# Shortened gate closure and revised bid and offer provisions

### Summary of submissions

4 November 2015

#### 1 Introduction

- 1.1 On 7 July 2015, the Authority published the *Shortened gate closure and revised bid and offer provisions* consultation paper (consultation paper).<sup>1</sup>
- 1.2 The consultation paper proposed to amend Parts 1 and 13 of the Electricity Industry Participation Code 2010 (Code) to:

Gate closure and grid emergencies

- (a) reduce the gate closure period to one hour for participants currently subject to a two hour gate closure period, including:
  - (i) grid-connected generators, other than intermittent generators
  - (ii) ancillary service agents (ASAs), other than embedded generators
  - (iii) purchasers submitting dispatch bids
  - (iv) the grid owner,

but excluding purchasers submitting non-dispatch bids (see below)

- (b) remove gate closure restrictions on revising non-dispatch bids
- (c) remove the grid emergency provisions that prevent a purchaser from revising its nominated non-dispatch bid upwards in a grid emergency to better reflect expected purchases

Intermittent generators

- (d) require persistence-based offers to take account of information about the generator's intentions for turbine availability
- (e) require a persistence-based offer to be submitted at least once every trading period

Revision provisions for offers, bids, reserve offers, and grid information

- (f) remove the obligation for the grid owner to provide a report to the Authority on any revised grid information submitted after gate closure
- (g) require offer quantities to not exceed "the quantity of electricity that the generator expects to be able to generate". For comparison, the existing provision requires that offers do not exceed "the generator's reasonable estimate of the quantity of electricity capable of being supplied"
- (h) revise the provisions that specify the maximum quantity an offer can contain, and when an offer must be revised, to make it clear that a generator must exercise reasonable care in preparing its offers (eg, if a generator made a mistake in submitting an offer which it later had to revise, the generator may be found in breach for not taking reasonable care)

Refer to <a href="https://www.ea.govt.nz/development/work-programme/wholesale/bid-and-offer-provisions-of-the-code/consultations/#c15415">https://www.ea.govt.nz/development/work-programme/wholesale/bid-and-offer-provisions-of-the-code/consultations/#c15415</a>.

- (i) reduce and simplify the minimum quantity change that requires an offer to be immediately revised
- (j) require that any change in the offer made after gate closure must change quantities only to the extent necessary to ensure that the offered MW can be delivered and not further
- (k) provide a process for participants to permanently cease providing bids, offers, or reserve offers at a particular location (eg, if a generation plant is being decommissioned)
- (I) remove references to the cancellation of offers, bids, and reserve offers
- (m) define "gate closure period" in Part 1 of the Code to simplify the drafting of various provisions in Part 13 of the Code.
- 1.3 This paper provides a summary of the views expressed by submitters in their submissions.

#### 2 Who made a submission?

- 2.1 The Authority received twelve submissions from the following parties:
  - (a) Carter Holt Harvey Pulp and Paper (Carter Holt)
  - (b) Contact Energy Limited (Contact)
  - (c) EnerNOC New Zealand Limited
  - (d) Fonterra Co-operative Group Limited (Fonterra)
  - (e) Genesis Energy Limited (Genesis)
  - (f) Meridian Energy Limited (Meridian)
  - (g) Meteorological Service of New Zealand Limited
  - (h) Mighty River Power Limited (Mighty River)
  - (i) New Zealand Steel Limited (NZ Steel)
  - (j) New Zealand Wind Energy Association (NZWEA)
  - (k) Nova Energy Limited (Nova)
  - (I) Transpower NZ Limited (Transpower)
- 2.2 This summary does not contain the full text of the submissions. However, the submissions have been published on the Authority's website.<sup>2</sup>

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http://www.ea.govt.nz/development/work-programme/wholesale/bid-and-offer-provisions-of-the-code/consultations/#c15415

#### 3 What did submitters say?

- 3.1 The key themes in submissions were:
  - (a) widespread support for shortening gate closure to one hour
  - (b) support for most other aspects of the proposal, with the following exceptions:
    - (i) while most submitters agree that the grid emergency provisions restricting non-dispatch bid revisions are ineffective, Transpower considers the existing provisions are effective and should be retained
    - (ii) submitters want to maintain some reporting and accountability on the grid owner in relation to changes made to grid availability after gate closure.
- 3.2 Section 4 below provides more detail on the submissions.

