



Improving the efficiency of prices in pivotal supplier situations

Decision paper

4 June 2014

The Authority has decided to introduce a trading conduct provision

- 1 The Electricity Authority (Authority) has decided to amend the Electricity Industry Participation Code 2010 (Code) to require generators and instantaneous reserve (reserve) providers to observe a high standard of trading conduct. The Code amendment is attached as Appendix A.
- 2 The trading conduct provision promotes the Authority's statutory objective because it provides long-term benefits to consumers. Consumers will benefit because it will reduce the incidence of inefficiently high prices in pivotal supplier situations (Appendix B explains this term). This, in turn, will help to:
 - (a) support competition in hedge and retail electricity markets
 - (b) support innovation
 - (c) prevent inefficient investment.
- 3 The Code amendment is consistent with the Authority's Code amendment principles in that:
 - (a) it is lawful, and consistent with the Authority's statutory objective and the empowering provisions of the Electricity Industry Participation Act 2010 (Act)
 - (b) it addresses a regulatory failure, in this case the lack of competition in pivotal supplier situations
 - (c) analysis indicates the Code amendment will provide a net economic benefit.
- 4 Appendix C explains how this Code amendment has developed.

Parties must maintain a high standard of trading conduct – one way to do this is to satisfy three criteria

- 5 Each generator and ancillary service agent must ensure that its conduct in relation to offers and reserve offers¹ is consistent with a high standard of trading conduct.
- 6 The Code amendment does not define the term "high standard of trading conduct". However, the Code amendment includes a 'safe harbour' provision. If a participant's behaviour meets all three criteria defining the safe harbour, it will automatically comply with the requirement.
- 7 The three criteria a participant must satisfy to be in the safe harbour are that:
 - (a) it offers all of its available capacity – energy and reserve – that is able to operate in a trading period
 - (b) it acts to submit, revise, or withdraw an energy or reserve offer in a timely manner after receiving the information that triggered this action
 - (c) when it is a pivotal supplier, *either*:
 - (i) prices and quantities in its offers do not result in a material increase in the price in the region where it is pivotal. This is assessed by comparing prices in the immediately preceding trading period or another comparable trading period in which it was not pivotal

¹ Ancillary service agents make reserve offers into the spot market. Parties that make reserve offers include generators that offer to increase their output and others, such as distributors and industrial consumers, which offer to decrease load.

- (ii) its offers when it is pivotal are generally consistent with its offers when it was not pivotal
 - (iii) it does not benefit financially from an increase in the price in the region where it is pivotal.
- 8 In this paper, (a), (b) and (c) above are referred to as the *first, second and third safe harbour criteria* respectively.
- 9 Enforcing the trading conduct provision is not a “mechanism available under the Code” as that phrase is used in the Code.² The Authority could enforce the trading conduct provision and also investigate whether there had been an undesirable trading situation (UTS).

The Authority will continue to monitor market behaviour

- 10 The Authority will continue to scrutinise the offer behaviour of pivotal suppliers, to examine the effectiveness of the new provisions. It will consider further action – including introducing more stringent measures – if the outcomes fall short of its expectations.

The Authority considered submissions on the proposed Code amendment

- 11 The Authority consulted on the proposed Code amendment. The following participants made submissions on the proposal: Contact Energy, Devon Funds Management, Genesis Energy, Major Electricity Users Group (MEUG), Meridian Energy, Mighty River Power, Transpower, and Trustpower.
- 12 Six out of the eight submissions were generally supportive of the proposal. Of those six:
- (a) two submitters (Meridian Energy and Trustpower) supported the introduction of a trading conduct provision as proposed, with few reservations
 - (b) two submitters (Contact Energy and Genesis Energy) supported the introduction of a trading conduct provision, but in a weaker (more limited) form than proposed
 - (c) two submitters (Devon Funds Management and Mighty River Power) supported the introduction of a trading conduct provision, but in a stronger (more comprehensive) form than proposed.
- 13 The submission from Transpower focussed on outage planning and did not comment on the Authority’s proposed Code amendment.
- 14 MEUG’s submission did not support amending the Code. It suggested the partial floating of the state-owned generators would make them more averse to bad publicity. Therefore, the Authority might only need to monitor and report on participant behaviour that did not appear to meet high trading standards. MEUG suggested the Authority make the proposed Code amendment only after this approach had proved ineffective.
- 15 The Authority is not convinced that the risk of public criticism is sufficient to deter pivotal suppliers from setting inefficiently high prices. Trustpower is a listed company and it was one of the parties involved in the pricing practices of concern to the Authority. Amending the Code also provides participants with appropriate guidance as to the trading standards expected in the market.

² The Authority can declare a situation to be an undesirable trading situation (UTS) if it threatens, or may threaten, confidence in, or the integrity of, the wholesale market. A situation can be a UTS only if “in the reasonable opinion of the Authority, [it] cannot satisfactorily be resolved by any other mechanism available under this Code”.

- 16 The Authority has considered the issues raised by submitters, which fell into 12 categories:
- (a) which parties should be subject to the trading conduct provision
 - (b) when the trading conduct provision should apply
 - (c) how capacity should be offered to satisfy the first safe harbour criterion
 - (d) what notice is required to satisfy the second safe harbour criterion
 - (e) how a pivotal supplier can satisfy the third safe harbour criterion
 - (f) the interaction between the trading conduct and grid emergency provisions
 - (g) the effect the trading conduct provision may have on market behaviour
 - (h) on whom does the burden of proof lie
 - (i) whether or not the safe harbour criteria limit the meaning of a high standard of trading conduct
 - (j) concerns about the cost benefit analysis
 - (k) how the trading conduct and UTS provisions coexist
 - (l) should the Authority issue a guideline for interpreting the provision.
- 17 The Authority has considered submissions under headings for each of these categories.

