A clearer HSOTC rule

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Background and what we were asked to do

- In 2012 the Authority became concerned about situations where the supplier is a ‘pivotal’ supplier and prices in those situations could be, in their view, artificially high.
- In 2013 WAG made its recommendation to the Authority.
- In 2014 the Authority consulted and released its decision to **Improve the efficiency of prices in pivotal supplier situations**.
- The rule has been tested twice. See the Authority’s:
  - May 2017 decision following a claim that Meridian may have breached the HSOTC rule based on the price outcomes in two separate trading periods on June 2 2016 and
  - October 2017 decision following a claim that Mercury may have also breached the rule as a result of price outcomes in one trading period 8 December 2016.
- As a result of this sequence of events, Meridian asked Kieran Murray and me to look to see what **A clearer High Standard of Trading Conduct Rule** would look like.

Note: The views set out in our paper /presentation are our views and are not necessarily shared by Meridian. In our brief Meridian stressed that our work should not seek to re-litigate the decision arrived at in relation to the events of 2 June 2016. Meridian agreed that we may present our independent view on this issue in any forum we are invited to.

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The original problem that was to be addressed

Prices set artificially high when a generator is pivotal could:

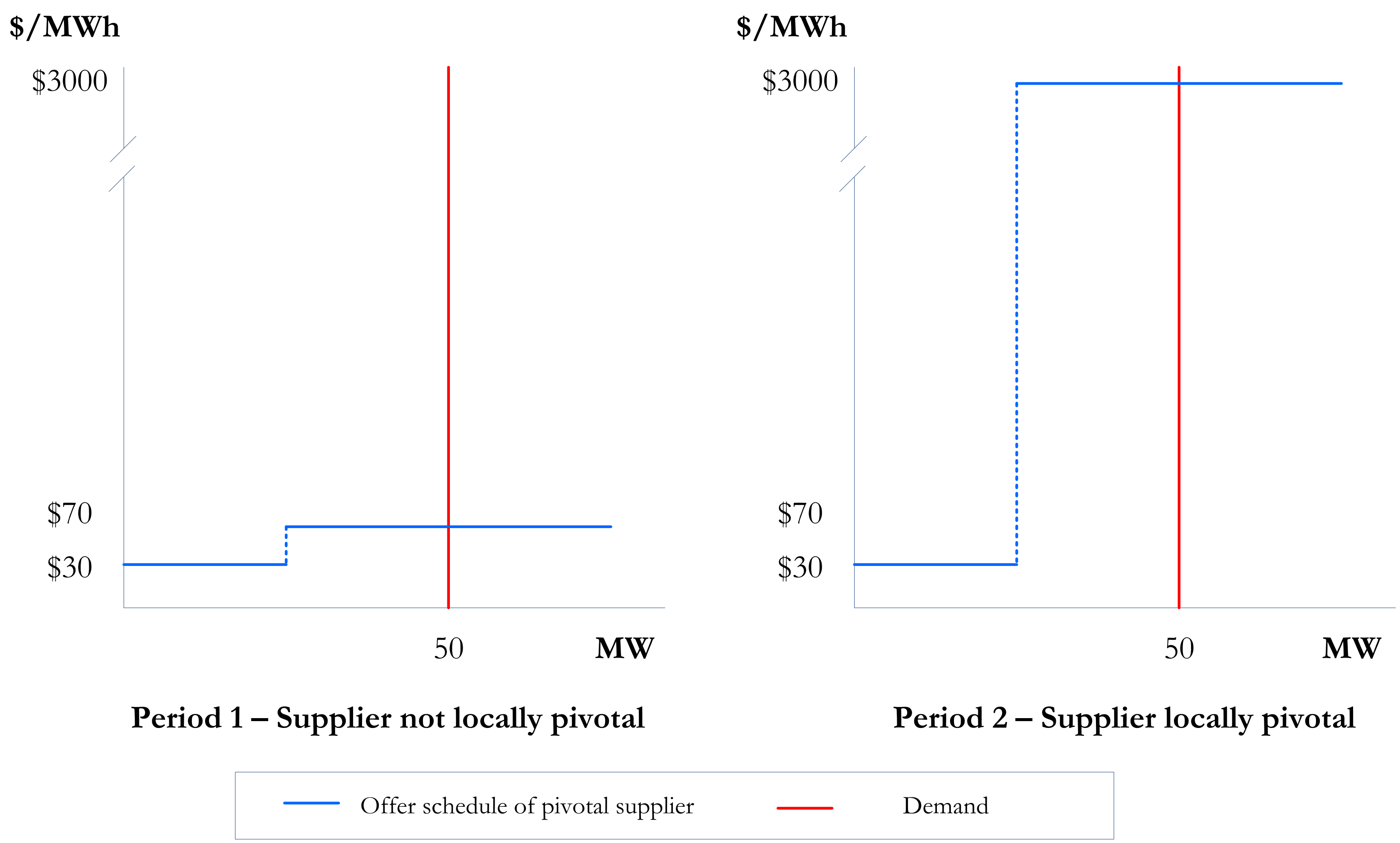
- reduce confidence in the price discovery process as prices in the pivotal period would be imposed by a single entity, not discovered through market exchanges
- wrongly incentivise new investment in generation or transmission or in demand reduction (as the price results from the exercise of market power rather than underlying excess of demand relative to supply)
- impede entry and competition in the retail markets by increasing price risk.

