles should be clearly specified up front by the Commission as part of the IM review.

*b)* Any change to an IM should be consistent with the core economic principles.

*c)* A change to a core economic principle should require a very high evidentiary and economic threshold (given it reflects the regulatory compact).

*d)* Examples of core economic principles include for example (i) the expectation of earning at least normal returns over the life time of an asset (expected NPV=0); and (ii) favouring outcomes that promote dynamic efficiency where there is a trade-off between dynamic efficiency and allocative efficiency.

*60.* In relation to changes made prior to a price reset, it would be helpful to clarify that these are changes to facilitate implementation / innovations between regulatory periods rather than fundamental changes to the IMs (such as amendments to the WACC).

*61.* We also recommend the Commission include a formal cost-benefit analysis step in its processes for reviewing and amending IMs.

# 3. Risk allocation and form of control

## 3.1 Overview of Commission position

*62.* The problem definition paper discusses various aspects of the regulatory framework that affect risk allocation:

*a)* Suppliers are able to fully recover the costs of the assets in the Regulatory Asset Base, plus a return.

*b)* A weighted average price cap applies to electricity and gas distribution businesses, a "full" revenue cap applies to Transpower and a "hybrid" revenue cap applies to gas transmission businesses.

*c)* Price paths can be reopened following catastrophic and change events, errors and the provision of false and misleading information.

*d)* Costs that suppliers are exposed to but have little or no control over (pass-through and recoverable costs) can be passed through to consumers. The pass-through balance approach recently introduced for ENBs ensures that these amounts are not over- or under-recovered.

*e)* The value of the RAB is indexed by inflation, allocating risk associated with the variance between forecast and actual inflation.

*f)* Suppliers are able to apply for a CPP where the DPP does not meet their individual circumstances.

*63.* The problem definition paper states that the Commission seeks to compensate suppliers for the prudent and efficiently incurred material costs of managing risks, consistent with them expecting to earn normal returns, and where it is in the long-term interest of consumers. The paper also states that risk allocation and compensation should be considered in a holistic way.

## 3.2 Form of control

*64.* The question of what form of control should apply to electricity distribution businesses has been raised as a key issue for the IM review by some ENA members. The ENA supports this being considered as part of the IM review.

### 3.2.1 Options for the form of control

*65.* Three different forms of control are currently applied by the Commission under the IMs. These are:

*a)* A weighted average price cap that is applied to ENBs and gas distribution businesses. This shares demand risk between suppliers and consumers.[3]

*b)* A "pure" revenue cap (i.e. a revenue cap with a wash-up mechanism that ensures only the revenue requirement is earned) that is currently applied to Transpower. This removes demand risk from Transpower.

[3] For the purpose of this paper we define "demand risk" as the risk that actual demand for electricity lines services or gas pipeline services will vary from forecasts set by the Commission at the time of making its price-quality determinations.

*c)* A form of revenue cap without a wash-up that currently applies to gas transmission businesses. This leaves some demand risk with the suppliers, but not as much as under the WAPC.

*66.* It can be helpful to think of the various forms of control on a spectrum, with a WAPC at one end and a "pure" revenue cap at the other end. The form of revenue cap that applies to gas transmission businesses in New Zealand is just one form of hybrid approach that is available. Other hybrids have been applied internationally. There are therefore a range of options available for setting the form of control for ENBs.

*67.* The problem definition paper has also raised the question of whether the form of control should continue to be specified in the IMs. We believe it should be – this provides some helpful certainty for suppliers and consumers. The form of control is not, generally, something that should change at each reset so reviewing it as part of the statutory IM reviews is appropriate.

### 3.2.2 WACC implications of changing the form of control

*68.* The problem definition paper has suggested that a change to the form of control may reduce suppliers' exposure to broader systematic risks, which may have knock-on effects on the appropriate regulatory cost of capital.

*69.* We have not seen any evidential basis for adjusting beta to account for changes to the form of control. If the Commission considers otherwise, this is an issue on which it may be useful for experts to convene.

*70.* The IM Reasons Paper described the equity beta as follows:[4] "The equity beta measures a security's sensitivity to market risk (i.e. beta is a measure of exposure to systematic risk)". We consider that, for a change to the beta to be justified, a theoretical rationale should be provided for a different level of systematic risk exposure. Then, given that the beta is estimated empirically, there will need to be empirical evidence of a change.

*71.* The Commission's approach to estimating the equity beta was the following six steps:[5]

*a)* Step 1: identify a sample of relevant comparator firms. This includes:

i. New Zealand firms from the service in question.

ii. New Zealand firms from industries with a similar risk profile.

iii. overseas firms from the service in question.

iv. overseas firms from industries with a similar risk profile.

*b)* Step 2: estimate the equity beta for each firm in the sample.

*c)* Step 3: de-lever each equity beta estimate to get an estimated asset beta for each firm in the sample.

*d)* Step 4: calculate an average asset beta for the sample.

*e)* Step 5: apply any adjustments for regulatory differences or differences in systematic risk across services to the average asset beta for the sample.

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[4] Commerce Commission, IM Reasons Paper, paragraph H8.4.

[5] Commerce Commission, IM Reasons Paper, paragraph H8.14.

*f)* Step 6: re-lever the average asset beta for the sample to an equity beta estimate using the Commission's assumed notional leverage."

*72.* It seems improbable that changing the form of control would lead to a materially different outcome from this approach, particularly given the range of pricing approaches that are applied by firms within the comparator sample. In addition, given the difficulties controlling for the other regulatory and market factors affecting the firms within the sample, we consider that it would be extremely difficult to robustly determine whether the specific form of control led to a different underlying beta value.

*73.* The Commission has also previously considered whether the application of revenue caps for GTBs should require changes to the asset beta for those firms. The IM Reasons Paper concluded that:[6]

> *"The Commission does not have any robust evidence that demonstrates that these differences in regulatory regimes affect or reduce the level of systematic risk in any material way. In practice, the empirical evidence has not shown a significant difference between the systematic risks associated with different types of regulation."*
>
> *"On this basis the Commission considers that if there is any reduction of systematic risk it is likely to be small, and the Commission therefore considers it not appropriate to differentiate the asset beta between regulatory regimes for gas transmission and gas distribution services."*

*74.* We are not aware of any changes or developments since 2010 that would challenge this conclusion. In fact, the Australian Energy Regulator (AER) has moved to a revenue cap approach and, for New South Wales' distributors at least, chose an equity beta from the top of the available range.[7]

*75.* Given the practical difficulties with estimating the effect of the form of control on the asset beta, we recommend that the IM Review concentrates on other elements of the IMs. We also note that if there was an early signal that the asset beta would not be reconsidered specifically due to a change in the form of control, this could potentially allow discussions about the merits of different forms of control to be better focused and objective.

### 3.2.3 Commission's previous reasons for choosing a WAPC

*76.* The problem definition paper requests input from submitters on whether the Commission's original reasons for supporting a WAPC in the 2010 IMs are still valid. These reasons were:[8]

*a)* WAPC generally provides incentives to price efficiently.

*b)* WAPC allocates the demand risk to regulated suppliers, which the Commission considered appropriate as suppliers were generally better able than consumers to manage the risk.

*c)* WAPC provides incentives to invest in new infrastructure and to connect new consumers to the network.

*d)* WAPC is suitable for situations where the (multiple) services supplied are relatively small in number and do not change regularly – meaning the 'tariff basket' of services is reasonably stable.

*e)* WAPC is familiar to electricity and most gas distribution businesses.

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[6] Commerce Commission, IM Reasons Paper, paragraphs H8.149-H8.150.

[7] For example: Australian Energy Regulator, FINAL DECISION Ausgrid distribution determination 2015-16 to 2018-19: Attachment 3 – Rate of Return, April 2015, section D5.

[8] Commerce Commission, IM Reasons Paper, paragraph 8.3.8.

