

**EVALUATIONS
PANEL ABD**

FINDINGS & CONCLUSIONS

Panel members:

- Raynor Asher – Queens Counsel, retired Judge in the Court of Appeal
- Alan Bollard – Chair of Infrastructure Commission, former Executive Director of APEC and Governor of Reserve Bank
- Pat Duignan – Consultant, former member of Commerce Commission, Expert Lay Member of the High Court under the Commerce Act 1986

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Disclaimer

The purpose of the Evaluation Panels' consideration of the case studies was to analyse how the existing Code provisions and the proposed Code amendment might be interpreted in a range of different hypothetical scenarios. The analysis by the Evaluation Panels is intended to assist the MDAG in developing recommendations to the Authority's Board in relation to the proposed amendment as part of the wider review of the high standard of trading conduct provisions in the Code.

For the avoidance of doubt, please note:

- The Evaluation Panels' consideration of the case studies and their associated commentary do not purport to represent binding precedent on the interpretation of the current or proposed Code provisions.
- The Evaluation Panels' consideration of the case studies and their associated commentary do not constitute a reconsideration or re-opening of any previous decision by the Rulings Panel or the Authority.
- The Evaluation Panels' consideration of the case studies and their associated commentary do not represent the views of MDAG or the Authority.

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**Observations that arose from applying
the existing and proposed Code**

Observations from application of existing Code (1 of 2)

- The Panel found parts of the existing Code could be interpreted in a variety of ways – making it difficult to apply the Code in a consistent and robust manner.

Interpretation of 'high standard of trading conduct' (clause 13.5A(1)):

- A 'reasonable standard of trading conduct' may be easier to interpret than a 'high standard of trading conduct'. This is because the law has a test of what a reasonable person would do, which judges understand. However, 'reasonable' is arguably a lower standard than 'high'.
- A 'high' standard of trading conduct may mean that a generator must always strive to avoid making excessive profits through its trading conduct. A reasonable standard of trading conduct may allow a modest increase in profit for a reasonable amount of time.
- A judge could get an expert opinion on what is considered a 'high standard of trading conduct' in the electricity market – although opinions are likely to differ among experts.
- A Court could possibly consider a high standard of trading conduct to be judged relative to the behaviour which is expected when competition applies, i.e. you are disobeying your natural monopolistic inclination to profiteer. The purpose statement in the Act would tend to support this interpretation – although it is not determinative. That said, a judge is unlikely to find that a generator has exhibited a high standard of trading conduct if it has made profits which are excessive and detrimental to consumers.

Application of safe harbour (clause 13.5B):

- Does 'offers in respect of all its generating capacity that is able to operate' (clause 13.5B(1)(a)) mean that the generator can only offer plant that will be available (that is, what happens if a generator offers capacity that they know won't be available)?
- It is unclear what 'generally consistent' means in 'offers are generally consistent with offers it has made when it has not been pivotal' (clause 13.5B(1)(c)(ii)). In addition, if a generator is always pivotal then it is impossible to assess whether its offer is generally consistent with offers it has made when it has not been pivotal—this seems to be a deficiency in the existing Code.
- The measurement of financial benefit in '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' (clause 13.5B(1)(c)(iii)) could be in any trading period in which the generator is pivotal (ie, the benefit could be gained in a trading period(s) other than the trading period(s) for which the offer(s) were made). This clause of the Code is not clear. There is uncertainty whether, when a generator changes their offer price and thereby prevents the market price from falling when it otherwise would have fallen (eg, due to a constraint on export occurring) but the final price does not increase from the previous period, that meets the criteria that they "benefit financially from an increase in the final price at which electricity is supplied".
- If a generator or ancillary service provider doesn't meet (a) and (b) of the safe harbour, then it's likely to be difficult to conclude that the generator's behaviour meets a high standard of trading conduct.
- A generator who isn't pivotal is in safe harbour if it meets clauses 13.5B 1(a) and (b), but there could be situations when this isn't appropriate —this seems to be a deficiency in the existing Code.
- The safe harbour provisions promote gaming.

Overall comment

- The existing Code is unsatisfactory because the core test has no recognised meaning in law, and the safe harbours may protect poor conduct from sanction.