The WAG's proposed approach

The WAG suggested that a supplier in a pivotal situation should be subject to a high standard of trading conduct test. WAG determined that a supplier could be deemed compliant with the positive conduct provision if its actions were consistent with three principles:

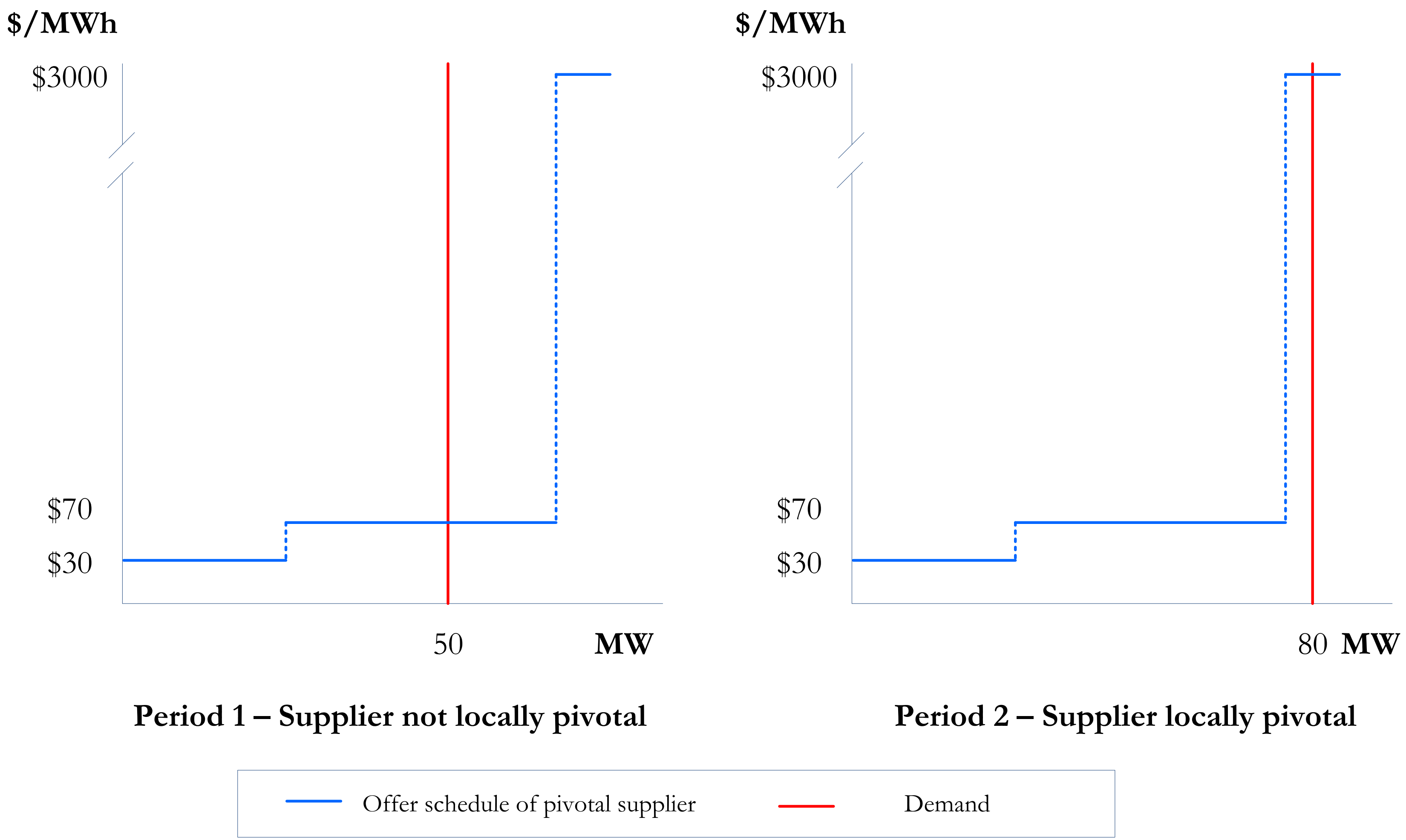
- Principle 1 – all generating capacity expected to be physically available is offered when a plant has been committed to generate
- Principle 2 – intentions to make changes to offers (prices and/or quantities) should be submitted at the earliest opportunity (to minimise late changes that provide little chance for others to respond)
- Principle 3 – price and quantity pairs in offers are not materially different between **adjacent trading periods**, except where there is a bona fide physical factor that alters the participant's capability to generate electricity between those periods.