(a) The provision will apply to all parties that make offers or reserve offers

The proposal

- 18 The Authority's consultation paper proposed that the trading conduct provision would apply to all parties that make offers or reserve offers. The proposal was consistent with the Wholesale Advisory Group's (WAG) recommendation that the provision should apply to "all suppliers...in the energy and reserves markets".

Feedback received

- 19 Meridian Energy, Genesis Energy, Contact Energy, Mighty River Power, Trustpower and Devon Funds Management agreed with the proposal.
- 20 Mighty River Power suggested the provision should also apply to "any demand-side bids", including bids made under the Code provision enabling demand to be dispatched.
- 21 Mighty River Power and Meridian Energy also suggested the provision could be extended to cover the frequency keeping market in the future.

The Authority's response

- 22 The Authority has decided that the provision will apply to all parties that make offers or reserve offers, but not to other parties at this point. As the WAG and some submitters have pointed out, the co-optimisation of energy and reserve markets makes it impractical to apply the provision to energy alone.
- 23 The Authority has decided not to apply the provision to parties that make demand-side bids. Dispatchable demand has only recently been enabled and there is, as yet, no evidence that bidders have a degree of market power of sufficient concern to warrant extending the provision. However, the Authority will continue to monitor market behaviour and could potentially extend the provision to demand-side bidders at a later date.

- 24 The Authority has also decided not to apply the provision to parties that supply frequency keeping services. The Code does not provide for frequency-keeping offers and frequency-keeping requirements - they are procured separately, not co-optimally, with energy and reserve. However, the Authority is developing the market arrangements for frequency keeping and will consider requiring frequency keeping providers to observe high standards of trading conduct as part of that work.

(b) The provision will apply at all times

The proposal

- 25 The consultation paper proposed that the trading conduct provision apply at all times. This was different from the WAG's recommendation, which was for it to apply only in pivotal supplier situations.

Feedback received

- 26 Meridian Energy, Genesis Energy, Mighty River Power, Trustpower and Devon Funds Management supported the proposal in the consultation paper. Contact Energy did not support this proposal, preferring the wording recommended by the WAG.
- 27 Contact Energy argued that applying the criteria at all times "opens up the scope for unintended consequences". It suggested the unintended consequences could include "generation capacity of last resort being permanently removed from the market", "an unnecessary increase in compliance and monitoring costs", and "distorting price and security signals".
- 28 MEUG recommended that if the Authority was to introduce a conduct provision, it should "consider just the specific safe harbour provisions for local net pivotal events".

Authority response

- 29 After considering these submissions, the Authority has decided that the trading conduct provision will apply at all times, on the basis that:
- (a) insufficient evidence was provided to support the argument that widening the scope of the provision could lead to the adverse outcomes suggested
 - (b) if the Authority limited the provision to pivotal supplier situations, it would:
 - (i) fail to capture the full efficiency benefits of the proposal
 - (ii) require participants to know when they are going to be pivotal when often this is not the case.
- 30 The Authority is alert to any suggestion that plant might be retired because of this provision. It is aware the flat market environment is already driving participants to consider the efficiency and ongoing operation of their power stations. The Authority does not anticipate that generators will suggest this provision has caused them to withdraw a station because they are no longer able to exploit pivotal supplier situations. It would be inconsistent with the Authority's statutory objective to allow generators to exploit pivotal situations so they can continue to keep inefficient power stations in service.

(c) The Authority will retain the first safe harbour criterion as consulted on

The proposal

- 31 The consultation paper proposed that the first safe harbour criterion deter suppliers from physically withholding capacity. It required a participant to make offers and reserve offers for all capacity that it can operate. This proposal differed from the form recommended by the WAG, which required a participant to offer all capacity that was physically available “and committed” to generate. The reference to committing a unit does not appear in the Authority’s proposal.³

Feedback received

- 32 Mighty River Power, Trustpower and Devon Funds Management supported the proposal in the consultation paper. Genesis Energy and Contact Energy did not support the proposal, preferring the wording recommended by the WAG.
- 33 Meridian Energy suggested that a generator should not be required to offer wind generation to satisfy the first safe harbour criterion. It suggested that “wind generation is currently required to submit offers at \$0.00/MWh or \$0.01/MWh. As such, it is not possible to price wind capacity out of the market, as can be done for other generation types. Furthermore, it stated there were a range of existing provisions in the Code that dictate how wind generation is to be offered”.
- 34 Contact Energy and Meridian Energy suggested a generator should not be required to offer generation that will, if it runs, result in an increase in its transmission charges.⁴ Contact Energy suggested further that:
- (a) a generator should not be required to offer generation with a capacity factor of less than 10%
 - (b) a generator should only be required to offer its ‘normal’ generating capacity (perhaps defined in terms of “the previous 30 days’ average of the total offered quantities”) rather than its full capacity that it can operate
 - (c) “while plant may be technically able to operate there are a number of reasons why it may not do so, including physical constraints such as transmission [constraints], fuel constraints and financial considerations”.
- 35 Two submitters also requested further guidance on the first safe harbour criterion:
- (a) Genesis Energy asked the Authority to reiterate “that the intention is not to capture investment and maintenance decisions, but rather the deliberate withholding of capacity for pricing reasons” and that “failing to meet the safe harbour is not, by itself, proof of a failure to meet the overall high standard of conduct”
 - (b) Meridian Energy asked the Authority to provide guidance as to what it means by “capacity that is able to operate”.⁵

³ Unit commitment refers to a decision made in advance to operate a slow-start plant, such as burning thermal fuel to provide steam for use some hours later, or releasing water from a storage reservoir so it is available later at a downstream power station.

⁴ The costs associated with the High Voltage Direct Current (HVDC) transmission line that connects the North and South Islands are allocated to South Island generators, based on the quantity of power they inject into the transmission grid during periods where the total power injected is at a peak. Generators may prefer not to offer generation during these periods in order to limit their allocated share of the HVDC costs.