Application of clause 13.5A(1) & (2):

- Initial view is that these clauses would deliver the policy intent (ie, outcomes that are consistent with the Authority's statutory objectives).
- These clauses require a counterfactual analysis – an approach commonly used in competition law. The type and complexity of the analysis required to decide whether the Code has been breached depends crucially on whether relevant comparable offer data from a period in which no generator has significant market power is available. If such data is available, the counterfactual should be straightforward to apply. If not, courts will see a flurry of mathematical simulation and modelling exercises asserted to demonstrate what offers would have been made if no generator had significant market power, technically sophisticated, but probably contested.
- Aside from case #4, the Panel considered there was insufficient information available in the materials provided to undertake robust counterfactual analysis. It was therefore unable to apply 13.5A(1) & (2) to case studies 1, 2, 3, and 5. The Panel noted that this may give an exaggerated impression of the difficulty in applying 13.5A(1) and (2) in practice, as more (and better) information would likely be available to a Court in a real case.

- The Panel noted these clauses apply to all generators irrespective of whether they individually possess significant market power. This is because it requires offers
- that must be consistent with offers made when *no* generator has significant market power - i.e. a smaller generator cannot “ride on the coat strings” of another generator which has significant market power. The Panel agreed this provision is required to achieve the intended outcome and did not see this provision as a problem but noted that when it is relevant the analysis will be more complex and considered it important for participants to understand the provision.

Application of clause 13.5A(3):

- While stated as a ‘purpose clause’, the Panel considered that decision-makers might use this clause in the following (non-mutually exclusive) ways:
 1. To aid in interpretation of the rule in 13.5A (1) and (2), because understanding the purpose of a rule can be useful for decision-makers when applying it;
 2. To provide an alternative or supplementary test when it is not possible to directly apply 13.5A (1) and (2) – this is especially relevant in relation to clause 13.5A (3)(a) which refers to prices and economic costs and may provide an accessible alternative ‘test’ if it is difficult to determine what constitutes a sufficiently robust counterfactual analysis on which to base a decision as to whether the Code has been breached;
 3. To consider of the scale of any detriment arising from an apparent breach of 13.5A(1) and (2) – especially the provision in 13.5A (3)(b) regarding efficiency effects.
- For its own work, the Panel used 13.5A(3)(a) fairly extensively in case studies 1, 2, 3 and 5. This was because the Panel considered the case studies provided information that enabled a comparison of offers and economic costs (and as noted above it thought there was insufficient information to undertake reliable counterfactual analysis).
- Having said that, it was not clear how to interpret “for too much or for too long” when considering differences between offers and economic costs. From an economic viewpoint the Panel would interpret this term to mean something like “significant enough to cause detriment in a discernable way”.
- The Panel did not find the efficiency references in 13.5A(3)(b) to be directly useful in its decision-making about the case studies as the efficiency references mainly focused on longer term effects, though they could still be useful to guide the general approach.
- More generally, the Panel noted that many (perhaps all) of the elements in 13.5A(3) could be ‘read into’ 13.5A(1) and (2).

**EVALUATIONS
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Case studies – summary of findings

Case studies – summary of findings

		Existing Code	Proposed Code
Case study 1	Generator A	Not in breach Causative event was outside control of generator.	Not in breach Offers likely below SRMC.
Case study 2	Generator A	In breach The conduct risked prices settling at an excessive level.	In breach Offer differed significantly from SRMC.
	Generator B	Not in breach Offer change did not cause market price to diverge from a 'normal' level.	Not in breach Offer price was close to SRMC.
Case study 3	Generator A	In breach Generator took advantage of thermal price increase to raise its offer.	Likely a breach Generator raised its offer above SRMC for significant period.
Case study 4	Generator A	In breach No valid reason identified to justify behaviour.	Likely a breach Offer price well above SRMC – although for a short period.
	Generator B	Indeterminate Depends on whether can justify not offering full capacity.	Uncertain but likely a breach Offer price above SRMC – although for short period.
Case study 5	Generator A	Indeterminate Depends on whether Generator A has reasonable justification.	Indeterminate Depends on whether Generator A has reasonable justification.

