

Wholesale Advisory Group

Pricing in Pivotal Supplier Situations Recommendations Paper

Report by the Wholesale Advisory Group
25 September 2013

Note: This paper has been prepared for the purposes of the Wholesale Advisory Group. Content should not be interpreted as representing the views or policy of the Electricity Authority.

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The Wholesale Advisory Group (WAG)

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Authority request

The Electricity Authority (Authority) has requested the input and advice of the Wholesale Advisory Group (WAG) in considering issues associated with pivotal supplier situations.

1 Introduction

- 1.1.1 In July 2012 the Electricity Authority (Authority) requested the input and advice of the Wholesale Advisory Group (WAG) in considering issues associated with pivotal supplier situations.
- 1.1.2 This paper presents the results of WAG's investigation into the issues associated with pivotal supplier situations.

2 Conclusion and recommendations

- 2.1.1 The WAG recommends the Authority:
- a) consider the introduction of a trading conduct provision within the Electricity Industry Participation Code 2010 (Code) that applies to gross pivotal suppliers following:
 - i) Principle 1 – all generating capacity expected to be physically available is offered when a plant has been committed to generate
 - ii) Principle 2 – intentions to make changes to offers (prices and/or quantities) should be submitted at the earliest opportunity (to minimise late changes that provide little chance for others to respond)
 - iii) Principle 3 – price and quantity pairs in offers are not materially different between adjacent trading periods, except where there is a bona fide physical factor that alters the participant's capability to generate electricity between those periods
 - b) clarify the net benefit test used in the Outage Protocol¹ to ensure that competition effects can be taken into account when scheduling transmission outages
 - c) consider the publication of information to participants on expected upcoming pivotal supplier situations
 - d) continue the active monitoring of market performance during pivotal supplier situations
 - e) consider other options if these measures do not adequately address concerns about pricing in pivotal supplier situations, in particular looking at temporary capping mechanisms on pivotal supplier offers or affected

¹ The Outage Protocol is incorporated in the Code by reference in clause 12.150

prices, and/or making the grid owner responsible for increased spot market costs arising from local pivotal supplier situations during grid outages.

3 Approach to the project

- 3.1.1 The Authority requested that the WAG add the consideration of issues associated with pivotal supplier situations to the WAG's work plan in July 2012. The Authority's objective in requesting the WAG to consider these issues was "to improve confidence in the efficiency of prices when competitive pressures in the wholesale market are weak, thereby contributing to the Authority's statutory objective by improving wholesale and retail market competition".²
- 3.1.2 The WAG agreed in July 2012 to add to its work plan:
- a) initial consideration of the issues associated with pivotal supplier situations
 - b) consideration of a wide range of potential solutions to the issues.
- 3.1.3 Subsequently the WAG developed a draft discussion paper that the Board considered at its meeting on 3 April 2013. The Board provided feedback on the draft discussion paper in a letter dated 12 April 2013.³
- 3.1.4 In its feedback the Board provided suggestions for the WAG to consider prior to publishing the discussion paper, including:
- a) Inclusion of an option that would require:
 - i) identifying upcoming outages that will cause a single generator to be pivotal
 - ii) generators being subject to early gate closure for stations that are pivotal for the duration of an outage
 - iii) advanced publication of the offer prices of pivotal generators that are subject to early gate closure.

² Correspondence – letter to WAG Chair, 22 June 2012, WAG work plan: <http://www.ea.govt.nz/our-work/advisory-working-groups/wag/5Jul12/>

³ Correspondence – letter to WAG Chair "Feedback from the Board on WAG discussion paper", 12 April 2013, providing comment on WAG draft discussion paper: <http://www.ea.govt.nz/our-work/advisory-working-groups/wag/8may13/>

- b) Inclusion of an option where the financial incentives for Transpower concerning outage planning are altered in a manner that would encourage Transpower to contract with generators for pivotal generation during outages. This option includes making Transpower accountable for the increased spot market costs during outages caused by pivotal generators.
- c) The assessment of each of the options in the discussion paper should include consideration of their effectiveness at meeting the terms of reference of the project, that is, the likelihood an option provides:
 - i) Consumers with more confidence about the efficiency of prices during pivotal supplier situations.
 - ii) Investors with more confidence to charge prices they need to get a return on their last resort plant.⁴

3.1.5 The Board also noted that ideally prices in a pivotal supplier situation would be notified well in advance to allow those affected to consider alternative arrangements, which would cause the price to settle at a level just below the short run marginal cost of the next best alternative.

3.1.6 The WAG considered these comments and made a number of amendments to the discussion paper, which was then released for consultation on 27 May 2013.

3.2 Proposals in WAG discussion paper of May 2013

3.2.1 In the discussion paper the WAG recommended:

- a) That in relation to a conduct provision the Authority considers:
 - i) including a conduct provision in the Code modelled on those contained in the NZEM or MARIA Rules
 - ii) including in the Code a provision relating to the formation of offers along the lines of that included in the NZEM Rules
 - iii) whether certain participants should be required to provide an annual compliance statement from their board to the Authority certifying that their board is satisfied that the steps taken by the participant

⁴ The WAG interprets this objective as applying to all 'last resort' resource, including voluntary demand-side response. Accordingly, references to last resort plant in this paper are taken to also include voluntary demand response.

were likely to result in its employees being aware of the conduct provisions.

- b) That the Authority considers a Code change to broaden the net benefit test in the Outage Protocol to include competition effects.
- c) That the Authority treat the introduction of a temporary capping mechanism as the preferred fall back option.

3.3 Submitter responses to WAG discussion paper

3.3.1 Eleven submissions were made on WAG's discussion paper, as set out in Table 1.

Table 1: Parties that made submissions on WAG discussion paper

Generator/retailers	Retailers	Electricity Users	Other
Contact Energy	Nova Energy	Major Electricity Users' Group (MEUG)	Devon Funds Management
Genesis Energy	Powershop	Norske Skog Tasman	Transpower
Meridian Energy			
Mighty River Power			
TrustPower			

- 3.3.2 Submitters generally agreed that the status quo was not sufficient to deal with efficiency concerns about pivotal supplier situations and that there was the potential for pivotal pricing behaviour to increase in the future. However, many submitters had reservations about, or were uncertain of, the potential magnitude of the efficiency losses from pivotal supplier situations. Meridian and Genesis emphasised that only interventions that have a low risk of unintended adverse consequences should be progressed. Similarly, Transpower and Contact considered that a relatively cautious approach to change should be taken in the first instance.
- 3.3.3 Submitters did not uniformly support any of the proposed options for addressing potential efficiency losses associated with pivotal supplier situations. However, the options with the greatest support were introducing a conduct provision into the Code, amending the Outage Protocol to include

competition effects, and introducing a temporary capping mechanism on prices or offers in pivotal supplier situations.

- 3.3.4 Submitters generally opposed the other options considered in the discussion paper, although Devon Funds Management supported a general cap on offer prices and Nova Energy supported an enforced contract offer obligation. More detail on the submitters' comments on each of the options is provided in sections 6, 7 and 8.

4 Extent of problems with current arrangements

4.1 A pivotal supplier can determine the spot price in the affected region

- 4.1.1 A supplier is *pivotal* in a region when the sum of all other suppliers' capacities (including imports via transmission links) is less than the total demand (including reserve requirements) in that region for the relevant trading periods. As a result, the pivotal supplier must offer some part of its generation if all planned demand is to be served and normal reserve levels are to be maintained. For this reason a pivotal supplier has the ability to determine the spot price for energy and/or reserve in the affected region during the relevant trading periods and is said to have transient market power.
- 4.1.2 However, a pivotal supplier's incentive to raise (or lower) the local spot market price may be affected by its net exposure in the relevant region. A *net pivotal* supplier is a party that is required to generate to avoid unserved load and whose generation is greater than its own retail and hedge sales in the relevant area. A party that is only *gross pivotal* (a pivotal supplier whose generation is not greater than its own retail and hedge sales in the relevant area) may not have an incentive to raise spot prices if this would result in its generation being less than its retail and hedge sales.
- 4.1.3 That said, unless such retail and hedge sales have fixed prices and relatively long terms, a supplier may still prefer higher spot prices in pivotal situations (even if they are not net pivotal) as these will presumably support higher contract prices in the future. For this reason, the threat of demand response or new generation entry may be more important constraints on pricing by pivotal suppliers.
- 4.1.4 A supplier could be pivotal at a local level (for example a few nodes), or in a wider area (such as an island or the entire country). In carrying out analysis on the potential for efficiency losses, the WAG focussed largely on local

pivotal supplier situations, as this was the type of event that triggered the Authority's original request for advice. However, the WAG notes that pivotal supplier situations need not be confined to a local area. For this reason it also undertook some analysis of pivotal supplier events affecting a wider area.

4.2 Overall view of evidence

- 4.2.1 The WAG has not identified any specific efficiency losses arising from recent local or wider pivotal supplier situations. However, this is not surprising as the effects are difficult to observe and measure and the situations still fairly recent. More generally, offer prices in some recent local pivotal supplier situations have been much higher than in the past, and it is not clear whether the upward movement will continue, recede, or stabilise. For this reason, the WAG also examined the potential for efficiency effects to arise in the future. This analysis indicated a potential for material efficiency losses to arise in some scenarios.
- 4.2.2 Submitters generally agreed with the WAG that there was potential for efficiency losses in some scenarios, but submitters had mixed views on how significant or likely these efficiency losses could be. Some submitters emphasised the potential adverse effects of pivotal supplier situations on participant confidence in the market, investment decisions and retail competition (Transpower, Mighty River Power and Powershop), and TrustPower stressed the limited alternatives open to participants exposed pricing risk from a local pivotal supplier.
- 4.2.3 Meridian and MEUG agreed with the WAG that there was potential for efficiency losses, but were not convinced by the estimates in the discussion paper. Meridian thought the estimates represented upper bounds of the potential efficiency losses, especially for wider pivotal events, because they were not based on specific observed examples and assumed purchasers were fully exposed to the spot market. MEUG submitted that the lower bounds for wider pivotal situations were likely to be closer to zero because new technologies and more effective public scrutiny could mitigate the exercise of market power, and noted that they thought less exercise of market power would be possible in wider pivotal situations than local pivotal situations. However, MEUG generally supported the upper bounds.
- 4.2.4 Genesis noted that the WAG had not found any evidence of actual efficiency losses resulting from either local or wider pivotal situations and that the

WAG acknowledged that any action to address a potential problem is precautionary. As a result, Genesis submitted that any options to address efficiency losses from pivotal supplier events should only be further advanced if the risk of unintended consequences is very low. Meridian also submitted that only interventions with a low risk of unintended consequences should be implemented.