Fails principle 3



In TP 2 the trader has raised the price on parts of the offered volume potentially because it can.

Satisfies principle 3



In TP 2 demand is higher but the offer is unchanged so the trader is in the safe harbour. This is what the WAG had in mind.

Comparison of WAG and the Authority's third safe harbour condition

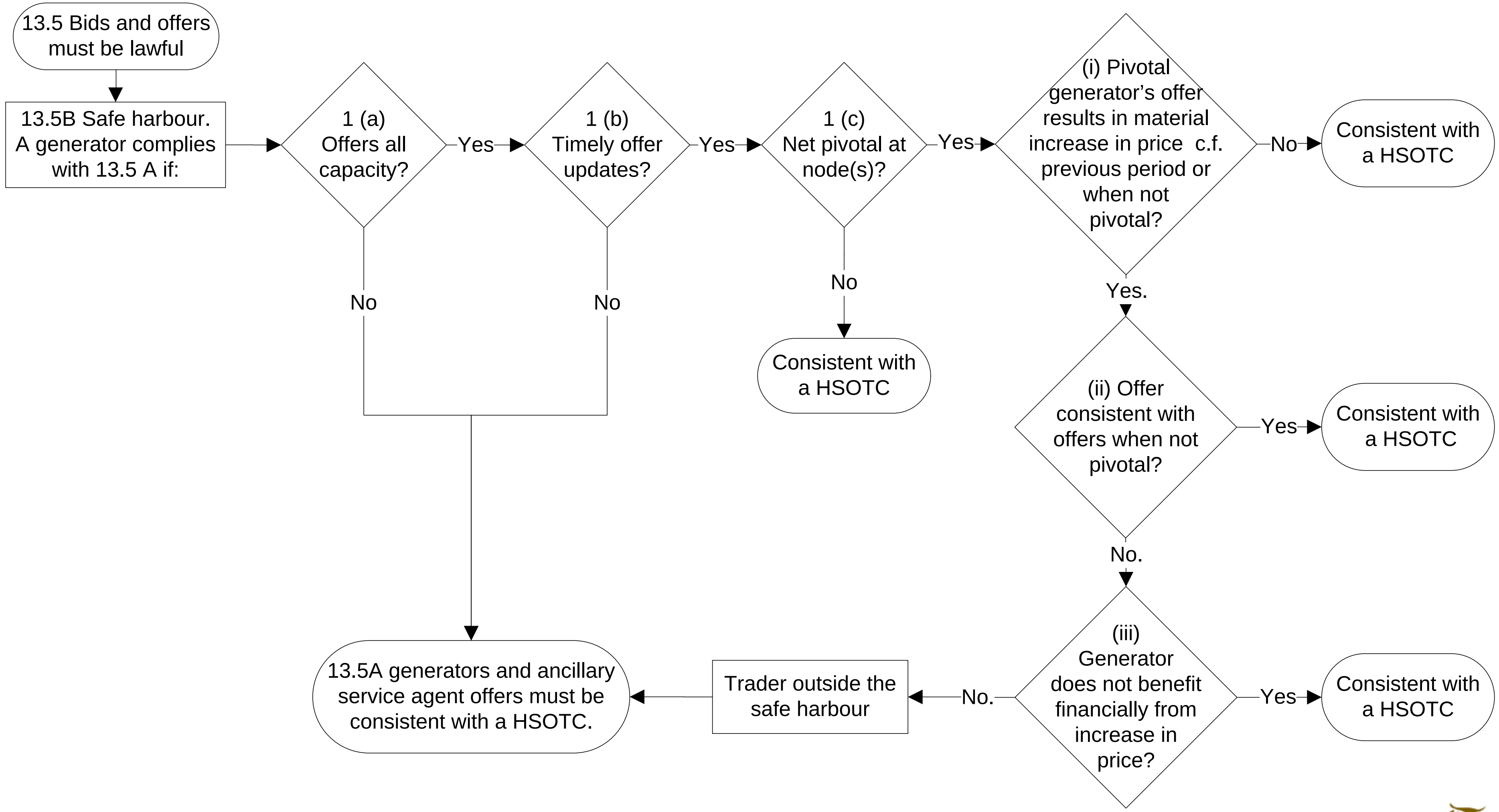
WAG Proposal		Authority decision
Safe harbour principle 3	Price and quantity pairs in offers are not materially different between adjacent trading periods, except where there is a bona fide physical factor that alters the participant's capability to generate electricity.	There are three ways to meet the safe harbour: (a) market price does not increase materially as a result of supplier's offers when a supplier is pivotal or (b) offers when a supplier is pivotal are generally consistent with offers when it is not or (c) the supplier can demonstrate it has not benefited financially.