⁵ Meridian’s query actually referred to the term “committed and available to generate”, but presumably “able to operate” was meant as this is the term used in the Authority’s proposal.

Authority response

- 36 The Authority does not agree that omitting the term “committed” would require generators to keep their generation available to operate at all times to satisfy the first safe harbour criterion. The Authority omitted the term because it is ill-defined and it is not possible for external parties to verify when a generator made a decision to commit a plant. Under the proposed wording, suppliers must make and revise offers for plant in line with what they could be expected to physically provide in the trading period in question. This test is easier to define and verify and meets the Authority’s objective.
- 37 Despite the arguably narrower wording of the criterion, the Authority expects suppliers to be able to meet a high standard of trading conduct even if it does not meet the first safe harbour criterion. The Authority does not believe that generators’ existing offer-making processes to burn fuel, manage water, or schedule maintenance fall short of a high standard of trading conduct.
- 38 The wording of the first criterion encourages suppliers to price their generating capacity to the greatest extent possible. However, the Authority acknowledges that it is not always possible for offers to adequately reflect the owner’s willingness to supply.
- 39 As an example, the Authority has considered how a generator might offer a slow-start generating station (such as a combined cycle gas turbine) to meet a high standard of trading conduct. A marginal slow-start generating station might be offered below cost to continue to operate at short periods of low demand and prices (such as, overnight). The generator might do this to avoid incurring large shutdown and start-up costs. This strategy remains profitable while the high prices it receives (during the day) more than cover any losses from low prices (overnight).
- 40 Generators offering this kind of plant could follow a two-step process:
1. place offers for all trading periods far enough in the future for the plant to be physically capable of starting up and generating, assuming this was justified by prices
 2. withdraw offers or reserve offers when prices make the plant unprofitable or there is a reasonable chance that the generator will not generate above its minimum load, in a manner that satisfies the second safe harbour criterion.
- 41 Alternatively, a generator could skip step 1 if it was unlikely a station could be scheduled profitably. While neither alternative might satisfy the condition for the first safe harbour criterion, the Authority does not expect this behaviour would necessarily fall below a “high standard of trading conduct”.
- 42 The Authority suggests wind generation owners do the same if they expect the market price to return less than its variable costs. It has therefore decided not to amend the wording of the safe harbour criterion as Meridian Energy suggested. The Authority may in future allow generators to offer wind generation at a higher price. If it does, generators would be able to “price wind capacity out of the market” on the rare occasions when energy prices were below the variable cost of wind generation.
- 43 The Authority has decided not to provide guidance or amend the wording of the safe harbour criterion for the other examples supplied by Contact Energy and Meridian Energy. It is up to the parties themselves (and ultimately, the Rulings Panel) to determine whether or not it meets a high standard of trading conduct if they do not offer generation that:

- (a) may, if it operates, result in an increase in a generator's HVDC charge
 - (b) has a capacity factor of less than 10%
 - (c) is subject to transmission constraints, fuel constraints or financial considerations
 - (d) is in excess of the generator's 'normal' generating capacity, defined with reference to average offered capacity in recent weeks.
- 44 However, if generators in these circumstances want to be within the safe harbour, they should make offers at a price that incorporates all the generator's costs and constraints.
- 45 Genesis Energy and Meridian Energy also requested other guidance on the first safe harbour criterion, as set out in paragraph 35 above. In response, the Authority:
- (a) agrees that the intention of the first safe harbour criterion "is not to capture investment and maintenance decisions, but rather the deliberate [physical] withholding of capacity for pricing reasons"
 - (b) confirms that failing to satisfy the safe harbour criteria does not (by itself) mean the party has failed to meet a high standard of trading conduct.
 - (c) would not expect capacity to be "able to operate" if it were not possible to incorporate costs in its offers in situations in the following situations:
 - (i) slow-start thermal generation that would not be able to reach operating temperature in time to generate
 - (ii) thermal generation capacity from duct-firing or from uncertain balance of plant performance
 - (iii) hydro generation capacity that could not operate due to unavailability of water, that would require spill or would place the generator into the 'rough running' range
 - (iv) capacity that would exceed a unit's normal rated capacity, was unavailable due to maintenance outages, was reserved for frequency keeping, would place the generator in breach of resource consent conditions, or would not be available because of risks to equipment or personnel
 - (d) would expect a generator that can provide both energy and reserve from a generating unit to satisfy the criterion by offering the capacity of the generating unit for both energy and reserve unless the outcome was not feasible.
- 46 For the reasons set out above, the Authority has decided to retain the first safe harbour criterion in the form proposed in the consultation paper.

(d) The Authority has clarified the wording of the second safe harbour criterion

The proposal

- 47 The consultation paper proposed that the second safe harbour criterion ensure the market is well informed and should not be surprised by alterations to offers provided with late notice. It required a participant to give as much notice as it is able to give of its intentions to submit, revise or withdraw an offer. This proposal was essentially the same as the form recommended by the WAG.

Feedback received

- 48 Genesis Energy, Contact Energy, Mighty River Power and Devon Funds Management supported this proposal.
- 49 Contact Energy commented that its support was on “the proviso that Generators are able to change their offers if the market significantly changes, e.g. if a major plant trips”.
- 50 Trustpower suggested the Authority reword the criterion and allow a participant to give as much notice as it is “practicably” able to give.
- 51 Meridian Energy suggested a participant “should be able to revise offers in accordance with [its] normal update processes in complying with this provision. For example, if it is a generator’s standard approach to update its offers in the Weekly Dispatch Schedule once a day, then the generator should be compliant with this safe harbour [criterion] if it updates its offers at the next scheduled daily update after its offer intentions change”.