5 Options recommended for implementation by the Authority

- 5.1.1 The WAG believes that concerns about pivotal supplier situations are sufficiently serious to warrant consideration of potential changes to the Code. However, in light of the uncertainty around the extent of potential efficiency losses, the WAG recommends the Authority focus at this point on options that have a relatively low risk of unintended consequences, and which are flexible and relatively easily reversed.
- 5.1.2 In brief, WAG recommends that the following options should be considered by the Authority:
- a) Including a trading conduct provision within the Code that would apply to gross pivotal suppliers. A possible broad form of the provision is described in section 6.
 - b) Clarifying the net benefit test used in the Outage Protocol, to ensure that competition effects can be taken into account when scheduling transmission outages. This recommendation is discussed in more detail in section 7.
 - c) Making more information available to participants about upcoming pivotal supplier situations, to provide more advance warning and facilitate mitigation by purchasers. This approach was not included in the discussion paper but was raised by some submissions. The option is discussed further in section 8.
 - d) If these measures don't adequately address concerns about pricing in pivotal supplier situations, other options should be explored, in particular looking at temporary capping mechanisms on pivotal supplier offers or affected prices, and/or making the grid owner responsible for increased spot market costs arising from local pivotal supplier situations during grid outages.

- 5.1.3 The WAG also recommends the Authority actively scrutinise pivotal supplier behaviour against the conduct principles through its market monitoring function.
- 5.1.4 Section 9 sets out other options that WAG does not recommend for adoption at this time and explains the relevant reasoning.

6 Introduce conduct provision into Code

6.1 Discussion paper proposal and submitter views

- 6.1.1 The discussion paper proposed that consideration be given to including a conduct provision within the Code to address concerns about pricing by pivotal suppliers. It canvassed a number of different options and proposed a provision framed around a positive requirement to act in good faith or observe high standards of conduct, based on the conduct provisions that were in the NZEM and MARIA Rules.
- 6.1.2 These NZEM Rules required participants to “observe high standards of trading conduct”⁵, while under the MARIA Rules participants were required to “maintain high standards of integrity and fair trading”⁶.
- 6.1.3 In addition the WAG raised the options of:
- a) Adding to the Code a provision that requires that a participant does not engage in manipulative or attempted manipulative activity based on the definition of Undesirable Situation in the NZEM Rules.⁷
 - b) Amending the trading provision in clause 13.9(b) of the Code to require that any offer made by a generator had to be a reasonable estimate of its ability to generate at each given price band, based on a requirement that was in the NZEM Rules.⁸ Clause 13.9(b) already requires each offer by a generator to be a reasonable estimate of its ability to generate, but has no reference to price.

⁵ NZEM rule 1.6.3, part 1.

⁶ MARIA rule 1.4.

⁷ NZEM rule 2.35, part 1.

⁸ NZEM rule 2.64, Part 2, Section B.

- 6.1.4 The majority of submitters supported a conduct provision in principle, although a number expressed some qualifications. In particular, these included:
- a) That the wording and interpretation of a conduct provision was critical (Meridian, TrustPower, Mighty River Power, MEUG) and publication of accompanying guidance notes would be important to provide more clarity (Meridian).
 - b) The Authority would need to provide guidance on how a conduct provision is expected to interact with UTS provisions prior to implementation (Meridian, Mighty River Power).
 - c) There is a risk that the first test for a conduct provision could be legal proceedings on interpretation and rather than improve confidence this was likely to undermine confidence by reinforcing views that suppliers are becoming increasingly litigious (MEUG).
 - d) There is a risk that genuine last-resort pivotal plant could become less economic under a conduct provision if it would otherwise rely on unlimited and uncontestable pricing offers to secure a return. However, with proper economic analysis, contestable pricing scrutiny and clear rules of conduct, benefits to consumers are likely to outweigh the costs (TrustPower).
 - e) A conduct provision may not eliminate all pivotal pricing, but might help in promoting confident and informed stakeholders and the development of fair and transparent markets (Powershop).
- 6.1.5 Some submitters did not support the inclusion of a conduct provision, because they considered it would be ineffective (Norske Skog Tasman) based on their experience of conduct provisions in the NZEM rules. Other submitters expressed concern that a conduct provision would carry too great a risk of unintended adverse consequences and would create uncertainty (Nova).
- 6.1.6 Having reviewed the submissions, the WAG reached a consensus that there is no harm, and possibly some merit, in pursuing a conduct provision. While a minority were sceptical about the effectiveness of a conduct provision, the balance of the group considered the provision could be effective and the risk of adverse unintended consequences precluded greater intervention. The group also agreed that other more prescriptive options should be considered

(as set out in section 11.1.1d) if the conduct provision proves to be ineffective.

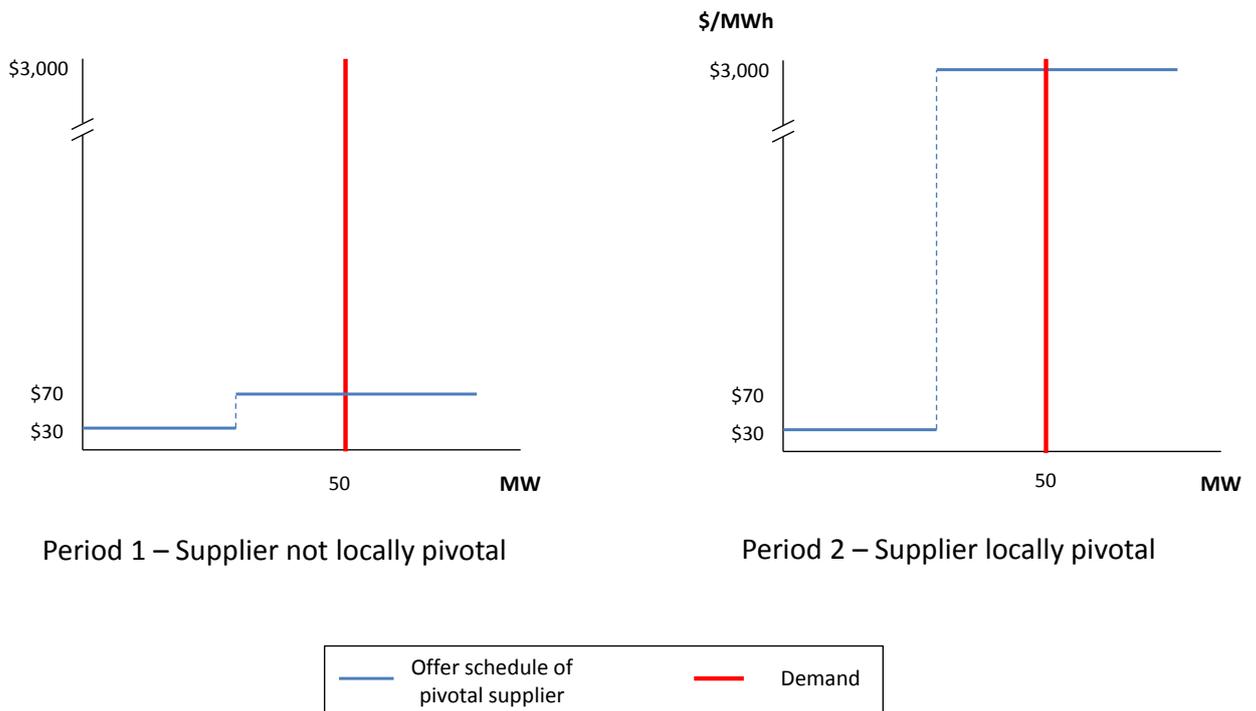
6.2 Possible form of a conduct provision

- 6.2.1 One approach canvassed in the discussion paper was to introduce a conduct provision that prohibits market manipulation or market abuse. After considering submissions, the WAG is sympathetic to the view that such prohibitions may be too uncertain in their effects because it is difficult to clearly define the line between acceptable and unacceptable behaviour in practice. This uncertainty could continue at least until 'case law' was established (which could take some years), and may not necessarily establish acceptable principles. Furthermore, the WAG is concerned that such prohibitions could overlap with aspects of the Commerce Act. For these reasons, the WAG is not attracted to broad prohibitions of this type.
- 6.2.2 Instead, the WAG believes it would be better to explore an approach that places a positive obligation on suppliers when they are gross pivotal to observe high standards of trading conduct. This would be coupled with principles (set out in the Code, guidelines or some other form) which provide guidance on behaviour by a gross pivotal supplier that would be consistent with the standard.
- 6.2.3 Although the WAG has not considered the precise wording of any Code amendment or guidelines, it could for example provide that a supplier is deemed to be compliant with the positive conduct provision for a trading period if:
- a) Principle 1 – all generating capacity expected to be physically available is offered when a plant has been committed to generate
 - b) Principle 2 – intentions to make changes to offers (prices and/or quantities) should be submitted at the earliest opportunity (to minimise late changes that provide little chance for others to respond)
 - c) Principle 3 – price and quantity pairs in offers are not materially different between adjacent trading periods, except where there is a bona fide physical factor that alters the gross pivotal supplier's capability to generate electricity between those periods.
- 6.2.4 While satisfaction of these principles could be deemed to constitute compliance with a trading conduct provision, the reverse would not necessarily apply. Instead, if one or more of the principles was not satisfied,