The Authority made four key changes to the rule they introduced:

1. It introduces a HSOTC obligation alongside the safe harbour although the WAG didn't develop this aspect
2. It applies at all times to all suppliers including pivotal and non pivotal
3. It is applied to "net pivotal" not "gross pivotal"
4. It is based on price outcomes rather than offer price behaviour.

The Authority concluded that its Code amendment would meet its statutory objective because it *will reduce the incidence of inefficiently high prices in pivotal supplier situations.*

Currently, where “high” prices are questioned, the HSOTC rule applies



An efficient rule

An efficient safe harbour rule would minimise the sum of the social costs of potentially opportunistic behaviour by:

- permitting (providing a safe harbour to) actions which can generally be presumed to be in the long-term interest of consumers – this presumption avoids raising costs in the wholesale market unnecessarily
- exposing to the HSOTC rule, and hence the possibility of investigation, actions which can generally be presumed to not be in the long-term interest of consumers, except in specific circumstances (which would be considered in any investigation).

In particular

WAG's (offer based) principle 3 recognised the role hydro based electricity generation plays in the New Zealand market and how it integrates with thermal plant especially peaking plant. In summary:

- hydro generation includes a mix of run of river, releases and an ability to respond where system reliability is at risk
- releases and last resort capability are offered according to each generator's own circumstances and their perception of the opportunity cost of generating in the near term or not
- in particular the availability of "last resort generation" from hydro is an integral part of system reliability and provides a long term benefit to consumers.

Risk of inefficient outcomes with current rule

Under the current rule a supplier in a pivotal position may find itself outside of the safe harbour and exposed to the HSOTC test where:

- it had not changed its offers to take advantage of being in a pivotal position, but an increase in demand or a short fall in generation by other parties meant the last resort generation was called to operate and as a result market prices increased
- the generator had priced its last resort generation to provide a reasonable return on its investment and obtained that financial benefit from the higher market prices
- it could not show that its offer was consistent with offers when it was not pivotal, possibly because it had modified its strategy in the hope of not breaching the above two criteria or for some other, non-opportunistic, reason.