#### 4 Key comments in submissions

## Trading conduct provisions are effective in limiting "strategic re-offering" behaviour (question 1)

- 4.1 Most submitters did not comment on the consultation paper's description of current arrangements for gate closure and bid and offer revisions. That description was set out in section 2 of the consultation paper.
- 4.2 Contact and Meridian both emphasised the effectiveness of the trading conduct provisions (clauses 13.5A and 13.5B) in creating a disincentive to engage in "strategic re-offering" behaviour. Meridian suggested the risk of "strategic re-offering" may have been overstated in the consultation paper.

## Strong agreement that shorter gate closure will improve flexibility and efficiency (question 2)

- 4.3 Section 3.2 of the consultation paper identified that gate closure restrictions limit system flexibility to meet demand at least cost.
- 4.4 There was strong agreement from submitters that a shorter gate closure would increase the flexibility and efficiency of the electricity sector. The following submissions presented that view: Contact, Meridian, Mighty River, Nova, and NZWEA. No submissions opposed that view.
- 4.5 Transpower's submission noted that the proposal would "unlock efficiencies in energy trading through more dynamic offer and bid provisions". This comment appears to have been directed towards the gate closure proposal in particular.

## Submitters agree that gate closure is ineffective for non-dispatch bids and hinders accurate forecasting (part of question 3)

- 4.6 Section 3.3 of the consultation paper identified that gate closure is ineffective for non-dispatch bids and hinders accurate forecasting. Support for this problem definition was received from Carter Holt, Meridian, NZ Steel, and Transpower. No submissions were opposed to this problem definition.
- 4.7 Contact submission said "Participants that are required to submit non-dispatch demand bids are currently not obligated to ensure that their actual demand meets their submitted bids. This is not impacted upon by the current gate closure and grid emergency Code requirements."

While most submitters agree that the grid emergency provisions restricting non-dispatch bid revisions are ineffective, Transpower considers the existing provisions are effective and should be retained (part of question 3)

- 4.8 Section 3.4 of the consultation paper identified that grid emergency provisions that restrict non-dispatch bid revisions are not effective. Support for this problem definition was received from Contact, Meridian, Mighty River, and NZ Steel.
- 4.9 Mighty River's submission said "We agree that participants should not be able to revise bids in a grid emergency". The Authority found this response confusing because it uses the word "agree" but then appears to disagree with the proposal which would further enable bids to be revised in a grid emergency. The Authority sought to clarify this response with Mighty River. Mighty River's response was "We've re-read and we agree with the EA view in Q3 that the problem definition is sound and that the loosening the rules around non-dispatch bids with respect to gate closure and grid emergency is appropriate".
- 4.10 Transpower argued against the problem definition and in favour of retaining the existing prohibition in clause 13.99 against increasing bid quantities during a grid emergency. Where purchasers have a level of control over load, clause 13.99 effectively requires purchasers not to increase demand during the grid emergency. Removing clause 13.99 would increase the scope and complexity of demand information that the system operator has to take into account before issuing any directions to manage the emergency. It could increase the risk associated with system operator decisions and actions, and increase the duration of the emergency situation.

Submitters agree that the requirements on intermittent generators to submit persistence-based forecasts in the last two hours need to be more robust (question 4)

- 4.11 Section 3.5 of the consultation paper identified a problem that the requirements on intermittent generators to submit persistence-based forecasts in the last two hours need to be more robust. Support for this problem definition was received from Contact, Meridian, Mighty River, and Nova.
- 4.12 No submissions disagreed with the problem definition, although NZWEA argued that non-persistence-based forecasts should be able to be used in the last two hours if they are more accurate.
- 4.13 NZWEA also noted "An approach that reduces unnecessary compliance costs is to be welcomed". The submission did not say that the proposal is such an approach.