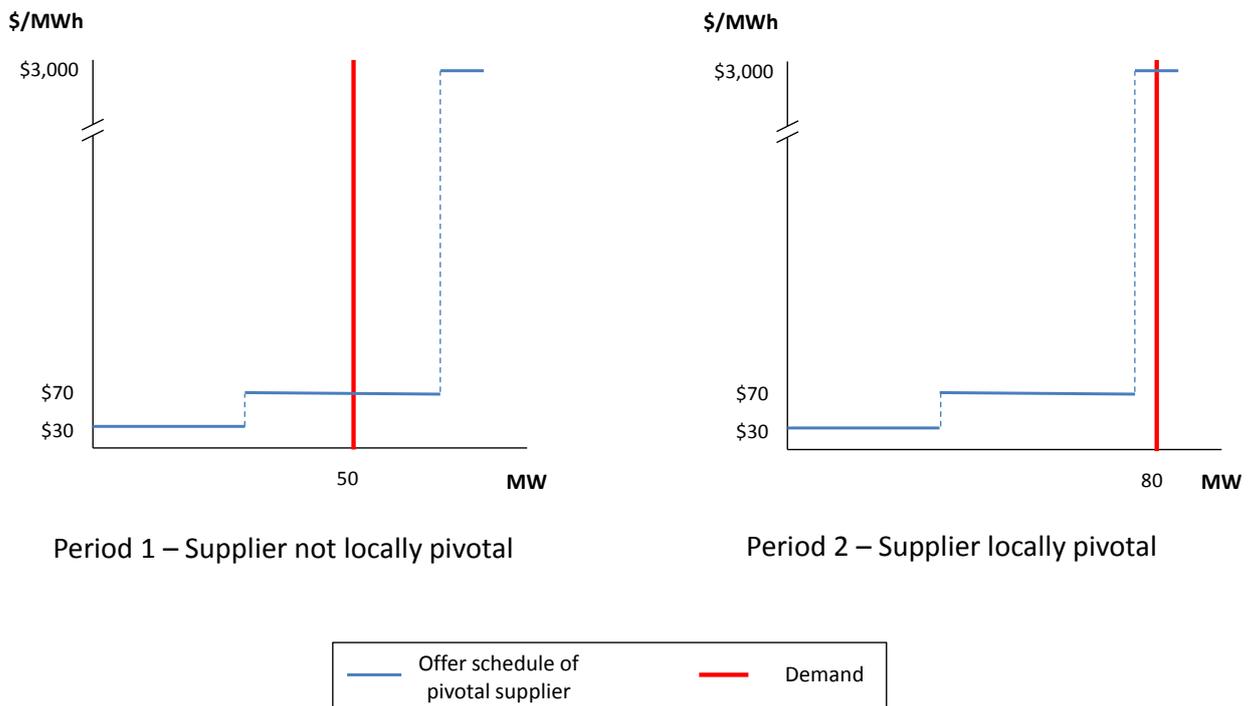
the burden of proof would be on the gross pivotal supplier to demonstrate that it met the conduct provision in the relevant trading period.

6.3 Rationale for suggested principles

- 6.3.1 Implicit in these principles is a view that suppliers are responsible for determining the prices and quantities in their offers, and that this process should be conditioned by competition as far as possible.
- 6.3.2 With this in mind, principle 1 is directed toward precluding the deliberate withholding of capacity. If a plant is committed and available to generate in a future trading period, the full potential MW capacity of that plant should be offered, in price bands determined by the relevant participant. Conversely, if a supplier has not committed a plant for a particular trading period, there would be no obligation for all of that plant's capacity to be offered.
- 6.3.3 Principle 2 is designed to ensure that the market is well informed about upcoming supply conditions and prices. The market should not be surprised by participants deliberately altering their offers to increase spot prices close to real time, when there will be fewer options available for other participants to respond to such an action. This principle would not preclude decisions made by suppliers about committing generating units based on profits implied by prices in forecast schedules.
- 6.3.4 Principle 3 is designed to reduce the scope for suppliers to modify their offers markedly across adjacent trading periods, solely because they expect to be pivotal in one of the periods. Thus, a supplier that offered much of its capacity at (say) \$70/MWh when it was not pivotal, and at a much higher price in the subsequent period (when it expected to be pivotal) would not meet principle 3, unless there was a physical reason that explained the change in its capability to supply between the periods (e.g. a change in fuel cost).
- 6.3.5 Figure 1 illustrates a situation where it would appear difficult to explain how the change in the offer structure is related to any factor that affects the supplier's physical capability.

Figure 1: Example of situation that would contravene principle 3

6.3.6 It is important to note that this principle is not intended to dampen spot prices per se, but is instead seeking to reduce the scope for suppliers to react to situations where competition is temporarily reduced due to factors such as a transmission outage. Figure 2 illustrates a situation that results in a sharp increase in spot prices that nevertheless meets principle 3. In this instance, the pivotal supplier has maintained a consistent offer, but there has been a sharp increase in demand for the suppliers' output.

Figure 2: Example of situation that would meet principle 3

6.3.7 Finally, it is important to re-emphasise that, even if a supplier's offer did not meet the principles, it would not necessarily mean the supplier had breached the conduct provision. Rather, if challenged, the supplier would be required to demonstrate how their action was consistent with the conduct provision, despite the offer structure not meeting one or more of the principles.

6.4 Scope of application of conduct provision

6.4.1 The WAG has considered how widely the trading conduct provision and principles should be applied (for example, to suppliers and purchasers, or only the former).

6.4.2 Consistent with the desire to minimise the potential for unintended consequences, the WAG recommends that a fairly tight scope be applied at the outset. For this reason, the WAG proposes that initially the mechanism should:

- a) Apply to only suppliers and exclude any application to bidders.
- b) Apply only to gross pivotal suppliers, where this is based on whether a supplier is gross pivotal at one or more market nodes (or islands for reserve). This measure is proposed because it should be practical to define whether a party is gross pivotal, but much more difficult to

determine whether a party is net pivotal since that would require knowledge of a party's contract position and retail sales.

- c) Apply to the energy and reserves markets, as issues in the former market triggered this work, and it would be impractical to exclude reserves as they are co-optimised with energy. It should not apply to the frequency keeping market at this point.

6.4.3 The WAG notes that the trading conduct provision and principles could be applied more widely by the Authority. It could choose to apply them more widely after undertaking analysis of historical data that suggests the chance of unintended consequences is likely to be low. Or it could widen the scope of the provision and principles after experience has been developed with the initial application, and if concerns arise regarding the behaviour of pivotal participants in other parts of the electricity market.

6.5 Would the provision increase confidence in efficiency of prices during pivotal supplier situations?

- 6.5.1 An analysis of recent local pivotal supplier situations that raised concerns has been undertaken to determine whether the principles noted above would have been met, or whether there would have been a requirement for suppliers to justify their actions (if a conduct provision had been in place).
- 6.5.2 In all of the cases that have been examined one or more of the principles would not have been met. In particular, principle 3 would not have been met in a number of cases because there was a marked change in the structure of the offer prices/quantities between adjacent trading periods for pivotal supplier plant were materially different. In particular, the situations were like those shown in Figure 1.
- 6.5.3 Naturally, this analysis is not definitive because had a conduct provision been in existence, suppliers may have altered the form of their offers. This raises the issue of whether it would be difficult for a locally pivotal supplier to circumvent principle 3. Analysis of historic cases suggests that suppliers would incur costs to do this.
- 6.5.4 For example, a supplier could achieve greater consistency in the offer price structure across non-pivotal and pivotal periods by 'pricing up' in the former but this would involve some sacrifice of generation volumes in those periods, with a consequent cost. The size of these costs will depend upon factors such as the level of production costs relative to prices, generation volumes and

hedge contract and retail positions. However, as a general observation, provided the provision restricts a supplier's ability to materially alter its offer structure (absent a physical change to generation capability), then the volume loss effect should provide a material disincentive.

- 6.5.5 Similarly, in the cases that were examined, it would not appear possible to structure offers in a way that meant most of a station's volume was cleared in non-pivotal periods, with a higher priced offer tranche that only cleared when the supplier was locally pivotal (i.e. like the example in Figure 2).
- 6.5.6 More generally, the WAG notes that all offer information is published with a short lag and that the Authority has an active market monitoring function. This means that any action by a gross pivotal supplier that departed from the principles should be readily identified. Accordingly, any gross pivotal supplier that acted contrary to the principles set out above could be required to justify its actions if they contributed to high spot prices.
- 6.5.7 In summary, the majority of the WAG thinks that the proposed conduct approach would assist in addressing local pivotal supplier situations (although it cannot be ruled out that there may be some local pivotal supplier situations where it would not be effective). Accordingly, a conduct provision along the lines described is expected to increase confidence in the efficiency of prices during local pivotal supplier situations.

6.6 Would the conduct provision increase confidence regarding investment in last resort plant?

- 6.6.1 To assess whether the proposed approach would affect confidence to invest in last resort plant, it is useful to consider each of the three principles in turn.
- 6.6.2 In respect of principle 1 (a supplier should offer all the available capacity of committed plant), there is no clear reason to expect any discernible impact on parties' willingness to invest in last resort plant, given that they would remain entirely responsible for determining whether to commit plant for operation, and for setting its offer price. Similarly, no significant impact is expected to arise from the adoption of principle 2 (suppliers should signal their intentions with respect to their offers at the earliest opportunity).
- 6.6.3 Principle 3 (a gross pivotal supplier should avoid material inconsistency in its offer structures between adjacent trading periods) is the principle that is most likely to 'bite' in relation last resort plant. In particular, investors may

be concerned that this principle could limit their ability to earn reasonable revenue during genuine shortages when last resort plant is required.

