6 November 2018

Trading conduct review: outstanding matters for problem definition

Market Development Advisory Group

Alistair Dixon, Principal Adviser Market Design

Introduction

This presentation provides:

- a high-level recap of the trading conduct provisions and how they interact (eg, through a flow chart)
- further detail on all items in the trading conduct term sheet marked ‘not yet considered’
- charts showing how often generators are pivotal *during peak demand periods* (including when generators are pivotal nationally)
- illustrative scenarios of behaviour when a party is pivotal and net pivotal to identify when behaviour is consistent with a high standard of trading conduct
- recommendations on a possible way forward on the issue of behaviour by a pivotal supplier

The purpose of this presentation is to assist the group in:

- identifying the type of behaviour by a pivotal or net pivotal supplier that may be of a policy concern
- completing the problem definition for trading conduct

Re-cap of trading conduct provisions

Trading conduct provisions

The trading conduct provisions in the Code are as follows:

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 or revises an **offer**; or

(b) an **ancillary service agent** submits or revises 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 or revise 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).

Trading conduct provisions

Trading conduct provisions continued:

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 or revise 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).

Trading conduct provisions

Trading conduct provisions continued:

13.5B Safe harbours for clause 13.5A

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(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 or revise 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).

Overview of trading conduct provisions

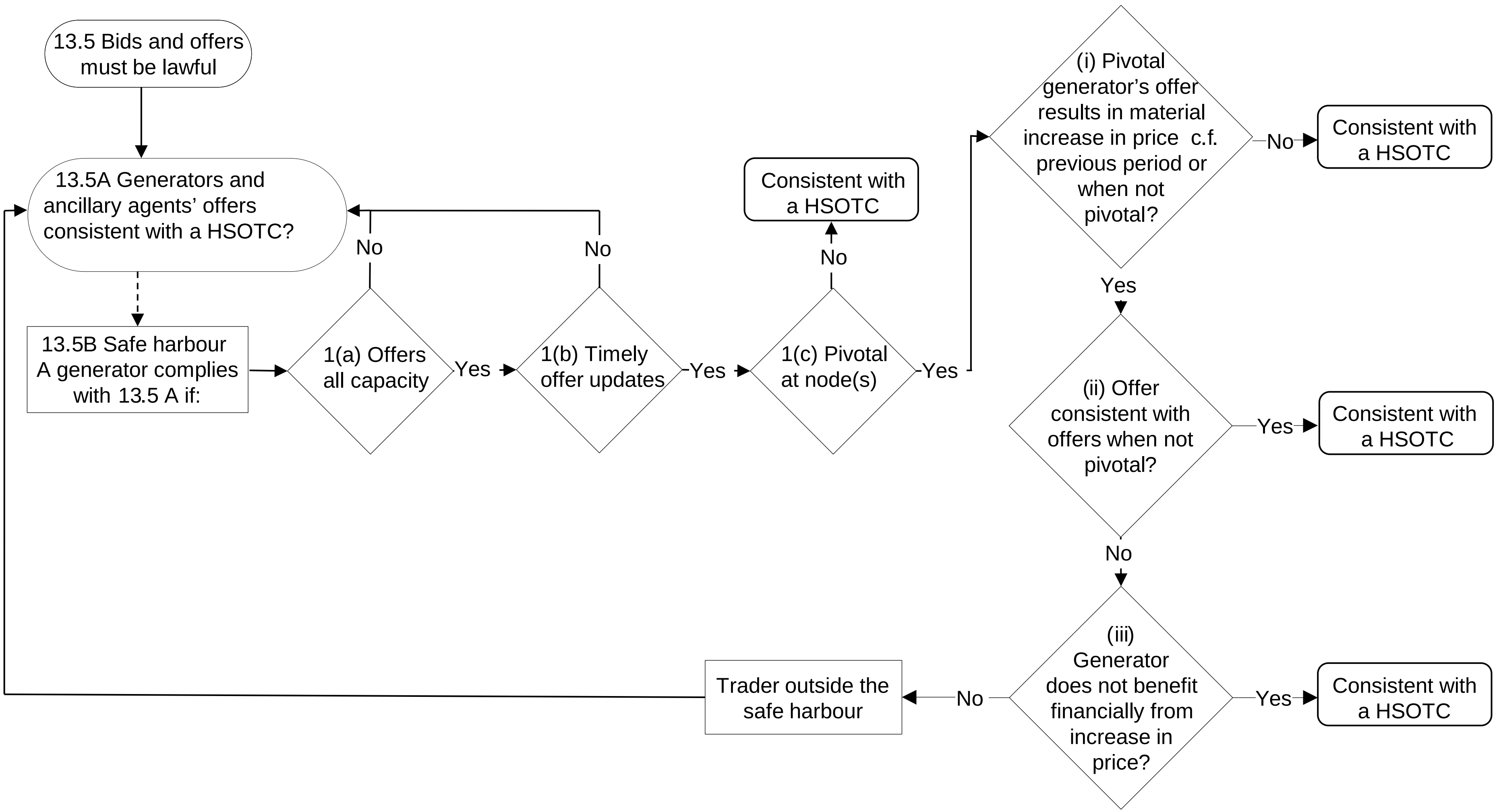


Diagram adapted from Sapere presentation to MDAG, 15 March 2018

Draft problem definition: summary

- The following table summarises the preliminary draft problem definition:

	Problem
1	The general requirement for a 'high standard of trading conduct' is considered unclear
2	The trading conduct provisions only apply to parties making offers
3	The trading conduct provisions do not prevent withdrawal of plant not subject to gate closure
4	There are divergent views on whether the trading conduct provisions apply to a party altering its offers to avoid a constraint
5	The trading conduct provisions do not make clear that offers should reflect the underlying physical capability of the plant
6	The trading conduct provisions do not make clear that: • plant should be offered unless it is not available because of bona fide reasons • where plant is not available, the market should be informed, eg by informing the market through POCP
7	The trading conduct provisions do not specifically address co-ordination of offers between generators or ancillary service agents – the Commerce Act may mean this is unnecessary

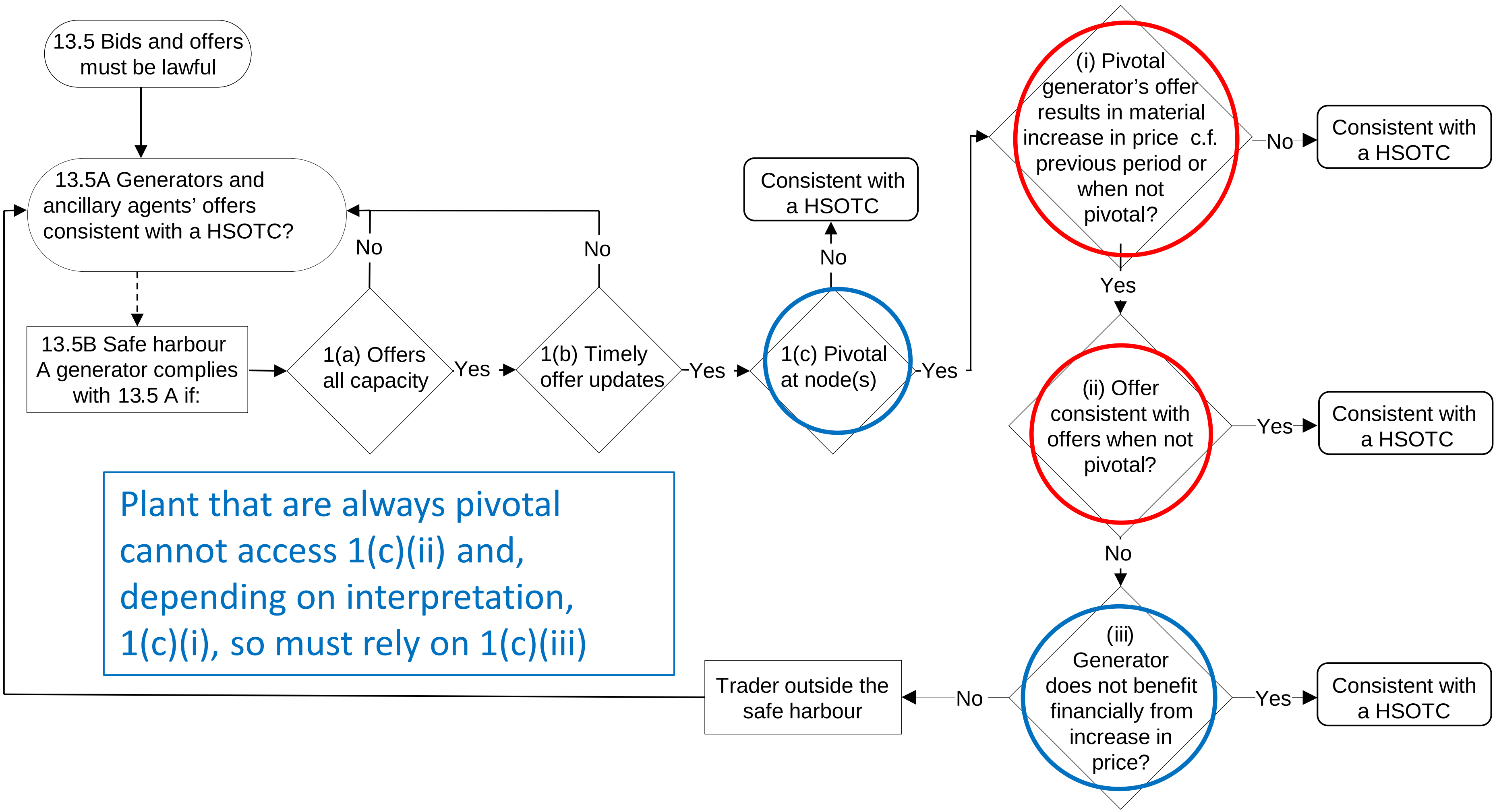
- This list does not include the matters identified in the term sheet that have yet to be discussed