*77.* Our comments on these points, in the light of experience gained since 2010, are:

*a)* In theory, WAPCs provide incentives for regulated firms to set prices that approximate Ramsey pricing.[9] However, the AER has recently found that it is unlikely that WAPCs provide meaningful incentives to price efficiently. The AER concluded that, for these incentives to be meaningful, Australian distribution network service providers (DNSPs) would need to have the expertise, incentives and ability to be able to set prices to maximise profits, retail bills would need pass-through the price signals fully and consumers would need to be aware of, and able to understand and respond to the price signals. The AER concluded that these assumptions do not hold for the majority of Australian DNSPs. It is plausible that these assumptions also do not hold for the majority of New Zealand ENBs.

*b)* In the light of the Orion CPP decision, ENBs now understand that the Commission considers ENBs also bear the risk that they do not fully recover their revenues following catastrophic events as a result of the delay between the event and the start of the CPP (or DPP reopener). This was not the understanding of ENBs when the IMs were determined in 2010. ENBs are not able to materially influence demand on their network or secure insurance for demand risk.

*c)* WAPCs do provide useful incentives to connect new customers to networks. ENBs may have other incentives to connect new customers, such as the reputational risk that may arise if they delay or prevent new connections. Investment incentives can be provided under either form of control.

*d)* Emerging technologies may create increased likelihood of volatility of demand and also of pricing structures as ENBs grapple with new commercial incentives and consumer demands.

*e)* WAPCs remain familiar to ENBs.

*78.* In conclusion, we consider there have been sufficient developments since 2010 to review whether these reasons are still a valid basis for applying a WAPC to ENBs.

### 3.2.4 Energy efficiency incentives and the form of control

*79.* As the Commission has acknowledged, WAPCs provide a disincentive to invest in energy efficiency and demand-side management. The problem definition paper claims this has been mitigated by the new energy efficiency allowance, but this is a limited mitigation. The energy efficiency allowance does not extend to tariff-based measures (and tariff-based measures are likely to become increasingly important as ENBs seek to provide more cost-effective price signals to consumers). There is also uncertainty about how the Commission may deal with applications, so ENBs cannot be sure in advance the Commission will approve an allowance – this uncertainty impedes investment in energy efficiency.

*80.* If the form of control is not changed, the IM review is an opportunity to improve the energy efficiency allowance mechanism, by extending it to tariff-based measures and by including a mechanism for ENBs to secure in-principle pre-approval of the allowance for energy efficiency investments they plan to make.

*81.* The problem definition paper questions whether the use of lagged quantities in the compliance formula could also be a disincentive for energy efficiency investment as variance between historical quantities and actual quantities can create a revenue risk for suppliers. We agree this could be a disincentive in theory but are not aware of it being an issue in practice. This is probably a second-

[9] These incentives are provided because under a WAPC regulated firms can increase revenues without breaching the cap by setting relatively higher prices for consumers that have a lower price elasticity of demand, and vice versa. This type of pricing approach can improve allocative efficiency.

order issue and is outweighed by the compliance benefits of using lagged quantities in the compliance formula.

### 3.2.5 Demand and forecasting risk

*82.* Forecasting revenues accurately requires the ability to forecast demand across different customer segments over time and also changes in the balance of demand between those customer segments over time. This is not easy to do and regulators in many jurisdictions struggle with this.

*83.* The problem definition paper asks whether demand risk under a WAPC is unnecessarily high. We consider that this risk relates to the accuracy of the Commission's revenue forecasts. We note that unanticipated changes in demand during the regulatory period can occur due to circumstances that outside the ENBs' control e.g.: the global financial crisis or a catastrophic event. It is unrealistic to expect the Commission to be able to forecast this type of event and its impact on demand.

*84.* From our perspective the Commission's forecasts have not been particularly accurate to date. For example, considering some key inputs into the Commission's revenue forecasts, at the 2012 electricity distribution DPP reset the Commission over-forecast change in usage per ICP for most ENBs, under-forecast the change in regional GDP for all ENBs and developed incorrect residential ICP forecasts for most ENBs.[10] These resulted in revenue forecasts that were inappropriate for several ENBs.

*85.* We also note that one impact of emerging technologies may lead to increased volatility in demand, making it harder to accurately forecast demand and increasing the likelihood and impact of demand risk.

*86.* If the Commission ultimately decides to retain the WAPC for ENBs, we would expect:

*a)* a strong commitment and focus from to making the DPP revenue forecasting methodology more robust and credible; and/or

*b)* introduction of a "mini-CPP" or DPP-reopener that ENBs could apply for where the DPP revenue forecast is materially wrong (e.g. greater than 1% of MAR, consistent with other reopener provisions).

### 3.2.6 Pricing flexibility and the form of control

*87.* The form of control affects the flexibility regulated suppliers have to adjust their pricing structures. Under a WAPC, pricing restructures create increased compliance risk as suppliers may breach price paths due to errors in forecasting the effects of the restructure (i.e. suppliers need to estimate up-take of tariffs where quantities are unknown). Also, under a WAPC pricing restructures create volume risk where suppliers may under-recover their revenues because the DPP requires the distributor to use t-2 volumes and are prevented from accounting for behavioural responses to more cost-reflective tariff designs.

*88.* This means suppliers on a WAPC are less likely to undertake pricing restructures and tend to restructure in a more incremental way. This can promote pricing stability but undermine efforts to set prices in response to new commercial drivers or to incentivise efficient usage decisions by consumers. If the Commission decides to retain a WAPC, it should make other changes to the

[10] We recognise the Commission's current DPP forecasting methodology contains an inbuilt offset for errors in forecasting growth in the number of ICPs. This is because the forecast of ICP growth is an input into both the revenue forecasts and the opex forecasts. Where the forecast of ICP growth is incorrect, this affects the revenue and opex forecasts in different directions, with the two effects broadly cancelling each other out. However, there is no certainty that the Commission will continue to forecast opex and revenue growth in this way. Also, the other inputs in the Commission's revenue forecast do not have a similar offset.

clauses in the DPP determination that deal with price restructures to mitigate the disincentive to restructure prices.

### 3.2.7 Advantages and disadvantages of the forms of control

*89.* Table 1 below summarises the advantages and disadvantages of a WAPC and a "pure" revenue cap. Hybrid options will generally retain a mixture of the advantages and disadvantages of each. This may be a useful basis for the assessment of the preferred form of control.

**Table 1: Advantages and disadvantages of WAPCs and revenue caps for ENBs**

| Weighted average price cap | Revenue cap |
|---|---|
| **Advantages** | **Advantages** |
| In theory, incentivises efficient pricing | ENBs no longer subject to a risk of changing demand that they cannot materially influence |
| Provides an ability to "out-perform" regulator forecasts | No disincentive to invest in energy efficiency and demand-side management |
| Where there are changes in costs on the network (e.g. entry of a large new customer), revenues will adjust to somewhat reflect the new costs | ENBs are better able to restructure prices to reflect consumer demands as the risk of revenue loss or price-path breach due to the restructure is removed |
| Provides incentives to connect new customers quickly | Regulator is not required to develop volume forecasts |
| Is already in place and understood by ENBs | Consistent with overseas jurisdictions dealing with similar pricing issues, such as Australia and the UK. |
| **Disadvantages** | **Disadvantages** |
| In practice, ENBs may not be able to set prices as efficiently as expected | In theory, ENBs may have an incentive to price inefficiently[11] (although this seems unlikely to occur in practice) |
| Relies on volume forecasts that may be inaccurate | Where there are changes in costs on the network (e.g. entry of a large new customer), revenues will not adjust to reflect the new costs. However, ENBs could seek to address this issue through requiring capital contributions from the new customer |
| Places a risk on ENBs that they cannot readily manage or influence | May not incentivise efficient connection of new consumers |

[11] The theory is that each customer of or sale by a firm imposes costs on the firm, so the firm would increase prices for price sensitive customers to encourage them to reduce their demand or cease being a customer altogether. In the meantime the firm would reduce prices for price insensitive customers, who may increase their demand but only by a relatively small amount. Assuming this can be implemented effectively (which may be challenging), the firm's revenue stays fixed while the firm's costs decline. See Stoft, S., Revenue caps vs. price caps: Implications for DSM, in G. A. Comnes, S. Stoft, N. Greene and L. J. Hill, Performance-based ratemaking for electric utilities: Review of plans and analysis of economic and resource-planning issues - Volume I, Energy & Environment Division University of California, Berkeley, November 1995, page 4-11.

| Weighted average price cap | Revenue cap |
|---|---|
| Provides a disincentive to invest in energy efficiency and demand-side management | Modest administrative effort would be required to design and implement a revenue cap for ENBs |
| May disincentivise price restructures | |

## 3.3 Other risk allocation mechanisms

*90.* The problem definition paper identifies other risk allocation mechanisms within the IMs. We discuss each of them below.