## Submitters agree that the drafting of re-offer provisions could be more robust (question 5)

- 4.14 Section 3.6 of the consultation paper identified a range of problems with the reoffer provisions in clauses 13.9, 13.17, 13.18, and 13.19. The consultation paper identified a number of ways in which those provisions could be made more robust.
- 4.15 Support for this problem definition was received from Contact, Meridian, Mighty River, and Nova. No submitters disagreed with the problem definition.

## Submitters generally wanted some accountability on the grid owner in relation to changes made to grid availability after gate closure (question 6)

- 4.16 Clause 13.34(3) provides that the grid owner must report to the Authority in writing about any "grid information" (that is, information about the availability of the grid) that is revised after gate closure. Section 3.7 of the consultation paper identified the requirement on the grid owner to prepare these reports imposes an administrative burden on the grid owner that is out of proportion with the corresponding risk being managed. A proposal was put forward later in the consultation paper (chapter 4.1) to remove this grid owner reporting obligation.
- 4.17 Several submissions noted the significant impact that grid information (grid availability) can have on market settlements and the importance to market participants of receiving information about changes as early as possible. This theme emerged from the submissions of Contact, Fonterra, Meridian, and Nova.
- 4.18 Mighty River said "We are comfortable with these changes as long as there are no market impacts".
- 4.19 These submissions generally recognised that the existing processes appeared onerous, but suggested that some sort of monitoring ought to continue to ensure grid information was being revised as soon as possible.
  - (a) Fonterra suggested the Authority could improve the efficiency of the reporting process (rather than removing the reporting obligation), perhaps by providing for some exceptions so not all changes have to be reported
  - (b) Meridian suggested a requirement on the grid owner to report where a participant requests this, or where the revision is a reduction (c.f. an increase) in grid capacity, or where the revision causes a constraint to bind
  - (c) Nova submitted that the Authority could do an analysis of existing reports to see how many are avoidable and how many have a significant market impact.
- 4.20 Transpower's submission made no comment on this issue, although the Authority is aware that Transpower supports the change.

## Provisions for cancelling offers and bids do not reflect operational practice (question 7)

- 4.21 Section 3.8 of the consultation paper identified a problem that the distinction made in the Code between a revision to a bid/offer and a cancellation of a bid/offer is unnecessarily complicated and does not reflect operational practice. In practice a bid/offer is cancelled by revising the quantity to zero. The Code does not make any provision for permanently cancelling an offer in situations such as the retirement of a generating plant.
- 4.22 Only two submissions commented on this issue. Meridian agreed with the problem definition. Mighty River submitted that the proposed amendment was appropriate. No submissions disagreed with the problem definition.

## Submitters highlighted some areas where there might be unintended consequences from the proposal (question 8)

- 4.23 Two submitters (Carter Holt and NZ Steel) noted that increased monitoring of bid and offer revisions made during the final two hours before the start of the trading period would mitigate the risks associated with shortening gate closure.
- 4.24 Meridian highlighted three areas where there could be unintended consequences from the proposal:
  - (a) removing any obligation on the grid owner to report on late revisions to grid information may reduce its efforts to submit accurate grid information prior to gate closure (Nova's submission also made a similar point)
  - (b) there is potential for conflict between the requirement that offer quantities not exceed the quantity "that the generator expects to be able to generate", and the "safe harbour" provision in clause 13.5B of the Code that applies where "the generator makes offers in respect of all of its generating capacity that is able to operate"
- 4.25 Meridian also sought guidance on how persistence-based offers should indicate that a wind farm is coming back from outage.

#### One-hour gate closure will reduce generation costs (question 9)

- 4.26 Question 9 in the consultation paper invited generators and dispatchable load purchasers to quantify the extent to which one-hour gate closure would allow the generator or dispatchable load purchaser to reduce its costs.
- 4.27 The submissions broadly supported the Authority's view that there are significant benefits in moving to one-hour gate closure.
- 4.28 Contact provided a qualitative description of the savings that could arise in a situation where there was an early return of the HVDC link from an outage.