Case study #1 – existing Code

Assessment of case study #1 against the existing Code:

Generator must satisfy both 1(a) and 1(b) to be in safe harbour		If generator pivotal, generator must meet at least one of 1(c) (i) to (iii) to be in safe harbour			Must meet 1(a), 1(b), and if pivotal, at least one of 1(c) (i) to (iii)	Based on interpretation of “high standard of trading conduct” (HSOTC)	
1(a) Was generator offering all available capacity?	1(b) Was generator submitting and revising offers in timely way?	1(c)(i) Did generator’s offer result in <u>no</u> material increase in price?	1(c)(ii) Was generator’s offer consistent with offers when it was previously not pivotal?	1(c)(iii) Did generator obtain no financial benefit in a trading period at a node at which it was pivotal?	Was generator inside safe harbour?	If generator was outside safe harbour, did it breach the Code?	Assumptions/ caveats
Yes*	Yes	No. Price increased materially compared to period before.	Offer price appears to be consistent with earlier periods based on data available and to extent capacity was available but Generator A was pivotal in those periods. No data available for periods when not pivotal.	No. Did obtain financial benefit due to reduction in amount on offer compared to counterfactual.	No (because do not have data on periods when generator not pivotal). Also failed on 1(c)(i) and (iii)	No. Based on offers in the chart the continuation of offers at the previous price but for a reduced amount due to circumstances beyond its control is consistent with a HSOTC.*	*Assumes that damage reduced capacity by 200MW. If this assumption does not hold, Generator A’s conduct may not be consistent with a HSOTC. Also assumes that intraday variations in hydro generation do not indicate withholding of capacity.

Other notes/comments:

- If Generator A had other capacity elsewhere (eg, at another hydro station) then Generator A would need to ensure they are offering all that available capacity as well.
- If Generator A was not offering all their capacity, then they may not have been showing a HSOTC—in this case, Generator A would need to justify their behaviour and provide a good reason why they are not offering all their available capacity. This raises the following questions: *Is it reasonable for a generator to not operate at full capacity because it is holding water for a higher price period? Is holding water for a higher price period consistent with a HSOTC?*
- Generator A is always pivotal in the trading periods we have data for, so can’t determine whether their offer was consistent with offers when it was not previously pivotal. 11
- The panel did not assess whether Generator B was in breach.

Case study #1 – proposed Code

Assessment of case study #1 against the proposed Code:

	<i>Substantive test 13.5A(1)</i>	<i>Possible guidance for interpretation of 13.5A(1) is set out in 13.5A(3)(a) and (c)</i>			<i>Based on interpretation of 13.5A as a whole</i>	
	Was the generator’s offer consistent with a hypothetical market where no supplier could exercise significant market power for that trading period?	Were the offer prices above the generator’s short-run marginal cost (SRMC)?	Were the offer prices above long-run marginal cost (LRMC)?	If offer prices were above SRMC or LRMC, was it by too much or for too long?	Was there a breach of the proposed Code provision?	Assumptions/ caveats
Generator A	Likely yes. Difficult to determine without considering Generator A’s relative to SRMC and LRMC.	Unlikely. Likely that SRMC > \$1/MWh.	No. LRMC > \$1/MWh.	No.	No. It’s likely that they offered at a price below SRMC and the reduction in offer quantity was the result of a technical constraint.	* Assumes all of the 200MW withdrawn by Generator A is due to the storm damage and that it has no other unoffered capacity. * Assumes that SRMC and LRMC are above \$1/MWh.

Other notes/comments:

- The reason for the capacity withdrawal is critical to determine whether the party is in breach. A *force majeure* event that restricted the generator from providing all its capacity would be justifiable.
- If Generator A had spare capacity elsewhere and didn’t offer that spare capacity following the storm damage, it’s not clear whether they are doing what they would have done if they didn’t have market power. This makes it difficult to assess this case study against the proposed Code if they did have spare capacity.
- The panel noted that when assessing whether a generator’s offer is consistent with a market where no supplier could exercise significant market power that we must assume a generator is commercially driven regardless of whether they have market power.
- The panel felt that it was more difficult assessing case study #1 against the proposed Code than the existing Code.
- The panel did not assess whether Generator B was in breach