*91.* As a general point, we note that Transpower's regulatory settings differ in some respects from those of ENBs. For example, Transpower is subject to a revenue cap and does not have an indexed RAB. It is also subject to an IPP and *ex-ante* regulatory approval of major capital expenditure. It is not clear that this balance of risk is the same as that of the ENBs. As Alison Andrew, Transpower CEO, observed at the IM Review Forum, Transpower considers that ENBs will be first to feel the effects of emerging technologies, yet Transpower enjoys more protection in regard to its ability to collect revenues from ENBs, who must recover their costs as best they can. The Transpower example indicates that there are a range of different appropriate risk allocations that can be delivered within the regulatory framework. ENA submits that there should be clear policy rationale for differences, if any, between Transpower and ENBs.

### 3.3.1 Full recovery of capital investments

*92.* It is appropriate that regulated suppliers expect to be able to recover the cost of their investments in full. This is a core part of the regulatory settings – suppliers expect to earn at least a normal return and expect that NPV=0. Recent Commission decisions regarding the WACC percentile indicate an intent by the Commission to limit returns; but implicit within this is an understanding by ENBs that the Commission must ensure that downside risk will be similarly truncated.

*93.* The current IM treatment of stranded assets is consistent with the principle of NPV=0: ENBs receive a low return in exchange for consumers bearing stranding risks. Any changes to this approach would be a significant challenge to the current regulatory framework as ENBs would then expect to earn less than NPV=0 on some assets and would need to see some offsetting improvement in returns in order to maintain investment incentives at the current level.

*94.* We note there is a risk of asset stranding associated with emerging technologies. This is discussed in the emerging technologies section below.

*95.* A problem with the current IMs that means the expected NPV=0 principle is not met is that catastrophic events create a risk that revenue recovery will not be achieved; this is because there is no *ex ante* or *ex post* allowance in cashflows for this risk. Following the Orion CPP, it has become clear that the Commission requires ENBs to bear the risk of revenue losses following a catastrophic event between the time of the event and the start of the CPP or DPP reopener. This risk cannot be insured against and means NPV=0 would not be achieved for ENBs that experience a catastrophic event. The Commission has not correctly assessed the role of investor diversification in determining the current policy position. Potential solutions are to change the form of control or extend the scope of the catastrophic event reopener to recover such losses. We note that this risk is not faced by Transpower, who is kept whole under the IPP and, for example, did not lose any revenues as a result of reduced demand in Canterbury following the earthquakes in 2010 and 2011.

### 3.3.2 Reopener mechanisms for price-quality paths

*96.* The ability to re-open a price path due to catastrophic or change events is an important aspect of the regime and we welcome the High Court's decision that these re-openers should be available under a DPP.

*97.* The inability to reopen DPPs to resolve settings that are clearly inappropriate for a particular ENB may be a problem in that it either requires substantial expenditure on a CPP application to address just one issue, or the ENB remains on the inappropriate DPP. A further re-opener could address this issue. This is discussed further below in the section on CPP application rules and processes.

### 3.3.3 Pass-through and recoverable costs

*98.* The ENA supports the principle that pass-through and recoverable costs should be passed through in full to consumers; and there should be no over- or under-recovery of these costs. The pass-through balance approach introduced for ENBs at the last price reset should deliver this outcome.

### 3.3.4 Inflation risk within the price path framework

*99.* The relationships between WACC, indexation of the asset base, CPI forecasting and DPP price setting are complex and some parties consider the current balance to be inappropriate. It would be useful for the IM review to consider the allocation of risk arising from the current settings.

*100.* The problem definition paper suggests that changes in WACC due to changes in inflation expectations would be broadly offset by changes in the forecast of asset revaluations. As a first step we suggest the Commission publish a worked example to support its view that there is a natural hedge at present as the effects of actual inflation differing from forecast will apply in different directions to different building block items, potentially offsetting each other. A worked example would help promote a common understanding of the issue and would be a useful basis for the debate.

### 3.3.5 Ability to apply for a CPP

*101.* While non-exempt ENBs are able to make CPP applications, applying for a CPP creates additional risks and costs for ENBs that they would not otherwise face. These include: costs of making the application, opportunity cost of management and staff time when they could be attending to other priorities, reputational risk associated with potential media statements made by the regulator, risks associated with Commission review of company information, risk of a lower price path, risk the DPP and CPP WACCs will vary, uncertainty of the price path at the end of CPP, the ability to make only one CPP application in a regulatory period, the regulatory time-lag before a remedy to the DPP can be achieved, the likelihood that CPP will cross two DPP periods unless restricted to 3 years – which adds more cost, etc.).

*102.* In the context of the problem definition paper, we submit that a problem with the option to apply for a CPP is that CPPs may not be being applied for when it would be in consumers' long-term interest. This appears to be a result of different perspectives between the Commission and industry regarding the relative risks involved in a CPP application, because ENBs perceive them as being too risky or costly while the Commission considers the balance appropriate.

*103.* As noted above, a single-issue CPP may address many of the cost and risk concerns ENBs have in relation to making CPP applications. This is discussed further below.

## 3.4 Recommendations

*104.* The ENA supports the form of control continuing to be defined in the IMs – this provides some helpful certainty for suppliers and consumers. The ENA notes there are a range of options available along the spectrum between a WAPC and a "pure" revenue cap and advantages and disadvantage for each.

*105.* We have not seen any evidential basis for adjusting beta to account for changes to the form of control. If the Commission considers otherwise, this is an issue on which it may be useful for experts to convene. We recommend that the IM Review concentrates on other elements of the IMs.

*106.* If the Commission ultimately decides to retain the WAPC for ENBs, we would expect the Commission to consider the following matters:

*a)* Improvements to the energy efficiency allowance mechanism (for example to include tariff-based mechanisms).

*b)* Making the DPP revenue forecasting methodology more robust and credible.

*c)* Introduction of a "mini-CPP" or DPP-reopener that ENBs could apply for where the DPP revenue forecast is materially wrong (e.g. greater than 1% of MAR, consistent with other reopener provisions).

*107.* It is appropriate that regulated suppliers expect to be able to recover the cost of their investments in full. This is a core part of the regulatory settings – suppliers expect to earn at least a normal return and expect that NPV=0 at least.

*108.* A problem with the current IMs that means the NPV=0 principle is not met is that catastrophic events create a risk that revenue recovery will not be achieved; this is because there is no *ex ante* or *ex post* allowance in cashflows for this risk. The Commission has not correctly assessed the role of investor diversification in determining the current policy position. Potential solutions are to change the form of control or extend the scope of the catastrophic event reopener or CPP to recover such losses.

*109.* The relationships between WACC, indexation of the asset base, CPI forecasting and DPP price setting are complex and some parties consider the current balance to be inappropriate. It would be useful for the IM review to consider the allocation of risk arising from the current settings.

*110.* We submit that a problem with the option to apply for a CPP is that CPPs may not be being applied for when it would be in consumers' long-term interest. This appears to be a result of different perspectives between the Commission and industry regarding the risks and costs involved in a CPP application.