Authority response

- 52 The Authority agrees with Contact Energy that a generator should be able to change its offer if there was a significant market event, for example, if a plant tripped. The Authority expects that a generator that changed its intentions and its offers in such circumstances would satisfy the second safe harbour criterion. However, the generator might not satisfy the *third* safe harbour criterion if it increased its offer price to take advantage of a temporarily low level of competition and was pivotal.
- 53 The Authority has decided not to adopt Trustpower’s suggested rewording of “*practicably* able to give”, because it would not alter the effect of the provision. “Practicably able” is synonymous with “able” in legal terms.
- 54 The Authority agrees with Meridian Energy that a participant should be able to revise offers in accordance with its normal update processes. The Authority does not consider the Code amendment would require participants to continuously update their intentions in real time to comply with this criterion. However, a participant should change its offer in a timely manner after receiving information that prompts this change (following a regular process).
- 55 In line with this interpretation, the Authority has decided to reword the requirement in a form that makes it clearer. The new wording requires that, when a supplier decides to submit, revise, or cancel an offer, it does so as soon as it can.

(e) The Authority has retained the third safe harbour criterion in the form that was consulted on

The proposal

- 56 The consultation paper proposed that the third safe harbour criterion reduce the scope for suppliers to modify their offers to increase prices to profit from periods where they are pivotal. It required a participant to meet *at least one* of the following three conditions *if it is pivotal*:
 - (a) prices and quantities in its offers or reserve offers do not result in a material increase in the price of energy or reserve in the region where it is pivotal (assessed by comparing prices in the immediately preceding trading period or a comparable trading period when it was not pivotal)

- (b) its offers or reserve offers when it is pivotal are generally consistent with its offers or reserve offers in comparable trading periods when it was not pivotal
 - (c) it does not benefit financially from an increase in the price of energy or reserve in the region where it is pivotal.
- 57 The Authority developed this approach from the wording recommended by the WAG. That wording required a pivotal supplier to satisfy the third safe harbour criterion if its “price and quantity pairs were not materially different between adjacent trading periods, except where there is a bona fide physical factor that altered [its] capability to generate electricity between those periods”.
- 58 The Authority amended the wording to both:
- (a) filter out ‘false positives’ (situations where a party observing a high standard of conduct would nevertheless be unable to satisfy the criterion)
 - (b) avoid the situation where parties must demonstrate ‘bona fide physical reasons’ for changes to their offers, as this is expected to add an unnecessary administrative burden.

Feedback received

- 59 Meridian Energy, Contact Energy, Mighty River Power and Trustpower supported the proposed wording.
- 60 Devon Funds Management suggested that:
- (a) “consistency of bidding behaviour over an extended period of time by node” should be the only test (the “material increase in prices” and “benefit financially” tests should not apply)
 - (b) with regard to consistency of bidding behaviour, “the Authority should consider a longer period of time than just adjacent trading periods”.
- 61 Genesis Energy suggested the Authority should not include the third safe harbour criterion – a participant should be in the safe harbour if it satisfied only the first two criteria (see paragraphs 7(a) and 7(b)). Genesis Energy also:
- (a) suggested the third safe harbour criterion (if retained) should apply only in locally pivotal situations where the load affected by the pivotal supplier situation is less than 100 MW (or alternatively 500 MW)
 - (b) suggested the safe harbour criterion may “potentially punish generators for situations that they have little or no control over... [because] whether a generator is net pivotal may depend on a myriad of decisions made by third parties”
 - (c) had “serious concerns with the practical implications of a ‘generally consistent’ obligation on offers”, suggesting that “this does not enable generation offers to reflect [resource] availability over time”
 - (d) suggested the Authority should replace the *material* increase in price to a *significant* increase in price.
- 62 Both Genesis Energy and Meridian Energy suggested that the test whether a participant benefits financially from an increase in price should be holistic. In Genesis Energy’s words, it should be “assessed with reference to the financial benefit of the generator’s broader business”. In Meridian Energy’s words, it should be assessed giving “consideration to

wholesale generation sales, wholesale purchases, and financial contracts, including ASX contracts, bilateral contracts, FTRs, and any other contracts settled with reference to wholesale prices". Both parties also sought further guidance on the meaning of a material increase in price.

- 63 Meridian Energy and Mighty River Power sought further guidance on the meaning of "generally consistent offers".
- 64 Meridian Energy questioned whether the safe harbour criteria would capture instances "where generators submit high offers into forward schedules but revise down such offers just prior to gate closure". Meridian Energy suggested "such practices simply push the impact of net pivotal situations into the hedge market, but would likely [satisfy] safe harbour [criterion] 3 as there would not be a 'material increase' in the final price".

Authority response

- 65 The Authority does not consider it practical to require participants to offer consistently at all times as Devon Funds Management suggested. Such a requirement could inhibit efficient investment in, and operation of, generation. For example, such a requirement would stifle legitimate changes in offers from changes in fuel costs or the opportunity cost of water.
- 66 The Authority agrees with Devon Funds Management's suggestion that "the Authority should consider a longer period of time than just adjacent trading periods". However, no change is necessary as the wording already refers to "the immediately preceding trading period *or another comparable trading period* in which [the participant] was not pivotal".
- 67 The Authority agrees with Genesis Energy that "whether or not a generator is net pivotal may depend on a myriad of decisions made by third parties". A pivotal generator may not know in advance whether it would benefit financially from the price increase in a particular trading period. As a result, it may be impractical for a generator to rely on the third criterion of safe harbour provision. However, there are two *alternative* criteria available for the third criterion of the safe harbour. A supplier that is unsure whether or not it will benefit financially in a pivotal supplier situation could meet the safe harbour requirements either by:
- (a) submitting offers when it is pivotal that are consistent with those when it was not pivotal
 - (b) avoiding offering in such a way as to raise the price materially when it is pivotal.
- 68 The Authority does not agree with Genesis Energy that the Code amendment will place an obligation on offers to be "generally consistent". Making offers that are generally consistent is just *one* way that a generator can qualify for the safe harbour when it is pivotal.
- 69 Also, operating outside the safe harbour does not make a supplier in breach of the requirement to observe a high standard of trading conduct. If a pivotal supplier's offers or reserve offers are not generally consistent with those it made when it was not pivotal, *and* result in a material increase in final prices, *and* the supplier benefits financially, its conduct may be challenged.
- 70 Nor does the Authority agree with Genesis Energy that the Code amendment would "not enable generation offers to reflect [resource] availability over time". There is no logic or evidence that suggests a requirement to maintain a high standard of trading conduct will unreasonably constrain a supplier's discretion to alter its offers to reflect changes in fuel or any other costs over time.