Issues not yet considered, as identified in term sheet

Issues not yet considered, as identified in term sheet

1. The safe harbours are not available to some plant
2. The safe harbour may shelter and facilitate behaviour inconsistent with a high standard of trading conduct
3. The safe harbour may be difficult to apply in practice
4. The trading conduct provisions do not provide guidance on when re-offering is appropriate

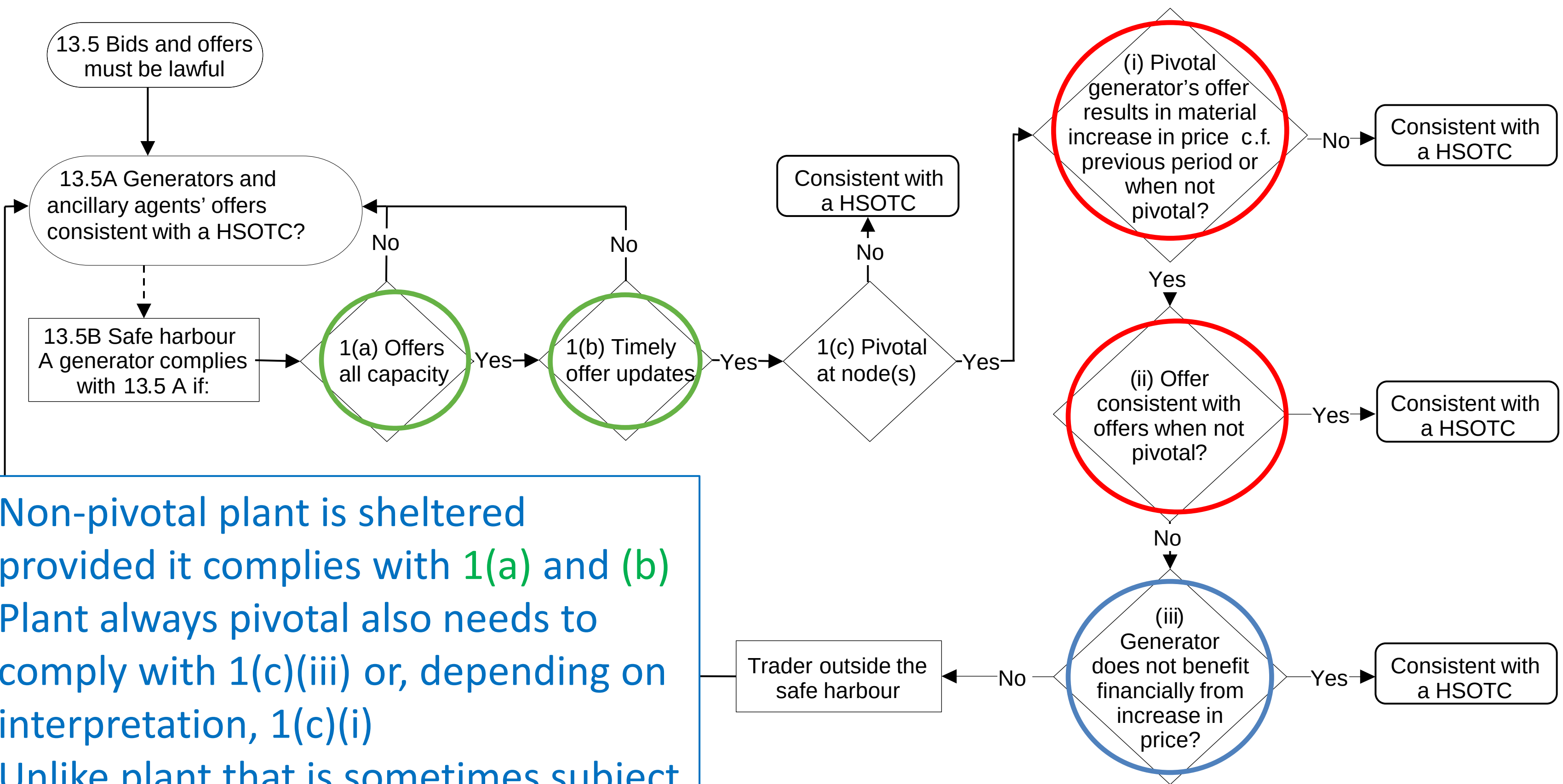
1. The safe harbours are not available to some plant