- 6.6.4 To assess this issue, the WAG has considered a number of hypothetical scenarios to determine whether the principle would inhibit reasonable actions by a last resort provider. These scenarios and possible ways for a last resort provider to manage them are set out in Table 2.

Table 2: Scenarios where investment in last resort plant could be affected

Scenario	Potential approach for last resort provider	Consistent with Principle 3?
Unexpected loss of transmission circuit leads to need to run local last resort plant	Parties with last resort plant can offer 'overload' capability tranches at higher prices on a consistent basis – expecting to be cleared if actual need arises	Yes – offer structure has no material change between adjacent non-pivotal and pivotal periods
Scheduled outage of HVDC link leads to need to run last resort plant in North Island	Parties with last resort plant can offer 'overload' capability tranches at higher prices on a consistent basis – expecting to be cleared if actual need arises	Yes – offer structure has no material change between adjacent non-pivotal and pivotal periods
Extreme dry year leads to need to run last resort plant	Last resort provider could: <ul style="list-style-type: none"> maintain consistent offer structure (high price tranche would be cleared if situation sufficiently severe) or gradually increase offer price over time to reflect increasing severity of situation 	Yes, if offer structure has not materially changed between adjacent periods, or has materially changed but generator is not gross pivotal

- 6.6.5 In light of the above factors, the WAG considers that the proposed conduct approach is unlikely to undermine incentives to invest in last resort plant. Furthermore, it could be argued that, to the extent that the approach provides a clearer line between acceptable and unacceptable conduct, this

may strengthen investor incentives. However, it is important to note that any such effect is unlikely to be significant, at least until some experience is built up around the proposed approach.

- 6.6.6 Based on the high level analysis that has been undertaken, the WAG considers that the approach based on the proposed good conduct provision and principles represents a workable path for addressing concerns about pricing by pivotal suppliers. The WAG suggests the Authority should use the draft provision and principles and refine them further. For example, it could be useful for the Authority to undertake some analysis of historical offer data to assess whether the principles would work in the intended manner without adverse effects. Similarly, the Authority may be able to undertake more detailed analysis of previous pivotal supplier situations to establish the effectiveness of the proposed approach, and make any necessary adjustments.

6.7 Enforcement of conduct provision

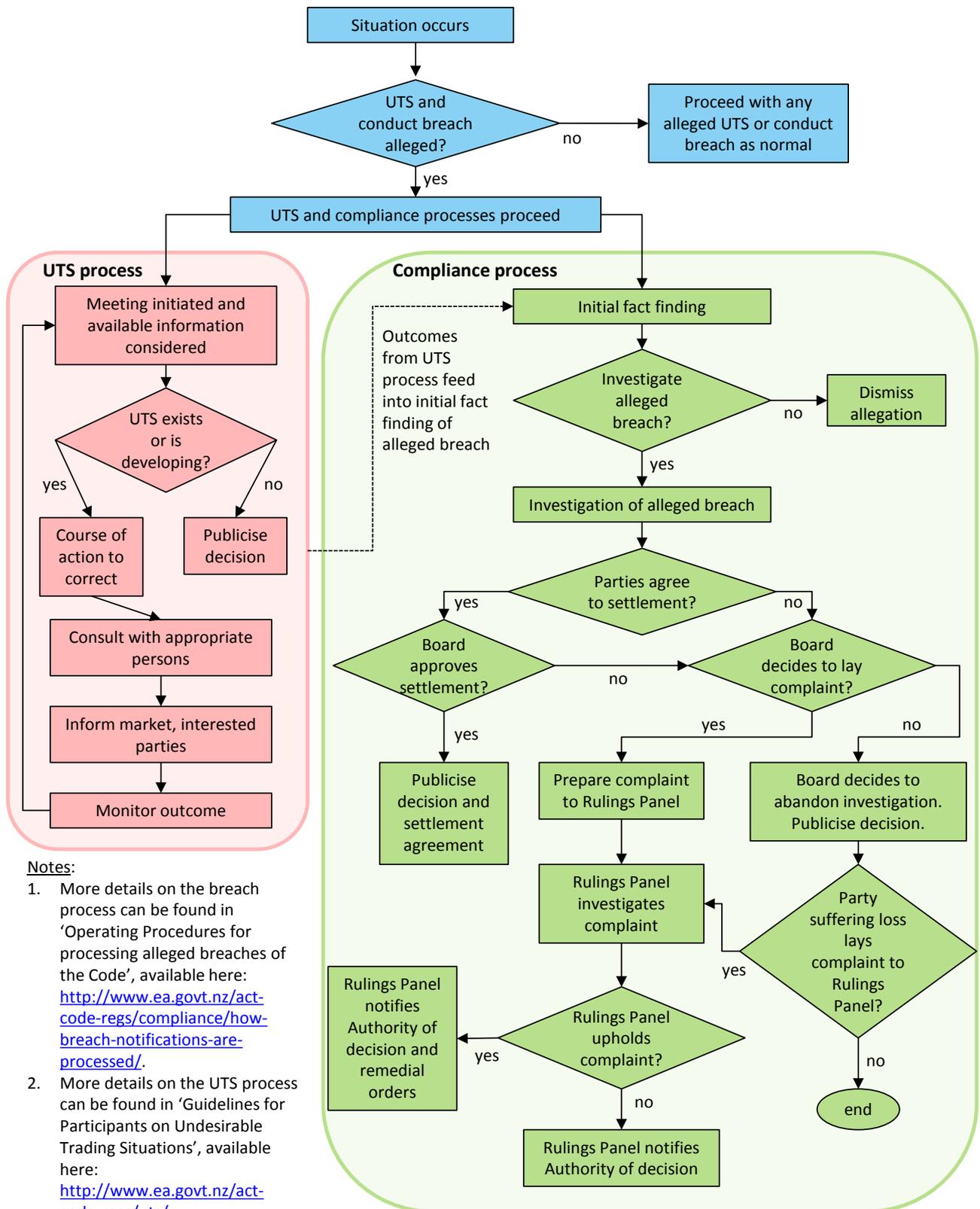
- 6.7.1 Enforcement of any conduct provision would fall within the legal framework set by the Electricity Industry Act and the Electricity Industry (Enforcement) Regulations 2010 (a description of relevant clauses is set out in Appendix A).
- 6.7.2 In brief, this legal framework makes the Authority responsible for investigating and enforcing compliance with the Code, and provides for the Rulings Panel (among other matters) to hear and determine any complaints about possible breaches of the Code, and to make remedial and other orders.
- 6.7.3 Where a breach is alleged, the Authority considers the complaint and determines whether to formally investigate. If a formal investigation is initiated, the Authority must publicise the information about the matter under investigation and affected parties may become a party to the investigation. It then determines what action should be taken. The options include discontinuing the investigation, approving a settlement among affected parties, and/or referring the matter to the Rulings Panel. In the latter case, the Authority may make a submission as to recommended actions by the Rulings Panel.
- 6.7.4 The powers of the Ruling Panel include:
- a) issuing a warning or reprimand to the participant
 - b) ordering the participant to pay a penalty to the Crown of up to \$200,000

- c) ordering the participant to pay compensation to another person
- d) requiring the participant to take any action necessary to restore it to a position of compliance with the Code
- e) recommending to the Authority that a change should be made to the Code or regulations.

- 6.7.5 To date, relatively few cases have been heard by the Rulings Panel. This is predominately due to the light-handed compliance approach adopted by the Electricity Commission and the Electricity Authority.
- 6.7.6 A number of practical issues in the enforcement context are important to consider if a conduct provision is to be added to the Code. First, there is a question of whether appropriate remedies are available to encourage compliance. Ultimately this is determined by the sanctions that the Rulings Panel may apply. Of relevance in this context is the fact that the Act empowers the Rulings Panel to impose penalties of up to \$200,000, and to order a participant to pay compensation to another party. In principle, these sanctions would appear to be sufficient to incentivise compliance with the Code.
- 6.7.7 Second, there is an issue of whether the compliance regime is suitable for addressing alleged conduct breaches. Just as it does for other alleged breaches, the Authority would appoint investigators in alleged conduct breaches. There is no reason to expect that the investigators and compliance process should not be able to deal with the alleged breaches of conduct provisions. The WAG considered the possibility of conduct issues being considered by a separate disciplinary panel, in similar manner to the Real Estate Agents Disciplinary Tribunal. However, the WAG concluded that this would add a layer of complexity that was not needed and was hopeful the existing compliance regime could work satisfactorily.
- 6.7.8 Finally, there is the issue of how a conduct provision would interact with the undesirable trading situation (UTS) regime in the Code. This issue was raised by a number of submitters, particularly whether there is any scope for 'double jeopardy' to arise for participants.
- 6.7.9 To start, it is relevant to note that the Authority is responsible for investigating any alleged UTS, as well as being the body involved in any alleged Code breaches. This means that the Authority should be in a position to effectively coordinate any investigations flowing from a simultaneous alleged breach of UTS and conduct provisions.