- 71 Genesis Energy and Meridian Energy’s concerns about whether a participant benefits financially from an increase in price should be allayed by clarifying the test. The test would compare, for the relevant trading periods, the ‘whole of business’ financial outcomes between:
- (a) what actually happened – that is, the pivotal supplier offered in a way that resulted in an increase in prices; and
 - (b) a counterfactual in which the pivotal supplier did not offer in such a way as to increase prices, but all else was equal.
- 72 If the Authority alleged a breach of the Code, the test would apply to the full information about the participant’s financial situation including its hedge positions.
- 73 The test is not designed to be (as one submission seems to suggest) a comparison of ‘whole of business’ financial outcomes between:
- (a) what actually happened; and
 - (b) a scenario in which there was no transmission restriction and no pivotal supplier situation.
- 74 It is impractical to define a “material increase in price”, as Genesis Energy and Meridian Energy have suggested, because it will depend upon the context. Factors that could be relevant include the relative and absolute level of price increase, the number of trading periods subject to the increase, and the volume of affected purchases. Ultimately, the Rulings Panel would interpret how the provision applied to the circumstances.
- 75 The Authority is not persuaded that a “significant increase in price” is less likely to be interpreted in an “overly cautious” manner and has less “inherent uncertainty” than “material”. The term “significant” would also be subject to interpretation and the Authority does not consider that it is clearer than “material”.
- 76 For the above reasons, the Authority is not convinced by Genesis Energy’s argument that applying the third safe harbour criterion to widespread pivotal situations will be problematic and result in a net harm. The Authority expects much of the anticipated efficiency benefit would be lost if the safe harbour criterion was restricted to local pivotal supplier situations. The WAG found that the magnitude of potential efficiency losses is greater for widespread pivotal supplier situations than for locally pivotal supplier situations – potentially over \$100M in present value terms.⁶
- 77 The Authority does not agree with Meridian Energy that the Code amendment would not prevent “instances where generators submit high offers into forward schedules but revise down such offers just prior to gate closure”. There would be no need for parties to contract with the pivotal generator if they consider that the pivotal generator is likely to need to rely on their offers being generally consistent with offers when they are not pivotal.
- 78 In summary, having considered the submissions, the Authority has decided to retain the third safe harbour criterion in the form proposed in the consultation paper.

⁶ As set out in Appendix B of the WAG discussion paper, <http://www.ea.govt.nz/dmsdocument/15049>.

(f) There is no need to change the trading conduct provision to allow for behaviour in grid emergencies

Feedback received

- 79 Genesis Energy and Contact Energy commented on interactions between the trading conduct provision and existing grid emergency provisions.⁷
- 80 The grid emergency provisions require participants to:
- (a) act quickly and safely during a grid emergency, so that the actual and potential impacts of any grid emergency are minimised
 - (b) use reasonable endeavours to respond to any request issued by the system operator under Schedule 8.3, Technical Code B – which may (among other things) be a request for a generator to vary its offer.
- 81 Genesis Energy recommended that:
- (a) the Authority amend the meaning of ‘pivotal’ to clarify that clauses 13.5A and 13.5B do not apply to grid emergency situations as defined in the Code, or
 - (b) the Authority should amend sub-clause to 13.5B(1c) to add grid emergency situations as an additional safe harbour.
- 82 Contact Energy suggested the Code amendment “shouldn’t be made unless there is also a change to clause 13.98 to allow a generator to lower its price(s) during a grid emergency. This is so that generators do not unintentionally become pivotal during this more extreme market condition”.

Authority response

- 83 The submitters are suggesting that the requirement to observe a high standard of conduct should not apply during a grid emergency. The Authority considers that a blanket relaxation in grid emergencies would be undesirable. There is a high likelihood that one or more suppliers will be pivotal during these events, given that the margin between offered supply and demand is likely to be tight. Participants have discretion in how they respond to requests from the system operator. They are not simply subject to direction by the system operator as is the case in some electricity markets overseas.
- 84 If the Authority or a participant took proceedings to the Rulings Panel, it would have to establish that the participant had not met a high standard of trading conduct. Complying with a request from the system operator would be a relevant factor in considering whether the participant had breached the trading conduct provision.
- 85 The Authority does not agree that clause 13.98 needs to change as suggested by Contact Energy. The Authority agrees a generator would be unable to prevent itself from becoming pivotal in a grid emergency. However, this would not make a generator breach the trading

⁷ See Schedule 8.3, Technical Code B of the Code. Part 13 of the Code is also relevant to trading behaviour in grid emergencies, with:

- clause 13.97 preventing a generator from reducing its total offer quantity or an ancillary service agent from reducing its total reserve offer quantity in a grid emergency, unless there is a bona fide reason to do so
- clause 13.98 allowing generators to increase their offer quantity in a grid emergency despite gate closure provisions, and to submit a new price band for the increased offer quantity, but not to revise price bands for the quantity that was offered before the grid emergency (and similarly for ancillary service agents and reserve offers).

conduct provision because its offers would not have changed and therefore be likely to be considered as generally consistent.