# 4. Interactions between the DPP and CPP

## 4.1 Overview of Commission position

*111.* This section of the problem definition paper focuses on the potential for the WACC used for DPP to vary from the WACC used for CPPs. The problem definition paper acknowledges the risk that this variance could incentivise suppliers either to apply for a CPP when it is not in consumers' interests to do so, or to not apply for a CPP when it would have been in consumers' interests to do so.

*112.* Since the publication of the problem definition paper, the Commission has confirmed that it will address alignment of CPP and DPP WACCs in a fast track review process, due to be completed by February 2016. The Commission intends to issue a draft decision on this topic in November 2015.

## 4.2 DPP and CPP WACC interactions

*113.* As the problem definition paper recognises, there are various options available for aligning the DPP and CPP WACCs. There are options that would fully align the CPP and DPP WACCs, and options that would increase the alignment between the two but not fully align them. We discuss the most prominent options below but acknowledge other options may be available.

*114.* We acknowledge that improving the alignment between the DPP and CPP WACCs is not the only relevant issue when considering these options. There are other advantages and disadvantages with the possible approaches that need to be considered.

*115.* Option 1: CPP WACC is set to equal the DPP WACC value. This would fully align the DPP and CPP WACCs. This option would require an adjustment to the CPP price path to reflect the new DPP WACC when that is set. The ENA considers that this would be straightforward to implement. This option would give confidence to suppliers that they would face the same WACC under a DPP and a CPP, although it would also mean that suppliers would not be certain of their revenues across the CPP period as those revenues will vary depending on the new WACC.

*116.* Option 2: WACC parameter values are updated annually. The parameter values that would be updated are those that change for each regulatory period (currently the risk-free rate and debt premium). This option would also fully align the DPP and CPP WACCs and would achieve a single regulatory WACC for each year that would be used for both DPPs and CPPs. However, we note that other building block inputs would not necessarily be updated annually under this option, including expenditure and inflation forecasts. It is not clear that it would be appropriate to update certain WACC parameters on an annual basis but not any other building block inputs.

*117.* Option 3: The cost of debt is updated annually. This option would increase the alignment between DPP and CPP WACCs but there would still be some divergence. This option is similar to option 2 in effect and implications, but limited to the cost of debt only. We note there is international precedent for this – Ofgem and the AER both update the cost of debt annually, but not the risk-free rate in the cost of equity.

*118.* Option 4: Using longer-term averages for bond yields. This option would increase the alignment between DPP and CPP WACCs but there would still be some divergence. This option would involve changing the period over which bond yields are averaged to determine the risk-free rate and debt premium from one month to, say, several years. This would reduce the volatility between the values for these parameters over time and make both DPP and CPP WACCs more stable. The ENA notes that longer-term averages are used in a number of other jurisdictions. For example,

Ofgem and the AER use 10 year periods. Ofwat derives its cost of debt value by blending the actual cost of embedded debt and current yields for new debt (a 75%:25% split).

*119.* There are other factors to consider when assessing this option. Shorter averaging periods, like the status quo, result in a more 'current' estimate of the parameter being assessed. Longer periods can average out fluctuations in the business cycle and recognise the reality that much of an ENB's debt will be in existence at the start of the regulatory period. The use of longer-term averages is a way of accounting for the different timings of debt issuance.

*120.* These options are not necessarily mutually exclusive – it would be possible to set the CPP WACC equal to the DPP WACC and also update parameter values more regularly or use longer-term averages for bond yields.

*121.* As noted above, the Commission intends to fast-track its review of aligning the DPP and CPP WACCs. The ENA supports this fast-track approach. There may not be enough time in the fast-track process to fully assess all of these options. A pragmatic approach could be to set the DPP WACC equal to the CPP WACC as described in option 1 above, and then consider the alternative options as part of the full IM review.

## 4.3 Moving from a CPP to a DPP

*122.* The other area where interactions between a CPP and a DPP can be improved relates to the transition back from a CPP onto the DPP. Clarity regarding the transition will be helpful as it will be an important input into suppliers' decisions about whether to apply for the first CPP and also whether to apply for another CPP while already on a CPP.

*123.* In terms of the problem definition, the problem is that there is currently a material uncertainty regarding what happens at the end of the CPP, which is an unnecessary disincentive to apply for a CPP.

*124.* The IMs could usefully specify the circumstances in which the prices that apply on moving back to a DPP will be those that applied at the end of the CPP, and the circumstances where the Commission would advise that different prices would apply. Where different prices would apply, the IMs could usefully clarify that the Commission will use the DPP IMs as inputs to determining the different prices. The IMs could also usefully set out the process (although not necessarily the methodology) the Commission must follow for making decisions regarding the prices that will apply following a CPP, such as the timing of the process, the consultation steps that would be carried out and the scope of the consultation. Further details can then be set out in each CPP determination.

## 4.4 Recommendations

*125.* The ENA supports the fast-track assessment of the alignment between DPP and CPP WACCs. We note there may not be enough time in the fast-track process to fully assess all of the available options that could improve the alignment. A pragmatic approach could be to set the CPP WACC equal to the DPP WACC and then consider the alternative options as part of the full IM review.

*126.* There is currently a material uncertainty regarding what happens at the end of the CPP, which could be an unnecessary disincentive to apply for a CPP. The IMs could usefully specify the process and circumstances (although not necessarily the methodology) for determining the prices that apply on moving back to a DPP from a CPP.

# 5. Future impact of emerging technologies in the energy sector

## 5.1 Overview of Commission position

*127.* The problem definition paper recognises that many stakeholders have identified emerging technologies and their impacts as a relevant topic for the IM review. The Commission has indicated it is keen to understand how electricity networks of the future will differ and, in particular, whether this requires changes to the IMs now.

*128.* The problem definition paper notes that potential effects of emerging technologies include:

*a)* Changes to electricity demand (i.e. flattening or declining volumes).

*b)* Changes to demand profile (i.e. peak demand could increase due to EV penetration).

*c)* Network reliability could be impacted through reverse power flows or clusters of EBs. DG may be able to mitigate these effects.

*129.* However, the Commission is more interested in how these issues relate to economic regulation. The problem definition paper has posed the following questions:

*a)* Do firms have the right incentives to make efficient expenditure decisions (e.g. new technologies may be better investment options)?

*b)* What is the boundary between regulated and unregulated activities?

*c)* Is network pricing sending the right signals to consumers?

*d)* Is there evidence to support a view that the risk of asset stranding has materially altered?

*130.* The problem definition paper has noted that in the short term the Commission's objective is to ensure there are no regulatory barriers obstructing the efficient adoption of emerging technologies and innovative business models.

*131.* The problem definition paper has requested that submitters consider the prospects for change in New Zealand electricity systems and potential implications for the IMs.

## 5.2 Potential impact of emerging technologies

*132.* The ENA agrees that emerging technologies and their potential implications for the IMs is a relevant topic for the IM review.

*133.* It is becoming clear that current technology trends will have impacts on the energy sector as a whole, including ENBs. However, the precise nature, pace and scale of the impacts are still subject to debate. It seems unlikely that certainty regarding these impacts will emerge during the course of this IM review, or potentially for some time thereafter. This submission therefore focuses on what could reasonably be done now given current information.

*134.* Recent innovations and technological breakthroughs in terms of producing solar PV, batteries, electric vehicles, etc. at ever lower costs is likely to drive significant change in the electricity sector. We currently see only a low risk that there will be widespread disconnection from the electricity network. However, patterns of use are likely to change and this will bring new challenges for ENBs to manage.

*135.* Where consumers invest in own-generation equipment, ENBs' revenues are likely to fall. This is because ENBs still recover a large portion of revenues through variable tariffs and there are regulatory barriers to changing this mix, particularly the constraint on fixed charges for residential consumers. Costs may not change very much, despite the falling revenues. Where consumers invest in electricity storage, whether using batteries or electric vehicles to provide this service, peak demand could fall. Concentrations of technologies in particular areas could create voltage or other technical network issues that need to be managed. Demand could become more intermittent and also more peaky. The overall impacts are unclear.