Case study #2 – existing Code

Assessment of case study #2 against the existing Code:

<i>Generator must satisfy both 1(a) and 1(b) to be in safe harbour</i>		<i>If generator pivotal, generator must meet at least one of 1(c) (i) to (iii) to be in safe harbour</i>			<i>Must meet 1(a), 1(b), and if pivotal, at least one of 1(c) (i) to (iii)</i>	<i>Based on interpretation of “high standard of trading conduct” (HSOTC)</i>		
1(a) Was generator offering all available capacity?	1(b) Was generator submitting and revising offers in timely way?	1(c)(i) Did generator’s offer result in <u>no</u> material increase in price?	1(c)(ii) Was generator’s offer consistent with offers when it was previously not pivotal?	1(c)(iii) Did generator obtain no financial benefit in a trading period at a node at which it was pivotal?	Was generator inside safe harbour?	If generator was outside safe harbour, did it breach the Code?	Assumptions/ caveats	
Generator A	Yes	Yes	No. Price increased materially.	No. Offer price was increased.	No. Obtained a financial benefit compared to what would have happened if they didn’t raise their offer price.	No	Yes. The conduct risked prices settling at an excessively high level.	* Assuming the increase in offer price reflects Generator A’s SRMC.
Generator B	Yes	Yes	No. Price increased materially.	No. Offer price was increased.	No. Obtained a financial benefit compared to what would have happened if they didn’t raise their offer price.	No	No. The offer change resulted in the market price being at its normal level and is consistent with a HSOTC.*	* Assuming the increase in offer price reflects Generator B’s SRMC.

Other notes/comments:

- Not entirely clear in (1)(c)(iii) what the counterfactual is when determining the financial benefit—should the financial benefit be compared to what would happen if the generator didn’t raise its offer prices? Or compared to if there was no transmission constraint? Believe the proper test is the former, but the Code isn’t particularly clear.
- In interpreting whether Generators A and B are in breach, it is reasonable for these generators to revise prices upwards **if** they acted in a way that safeguards their income and covers their SRMC.
- It is not a reasonable excuse for a generator to claim (as Generators A and B did) that it was unaware it was in a pivotal position and did not factor this circumstance into its decisions.

Case study #2 – proposed Code

Assessment of case study #2 against the proposed Code:

	<i>Substantive test 13.5A(1)</i>	<i>Possible guidance for interpretation of 13.5A(1) is set out in 13.5A(3)(a) and (c)</i>			<i>Based on interpretation of 13.5A as a whole</i>	
	Was the generator’s offer consistent with a hypothetical market where no supplier could exercise significant market power for that trading period?	Were the offer prices above the generator’s short-run marginal cost (SRMC)?	Were the offer prices above long-run marginal cost (LRMC)?	If offer prices were above SRMC or LRMC, was it by too much or for too long?	Was there a breach of the proposed Code provision?	Assumptions/ caveats
Generator A	Uncertain – insufficient information to form counterfactual	Yes. SRMC is \$50/MWh (and geothermal does not face fuel shortages (unlike hydro) so no opportunity cost).	Probably given \$500/MWh is a relatively high price.	Yes	Yes. Offer price is significantly above SRMC (and probably LRMC) for 11 trading periods.	
Generator B	Likely yes, because SRMC closer to \$100/MWh.	Probably close to SRMC.*	Probably not above LRMC.	No	No. Offer price is close to SRMC.	* Assuming \$100/MWh reflects opportunity cost –ie, value of stored water.

Other notes/comments:

- The panel thought that Generator A’s offer price was above SRMC and LRMC by too much and for too long. But this was an intuitive call. The panel thought that to “an unreasonable extent” would be easier to assess.
- The panel considered whether the proposed Code was more binding than the existing Code for case study #2.
- The panel questioned how to incorporate clause 13.5A(3)(b) into the assessment.