- 6.7.10 The Code sets a relatively high bar for a UTS to exist, since it requires that the situation threatens, or may threaten, confidence in, or the integrity of, the wholesale market. Furthermore, the Authority must not commence a UTS investigation if 10 business days or more have passed since the situation, which the Authority suspects or anticipates may be a UTS, has occurred.
- 6.7.11 In practice, these provisions are expected to mean that the Authority will give priority to determining whether a situation is a UTS, and if so, pursuing that process to a conclusion. This view is reinforced by the fact that by definition, a situation can only be a UTS if, in the reasonable opinion of the Authority, it cannot be resolved by any other mechanism under the Code (including any new conduct provision). Conversely, if a situation is determined to not be a UTS, then the only investigation activity would be under the Code compliance framework.
- 6.7.12 So, while it is possible for a participant to face remedies/reparations under the UTS and conduct provisions for a single situation or event, decision makers would take account of any remedies/reparations have already been applied. Figure 3 provides an overview of how the two processes would be expected to interact if both a UTS and a breach of the conduct provision are alleged for a single event.

Figure 3: Interaction of alleged UTS and alleged conduct provision breach processes



6.8 Comparison of proposed approach with NZEM and MARIA provisions

- 6.8.1 The NZEM and MARIA rules contained conduct provisions, and there are mixed views about their effectiveness from parties that are familiar with their operation.
- 6.8.2 The WAG considers that the approach it is proposing should be more effective than the provisions in the NZEM and MARIA rules. In part this is because the institutional environment is now quite different. The NZEM and MARIA rules were multi-lateral contracts that relied in part on affected parties being active in initiating and pursuing alleged breaches. Although investigators could be appointed under the rules, there was no permanent and ongoing group tasked with market monitoring.
- 6.8.3 By contrast, the Authority has a statutory responsibility for investigating and enforcing compliance with the Code.
- 6.8.4 A second important difference is that the NZEM and MARIA provisions were general in nature, whereas the proposed approach envisages both a conduct provision, and some specific elements (the principles) which set out how it would be applied.
- 6.8.5 Finally, the Authority has a statutory responsibility for market monitoring, and it has demonstrated a willingness to investigate unusual market outcomes and instigate projects to consider changes to the Code, where necessary. This is in contrast with the position of the supervisory bodies in the NZEM and MARIA codes. If a conduct provision were to be introduced into the Code, the Authority should actively monitor situations which could be in breach of the principles and request an explanation of the generator involved.
- 6.8.6 For these reasons, the majority of the WAG believes that the proposed approach is expected to be more effective than the NZEM and MARIA conduct provisions.

6.9 Conduct versus operative provision in trading arrangements of Code

- 6.9.1 Given the residual uncertainties associated with enforcement of a conduct provision, the WAG has considered an alternative approach which could utilise the broad principles set out in paragraph 6.2.3, but expressed as operative provisions. Under this approach, Part 13 of the Code which covers trading arrangements could be amended to include requirements for gross pivotal suppliers along the lines of:

- a) Participants must offer all capacity of committed plant under their control that is expected to be physically available.
- b) Prices and quantities set out in each offer must reflect participant's genuine intentions at the time offers are submitted.
- c) Offer prices for each quantity tranche must not be materially different across adjacent trading periods, except where there is a bona fide physical factor that alters the participant's capability to generate electricity between those periods.

6.9.2 The WAG notes that although the principles could be expressed as operative provisions, enforcement would nonetheless fall within the compliance framework. For example, an allegation might arise that a gross pivotal supplier did not offer all of its available plant. In practical terms, this could not be determined in real time, so it would become a matter for investigation by the Authority and possible settlement or referral to the Rulings Panel.

6.9.3 In theory, some provisions could be redrafted in a way that reduces the need for any ex post review in the compliance process. For example, the provision relating to consistency in offer prices across adjacent trading periods might specify an absolute maximum rate of change. To avoid any need for judgements about 'bona fide physical factors', this would need to apply in all circumstances, even if a physical change occurred that did affect a generator's supply capability. Clearly, this would introduce some degree of inefficiency.

6.9.4 Thus, whether provisions are expressed as conduct or operative requirements does not appear to be the main issue in relation to uncertainty. Rather, if Code provisions allow for any flexibility and judgement by participants, it appears inevitable that this could require enforcement through the compliance process with some consequent uncertainty.

6.9.5 Indeed, this trade-off is apparent with existing provisions such as the gate closure rule that allows offer revisions within two hours of real time for bona fide physical reasons. Enforcement of this rule comes within the compliance regime, which introduces a degree of uncertainty. This could be removed by not permitting any offer revisions inside the 2 hour gate closure period. However, this would presumably introduce larger inefficiencies than those created by uncertainty.

6.9.6 Viewed from this perspective, while the conduct provision with reliance on the enforcement framework does entail some degree of uncertainty, the WAG considers this to be preferable to introducing operative provisions in the trading section of the Code that would eliminate flexibility to address unusual circumstances.

7 Clarify the net benefit tests used in the Outage Protocol

7.1 Intent of guidance on the net benefit tests

7.1.1 Most local pivotal supplier situations arise because of planned transmission outages. The timing and duration of such outages can therefore have a material impact on effects arising from pivotal supplier situations.

7.1.2 In the discussion paper, WAG proposed amending the net benefit tests that Transpower is required to apply in certain circumstances when planning such outages. After further consideration, the WAG now considers that the net benefit tests per se do not need to be changed as it believes competition effects can be taken into account with the current tests. However, the WAG considers that providing guidance on the net benefit tests will make it clearer to all parties that competition effects can be taken into account.

7.2 Current form of the net benefit tests in the Outage Protocol

7.2.1 Transpower is required to include all reasonably foreseeable outages in its annual Outage Plan. Before the Outage Plan is published, Transpower must consult with certain parties on proposed outages. During this consultation period a party may notify Transpower if it believes that a proposed outage may not meet the “net benefit principle”. Under the net benefit principle, Transpower must ensure that “the planned outage is likely to result in net benefits to persons who produce, transmit, distribute, retail or consume electricity”⁹.

7.2.2 If a party has notified Transpower that it believes a proposed outage may not meet the “net benefit principle” and Transpower still wishes to proceed with the proposed outage, then under certain circumstances Transpower must undertake the “net benefit test”. This involves estimating specified costs and benefits of the outage. If the net benefit test gives a negative result then Transpower cannot go ahead with the outage.

⁹ Clause 12.140(2) of the Code.

7.2.3 The net benefit tests do not explicitly require Transpower to take into account any competition effects of the proposed outage. However, the net benefit tests require Transpower to estimate:

“any other [cost/benefit], considered relevant to a proposed **outage** subject to this paragraph, to a person who produces, transmits, retails or consumes **electricity** in New Zealand”¹⁰.

7.3 Discussion paper proposal and submitter feedback

7.3.1 In the discussion paper the WAG proposed that the net benefit tests used in the Outage Protocol be amended so that they explicitly require Transpower to include any costs and benefits arising from competition effects. It was suggested that competition effects be defined in a similar way to that used for competition effects in the Commerce Commission’s regime applying to Transpower’s capital costs (the CAPEX Input Methodology).

7.3.2 Most submitters supported the inclusion of competition effects in the net benefit test. TrustPower supported this general principle, but noted that although competition effects are not explicitly included in the net benefit test, Transpower is required to take into account any other cost considered relevant. TrustPower therefore considered that Transpower should already consider competition effects where they are relevant.

7.3.3 TrustPower also submitted that the Authority consult on whether the Outage Protocol could be changed to require Transpower to undertake a net benefit test for all outages where pivotal generation is involved (i.e. not just where a participant notifies Transpower that they believe a proposed outage does not meet the net benefit principle).

7.3.4 Transpower submitted that they engage collaboratively with interested participants when planning outages, and that they already take into account market effects. Transpower and Meridian also noted that the net benefit tests in the Outage Protocol are rarely used. Transpower considered that if the net benefits test was required to be used for all outages, the planning process would become unworkable because of the significant volumes involved.

¹⁰ Clauses 12.141(2)(a)(i)(E), 12.141(2)(a)(ii)(D), 12.141(2)(b)(i)(F), 12.141(2)(b)(ii)(D), 12.141(2)(c)(i)(E) and 12.141(2)(c)(ii)(E) of the Code.

7.4 WAG recommends the net benefit test for outages includes competition effects

7.4.1 Following consideration of submissions on the discussion paper and the Authority's proposals regarding urgent temporary grid reconfigurations¹¹, the WAG recommends the net benefit test for the Outage Protocol includes any costs from competition effects, where the costs from competition effects are equal to:

the value of any expected reduction in economic surplus due to a change in competition among participants in the electricity market as a result of the proposed outage.

7.4.2 The WAG notes that in general there is unlikely to be any increase in economic surplus due to a change in competition during an outage, but in some cases there may be an increase in economic surplus due to a change in competition following the outage.

7.4.3 In relation to TrustPower's suggestion, that Transpower should be required to undertake a net benefit test for all outages when pivotal generation is involved, the WAG is mindful that this could significantly complicate the outage planning process. The WAG believes it is preferable to retain the current practice where Transpower will apply the tests when requested by a participant.

8 Improved notice of expected of pivotal supplier situations

8.1.1 Participants could be notified of potential pivotal supplier situations in advance, thereby giving purchasers and retailers time to make alternative arrangements to avoid or mitigate any high spot prices. This notification could be as part of the Outage Plan (giving purchasers at least six weeks' notice of a potential pivotal supplier situation) and/or in the week prior to real time as pre-dispatch schedules are released.

8.1.2 This option was not considered in the WAG's discussion paper, but was raised by two submitters. Nova Energy submitted that there would be value in a single agency identifying potential net pivotal situations in advance and advising the market of these. Nova Energy felt this would reduce the inherent advantages the large generator/retailers have in respect of

¹¹ See consultation paper on this page: <http://www.ea.govt.nz/our-work/consultations/transmission/temporary-changes-to-configuration-of-the-grid/>

identifying and mitigating against such situations, given their greater analytical resources.