*136.* However, it is likely that:

*a)* The scale and timing of any change is likely to vary across networks, based on geography and socio-economic factors.

*b)* Future consumers are likely to have increased options to secure a portion of their energy needs from alternative sources.

*c)* Emerging technologies may increase costs on ENBs as they seek to manage voltage fluctuations etc. and act as a "distribution system operator". ENBs are still investigating efficient means of managing this change. Implications for ENB opex and capex requirements are being worked through – forecasting for the next DPP reset will need to take this into account.

*d)* ENBs will still be required to maintain the safe and reliable operation of the network. While ENBs are able to adopt new technologies to supply some customers, they need to have confidence this would not imperil other obligations, e.g. quality standards. It is not yet clear whether the new technologies will be able to materially assist ENBs that are facing substantial renewal programmes to reduce their costs of supply.

*e)* ENBs will need to consider changes to network architecture and are likely to see an increase in network complexity. They may need to secure staff with different skill sets in order to effectively manage the transition.

*f)* Pricing that can signal to consumers the efficiency implications of their use of the network could greatly assist ENBs manage the transition in a least-cost way. Prices that signal the cost of capacity, or the cost of peak usage, may be the most efficient means of recovering the bulk of network costs. Pricing reform will require co-ordination with consumers, ENBs, the Commission, Electricity Authority and MBIE to ensure workable solutions are delivered.

*137.* The core principle remains the ability to earn at least a normal return, or that NPV=0 at least. Suppliers make investments in accordance with understanding that they will recover the costs of those investments. If this was to change it would be challenging for ENBs to justify any investments, which would be to be to the long-term detriment of consumers. We therefore do not see any justification for changing the treatment of stranded assets within the current regulatory framework.

## 5.3 Implications of the technology trends

*138.* It is prudent for ENBs to devote some effort to reviewing the likely impact of the emerging technologies on their network and consumers. ENBs should also assess potential opportunities that may be emerging to deliver improved services, or cheaper services, to their consumers.

### 5.3.1 Adjustments to cash-flow profiles

*139.* Emerging technologies can be expected to give consumers an opportunity to find alternative sources of electricity supply; these opportunities are likely to mainly be taken up by relatively wealthy residential consumers. As long as regulatory constraints limit the scope of fixed charges, consumers face the risk that the relatively less wealthy consumers will subsidise those that can afford the new technologies.

*140.* Further, the asset base revaluations required by the current IMs mean that some cash-flows are tilted towards the end of an asset's life. This exacerbates risks faced by investors that they will not fully recover costs of investments made today, making them less likely to invest.

*141.* It would be helpful to model the overall (societal) efficiency impacts of various uptake scenarios of emerging technologies that enable some consumers to avoid some distribution charges.

*142.* The long-term interests of consumers in terms of efficient overall investment and avoiding cross-subsidies could favour tilting cash-flows to enable increased short-term recovery of investments. This would mitigate the risk that a smaller group of future consumers will be exposed to significantly higher prices. The overall expected NPV of each investment would remain unchanged but suppliers would have greater incentives to invest and future consumers may not face such large disincentives to use the network and may have an increased willingness to pay for electricity lines services.

*143.* One way to do this would be to adjust depreciation rates, whether by changing standard asset lives or by extending the accelerated depreciation option that is currently available in the CPP to the DPP.

### 5.3.2 Incentives for longer-term cost savings

*144.* Emerging technologies also create opportunities for ENBs to invest in the new technologies to provide better and/or cheaper services to their consumers. However, ENBs currently have limited opportunities to invest in smart grid[12] or similar initiatives that would deliver longer-term benefits. ENBs would need to invest up front in enabling technologies, research and development, systems and process development; while sufficient benefits to justify this expenditure are unlikely to be accrued until after the end of the five-year IRIS period.

*145.* Therefore, emerging technologies may enable investments that could lead to large cost-savings in the long-run, but ENBs may be disincentivised from making such investments. The IMs could usefully provide improved incentives for research and development initiatives, or enabling investments in smart grids, where the benefits are realised in the long term through better capacity utilisation and deferral of investment requirements. We suggest that this is an important area of research that could be considered by a working group.

*146.* The ENA recommends the Commission consider developing an IM that provides expenditure allowances for smart grid, or similar initiatives, in circumstances where specified and measurable outputs or outcomes are delivered. This would give ENBs incentives to invest and address any concerns there might be regarding potentially ineffective outcomes from the investments.

### 5.3.3 Implications for the 2020 price reset and IRIS

*147.* For the 2020 DPP reset, the Commission's opex and capex forecasts will need to account for research and development costs, for the costs of obtaining new skills, for the costs of securing and utilising increased volumes of data and for operating networks of increasing complexity. The Commission's revenue forecasts will need to account for any demand implications of the technology

[12] The New Zealand Smart Grid Forum defined a smart grid as: "A Smart Grid is an electricity network that can intelligently integrate the actions of all users connected to it – generators, consumers and those that do both – in order to efficiently deliver sustainable, economic and secure electricity supplies."

changes that will have occurred. The IMs (IRIS) may also create disincentives to make efficient trade-offs between capex and opex if there are different rewards/penalties for expenditures relative to the DPP baselines.

*148.* The ENA recommends the Commission review the IRIS arrangements and the approaches to setting expenditure forecasts at the next price reset to ensure there are no undue barriers for ENBs to making efficient investments in emerging technologies.

## 5.4 Recommendations

*149.* The ENA agrees that emerging technologies and their potential implications for the IMs is a relevant topic for the IM review. The core principle remains the ability to earn at least a normal return, or that expected NPV=0 at least. We therefore do not see any justification for changing the treatment of stranded assets within the current regulatory framework.

*150.* The long-term interests of consumers in terms of efficient overall investment and avoiding cross-subsidies could favour tilting cash-flows to enable increased short-term recovery of investments. This would mitigate the risk that a smaller, and relatively less wealthy, group of future consumers will be exposed to significantly higher prices.

*151.* The IMs could usefully provide improved incentives for research and development initiatives, or enabling investments in smart grids, where the benefits are realised in the long term through better capacity utilisation and deferral of investment requirements. This is an important area of research that could be considered by a working group. The ENA recommends the Commission consider developing an IM that provides expenditure allowances for smart grid investments, or similar initiatives, in circumstances where specified and measurable outputs or outcomes are delivered.

*152.* Pricing that can signal to consumers the efficiency implications of their use of the network could greatly assist ENBs manage the transition in a least-cost way. Pricing reform will require co-ordination with consumers, ENBs, the Commission, Electricity Authority and MBIE to ensure workable solutions are delivered.

*153.* The ENA also recommends the Commission review the IRIS arrangements and the approaches to setting expenditure forecasts at the next price reset to ensure there are no undue barriers for ENBs to making efficient investments in emerging technologies.

# 6. Issues raised by the High Court on the Cost of Capital

## 6.1 General comments

*154.* In December 2013 the High Court delivered its judgment on the merits review appeals taken regarding the input methodologies determined in 2010. In that judgment the Court raised some issues that it expected the Commission to consider next time it reviewed the cost of capital IM. The problem definition paper suggests that, at this stage, "it is not clear that substantive changes to the IMs in response to these issues would provide long-term benefits to consumers".[13]

*155.* The problem definition paper notes that for "this phase of the IM review we intend to focus on 'high-level' conceptual issues associated with estimating the WACC".[14] That is a reasonable approach for the problem definition phase. However, we understand the IM review is also likely to consider updating the WACC parameters to reflect new market information and other data. This is an important activity itself and should be given prominence in the next phase, potentially with an expert working group being established to examine the evidence that may support (or not) changing the various WACC parameters. We also note that reviewing some parameter values, particularly the asset beta, may take a significant amount of time, and there may be merit in beginning this analysis before that of other parameters.

*156.* The WACC issues raised by the High Court were:

*a)* The appropriateness of using the 75th percentile WACC estimate in price-quality regulation.