Case study #3 – existing Code

Assessment of case study #3 against the existing Code:

Generator must satisfy both 1(a) and 1(b) to be in safe harbour		If generator pivotal, generator must meet at least one of 1(c) (i) to (iii) to be in safe harbour			Must meet 1(a), 1(b), and if pivotal, at least one of 1(c) (i) to (iii)	Based on interpretation of “high standard of trading conduct” (HSOTC)		
1(a) Was generator offering all available capacity?	1(b) Was generator submitting and revising offers in timely way?	1(c)(i) Did generator’s offer result in <u>no</u> material increase in price?	1(c)(ii) Was generator’s offer consistent with offers when it was previously not pivotal?	1(c)(iii) Did generator obtain no financial benefit in a trading period at a node at which it was pivotal?	Was generator inside safe harbour?	If generator was outside safe harbour, did it breach the Code?	Assumptions/ caveats	
Generator A	Yes	Yes	No. Price increased materially.	No. Not consistent with data shown for previous periods.	No. Did obtain financial benefit compared to period before change in offer.	No	Yes. Generator A took advantage of thermal price increase which is not consistent with a HSOTC.	* No likelihood of factors leading to an even higher value of water going forward.

Other notes/comments:

- Can’t accept Generator A’s argument that it’s not in breach because its offer didn’t directly set the price. This would allow generators to jack up prices really high and rely on another generator to set the price.
- Generator A’s argument is that water is now more valuable in the future, but the panel found it hard to sustain that argument. The increase in the gas price doesn’t increase the value of water (the opportunity cost) in the trading periods when there is a shortage of gas. However, if a hydro generator knew of the gas shortage ahead of time and were concerned that they may have a water shortage at the time the gas price is high, then the value of water (the opportunity cost) prior to event has increased and it would be reasonable to raise offers then.
- Long term could see that the price of thermal would be the opportunity cost of water, but not sure it holds in the short term.
- The panel noted that Generator B would be in safe harbour (it meets 1(a) and 1(b), and 1(c) doesn’t apply because it isn’t pivotal). Therefore, Generator B could not be found in breach of the Code. This may be a deficiency in the existing Code.
- The insufficiency of information also raises a question about the burden of proof.

Case study #3 – proposed Code

Assessment of case study #3 against the proposed Code:

	<i>Substantive test 13.5A(1)</i>	<i>Possible guidance for interpretation of 13.5A(1) is set out in 13.5A(3)(a) and (c)</i>			<i>Based on interpretation of 13.5A as a whole</i>	
	Was the generator’s offer consistent with a hypothetical market where no supplier could exercise significant market power for that trading period?	Were the offer prices above the generator’s short-run marginal cost (SRMC)?	Were the offer prices above long-run marginal cost (LRMC)?	If offer prices were above SRMC or LRMC, was it by too much or for too long?	Was there a breach of the proposed Code provision?	Assumptions/ caveats
Generator A	Likely not consistent.	Yes	No. LRMC likely to be higher.	Prices were above SRMC for too long (a number of days), but not by too much.	Likely a breach. Generator A increased its offer price to above SRMC when it had market power for a significant (indeed relatively long) period.	

Other notes/comments:

- Allowing a large generator with market power to increase price due to increased costs of a small generator is to the detriment of consumers (which is not consistent with the Authority’s statutory objective).
- The panel considered there was an efficiency cost to increasing the prices in long run. In the short run there may or may not be costs – but this will depend on a range of factors including whether the increase is likely to recur, its quantum, and the whether it leads to inefficient demand response.

Case study #4 – existing Code

Assessment of case study #4 against the existing Code:

<i>Generator must satisfy both 1(a) and 1(b) to be in safe harbour</i>		<i>If generator pivotal, generator must meet at least one of 1(c) (i) to (iii) to be in safe harbour</i>			<i>Must meet 1(a), 1(b), and if pivotal, at least one of 1(c) (i) to (iii)</i>	<i>Based on interpretation of “high standard of trading conduct” (HSOTC)</i>		
1(a) Was generator offering all available capacity?	1(b) Was generator submitting and revising offers in timely way?	1(c)(i) Did generator’s offer result in <u>no</u> material increase in price?	1(c)(ii) Was generator’s offer consistent with offers when it was previously not pivotal?	1(c)(iii) Did generator obtain no financial benefit in a trading period at a node at which it was pivotal?	Was generator inside safe harbour?	If generator was outside safe harbour, did it breach the Code?	Assumptions/ caveats	
Generator A	Yes	Yes	No. Price increased materially.	No. Not consistent with prices in previous periods (and was pivotal then also).	No. Did obtain financial benefit compared to period before change in offer.	No	Yes. Can’t see any argument to justify its behaviour.	
Generator B	No	Yes	No. Price increased materially	Uncertain since no information available on previous response to Generator A raising its price.	No. Did obtain financial benefit compared to period before change in offer.	Uncertain since no information available on previous response to Generator A raising prices.	Uncertain. Depends on whether they can justify why they’re not offering full capacity.	