Contact provided a numerical example in which the additional flexibility for a thermal plant to revise its offer would save \$7,000 in fuel costs for the thermal plant in an event where the load forecast improved substantially between two hours and one hour ahead

- 4.29 Meridian provided some indicative calculations showing benefits of:
  - (a) \$234,000 per year from allowing earlier return of plant from planned maintenance
  - (b) \$405,000 per year from being able to adjust offers more quickly following responding more quickly to unplanned grid availability changes
  - (c) \$444,000 per year from better response to weather events such as electrical storms that result in double circuits being treated as contingent risks.
- 4.30 Mighty River noted that one hour gate closure will allow Mighty River to make better decisions, and that each efficient decision displacing thermal generation would create significant productive efficiencies.

#### The benefits of the proposal will exceed its costs (question 10)

- 4.31 Submitters' comments on the cost-benefit analysis indicated a belief that the benefits would exceed the costs (Contact, Meridian, and Mighty River), especially in relation to shortened gate closure (Contact and Mighty River). No submissions disagreed with this assessment.
- 4.32 Nova noted that "any improvements in intermittent generator persistence-based forecasts will have very significant positive benefits for offering of controlled generation". However, it was not clear whether Nova believes the proposal will achieve such improvements.

## The proposed Code amendment will better meet the objectives than the status quo (question 11)

- 4.33 The following submitters agreed the proposed Code amendment will better meet the objectives than the status quo: Carter Holt, Contact, Genesis, Meridian, Mighty River, Nova, NZ Steel, and NZWEA.
- 4.34 No submissions disagreed with this proposition.

## Submitters prefer the proposed approach to the offer revision provisions rather than an alternative approach ("Option B") which would use a subjective structure for revising offers (question 12)

4.35 There was a strong preference in submissions (Contact, Fonterra, Genesis, Meridian, Mighty River, and Nova) for the proposed approach to the offer revision provisions rather than a subjective structure which could require that offers be made in "good faith" or with a "genuine intention" to honour the offer (refer to

- Option B in section 4.6 of the consultation paper). In particular, the submissions noted that a subjective approach could be difficult to enforce.
- 4.36 Fonterra's submission said "Fonterra supports the EA's recommendation to progress the Code amendment, rather than the other options provided."
- 4.37 No submissions expressed a contrary view.

## Submitters prefer the proposed approach to the offer revision provisions rather than an alternative approach ("Option C") based on provisions recently proposed by the AEMC (question 13)

- 4.38 Section 4.6 of the consultation paper notes as "Option C" an approach to offer revision provisions being proposed by the Australian Energy Market Commission (AEMC) for the Australian national electricity market. The AEMC's proposal is that participants should not make offers that are "false, misleading, or likely to mislead". Without limiting that provision, an offer would be misleading if, at the time of making it, the participant does not have a genuine intention to honour the offer.
- 4.39 Submissions suggest that the Authority's proposed approach to the offer revision provisions is to be preferred in New Zealand over an approach modelled on the AEMC proposal (Contact, Fonterra, Meridian, Mighty River, and Nova). Some of these submissions (Contact and Meridian) noted in particular that the AEMC proposal would be a significant departure from the current New Zealand approach. Nova argued the volatility in New Zealand of demand and wind generation, and New Zealand's smaller generation fleet, would make an AEMC-like approach ineffective in the New Zealand context.
- 4.40 No submissions were in favour of Option C.

## Reducing gate closure to one hour is a useful intermediate step to moving to half hour gate closure (question 14)

- 4.41 Several submissions (Carter Holt, Contact, Fonterra, Meridian, Mighty River, and NZ Steel) supported the reduction of gate closure to one hour but suggested that further thought be given subsequently to moving to half hour gate closure which would be likely to deliver further net benefits. Mighty River also suggested that complete removal of gate closure could deliver further net benefits.
- 4.42 Nova's submission was similar with the slight difference that they suggested further relaxing gate closure restrictions by allowing generators to increase (but not reduce) offer quantities within the final hour.
- 4.43 Genesis preferred the proposal to alternatives such as half hour gate closure.

  Genesis' submission noted "Total removal of gate closure or a move to half-hour gate closure would limit flexibility".