*b)* The suitability of using the Simplified Brennan-Lally Capital Asset Pricing Model (SBL-CAPM).

*c)* Whether a term credit spread differential (TCSD) allowance is required as part of the IMs.

*d)* Whether a split cost of capital should be applied, with a higher WACC applying to new investment and a lower WACC to sunk investment.

*157.* We consider each of these issues in turn below.

## 6.2 Specific issues raised by the High Court

### 6.2.1 WACC percentile used to set prices

*158.* The Commission reviewed the WACC percentile used for price-quality regulation in 2014, and changed the percentile estimate of WACC used to set prices from the 75th to the 67th percentile. The Commission has not indicated an intention to revise this decision as part of this IM review.

*159.* The problem definition paper implies that there is unlikely to be material additional information available regarding this issue, beyond what was considered in 2014. We agree there is unlikely to be sufficient new evidence to justify reopening this topic. In general we recommend that the IM Review concentrates on other issues. However, we note the following:

[13] Problem definition paper, paragraph 247.

[14] Problem definition paper, paragraph 252.

*a)* In 2014 we submitted that the Commission had erred in its interpretation of the available evidence, and that its evidence did not necessarily support a reduction in the percentile. We remain of this view.

*b)* If other elements of the WACC IM, or the wider regulatory methods, change as a result of the IM Review – for example, adoption of a split cost of capital – consideration may need to be given to whether this has implications for the appropriate WACC percentile used for price-setting.

### 6.2.2 Use of the SBL CAPM

*160.* The concern of the High Court regarding the SBL CAPM was that it allows the WACC to change if leverage changes; a result which is inconsistent with long-established finance theory and which the High Court referred to as the 'leverage anomaly'.

*161.* The problem definition paper stated that:

*a)* The Commission was not aware of any alternative to the SBL-CAPM that can reflect both the New Zealand tax regime and resolve the leverage anomaly.

*b)* The SBL-CAPM is the most widely used approach to estimating the cost of equity capital, by analysts, practitioners and suppliers, and that there was no evidence of a reduction in its use or the development of new alternatives.

*c)* The leverage anomaly was noted by the Commission in 2010 when the IMs were established and the Commission considered that the benefits of using the SBL-CAPM outweighed the costs.

*d)* The proposed use of the SBL-CAPM in recent UCLL/UBA decisions had been generally supported by interested parties.

*162.* While we acknowledge the points raised by the Commission, we consider that there may be value in reviewing the use of the SBL-CAPM to test whether a better approach is available.

### 6.2.3 Use of the TCSD allowance

*163.* The Commission considered that its reasons for including a TCSD allowance in the IMs remain convincing, as it is reasonable to compensate suppliers who have prudently issued long-term debt to manage refinancing risk. The ENA agrees it is reasonable to compensate suppliers for taking on longer term debt.

*164.* However, we submit that it is necessary to consider the appropriate term of the debt premium that applies to all ENBs. There is an argument that the cost of debt for the industry should reflect a longer term, to better reflect the average issuance term for the industry; which we understand is the position of the AER. If a longer debt term was adopted for the industry-wide cost of debt, the TCSD allowance may no longer be necessary.

*165.* Lastly, we note that some businesses hedge their debt costs to the term implied by the regulatory allowances. This is a cost which is not allowed for in regulatory revenues. If the cost of debt better reflected the actual term and cost of the industry's debt, the use of this type of hedging may be less necessary, which would be an efficiency gain for the industry.

### 6.2.4 Split cost of capital approach

*166.* The problem definition paper noted that the Commission had previously not favoured a split cost of capital due to its potential to distort investment, increase the risk of under-investment and increase

administration costs. We support that view and recommend that the IM Review does not devote significant effort to considering this approach.

*167.* If this approach is to be seriously considered (let alone adopted), we submit that the rationale for its use will need to robustly demonstrated, including that any possible benefits are likely to outweigh the adverse effects on investment incentives.

## 6.3 Process for reviewing the WACC IM

*168.* As noted above, we consider that the IM review would benefit from stakeholder and expert working groups being convened to consider, and preferably agree on, particular issues. WACC is the topic where this approach would be most helpful.

*169.* We would support one or more expert groups being established to consider the WACC issues raised by the High Court, updates to the WACC parameters and any other changes to the WACC IM. The Commission could invite interested parties to nominate their experts to discuss the relevant issues alongside the Commission's experts. This would enable early identification of the areas in which there is a consensus and a clear focus on the evidence and analysis that underpin any divergence of views.

## 6.4 Recommendations

*170.* The ENA considers that there is unlikely to be sufficient new evidence to justify reopening the WACC percentile.

*171.* We consider that there may be value in reviewing the use of the SBL-CAPM to test whether a better approach is available.

*172.* We agree it is reasonable to compensate suppliers for taking on longer term debt, which the TCSD allowance seeks to do. However, if a longer debt term was adopted for the industry-wide cost of debt, the TCSD allowance may no longer be necessary.

*173.* We support the view that a split cost of capital is not desirable due to its potential to distort investment, increase the risk of under-investment and increase administration costs. We recommend that the IM Review does not devote significant effort to considering this approach.

*174.* We would support one or more expert groups being established to consider the WACC issues raised by the High Court, updates to the WACC parameters and any other changes to the WACC IM. This would enable early identification of the areas in which there is a consensus and a clear focus on the evidence and analysis that underpin any divergence of views.

# 7. Cost effectiveness of the rules and processes for CPP applications

## 7.1 Overview of Commission position

*175.* The problem definition paper recognises that there are opportunities to make CPPs more cost-effective for suppliers without reducing the ability of the Commission to scrutinise CPP applications.

*176.* Since the problem definition paper was published, the Commission has decided to progress improvements to the CPP rules and processes through a fast-track IM review process, with final decisions expected in November 2014.

*177.* Key issues to be covered by the review are:

*a)* Simplifying the application process (i.e. reducing the volume of information required and aligning it better to existing practice; also better targeting of audit requirements).

*b)* Clarifying the role and expectations of the verifier and the independent engineer.

*c)* Undertaking the CPP applicant's consumer consultation process.

*d)* Use of financial models.

*e)* The treatment of a supplier's CPP-related costs.

*f)* CPP applications made in response to catastrophic events.

*178.* Two other issues have been raised:

*a)* Whether a simplified CPP process should be introduced to cater for suppliers that have an issue with only one element of a DPP decision. The problem definition paper notes that if single-issue CPPs were introduced, the risk of suppliers attempting to 'cherry pick' only certain aspects of a DPP would need to be considered.

*b)* How IMs that are amended after a CPP application is submitted but before the Commission's decision is made should affect the CPP proposal. The problem definition paper suggests that the IMs that were in force at the time the application was made should apply to the CPP.

## 7.2 Rules and processes

*179.* The ENA supports the inclusion of this topic in the fast-track IM review. The current CPP IMs require too much information in a manner that is too costly (driven by prescriptive information and process requirements). There is a strong consensus across the industry that improvements can be made to the requirements for CPP applications that will improve the quality of CPP applications, eliminate unnecessary costs and complexity and reduce uncertainty without impeding the Commission's ability to scrutinise CPP applications.

*180.* The ENA has previously submitted on this topic.[15] We do not repeat all of the points made in the previous submission here, but we refer the Commission to that submission. In this submission we provide a brief overview of the improvements we consider can be made to the CPP IMs. We

[15] 'Feedback on setting Orion's customised price-quality path', 11 April 2014.

consider that the previous submission, having been referenced here, now forms part of the record for the current IM review. We request the Commission advise as soon as practicable if it does not consider that the previous submission is part of the record by way of reference in this submission.

*181.* Despite the fast-track review process, we consider it would still be useful to review the CPP IMs as part of the full IM review, to ensure nothing is missed. Similarly, if there is a CPP application made in early 2016, it may be possible to accommodate any initial learnings from that application process in the full IM review to assist any CPP applications that are made from 2017.