Case study #4 – proposed Code

Assessment of case study #4 against the proposed Code:

	<i>Substantive test 13.5A(1)</i>	<i>Possible guidance for interpretation of 13.5A(1) is set out in 13.5A(3)(a) and (c)</i>			<i>Based on interpretation of 13.5A as a whole</i>	
	Was the generator's offer consistent with a hypothetical market where no supplier could exercise significant market power for that trading period?	Were the offer prices above the generator's short-run marginal cost (SRMC)?	Were the offer prices above long-run marginal cost (LRMC)?	If offer prices were above SRMC or LRMC, was it by too much or for too long?	Was there a breach of the proposed Code provision?	Assumptions/ caveats
Generator A	Not consistent. If Generator A didn't have market power they wouldn't be able to raise prices to offset their retail prices in the North Island.	Yes. Given Generator A accepts price of \$100/MWh set by "higher price generators".	Likely given no supply constraint binding in South Island.	Offer price was very high indeed (albeit for relatively short period).	Likely a breach since offer price was well above SRMC which offsets that it is for a short period.	
Generator B	Likely not consistent.	Almost certainly above SRMC given normally run at price of \$200/MWh.	Probably given \$1000/MWh is very high.	Offer price was very high (albeit for relatively short period).	Uncertain, but likely a breach since offer price is above SRMC (albeit is for a short period).	

Other notes/comments:

- Generator A pushed up the price from \$200 to \$980 in a market where the link between the two Islands is operating at full capacity—they clearly look like they're exercising their market power. There's no change in supply and demand in the South Island so don't even need to run a model to determine what would happen if there was no market power. (the counterfactual).
- When considering Generator A's behaviour, you look at clause (1) and its clear its exercising market power. To determine whether its exercising significant market power you look at their offer and think about whether its plausible that their offer price is consistent with no market power.
- Generator B's defence that they just responded to Generator A is not acceptable. Whenever there is a generator with significant market power, any generator (not just the generator with the market power) can be found breach of 13.5A if their offers are not consistent with a market where no generator has significant market power. Generators would need to be made aware that if you see another generator possibly exercising market power it is not allowable to "ride on their coat strings".

Case study #5 – existing Code

Assessment of case study #5 against the existing Code:

<i>Generator must satisfy both 1(a) and 1(b) to be in safe harbour</i>		<i>If generator pivotal, generator must meet at least one of 1(c) (i) to (iii) to be in safe harbour</i>			<i>Must meet 1(a), 1(b), and if pivotal, at least one of 1(c) (i) to (iii)</i>	<i>Based on interpretation of “high standard of trading conduct” (HSOTC)</i>	
1(a) Was generator offering all available capacity?	1(b) Was generator submitting and revising offers in timely way?	1(c)(i) Did generator’s offer result in <u>no</u> material increase in price?	1(c)(ii) Was generator’s offer consistent with offers when it was previously not pivotal?	1(c)(iii) Did generator obtain no financial benefit in a trading period at a node at which it was pivotal?	Was generator inside safe harbour?	If generator was outside safe harbour, did it breach the Code?	Assumptions/ caveats
Yes	Yes	No. Price increased materially.	No. Is usually pivotal so no information available.	No. Did obtain financial benefit compared to period before change in offer.	No	Uncertain, since Generator A controls the market for both generation and IR. Water in the South Island is in short supply (ie, has high opportunity cost). Would need to consider how close lakes are to minimum operating levels since that would be key justification for the conduct.	

Other notes/comments:

- Not enough information to come to a conclusion. Conclusion would depend on whether Generator A’s price increase reflected the opportunity cost of not holding water for later when hydro levels could become dangerously low.