## The proposal is preferable to the status quo and other options (question 15)

- 4.44 Submitters considered that the proposal is preferable to the status quo and other options (Carter Holt, Contact, Genesis, Meridian, Mighty River, Nova, and NZ Steel).
- 4.45 Mighty River noted this preference was subject to their view that half hour gate closure or no gate closure would be preferable to one hour gate closure.
- 4.46 Nova noted this preference was subject to their view that the removal of the obligation on the grid owner to report late changes to grid availability may not be beneficial to the market.

## Proposed amendment complies with section 32(1) of the Electricty Industry Act 2010, and with the Code amendment principles, and should therefore proceed (question 16)

4.47 Submitters considered that the proposal complies with section 32(1) of the Electricity Industry Act 2010 (Act), and with the Code amendment principles, and should therefore proceed (Contact, Genesis, Meridian, Mighty River, Nova and NZ Steel). Nova's agreement noted their concern about the aspect of the proposal related to the grid owner's reporting of late changes to grid availability.

## Some comments were made on the drafting of the proposed Code amendment (question 17)

- 4.48 Contact suggested a change to the drafting of clause 13.98 to allow participants to reduce the price of an offer band during a grid emergency.
- 4.49 Genesis suggested that clause 13.19(2) should be deleted. Genesis stated "It may not be efficient for a generator to submit a revised offer as soon as possible. Depending on the circumstances; they may prefer to re-offer outside gate closure."

#### 4.50 Meridian suggested:

- (a) using the term "generating plant" rather than "generating units" in clause 13.18A(3)(b)
- (b) adding the word "settings" to clause 13.18A(3)(b) before the words "availability and capability"
- (c) modifying clause 13.18(2)(b) by adding "unless otherwise agreed with the Electricity Authority" to take into account block offers
- (d) reconsidering the definition of "gate closure period" to take into account the possibility that a generator may not previously have submitted an offer for a particular trading period
- (e) clarifying the intended effect of clause 13.9A if a generator learns during the gate closure period that it will be able to generate an amount 4MW less than its offer

(f)	clarifying the effect of the word "immediately" in clause 13.18(1).

## **Appendix A: List of consultation questions**

#	Question
Q1	Do you have any comments on the of the existing provisions in Chapter 2 of this paper?
Q2	Do you have any comments on the problem definition relating to gate closure?
Q3	Do you have any comments on the problem definition relating to the way gate closure and grid emergency provisions apply to bids?
Q4	Do you have any comments on the problem definition relating to requirements on intermittent generators to submit persistence-based forecasts in the last two hours?
Q5	Do you have any comments on the problem definition relating to the drafting issues with re-offer provisions?
Q6	Do you have any comments on the problem definition relating to grid owner reporting of late updates?
Q7	Do you have any comments on the problem definition relating to the cancellation of bids?
Q8	Do you consider that the proposed amendments would carry a risk of unintended consequences? If so, what are they?
Q9	If you are a generator or a dispatchable load purchaser, can you quantify the extent to which one-hour gate closure would allow you to reduce your cost of production? Please provide supporting evidence.
Q10	Do you have any other comments on the costs and benefits of the proposal?
Q11	Do you agree that the proposal will better meet the objectives than the status quo? If not, why not?
Q12	Do you prefer the proposal or Option B which would use a subjective structure for revising offers? Please explain.
Q13	Do you prefer the proposal or Option C which would use the structure for revising offers proposed by AEMC? Please explain.
Q14	Do you prefer the proposal or Option D which would reduce gate closure restrictions in an alternative way such as providing more exceptions, moving to half-hour gate closure, or removing gate closure completely? Please explain.
Q15	Do you consider that the proposal in Section 4 is preferable to the status quo and other options? If not, please explain your preferred option(s) in terms consistent with the Authority's statutory objective.
Q16	Do you consider that the proposal in Section 4 complies with section 32(1) of the Act, and with the Code amendment principles, and should therefore proceed?

#	Question
Q17	Do you have any comments on the drafting of the proposal in Section 4, which is included in Appendix A?