- 86 In light of the submissions, and for the reasons set out above, the Authority has decided not to make the changes suggested by Genesis Energy and Contact Energy.

(g) Changes to the provision are not needed in response to concerns about its effects on offer behaviour and hedging decisions

Feedback received

- 87 Genesis Energy commented that the trading conduct provision may:
- (a) operate as an unreasonably low price cap and that this has the potential to chill investment
 - (b) result in static offer behaviour in the wholesale market and cause pivotal generators to consistently offer higher-priced blocks of generation in order to avoid breaching the provisions
 - (c) “reduce incentives for retailers to hedge in situations where they would normally look to market tools such as hedges or FTRs to manage their basis risk”.
- 88 Genesis Energy did not provide any evidence or logic that would support the argument that the trading conduct provision would operate as a price cap. Genesis Energy also suggested the other extreme, that “pivotal generators may consistently offer higher-priced tranches of generation in order to avoid breaching the provisions”.

Authority response

- 89 The Authority does not believe either outcome is likely. No logic or evidence was provided that suggests a requirement to maintain a high standard of trading conduct will unreasonably constrain a supplier’s discretion to alter its offers to reflect changes in fuel or any other costs over time. The Authority remains of the view that the proposed Code amendment will not directly or indirectly undermine suppliers’ ability to charge prices needed to justify efficient investment in capacity.
- 90 The Authority agrees with Genesis’s third point, that the Code amendment may reduce retailers’ incentives to use market tools such as hedges or FTRs to manage their basis risk. If the Code amendment works as expected, retail competition in transmission constrained areas will no longer be stifled by pivotal suppliers trying to maintain or increase profit levels when their output is reduced⁸ during transmission outages.

(h) The Authority must establish any breach of the trading conduct provision

Feedback received

- 91 Genesis Energy suggested the Authority confirm that the onus for demonstrating a breach of the trading conduct provision is on the Authority. It said it raised the issue because the consultation paper indicated a party falling outside the safe harbour “may still be able to demonstrate that it is observing high standards of trading conduct”.

⁸ A generator could be in the safe harbour if they have to increase their generation when they are pivotal and their offers are generally consistent with offers when it is not pivotal.

Authority response

- 92 The statement in the consultation paper means a participant outside the safe harbour has not necessarily fallen below a high standard of trading. It would not have the automatic defence of being in the safe harbour but it does not mean that the burden of proof would lie with a participant.
- 93 It is the Authority's role to establish that a participant had breached the Code in any complaint it took to the Rulings Panel. The Act also allows participants to refer complaints to the Rulings Panel. In that case it would be the responsibility of the participant who referred the complaint to establish that another participant had breached the Code.

(i) The safe harbour criteria do not limit the meaning of a high standard of trading conduct

Feedback received

- 94 Genesis Energy suggested the Code amendment should confirm that the safe harbour criteria are not intended to define or limit the meaning of a high standard of trading conduct.

Authority response

- 95 If a supplier operates outside the safe harbour it does not automatically mean that it is in breach of the high standard of trading conduct. The proposed Code amendment is consistent with this intent.

(j) The Authority is confident with the result of the cost benefit analysis

Feedback received

- 96 Contact Energy and Genesis Energy did not support the cost-benefit analysis (CBA) in the consultation paper. Contact Energy commented that "no rationale has been provided for how the costs and benefits have been estimated". Genesis Energy submitted that the potential for adverse consequences might be greater than the Authority had anticipated.

Authority response

- 97 The Authority based its assessment of the benefits (avoided efficiency losses) largely on analysis previously undertaken by the WAG. The consultation paper referenced the 36-page appendix to the WAG paper that set out how it estimated the efficiency effects. Table 4 of the consultation paper contained both the Authority's estimate of costs arising from the Code amendment and its rationale for the estimates.
- 98 The Authority has responded above to the arguments Genesis Energy has put forward to explain why the Code amendment might lead to a higher potential for adverse consequences and is not moved to change its assessment of expected costs.
- 99 For these reasons, the Authority remains of the view that the Code amendment is expected to provide a net economic benefits.

(k) Enforcing the trading conduct provision does not preclude a UTS

Feedback received

- 100 Genesis Energy suggested the Authority should not make the proposed change to the definition of undesirable trading situation (UTS). It argued this would make enforcement of the trading conduct provision a 'mechanism available under the Code'. It also suggested

the Authority might not be able to both activate the UTS provisions and enforce a breach of the trading conduct provision. This is because the Code provides that a situation cannot be a UTS unless “in the reasonable opinion of the Authority, [the situation] cannot satisfactorily be resolved by any other mechanism available under this Code.”⁹

101 Genesis Energy said that:

- (a) it sees “no reason why the pivotal conduct provisions should be the one exception to pursuing other Code mechanisms first”
- (b) as a matter of good regulatory practice it is undesirable for any entity to face multiple prosecutions for the same action
- (c) allowing the Authority to pursue both Code breach and UTS processes in parallel creates uncertainty.

102 Genesis Energy’s view seems to be that, if the Authority does not amend the definition of an UTS, it can treat enforcing a Code breach as a mechanism available under the Code.

Authority response

103 Pursuing an enforcement action against a participant for alleged breach is not a mechanism that is within the Code. That is because the enforcement provisions are not under the Code, they are in the Act and the Electricity Industry (Enforcement) Regulations.

104 The Authority proposes amending the UTS definition to avoid participants challenging the Authority’s ability to act to remedy a UTS promptly.

105 The Code currently sets a relatively high bar for the Authority to invoke the UTS provisions and this will not change under the proposed amendment. The Authority does not agree with Genesis Energy’s point referred to in paragraph 101(a). Any enforcement action falls outside the scope of mechanisms under the Code for the purposes of the UTS definition. The Authority’s legal advice on this issue is clear.