Case study #5 – proposed Code

Assessment of case study #5 against the proposed Code:

	<i>Substantive test 13.5A(1)</i>	<i>Possible guidance for interpretation of 13.5A(1) is set out in 13.5A(3)(a) and (c)</i>			<i>Based on interpretation of 13.5A as a whole</i>	
	Was the generator’s offer consistent with a hypothetical market where no supplier could exercise significant market power for that trading period?	Were the offer prices above the generator’s short-run marginal cost (SRMC)?	Were the offer prices above long-run marginal cost (LRMC)?	If offer prices were above SRMC or LRMC, was it by too much or for too long?	Was there a breach of the proposed Code provision?	Assumptions/ caveats
Generator A	Uncertain. Offer in question is IR offered by Generator A and the SRMC is determined by the price of foregone future generation if IR is called upon.	Uncertain. There is a lack of information on interruptible load pricing and future generation pricing but implication is that no other party was offering interruptible load in the market. On the other hand \$500/MWh is high.	Uncertain.	Pricing is high for sustained period but relationship to SRMC and LRMC is uncertain.	Uncertain, since Generator A controls the market for both generation and IR. Water in the South Island is in short supply (ie, has high opportunity cost). In order to begin to assess SRMC (ie, the opportunity cost) the key data would be how close the relevant lakes are to minimum operating level.	

Other notes/comments:

- Not enough information to come to a conclusion. Conclusion would depend on whether Generator A’s price increase reflected costs, including the opportunity cost. The opportunity cost would include the cost of not holding water for later when hydro levels could become dangerously low.



**EVALUATIONS
PANEL ABD**



**Evaluation panel's suggested
improvements**

Panel's suggested improvements to proposed Code

- The Panel considered the current Code to be unsatisfactory and felt an economic-based test would be preferable (as proposed by MDAG). The Panel offered the following improvement suggestions to the proposed Code for consideration.

Clauses 13.5A (1) and (2)

- The Panel thought clauses 13.5A (1) and (2) were fundamentally robust but questioned whether guidance could be provided to bound the range of counterfactual analysis and ensure it does not become intractable. One possibility would be some reference to require a comparison of *changes in* offers with *changes in* supply/demand conditions – noting this approach may be viable where significant market power is exercised on a transitory basis.
- More generally, the Panel queried whether clauses 13.5A (1) and (2) could be combined, as they largely mirror each other in their operative provisions.

Clause 13.5A(3)

- The Panel's suggestions centred on this clause. While the Panel thought it useful for the Code to provide some guidance beyond the provisions of 13.5A(1) and (2), it considered 13.5A(3) was currently trying to do too much.
 - 13.5A(3)(a)—the Panel found it useful to have an explicit reference to offers and economic costs in the Code but disliked the phrase “by too much or for too long” because it has no recognised legal meaning. A formulation more familiar to Courts could reduce uncertainty – such as “not unjustifiably”. Economists could be comfortable with this phrase, but if doesn't work in a legal sense it could be replaced.
 - 13.5A(3)(b) – inclusion of the various efficiency criteria is likely to undermine certainty by creating scope for parties to allege the criteria have not been properly weighed by a decision-maker. The Panel felt their inclusion was unnecessary as they were mainly longer term, and in any case the Authority's interpretation of its statutory objective is framed in economic efficiency terms. They still could be useful in an explanatory note.
- More generally, the Panel questioned whether a “purpose” formulation was ideal. It suggested that consideration be given to framing 13.5A(3) to be a range of matters or indicia which a Court could take into account in applying the overarching test in 13.5A(1) and (2). These matters could include an amended form of 13.5A(3)(a), and other matters which could indicate significant market power has been exercised, such as the physical withholding of available capacity.
- If 13.5A(3) was re-drafted to refer to a range of matters that could be considered, it would need to be stated that the matters were listed to assist the implementation of the main test, if the decision maker in its discretion thought that helpful, and they were subsidiary to and not to supplant the test at 13.5A(1).
- Such a 13.5A(3) would not include 13.5A(3)(b) but could include some of the safe harbour criteria in the existing 13.5B, in particular the existing 13.5B(1)(a). However, the Panel is not suggesting these criteria would constitute a safe harbour.