### 7.2.1 CPP application

*182.* We suggest the objective of the clauses that set out what a CPP application must contain should be to "ensure information is relevant to the applicant and stakeholders, including the Commission". We consider the level of prescription can be significantly reduced.

*183.* We submit that a CPP application should only need to contain the following:

*a)* Reason(s) for making the proposal.

*b)* Information to support a Commission decision on prioritisation of CPP proposals.

*c)* Proposal regarding the duration of the CPP regulatory period.

*d)* Statement of how the proposal meets the CPP evaluation criteria, as specified in the IMs.

*e)* A CPP price path proposal, including an IM-compliant financial model, supporting data, assumptions and forecasting approaches.

*f)* Actual and forecast expenditure (projects and programmes).

*g)* A quality standard proposal.

*h)* An Asset Management Plan, based on the Information Disclosure AMP with consistent expenditure categories. This would include justifications for capital and operational expenditure plans, demand forecasts and linkages to service outcomes.

*i)* Consumer consultation activities and responses, including a demonstration of how that feedback had been taken into account.

*j)* Verification, audit and certification.

*184.* It may also be possible to tailor the requirements to particular applications (so the IMs are not treated as a "one-size fits all" set of rules). This could be done through a pre-application process and/or through the publication of guidance on completing CPP applications. ENBs have varying scale, history and business structures, meaning the information they hold and are able to produce will vary across ENBs. More flexibility for ENBs to tailor applications based on their actual systems and processes would help to make CPPs a viable option for more ENBs; the cost of applications is currently prohibitive for many non-exempt ENBs.

### 7.2.2 Post-application review process

*185.* We suggest the objective of the post-application process should be to "ensure the process reviews the proposal in a way that is transparent, targeted, cost effective and robust".

*186.* The Orion CPP experience suggests there is room for improvement in this process. In particular, we would suggest:

*a)* The Commission's use of experts should be transparent; publication of their terms of reference would assist with this.

*b)* If the verifier function is retained, the Commission should utilise the verifier to support its own review so the CPP applicant does not need to explain the same issues to both the verifier and the Commission's expert advisors.

*c)* There is a tension between outcomes within the CPP period and after it. It would not be optimal to push expenditure beyond the end of a CPP period where this would increase overall costs. This should be recognised.

*d)* The CPP applicant will have made a CPP application based on their understanding of the IMs at the time. The Commission should take care in re-interpreting the IMs in ways that were not understood at the time the CPP application was made – this creates a lack of confidence and certainty that impedes future CPP applications. As noted in the RMV advice, it is important that the policy intent of IMs is clearly defined up front and not changed without a high evidentiary and economic threshold.

*e)* Information will necessarily evolve throughout the assessment period. The IMs should clarify the extent to which any updated information will be taken into account in the CPP decision. For example, if budgets produced with the CPP application need to be updated for actual expenditure it will be helpful for CPP applicants to be aware of this in advance so they can include this action in their project planning.

### 7.2.3 Complexity and compliance costs

*187.* An objective of the review should be to make the CPP a more viable alternative to the DPP, including by removing unnecessary complexity and compliance costs.

*188.* Our detailed suggestions for delivering this objective are set out in our submission of April 2014. At a high level, these proposals involve:

*a)* Fixing anomalies, errors and ambiguities in the IMs.

*b)* Reducing levels of disaggregation in valuation and tax IMs for CPPs.

*c)* Comprehensively reviewing the CPP schedules to the IMs (Schedules B-G).

*d)* Including, as recoverable costs, some additional costs that CPP applicants will incur that are not business as usual costs, such as preparing the CPP price path and quality proposal models and the consumer consultation costs.

## 7.3 Quality-only CPP

*189.* The scope of the quality-only CPP seems to be wider than was originally intended. We understand the Commission would require detailed expenditure information to be provided in support of a quality-only CPP that would be similar in scale to the expenditure information for a full CPP application. Faced with this reality, applicants may choose to apply for a full CPP anyway if information requirements are similar. The problem here is that the lack of certainty about what the information requirements are for quality-only CPPs may be unduly deterring quality-only CPP applications.

*190.* We recommend the Commission consider quality-only CPP applications with a focus on the quality-related information and without requesting unnecessary expenditure-related information that is not directly relevant to a quality-only CPP.

## 7.4 Mini CPP or DPP reopener

*191.* A problem with the current IMs is that the only tools available to address an aspect of the DPP that is unsuitable are the full CPP application or the quality-only CPP application. This means if a non-quality aspect of the DPP is unsuitable for an ENB they must either live with the unsuitable DPP or make a full CPP application.

*192.* Where one or two (non-quality) aspects of the DPP are unsuitable, a full CPP application may well be more costly and time consuming for all parties than is necessary. For example, where the revenue forecast is clearly inappropriate but the other DPP inputs are reasonable, it is unlikely to be efficient to conduct a full expenditure review of the ENB's plans and develop input price indices as well as developing the needed more reasonable revenue forecasts.

*193.* We support a smaller form of CPP to address one or a few particular items within a DPP that are unsuitable for a supplier. Whether the mechanism to address this would be called a mini-CPP or DPP reopener seems mainly a matter of semantics. In either case we accept there would need to be controls and safeguards in place to ensure there would not be serious concerns of 'cherry picking' taking place.

*194.* We submit that such controls could reasonably be introduced. These could include:

*a)* Directors' certification of the reasons for applying for a mini CPP/DPP reopener rather than a full CPP.

*b)* Confirmation that the input assumptions for the aspect of the DPP being reviewed are not also inputs into other aspects of the DPP that are not being reviewed (or at least that the inputs are immaterial to the non-reviewed aspects of the DPP).

*c)* Requirement that consumer consultation on the CPP proposal must include notice of the aspects of the DPP that are not being reviewed and the reasons for the limited scope of the CPP.

*d)* A materiality threshold, where a mini-CPP or DPP reopener can only be applied for if the reasonably estimated impact is greater than a specified amount; for example 1% of MAR, which is consistent with the threshold for other reopener provisions).

## 7.5 Which IMs should apply to a CPP?

*195.* We agree in principle with the Commission's initial view that the IMs that were in force at the time the application was made should apply to the CPP. If this is not the case, then suppliers may be less likely to apply for a CPP as they will be unsure at the time of making the application what IMs will apply to their CPP proposal. Given the effort and resources that must be devoted to a CPP application, this is would not be reasonable – suppliers need to have certainty regarding the context within which their CPP will be determined.

*196.* Additionally, any amended IMs could still apply to the CPP where both the Commission and applicant agree.

*197.* However, there may need to be a buffer period to ensure CPP applications do not need to take account of very recently changed or introduced IMs. For example, an IM change determined immediately before a CPP application is lodged could not reasonably be expected to be reflected in the CPP application. The IMs could therefore usefully provide that the IMs that apply to a CPP will be those that were in place a set number of months before the application. We do not have firm views on how long this buffer period should be and would be interested in exploring this further.

## 7.6 Recommendations

*198.* We believe improvements can be made to the requirements for CPP applications that will eliminate unnecessary costs and complexity and reduce uncertainty without impeding the Commission's ability to scrutinise CPP applications.

*199.* We suggest the objective of the clauses that set out what a CPP application must contain should be to "ensure information is relevant to the applicant and stakeholders, including the Commission". We consider the level of prescription can be significantly reduced.

*200.* We suggest the objective of the post-application CPP review process should be to "ensure the process reviews the proposal in a way that is transparent, targeted, cost effective and robust". The Orion CPP experience suggests there is room for improvement in this process.

*201.* We also recommend the Commission consider quality-only CPP applications with a focus on the quality-related information and without requesting unnecessary expenditure-related information that is not directly relevant to a quality-only CPP.

*202.* Where one or two (non-quality) aspects of the DPP are unsuitable, a full CPP application may well be more costly and time consuming for all parties than is necessary. We support a "mini-CPP" (or DPP reopener) to address a few particular items within a DPP that are unsuitable for a supplier.