- 8.1.3 TrustPower thought there could be some merit in the Authority publishing gross pivotal forecasts, which would provide an indication of pricing risk that is currently not easily identifiable by participants. TrustPower noted that publishing gross pivotal forecasts would also provide a good platform on which to base any estimates of whether a generator is net pivotal should these become relevant to a “good conduct” investigation.
- 8.1.4 The WAG sees merit in these proposals, but notes that there would be a number of issues of detail to consider further. For example, it would be important to consider the feasibility of identifying such situations ahead of time. Another issue would be whether making such notification might alert pivotal suppliers to situations of which they were not aware, with possible adverse efficiency consequences.
- 8.1.5 Because this option has arisen at a fairly late stage, the WAG has not been able to consider these kinds of issue in detail. However, the WAG believes the option has sufficient merit to be worthy of more detailed consideration by the Authority.

9 Other options not recommended for adoption at this point

9.1 Early gate closure for single pivotal generators

- 9.1.1 Under this option, the Authority would assess forecast schedules to identify when any single generators are expected to be net pivotal as a result of a transmission outage, and any such generators would need to provide and ‘lock-down’ their offer prices and quantities for the affected plant earlier than normal (i.e. gate closure would be significantly before the standard two hours ahead of real time). Pivotal generators could only make offer adjustments if these reduced expected spot prices or there was a bona fide physical reason to do so.
- 9.1.2 The WAG considered that a key disadvantage of this option is that a generator who is required to ‘lock-down’ its offer prices and quantities earlier than usual could inefficiently shape its initial offers to preserve flexibility for making changes later (if there is any latitude to do so). Even prohibiting later changes would incentivise inefficient offer behaviour with respect to its initial offers.

- 9.1.3 Looking at the option from the perspective of potential investors in last resort resource, there should not be any direct dampening effect on incentives. However, it is likely to be perceived as an important enabling step to more intrusive options, which could dampen these incentives.
- 9.1.4 Submitters did not support early gate closure for single pivotal generators. Submitters agreed with the risks identified by WAG in the discussion paper. In addition, Meridian noted that there are often few genuine alternative sources of supply or demand response opportunities, limiting the usefulness of early gate closure to purchasers. Powershop noted that a net pivotal generator could initially set offers at a high price prior to gate closure and reduce its offers later, forcing competitors to seek hedge contracts and effectively shifting the impact of net pivotal pricing to the hedge market.
- 9.2 Make grid owner accountable for increased spot market costs**
- 9.2.1 In principle, the grid owner could be made financially accountable for any increased spot market costs caused by pivotal generators during outages. The rationale for this option is that pivotal supplier situations observed occur in areas of the grid where transmission is so weak the grid owner requires the cooperation of a single generator to supply local load to carry out routine maintenance on transmission equipment.
- 9.2.2 At present, the grid owner secures an agreement with the generator to supply power in the affected area to carry out the maintenance but does not concern itself with the price charged by the generator. Generation is being used as a transmission alternative yet the cost is foisted on wholesale and retail participants rather than transmission customers. Yet, the grid owner may have access to more options, or could be in a better position to coordinate across options (e.g. demand response, back-up generation) than individual wholesale market participants. Making the cost of generation part of the cost of an outage could improve the bargaining power with pivotal generators.
- 9.2.3 However, as the WAG noted in the discussion paper, the adoption of such a mechanism could require substantial changes to the revenue control regime under which Transpower operates, careful coordination with the Commerce Commission, and may also involve legislative changes. It would also be important to consider possible unintended consequences, such as the potential for the grid owner to be dissuaded from undertaking some maintenance, to avoid costs associated with planned outages.

- 9.2.4 Generally submitters did not support this option. Some submitters (Transpower and Meridian) felt that this option could encourage higher offer prices by pivotal suppliers because the cost could be ‘averaged’ over a wider base of purchases, reducing the likelihood of a market response. Meridian and Powershop were also concerned that making the grid owner accountable for increased spot market costs could discourage the grid owner from undertaking prudent and necessary maintenance. Nova submitted that the most important incentive on the grid owner was to maintain the overall performance of the grid.
- 9.2.5 Given the range and complexity of the issues that would need to be addressed for this measure to be implemented, a wide adoption of this measure would best be considered as part of any broader initiative to create appropriate incentives on Transpower to invest in an appropriate level of grid availability, rather than being directed solely at situations involving a pivotal generator.
- 9.2.6 However, if the other proposed solutions did not prove effective, there may be merit in revisiting this option, particularly as a measure to address the highly localised pivotal supplier situations caused by transmission outages. Nonetheless, if this option is revisited the WAG urges caution because it could be fraught with unintended consequences.

9.3 Apply general cap on prices or offers

- 9.3.1 In the pivotal supplier context, the key argument in favour of a general price or offer cap is that it would place an upper limit on participants’ risk exposure. However, the WAG does not consider that a general price or offer cap would be an effective option because:
- a) it is unlikely to increase purchaser confidence in the efficiency of prices in pivotal supplier situations because the regulator will not have better information than participants about the nature and costs of various alternatives
 - b) it may reduce investor confidence in prices being sufficient at times to ensure revenue adequacy for last resort plant because of a perceived incentive on the regulator to dampen high spot prices even if they are economically justified.
- 9.3.2 The WAG also notes that where general price or offer caps are utilised in overseas energy-only markets, they are set at fairly high levels to broadly

reflect the assessed cost of involuntary demand curtailment, and/or to ensure adequate provision of last resort plant or voluntary demand response. Setting a general cap at a high level would do little to address concerns about pivotal supplier situations and may be perceived as validating offers at that level in all pivotal supplier situations, not just those where there is a genuine shortage. Setting a relatively low general cap may address these concerns, but would suppress prices at times of genuine scarcity and therefore undermine incentives to maintain resources to ensure adequate reliability.

- 9.3.3 Most submitters opposed a general cap on offers or prices for the same reasons noted above. Devon Funds Management was the only submitter to express support for a general price cap, noting that following the undesirable trading event in 2011 there is a perception that an implicit price cap already exists in the market.
- 9.3.4 The WAG recommends that a general price cap is not considered further to address concerns about pivotal supplier situations.

9.4 Apply temporary capping mechanism on prices or offers

- 9.4.1 Under this option a temporary price cap would be applied in regions when a generator is 'pivotal', or an offer cap would be applied only when a generator is 'pivotal'. The price cap or offer cap could be applied ex ante or ex post.
- 9.4.2 A temporary price or offer cap might increase purchaser confidence in the efficiency of prices in pivotal supplier situations, but it depends on the ability of a regulator to set prices at the 'correct' level, which is inherently hard to achieve. For the same reason, the mechanism is likely to reduce investor confidence in prices being sufficient at times to ensure revenue adequacy for last resort plant.
- 9.4.3 Submitters were split on whether a temporary capping mechanism should be considered for reducing efficiency concerns around pivotal supplier situations.
- 9.4.4 Five submitters (Meridian, Norske Skog Tasman, MEUG, Devon Fund Management and Powershop) supported a temporary price or offer cap being investigated further. Comments by these submitters included:
- a) A temporary price cap applied at local nodes following the demonstration of unacceptable exploitation of market power by a net

pivotal generator would be an appropriate threat that should provide incentives for generators to offer their output at true marginal values (Norske Skog Tasman).

- b) A similar approach seemed to be employed successfully in other jurisdictions (Meridian and Powershop).
- c) Careful thought would need to be given to the design of a temporary price or offer cap (Meridian).
- d) A temporary cap should be set materially below a general market cap (Devon Fund Management).

9.4.5 Six submitters (Transpower, Nova, TrustPower, Genesis, Mighty River Power and Contact) opposed applying a temporary price or offer cap. Reasons for this opposition included:

- a) There were risks that a temporary cap may be applied at the wrong time and at a level too low or too high (Transpower).
- b) A temporary price or offer cap may create a pricing target (Transpower).
- c) A temporary price or offer cap would be distortionary with the wide diversity of generation available (Nova).
- d) Even the threat of a capping mechanism could chill investment (Genesis).
- e) It is preferable to give a conduct provision and changes to the Outage Protocol time to work before more heavy-handed and administratively costly regulation such as capping is put in place (Contact).

9.4.6 The WAG recommends that the Authority treat the introduction of a temporary capping mechanism as a preferred fall back option. This option could be progressed if a conduct provision and guidelines on the net benefit tests in the Outage Protocol proved to be insufficient, or if new information emerges to place priority on improving consumer confidence in pricing outcomes in pivotal supplier situations ahead of other objectives.

9.5 Enforce contract offer obligation where supplier expected to be pivotal

9.5.1 Under this option, a supplier that is expected to become pivotal would be required to offer contracts to affected parties so they can mitigate the risk of high spot prices.

9.5.2 This mechanism could take a range of forms. For example, it could provide a framework for parties to discuss contracting arrangements, and possibly also

include a mediation process. Ultimately, the mechanism would need to empower an external party (presumably the Authority) to determine the contract price (and perhaps terms) if the parties cannot agree, otherwise the supplier may simply take advantage of weak competition in the contract market rather than the spot market.

- 9.5.3 An enforced contracting mechanism appears unlikely to increase purchaser confidence in the efficiency of prices in pivotal supplier situations because the regulator is unlikely to have better information than participants about the nature and costs of various alternatives. The mechanism is unlikely to increase investor confidence in prices being sufficient at times to ensure revenue adequacy for last resort plant. Indeed there is a risk that the mechanism undermines normal contracting incentives.
- 9.5.4 Nova was the only submitter to support the introduction of an enforced contract offer obligation. Nova submitted that the Authority should be able to require net pivotal suppliers to sell hedges to such a level that they are no longer net pivotal. Nova noted that enforcing a contract offer obligation when a supplier was expected to be pivotal would impinge on the rights of generators, it would allow generators to obtain fair value for their generation output and balance out their risks in an appropriate way.
- 9.5.5 Other submitters did not support enforcing a contract offer obligation where a supplier was expected to be pivotal. Submitters generally agreed with the WAG's arguments in the discussion paper. Meridian and Powershop both noted that a regulated contract process was unlikely to set a more appropriate price because the mediator is unlikely to have better information and there would still be a risk of inappropriately high or low contract prices. Powershop was also concerned that it may shift the concern from the spot market to the contract market.