106 The Authority does not agree with Genesis Energy’s points (b) and (c) referred to in paragraph 101. A single event or circumstance may give rise to more than one potential action. The Authority would first determine whether a situation is a UTS and if so, pursue that process to a conclusion. The Authority considers that by ensuring that there is certainty about the availability of the UTS provisions it will promote, not harm, market confidence.

107 In light of these factors, the Authority intends to proceed with the proposed amendment in the current form.

(I) The Authority will consider whether to provide further guidance on the proposed Code amendment

Feedback received

108 Several submitters suggested the Authority or the Rulings Panel should provide guidance on specific matters and situations.

⁹ See Part 1 of the Code for the full list of requirements.

Authority response

- 109 The Authority has provided clarification on the issues already raised by submitters in this paper. While it has chosen not to produce a set of guidelines at this time, the Authority is open to providing further guidance in future, where this is useful.

Appendix A Drafting of Code amendment

New definition in clause 1.1 (Interpretation)

pivotal means—

- (a) in relation to a **generator**, that the total **demand** in a **trading period** at any 1 or more **nodes** would not have been met if the **generator** had not submitted **offers** for all or any of its **generating plant**; and
- (b) in relation to an **ancillary service agent**, that the total **demand** in a **trading period** for an **ancillary service** supplied by the **ancillary service agent** in an **island** would not have been met if the **ancillary service agent** had not submitted **reserve offers** for all or any of its capacity to provide **instantaneous reserve** in the **island**.

Amendment to clause 1.1 (Interpretation)

undesirable trading situation means any situation—

- (a) that threatens, or may threaten, confidence in, or the integrity of, the **wholesale market**; and
- (b) that, in the reasonable opinion of the **Authority**, cannot satisfactorily be resolved by any other mechanism available under this Code (but for the purposes of this paragraph a proceeding for a breach of clause 13.5A is not to be regarded as another mechanism for satisfactory resolution of a situation)

New clauses 13.5A and 13.5B inserted

13.5A Conduct in relation to generators' offers and ancillary service agents' reserve offers

- (1) Each **generator** and **ancillary service agent** must ensure that its conduct in relation to **offers** and **reserve offers** is consistent with a high standard of trading conduct.
- (2) Subclause (1) applies when—
 - (a) a **generator** submits, revises, or cancels an **offer**; or
 - (b) an **ancillary service agent** submits, revises, or cancels a **reserve offer**.

13.5B Safe harbours for clause 13.5A

- (1) A **generator** complies with clause 13.5A if—
 - (a) the **generator** makes **offers** in respect of all of its generating capacity that is able to operate in a **trading period**; and
 - (b) when the **generator** decides to submit, revise, or cancel an **offer**, it does so as soon as it can; and
 - (c) in the case of a **generator** that is **pivotal**,—
 - (i) prices and quantities in the **generator's offers** do not result in a material increase in the **final price** at which **electricity** is supplied in a **trading period** at any **node** at which the **generator** is **pivotal**, compared with the **final price** at the **node** in an immediately preceding **trading period** or other comparable trading period in which the **generator** is not **pivotal** at that **node**; or
 - (ii) the **generator's offers** are generally consistent with **offers** it has made when it has not been **pivotal**; or
 - (iii) the **generator** does not benefit financially from an increase in the **final price** at which **electricity** is supplied in a **trading period** at a **node** at which the **generator** is **pivotal**.
- (2) A **generator** does not breach clause 13.5A only because the **generator** does not comply with subclause (1).
- (3) An **ancillary service agent** complies with clause 13.5A if—

- (a) the **ancillary service agent** makes **reserve offers** in respect of all of its capacity to provide **instantaneous reserve** that is able to operate in a **trading period**; and
 - (b) when the **ancillary service agent** decides to submit, revise, or cancel a **reserve offer**, it does so as soon as it can; and
 - (c) in the case of an **ancillary service agent** that is **pivotal**—
 - (i) prices and quantities in the **ancillary service agent's reserve offers** do not result in a material increase in the **final reserve price** in a **trading period** in an **island** in which the **ancillary service agent** is **pivotal**, compared with the **final reserve price** in the **island** in an immediately preceding **trading period** or other comparable trading period in which the **ancillary service agent** is not **pivotal**; or
 - (ii) the **ancillary service agent's reserve offers** are generally consistent with **reserve offers** it has made when it has not been **pivotal**; or
 - (iii) the **ancillary service agent** does not benefit financially from an increase in the **final reserve price** in a **trading period** in an **island** in which the **ancillary service agent** is **pivotal**.
- (4) An **ancillary service agent** does not breach clause 13.5A only because the **ancillary service agent** does not comply with subclause (3).

Appendix B Definition of a pivotal supplier situation

- B.1 In a pivotal supplier situation, a supplier (the pivotal supplier) must offer at least some of its capacity so the system operator can meet demand in the affected region. A pivotal supplier can unilaterally set the wholesale electricity spot price to a high level in the affected region. The pivotal supplier may have a financial incentive to do so (in which case it is “net pivotal”).
- B.2 A supplier may be pivotal in an entire island or both islands (widespread pivotal supplier situation), or in a smaller region (local pivotal supplier situation). Local pivotal supplier situations generally occur when there are temporary restrictions on transmission capacity (such as a maintenance outage). These restrictions reduce the scope for generators or reserve providers to compete to supply the affected region.
- B.3 Pivotal supplier situations are relatively rare, but when they occur they result in less competition among suppliers. This can lead to inefficiently high spot prices, even if there is no physical shortage.
- B.4 In 2012, the Authority reviewed events in the wholesale electricity spot market during 2011 and 2012. The review showed that some generators had set prices to a high level in a local region (including Tekapo A and Cobb) when they were temporarily pivotal. This happened even though there was no physical shortage of supply at the time.¹⁰ The Authority was concerned that this behaviour, if unchecked, could lessen electricity retail competition, encourage inefficient investment in generation, and undermine confidence in electricity price outcomes. This in turn could lead to even greater efficiency losses.