*203.* We agree with the Commission's initial view that the IMs that were in force at the time the application was made should apply to the CPP, although there may need to be a buffer period where IM changes made immediately before a CPP application is submitted do not need to be applied to the CPP. Any amended IMs could still apply to the CPP where both the Commission and applicant agree.

# 8. Reducing complexity and compliance costs

## 8.1 Overview of Commission position

*204.* The problem definition paper notes there is a desire among submitters for the removal of unwarranted complexity and compliance costs within the IMs. The Commission noted that a certain level of complexity and compliance cost will be unavoidable for the IMs to work and there is also a need to consider the cost of making a change to requirements that are already in place.

*205.* Topics that the problem definition paper suggests could be reviewed for unwarranted complexity are:

*a)* Related-party transactions.

*b)* Regulatory taxation.

*c)* Cost allocation.

*d)* Cost definitions.

## 8.2 Overview

*206.* The ENA agrees that finding opportunities to reduce the complexity and compliance costs of the IMs is an appropriate focus of the IM review. However, some level of complexity is unavoidable, particularly given the challenges inherent in delivering the policy intent behind the IMs.

*207.* We also note that avoiding complexity is particularly important at the time regulations are made. Once regulations are in place parties will have expended some effort to understand and implement them. The Commission has also provided guidance that helps parties to understand and interpret the requirements. In such circumstances it may in fact be more costly to simplify the IMs, where this would require suppliers to change their own systems or processes. We therefore caution against making unnecessary changes to the IMs.

*208.* The focus of this part of the IM review could usefully be to:

*a)* Remove ambiguity and address any unintended consequences of the drafting of the current IMs (e.g. related party transactions).

*b)* Remove complexity where that disrupts the policy intent (e.g. the IRIS mechanism).

*c)* Reduce compliance costs.

*209.* We suggest that the Commission also has an obligation to make its own assessment of what has been and has not been useful within the IMs and to consider removing the less-useful parts of the regulations. It seems improbable that there is nothing within the IMs that could be removed to simplify or reduce the burden of regulation.

*210.* In its final decision on amendments to information disclosure earlier this year, the Commission noted that it had deferred some matters relating to ID where an amendment to the input methodologies was required. The Commission indicated that these matters would be considered as

part of the 7-yearly IM review.[16] We trust these matters have not been forgotten by the Commission and will be addressed through this review.

*211.* As a general point, we suggest the presentation and usability of the IMs could be improved. Increased use of equations (as in the WACC IM) rather than text (as in the Tax IM) would assist readers to understand and work through the IMs. Worked examples may also assist, as would reductions in the number of places that need to be referred to when seeking definitions of terms.

*212.* The ENA has provided previous submissions on this topic and we refer the Commission to those submissions.[17] We consider that the previous submissions, having been referenced here, now form part of the record for the current IM review. We request the Commission advise as soon as practicable if it does not consider that the previous submissions are part of the record by way of reference in this submission.

# 8.3 Four areas raised by Commission

*213.* In this section we respond at a high level to the four topic areas raised by the problem definition paper as potential areas for reducing cost and complexity.

## 8.3.1 Related party transactions

*214.* The current design of the related party rules gives rise to unnecessary confusion and complexity. Capex related party transactions are addressed in the IMs, but opex and revenue related party transactions are addressed in information disclosure (ID).

*215.* Consistency between the two sets of requirements could be enhanced by making the sequence of options, terminology and criteria (where the clauses have substantially the same effect) consistent between ID and IMs wherever possible.

*216.* A key change to improve the workability of the related party rules would be to address the linkage to the cost allocation IM term '**directly attributable cost'**. Amendments are needed to ensure that related party charges can include recovery of both direct costs and shared costs. This will also ensure related party arrangements are not penalised relative to in-house models or external provider models, and assist related party costs to become more consistent with arms' length prices.

*217.* In our view, the reference to the term 'directly attributable cost' in the related party rules is not appropriate, unless 'not directly attributable cost' is also included. This is because 'directly attributable cost' may mean different things to different businesses and for different services. As a result, different related party transactions (depending on which valuation option applies) may recover different components of cost.

*218.* It would also be helpful to:

*a)* Adjust the third party test to permit the inclusion of other parties (who are not party to the transaction) but who may also be related parties.

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[16] Commerce Commission, Amendments to information disclosure determinations for electricity distribution and gas pipeline services: Final reasons paper, 24 March 2015, page 58.

[17] These submissions are: 'Review of IMs – Issues and Suggested Solutions', 14 February 2014; 'Feedback on setting Orion's customised price-quality path', 11 April 2014; 'Submission on proposed amendments to IMs: Incremental rolling incentive scheme', 29 August 2014; 'Submission on the technical drafting of the Draft DPP Determination and IM amendments', 31 October 2014; 'Submission on the proposed amendments for 2015 to the information disclosure determination for electricity distribution services', 19 December 2014; 'Submission on the proposed amendments for 2015 to the information disclosure determination for electricity distribution services – Technical consultation paper', 6 March 2015.

*b)* Remove the anomaly that Directors' certification may only be used where none of the other options are available.

*c)* Reduce the scope of information required by the CPP IM related party rules.

### 8.3.2 Treatment of taxation

*219.* The deferred tax methodology is more complex to implement than the tax payable methodology. However, ENBs (and gas distribution businesses) have experience of implementing this method and processes in place to do so. The Commission has also provided some guidance. It is now reasonably well understood and there is likely to be more cost in changing the approach.

*220.* We also note that the rationale for adopting the deferred tax methodology in the first place still stands, for example:

*a)* There are dynamic efficiency benefits from the cash flows associated with the deferred tax methodology, which should promote incentives to invest.

*b)* The basis of accounting for deferred tax is consistent with the basis on which other costs are recognised and recovered from consumers.

### 8.3.3 Cost allocation

*221.* We consider that the current cost allocation IM works well. It contains sufficient flexibility to accommodate different business models and cost reporting systems, while still ensuring only reasonable allocators are used to allocate costs between business units.

*222.* The Optional Variation to the Accounting-Based Allocation Approach (OVABAA) has not been widely used. However, we do not believe any harm is created by retaining this option in the IMs – it may become more relevant in the future as ENBs develop initiatives to deliver services to consumers in the light of technology change.

### 8.3.4 Cost definitions

*223.* We interpret this issue to relate to the definitions of costs within the IMs. We consider the intention should be to maintain consistency with GAAP unless a variance is absolutely necessary. GAAP rules are applied by ENBs in the ordinary course of their business, so these requirements are understood and more easily complied with. Any departures from GAAP should provide a materially better implementation of the policy intent.

*224.* We also note there are opportunities to improve alignment with GAAP within the asset valuation IM, for example in relation to the treatment of disposals and the cost of financing.

## 8.4 Process

*225.* The complexity and compliance costs associated with implementing the IMs after this review will be materially affected by the quality of this review process. It is important that the Commission's process for the IM review ensures the final IMs are as well-developed and error-free as possible. We would support the establishment of working groups to consider the detail of proposals and an independent Quality Assurance process to review the draft determination to ensure it is workable.

## 8.5 Recommendations

*226.* The ENA agrees that finding opportunities to reduce the complexity and compliance costs of the IMs is an appropriate focus of the IM review. However, some level of complexity is unavoidable,

particularly given the challenges inherent in delivering the policy intent behind the IMs. We caution against making unnecessary changes to the IMs.

*227*. The focus of the compliance costs and complexity part of the IM review could usefully be to:

*a)* Remove ambiguity and address any unintended consequences of the drafting of the current IMs (e.g. related party transactions).

*b)* Remove complexity where that disrupts the policy intent (e.g. the IRIS mechanism).

*c)* Reduce compliance costs.

*228*. It is important that the Commission's process for the IM review ensures the final IMs are as well-developed and error-free as possible. We would support the establishment of working groups to consider the detail of proposals and an independent Quality Assurance process to review the draft determination to ensure it is workable.