10 Explanation of how the WAG's recommendations are consistent with the Authority's statutory objective and the Code amendment principles

10.1 WAG's recommendations are consistent with the Authority's statutory objective

- 10.1.1 The WAG considers that its recommendations are consistent with the Authority's statutory objective, which is to promote competition in, reliable

supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.

- 10.1.2 The Authority's objective in requesting the WAG to consider issues associated with pivotal supplier situations was "to improve confidence in the efficiency of prices when competitive pressures in the wholesale market are weak, thereby contributing to the Authority's statutory objective by improving wholesale and retail market competition"¹².
- 10.1.3 The WAG considers that introducing a conduct provision to the Code based on the principles outlined in paragraph 6.2.3 will promote competition by helping to ensure that all plant that is expected to be physically available to generate is offered for each trading period, that the market is well informed about participant intentions, and that suppliers are less able to modify their offers markedly across adjacent trading periods solely to take advantage of transient pivotal supplier situations.
- 10.1.4 For the reasons set out in sections 6.5 and 6.6, the WAG considers that the proposed conduct provision will increase the confidence in the efficiency of prices during local pivotal supplier situations and is unlikely to undermine incentives to invest in last resort plant. Therefore, the WAG considers that the introduction of a conduct provision will promote competition and efficiency and will not undermine the reliable supply by the electricity industry.
- 10.1.5 The WAG has also recommended that the net benefit tests in the Outage Protocol be clarified to ensure that when Transpower is required to undertake a net benefit test that it takes into account competition effects (such as any competition effects from an outage leading to a pivotal supplier situation). It also recommends that further consideration be given to measures to provide participants with more notification of expected pivotal supplier situations. The WAG considers these changes will provide modest yet worthwhile benefits.
- 10.1.6 The WAG recommends that the effectiveness of the proposed measures be monitored. This monitoring could directly lead to modest efficiency gains as participants are influenced by external scrutiny, but will also facilitate the adoption of other options for improving confidence in the efficiency of prices

¹² Correspondence – letter to WAG Chair, 22 June 2012, WAG work plan: <http://www.ea.govt.nz/our-work/advisory-working-groups/wag/5Jul12/>

in pivotal supplier situations if the options recommended by the WAG are not leading to the desired outcomes.

10.2 WAG's recommendations are consistent with the Code amendment principles

- 10.2.1 The WAG is recommending that the Authority consider including a conduct provision within the Code. The other recommendations by the WAG – clarifying the net benefit tests in the Outage Protocol, providing more notice about expected pivotal supplier situations, and monitoring the effectiveness of proposed measures – are not expected to require Code amendments.
- 10.2.2 The WAG considers that its recommendation to introduce a conduct provision to the Code is consistent with the Authority's Code amendment principles, and while the other recommendations should not require Code amendments the WAG also considers that these recommendations are also consistent with the Authority's Code amendment principles.
- 10.2.3 In particular, the recommendations (if followed) should lead to outcomes that are *lawful* (Principle 1) and would *improve the efficiency of the electricity industry for the long-term benefit of consumers* (Principle 2). Net economic benefits have not been *quantified* by the WAG, but the WAG's analysis of the potential efficiency losses from pivotal supplier situations indicate that the net benefits could be positive, although there may be significant uncertainty as to the magnitude of these benefits.
- 10.2.4 Due to the uncertainty of the magnitude of the benefits, the WAG has also considered the consistency of its recommendations with the tie-breaker Code amendment principles. The WAG considers that the recommendations are consistent with the tie-breaker Code amendment principles. In particular, the WAG notes that the introduction of a trading conduct provision applying to gross pivotal suppliers is consistent with Principles 4, 7 and 8:

Principle 4 – Preference for Small-Scale 'Trial and Error' Options: When considering possible amendments to the Code, the Authority and its advisory groups will give preference to options that are initially small-scale, flexible, scalable and relatively easily reversible. In these circumstances the Authority will monitor the effects of the implemented option and reject, refine or expand that solution in accordance with the results from the monitoring.

Principle 7 – Preference for Opt-Out Features: The Authority and its advisory groups will give preference to Code amendment options that provide industry participants with greater freedom and lower costs to adapt to the Code amendment as they see fit, unless more restrictive options are justified on the grounds of non-rivalry and/or non-excludability conditions. In the case where both conditions hold perfectly it is generally efficient to adopt a ‘one size for all’ approach, in which case opt-out provisions would be inefficient.

Principle 8 – Preference for Non-Prescriptive Options: Wherever practicable, the Authority and its advisory groups will give preference to Code amendment options that specify the outcomes required of industry participants rather than prescribe what they must do and how they must do it.

10.2.5 The introduction of a trading conduct provision applying to gross pivotal suppliers is consistent with Code Amendment Principles 4, 7 and 8 as follows:

- a) Principle 4: it is small-scale as it only applies to gross pivotal suppliers, it can be relatively easily reversed if not successful, and can be scaled to more participants in the market if deemed necessary
- b) Principle 7: it will allow gross pivotal suppliers to amend their systems and procedures as they see fit to meet the trading conduct provision
- c) Principle 8: it is non-prescriptive as it specifies the behavioural outcomes required of gross pivotal suppliers rather than prescribing, in highly specific terms, how they must meet this obligation.

11 Next steps

11.1.1 If the Authority agrees with the WAG’s recommendations, then the WAG would suggest the next steps would be:

- a) Conduct provision - The Authority would develop the detailed form of a Code amendment, consult on the proposal, and make a final decision on how to proceed.
- b) Outage protocol net benefit test – The Authority would include an appropriate reference to competition effects in the forthcoming planned guidelines on the application of the net benefit test.

- c) Improved notice of expected of pivotal supplier situations – the Authority would consider alternative means of providing improved notice about expected pivotal supplier situations. This is likely to require consideration of the practical issues in making advance assessments (e.g. what information would be required), possible timeframes over which such assessments could be made, and options for making information available.
- d) Other options (temporary capping mechanisms and/or making the grid owner responsible for increased spot market costs) – these should be considered further if the options set out above are deemed to be ineffective.

11.1.2 The WAG would welcome an opportunity to have input into these processes, and undertakes to make itself available to provide advice to the Authority as required through the course of the Authority's future work on this matter.

John Hancock
Chair, Wholesale Advisory Group

Appendix A Description of compliance framework

A.1.1 The legal framework for enforcement of the Code (including any new conduct provision) is set out in the Electricity Industry Act (Act)¹³ and the Electricity Industry (Enforcement) Regulations 2010 (Regulations).¹⁴ This appendix describes the key provisions of the Act and Regulations. Information on the procedures that the Authority follows when processing an alleged breach can be found in the Authority's "Operating Procedures for processing alleged breaches of the Code".¹⁵

The Act

A.1.2 Of most relevance to the enforcement of conduct provisions are sections 50, 54, 56, 58, 59 and 60. These sections are provided for reference below:¹⁶

50 Complaints, appeals, and disputes

- (1) Complaints about breaches or possible breaches of the Code must be made to the Authority at first instance.
- (2) The Authority must deal with complaints in accordance with this Part and the regulations.
- (3) Complaints may subsequently be referred to the Rulings Panel, in accordance with this Part and the regulations, by either the Authority or an industry participant.
- (4) The Rulings Panel may determine appeals against decisions made under the Code, and resolve disputes between industry participants that relate to the Code, that are of a kind that are identified in the regulations or the Code.
- (5) If the regulations or the Code prescribe practices and procedures in relation to any kind of such appeal or dispute, the Rulings Panel must apply those practices and procedures when dealing with the appeal or dispute.

54 Remedial orders for breach of Code

- (1) On determining a complaint that an industry participant has breached the Code, the Rulings Panel may decide that no action should be taken, or do any 1 or more of the following:
 - (a) issue a private warning or reprimand to an industry participant:

¹³ Available here: <http://www.legislation.govt.nz/act/public/2010/0116/latest/whole.html#DLM2634233>

¹⁴ Available here: <http://www.legislation.govt.nz/regulation/public/2010/0362/latest/whole.html#DLM3285339>

¹⁵ See <http://www.ea.govt.nz/act-code-regs/compliance/how-breach-notifications-are-processed/>

¹⁶ For a more complete understanding of the Authority and Rulings Panel's responsibilities and powers in respect to Code enforcement, the reader should refer directly to the Act.

- (b) make an order that a public warning or reprimand be issued to an industry participant:
 - (c) impose additional or more stringent record-keeping or reporting requirements under or in connection with the Code:
 - (d) make a pecuniary penalty order requiring an industry participant to pay a pecuniary penalty to the Crown of an amount not exceeding \$200,000 (see section 56):
 - (e) make a compensation order requiring an industry participant to pay a sum by way of compensation to any other person:
 - (f) make a compliance order requiring an industry participant that is found not to be complying with the Code to take any action that is necessary to restore it to a position of compliance (see [section 57](#)):
 - (g) make orders regarding the reasonable costs of any investigations or proceedings:
 - (h) recommend to the Authority that a change should be made to the Code or the regulations:
 - (i) recommend to the Minister that a change should be made to the regulations or the Act.
- (2) The Rulings Panel must take into account its own previous decisions in respect of any similar situations previously dealt with by the Authority or any predecessor of the Authority.