An invidious situation

The rule currently in place places both the Authority and the supplier in an invidious situation:

- a supplier preparing offers for last resort generation in advance cannot be confident as to what the price outcomes of those offers would be as it does not know if that generation would be called or if it would be pivotal when asked to generate or whether in the circumstances the Authority would view the prices as artificially high
- the Authority cannot be confident that any particular price for last resort generation is inefficiently high as the efficient price is not observable; the efficient price is the opportunity cost of the dispatched generation and this depends upon the expectations of the generator and marginal demand.

A clearer safe harbour provision in the HSOTC Rule

The safe harbour provision in the HSOTC rule would be improved by replacing the Authority's three safe harbour tests which apply when a supplier is pivotal, with a rule applying principle 3 as recommended by the WAG. A pivotal supplier would be deemed to be in the safe harbour part of the HSOTC rule where:

- *its price and quantity pairs in offers are not substantially different between the adjacent trading periods,*

and

- *its offer price is not substantially different from the offers of other last resort generation made during periods those generators are not pivotal*

In terms of the Authority's statutory objective

This change would advance the Authority's statutory objective because:

- it provides for suppliers of last resort to be compensated for making generation available, as long as the prices offered do not exceed those offered in periods in which the supplier is constrained by the competitive conditions in the market – a supplier cannot alter its offer simply because it is pivotal without being able to justify that its offer remains consistent with a HSOTC
- neither the Authority nor suppliers need to second guess as to what prices might be efficient, when supply is constrained relative to demand
- all participants in the market (purchasers and suppliers) can have confidence that the prices that will prevail, in pivotal and non-pivotal periods reflect the workings of the market
- suppliers have a clear rule, ex ante, as to what offers are acceptable during periods they become pivotal.

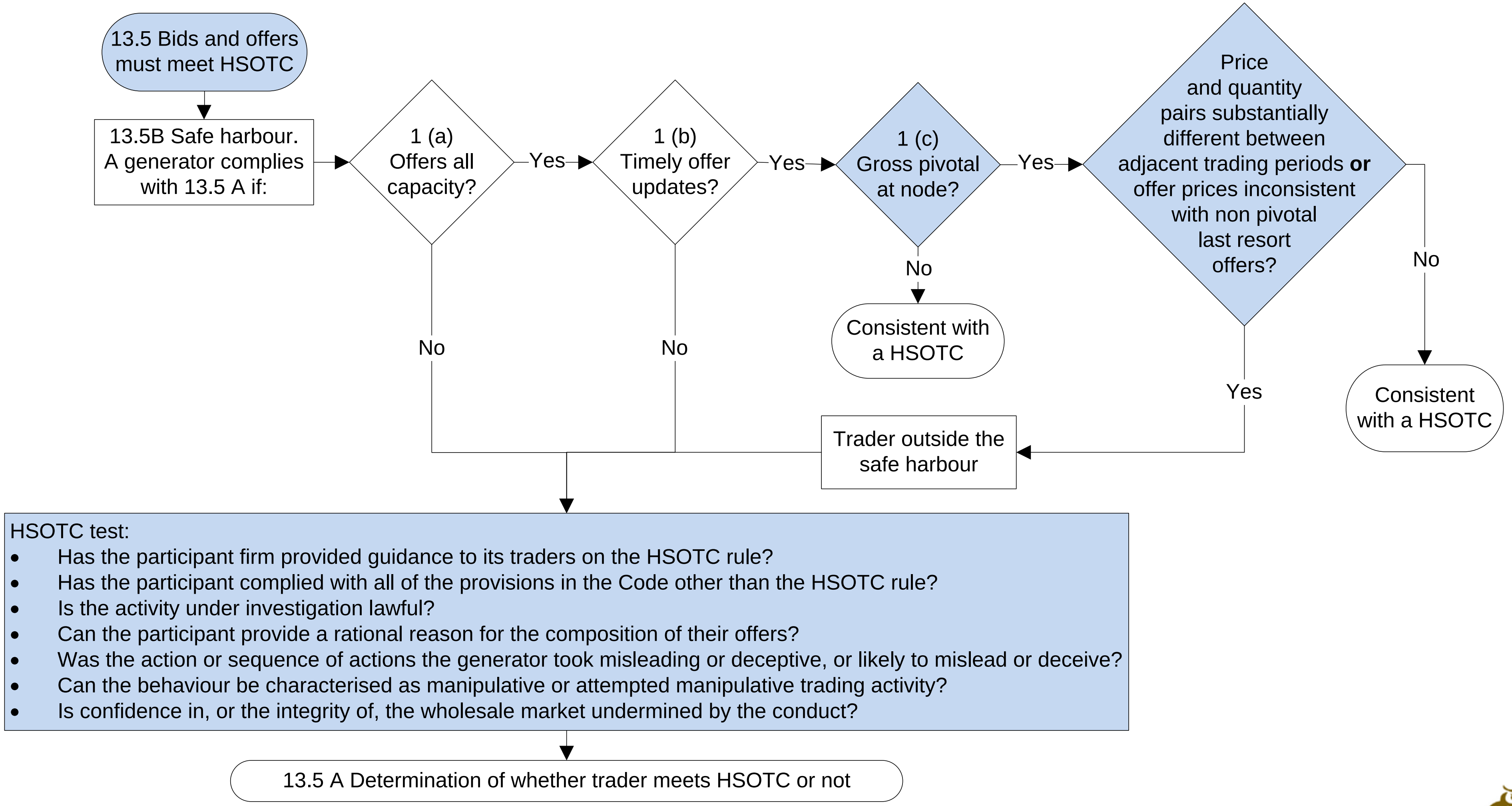
A clearer test for the trading conduct part of the HSOTC Rule