¹⁰ The Authority's review has been published at <http://www.ea.govt.nz/monitoring/enquiries-reviews-and-investigations/2012/locally-net-pivotal-generation/>

The Authority and the Wholesale Advisory Group consulted on the problem and options to address it

- C.1 This section sets out the process the Authority and the Wholesale Advisory Group (WAG) followed to identify possible solutions to address pivotal supplier situations.
- C.2 In June 2012, the Authority asked the WAG to consider pivotal supplier situations. The WAG was to recommend to the Authority a way 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”.¹¹
- C.3 The WAG published a discussion paper “Pricing in Pivotal Supplier Situations” in May 2013.¹² The discussion paper could not identify specific efficiency losses from real examples of pivotal supplier situations. However, the paper noted that this was not altogether surprising as the events were relatively recent and the effects were likely to be slow to emerge.
- C.4 The WAG also considered the potential for further events and calculated the associated efficiency losses. It said that “this analysis indicates credible potential for material efficiency losses to arise from pivotal supplier situations in some scenarios – particularly in relation to dynamic efficiency effects”. The paper suggested that efficiency losses from local pivotal situations could potentially be in excess of \$20M in present value (PV) terms. It found that efficiency losses from widespread pivotal situations could potentially be in excess of \$100M PV.
- C.5 The majority of submitters to the WAG’s discussion paper broadly agreed with the WAG’s assessment of potential efficiency losses.¹³
- C.6 The WAG recommended¹⁴ the Authority:
- (a) consider introducing a trading conduct provision within the Code, with safe harbour criteria¹⁵
 - (b) clarify the net benefit test used in the Outage Protocol to ensure that competition effects can be taken into account when scheduling transmission outages¹⁶
 - (c) consider the publication of information to participants on expected upcoming pivotal supplier situations

¹¹ “Re: Wholesale Advisory Group work plan”, <http://www.ea.govt.nz/dmsdocument/13381>

¹² “Pricing in pivotal supplier situations”, <http://www.ea.govt.nz/dmsdocument/15049>

¹³ Submissions have been published at <http://www.ea.govt.nz/development/work-programme/wholesale/efficiency-of-prices-in-pivotal-supplier-situations/consultations/#c7603>

¹⁴ “Pricing in pivotal supplier situations recommendations paper”, <http://www.ea.govt.nz/dmsdocument/15953>

¹⁵ The Authority notes the WAG’s report indicated that while a minority of members were sceptical about the effectiveness of a conduct provision, the balance of members considered it could be effective and appropriate for current circumstances. By consensus, the group agreed to support a conduct provision on the basis that it had potential benefits and low risk of harm. The WAG’s exact wording was that the Authority should “consider the introduction of a trading conduct provision within the Code that applies to gross pivotal suppliers”. The WAG went on to set out three safe harbour criteria. As set out in the following sections, the Code amendment that the Authority consulted on (and which it will now enact) follows the thrust of the WAG proposals but differs in some details.

¹⁶ Transpower is required to include all reasonably foreseeable outages in its annual Outage Plan. Before the Authority publishes the Outage Plan, Transpower must consult 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”. If Transpower still wishes to proceed with the proposed outage, then under certain circumstances Transpower must undertake the “net benefit test”. If the net benefit test gives a negative result then Transpower cannot go ahead with the outage. The net benefit test allows, but does not explicitly require, Transpower to take into account any competition effects of the proposed outage. The WAG proposed that the Authority should amend the net benefit tests used in the Outage Protocol so that they explicitly require Transpower to include any costs and benefits arising from competition effects.

- (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. The WAG recommended looking at temporary capping mechanisms on pivotal supplier offers or affected prices, or making Transpower responsible for increased spot market costs arising from local pivotal supplier situations during grid outages, or both.

C.7 In response to the WAG's recommendations, the Authority Board:

- (a) approved developing a consultation paper that discussed a tightly defined trading conduct provision and 'safe harbour' criteria. The paper was also to discuss other reasonably practicable alternatives to address pricing in pivotal supplier situations
- (b) directed that the trading conduct provision with 'safe harbour' criteria take into account how the criteria would work in practice, and address implications for the UTS regime
- (c) noted, in relation to the WAG's other recommendations, that:
 - (i) the Board had previously agreed to amend the Code to explicitly provide for Transpower to take competition effects into account when scheduling transmission outages
 - (ii) Authority staff were working on a calculation methodology that it could use to indicate which generators are pivotal at times (in final pricing cases, rather than in advance of real time)
 - (iii) the Authority's market performance team would continue to maintain close scrutiny of the offer behaviour of pivotal suppliers
 - (iv) the Authority would not pursue the "other options" set out in the WAG's last recommendation at this point, but supported consideration of other options should a conduct provision prove to be unworkable or ineffective.

C.8 The Authority consulted during March-April 2014 on proposed amendments to the Code to give effect to a trading conduct provision and 'safe harbour' criteria.¹⁷

C.9 The consultation paper set out that the Authority considered that the proposal satisfied the Code amendment principles – that is:

- (a) the proposal was lawful and consistent with the Authority's statutory objective and the empowering provisions of the Act
- (b) the proposal addressed a market failure
- (c) the Authority expected that the proposal would provide a net economic benefit.

¹⁷ "Improving the efficiency of prices in pivotal supplier situations", <http://www.ea.govt.nz/development/work-programme/wholesale/efficiency-of-prices-in-pivotal-supplier-situations/consultations/#c10795>