56 Pecuniary penalty orders

- (1) The Rulings Panel may make a pecuniary penalty order under section 54(1)(d) only on an application by the Authority.
- (2) In determining whether to make a pecuniary penalty order and, if so, the amount of the order, the Rulings Panel must consider the seriousness of the breach of the Code, having regard to the following:
- (a) the severity of the breach:
 - (b) the impact of the breach on other industry participants:
 - (c) the extent to which the breach was inadvertent, negligent, deliberate, or otherwise:
 - (d) the circumstances in which the breach occurred:
 - (e) any previous breach of the Code by the industry participant:
 - (f) whether the industry participant disclosed the matter to the Authority:
 - (g) the length of time the breach remained unresolved:
 - (h) the participant's actions on learning of the breach:
 - (i) any benefit that the participant obtained, or expected to obtain, as a result of the breach:
 - (j) any other matters that the Rulings Panel thinks fit.

58 Suspension and termination for breach of certain Rulings Panel orders

The Rulings Panel may make a suspension order or a termination order against an industry participant if—

- (a) the industry participant has failed to comply with an order of the Rulings Panel, and the failure has seriously prejudiced the operational or financial security of the wholesale market or transmission system for electricity; or
- (b) the Authority has suspended trading in a generator or purchaser under [section 49](#) and applies to the Rulings Panel for a termination order.

59 Effect of suspension and termination orders

- (1) A suspension order suspends all or specified rights under the Code of the industry participant against whom it is made, subject to any conditions set out in the order, and for the period specified in the order.
- (2) A termination order terminates all or specified rights under the Code of the industry participant against whom it is made.
- (3) A termination order does not affect any liability for payment of money under the Code before the date of the relevant order.

60 Offences relating to suspension and termination orders

An industry participant commits an offence, and is liable on conviction to a fine not exceeding \$20,000, if it fails to comply with—

- (a) a suspension order or a termination order; or
- (b) any direction or arrangement made by the Rulings Panel under the regulations in relation to a suspension order or a termination order.

The Regulations

A.1.3 The Regulations set out how a participant or any other person can allege a breach of the Code and the process that must be followed when a breach has been alleged. The Regulations have four Parts, of which the first two Parts – Part 1: Complaints about breaches of the Code and Part 2: Rulings Panel consideration of complaints – are most relevant here. Parts 1 and 2 are summarised below.

Part 1: Complaints about breaches of Code

A.1.4 Regulation 4 of the Regulations provides an overview of the process under Part 1:

4 Overview

- (1) Reports of a breach of the Code may be received by the Authority as a result of mandatory reporting by an industry participant or as a result of voluntary reporting by any person.
- (2) If the Authority decides that a reported breach should be investigated, it appoints an investigator.
- (3) The investigator—
 - (a) notifies the relevant parties and publicises the matter; and
 - (b) attempts to reach a settlement.
- (4) If a settlement is reached, it is submitted to the Authority, which must either accept or reject it.
- (5) If a settlement is not reached, or if the Authority rejects a settlement, the Authority may lay a formal complaint with the Rulings Panel, in which case the investigator formulates the complaint and submits it to the Rulings Panel on the Authority's behalf.
- (6) If the Authority decides not to lay a formal complaint, an industry participant that was a party to the investigation and that has suffered loss as a result of it may independently lay a formal complaint with the Rulings Panel.
- (7) This regulation is by way of explanation only. If any other provision of the Act or these regulations conflicts with it, the other provision prevails.

A.1.5 More details on process under Part 1 are included in regulations 5 – 31.

A.1.6 In practice, when an alleged breach is reported to the Authority, Compliance staff prepare a fact finding report and then the Compliance Committee assesses the severity of the alleged breach against certain criteria¹⁷. If the Compliance Committee decides that the breach should be investigated further it will appoint an investigator to undertake an investigation.

A.1.7 The investigator will publicise the investigation and notify relevant parties and will then attempt to reach a settlement between the parties (the participant allegedly in breach and any other participants who have joined the investigation).

A.1.8 If a settlement is reached between the parties then the investigator will provide a report to the Compliance Committee that includes a

¹⁷ These criteria are in the Authority's "Breach Assessment Guidelines", which are part of the Authority's "Operating Procedures for processing alleged breaches of the Code".

recommendation on whether the Authority should approve the settlement. The Compliance Committee may then:

- a) recommend that the Board approve the settlement
- b) reject the settlement and either
 - i) recommend that the Board lay a formal complaint with the Rulings Panel
 - ii) direct that the investigation be discontinued or
 - iii) direct the investigator to further endeavour to effect a settlement.

A.1.9 If a settlement is not reached the investigator will provide a report to the Compliance Committee recommending whether a formal complaint should be laid. The Compliance Committee may then:

- a) decide to discontinue the investigation or
- b) recommend the Board lay a formal complaint.

Part 2: Rulings Panel consideration of complaints

A.1.10 Part 2 of the Regulations is in two subparts – Subpart 1 (regulations 32-49) deals with the Rulings Panel’s procedures and orders, while Subpart 2 (regulations 50-75) deals with limits on liability.

A.1.11 In brief, when the Rulings Panel receives a formal complaint the Rulings Panel:

- a) must notify parties of the complaint (where the parties are: the participant allegedly in breach, the original complainant, the Authority, and any other participant that was a party to the investigation by the Authority) (regulation 33)
- b) may hold a hearing into the complaint (and must do so if a party of the complaint requests it to do so), which will be public unless the Rulings Panel directs otherwise (regulations 34 and 36)
- c) will consider and decide the matter based on written submissions and evidence it has received if no hearing is held (regulation 38)
- d) may request further information and seek advice (regulations 40 and 41)
- e) must use reasonable endeavours to make its decision on a complaint within 40 working days of receiving all written and oral submissions on the complaint (regulation 43).

A.1.12 Once the Rulings Panel has made a decision:

- a) the Authority must publicise the terms of the decision and reasons for the Rulings Panel's decision within 10 working days of receiving the decision from the Rulings Panel (regulation 44)
- b) participants must comply with orders and directions made by the Rulings Panel, including sums due to be paid (regulations 45 and 46).

A.1.13 Regulations 47 and 48 outline the process the Rulings Panel must follow when making a termination or suspension order (or making any change to a termination or suspension order). Regulation 49 states that it is an offence for a participant to not comply with a direction or arrangement made by the Rulings Panel in respect of a termination order or suspension order and that a participant is liable on conviction of a fine not exceeding \$20,000.

A.1.14 Subpart 2 (regulations 50-75) sets out certain limits on liability for orders made by the Rulings Panel under section 54 of the Act (which sets out remedial orders for a breach of the Code). The limits on liability for orders made by the Rulings Panel are set out for specific participants including asset owners. However, the limits on liability set out for asset owners in this Subpart are only in respect of Part 8 of the Code (which deals with common quality) or any related provision of Part 17 of the Code. Therefore, these limits on liability are not relevant to the enforcement of any conduct provisions. However, under section 54 of the Act (see paragraph A.1.2 above), the maximum pecuniary penalty that a participant can be ordered to pay in respect of any breach is \$200,000.

Appendix B Analysis of costs and benefits of proposed measures

- B.1.1 The WAG has not compiled a quantitative assessment of the expected costs and benefits of the proposed measures because some aspects have not yet been defined (for example the precise form of any conduct provision to be added within the Code). Instead, the WAG has considered the likelihood of net benefits arising based on a broader qualitative assessment.
- B.1.2 As noted in section 4.2, the WAG analysed the potential for efficiency losses to arise in pivotal supplier scenarios under current arrangements. That analysis indicated a potential for efficiency losses ranging up to tens of millions in local pivotal supplier scenarios, and potentially significantly higher if losses were to arise in wider pivotal supplier situations. However, the analysis also noted that no specific efficiency losses had been identified from recent local or wider pivotal supplier situations at that point in time.
- B.1.3 Given the uncertainty about the size of efficiency losses under current arrangements, the likelihood of net benefits will be higher if:
- a) The implementation and operating costs of the measures are low relative to potential benefits; and
 - b) There is a low risk of unintended adverse consequences, since these could exceed the potential benefits.
- B.1.4 In relation to the implementation and ongoing costs, the WAG notes that:
- a) These are expected to be low for a conduct provision, as it is not expected to give rise to any major systems upgrade costs for market participants, the Authority or its service providers. Some costs would arise if an alleged breach occurs, but the proposed approach is designed to provide a reasonable degree of clarity around the conduct provision, and therefore minimise the likelihood of such allegations and costs for dealing with them.
 - b) The release of guidelines to clarify the treatment of competition effects in the net benefits test should have very limited implementation costs. Nor is it expected to give rise to material ongoing costs, as the guidelines would only have relevance if a participant requests that Transpower apply the net benefit test (which is expected to be very infrequent).
 - c) The proposal to provide improved notification around expected pivotal supplier situations is expected to use existing processes and systems as a foundation, and is therefore intended to have low costs to implement

and operate. However, the WAG notes that there is some uncertainty in this area, and the proposal will need further work (see below).

- B.1.5 In relation to the likelihood of adverse consequences arising from the proposed measures, the WAG notes that:
- a) This is expected to be low for a conduct provision for the reasons set out in section 6.6. In particular, the proposed form seeks to avoid imposing any undue constraints on the flexibility of suppliers and demand side parties (especially in relation to last-resort resources).
 - b) This is expected to be low in relation to clarifying the treatment of competition effects in the application of the net benefit test.
 - c) The improved notification of expected pivotal supplier situations is not expected to lead to adverse consequences since it would not compel parties to undertake any particular action – instead it should provide better information to improve decision making. However, the possibility of unintended consequences cannot be ruled out entirely. As discussed in paragraph 8.1.5, the proposal has arisen at a late stage in the project and WAG has not had an opportunity to fully assess it. The Authority would need to consider the risks and costs associated with this measure, but should be well placed to do so.
- B.1.6 In conclusion, for the reasons set out above, the recommended measures are expected to yield net benefits (or at worst have a neutral effect), provided they are implemented substantially in the form proposed.