- We also develop a HSOTC test for a generator who fails the safe harbour test. We propose seven questions be codified so participants could test themselves before the event and know that these are the same questions the regulator would ask when viewing their conduct after the event
- We note that this approach is similar to the UTS provisions which contain a list of examples of what the Authority may consider to constitute an undesirable trading situation (5.1 (2)).

A HSOTC test for the HSOTC rule

1. Does the participant firm provide guidance to its traders on the need to ensure its composition of offers and bids is consistent with a HSOTC?
2. Has the participant satisfied all of the rules within the regulator's jurisdiction other than the HSOTC rule?
3. Is the activity under investigation lawful? (We propose including this in a list of matters the Authority will consider in addition to the general provision in 13.5)
4. Can the participant provide a rational reason for the composition of their offers?
5. Was the action or sequence of actions the generator took misleading or deceptive, or likely to mislead or deceive? (We propose including this in a list of matters the Authority will consider explicitly in relation to HSOTC in addition to the general provision in 13.2)
6. Can the behaviour be characterised as manipulative or attempted manipulative trading activity? This test would look at three indicators:
   - Illicit purpose;
   - Uneconomic conduct; or
   - Conduct inconsistent with market fundamentals
7. Is confidence in, or the integrity of, the wholesale market undermined by the conduct?

Our suggestion for a clearer HSOTC rule



Some matters are for market design not breach decisions

The emphasis for our recommended HSOTC test is on behaviour rather than outcomes. We see the Authority's position on behaviours as driven by outcomes viewed through its statutory objective. It leads to a strong temptation to consider behaviour through tests such as whether the outcomes are:

- deemed to signal scarcity
- perceived to be the result of innovation
- assessed as creating a useful signal for potential entrants.

These issues are matters for market design. They may form a useful framework for judging the success of market design but do not inform the Authority on the behaviour of participants as much as the ex ante circumstances in the market and participants' motives. If a behaviour is acceptable and the outcomes are not what the Authority wants, it can make its expectations clear and change the rules.

Addendum

Following the release of the final market performance review regarding **High Prices on 2 June 2016** we can now see some additional context. Meridian have asked us to consider 2 additional questions which we will discuss in an addendum to our 14 February paper:

1. Do offer changes to prevent price separation between North and South Islands risk inefficient location signals?
2. How many adjacent periods should be considered in the proposed safe harbour rule?

Our core values are independence, integrity and objectivity

Sapere aude *– dare to be wise*