Plant that are always pivotal cannot access 1(c)(ii) and, depending on interpretation, 1(c)(i), so must rely on 1(c)(iii)

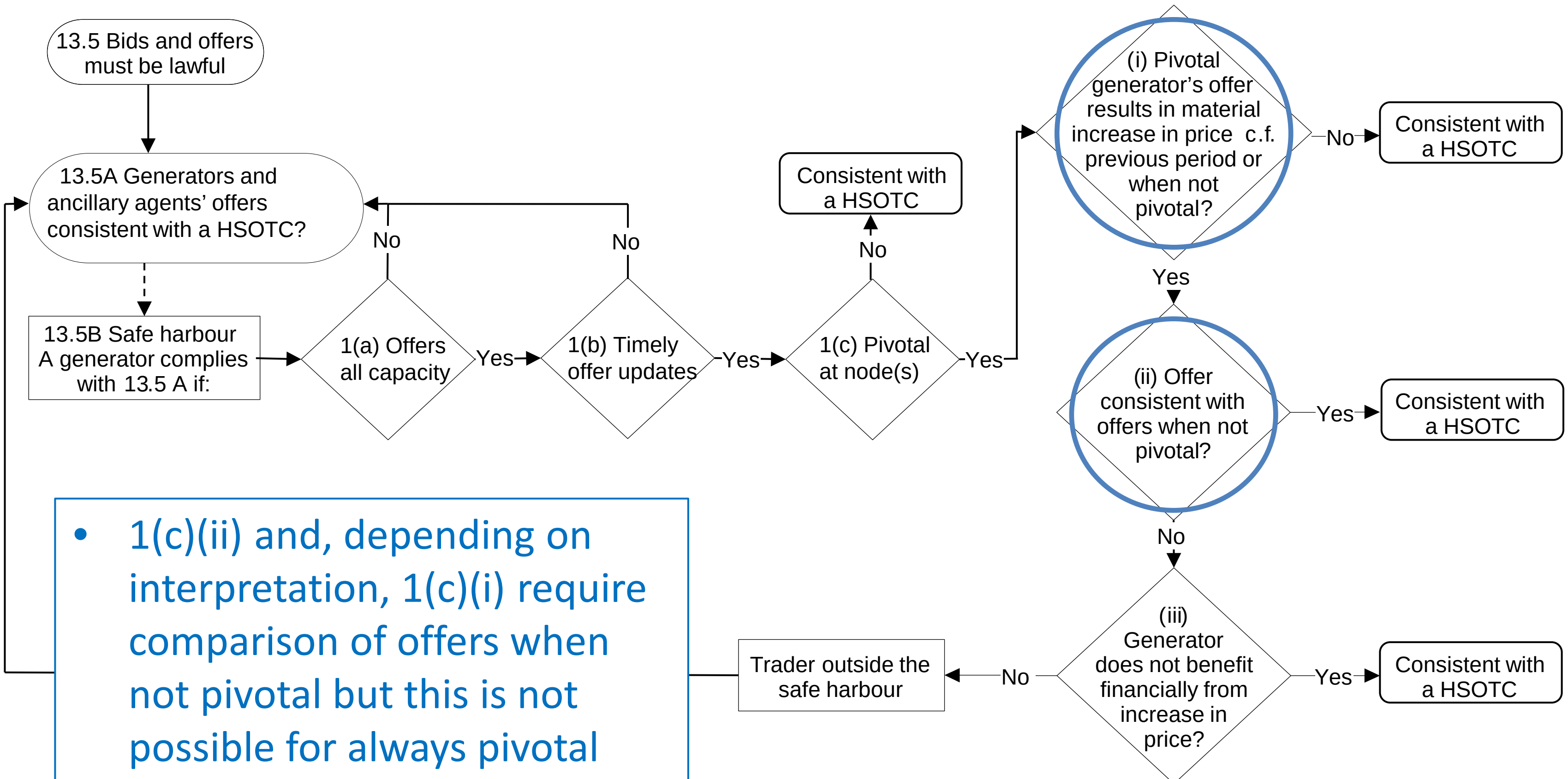
Diagram adapted from Sapere presentation to MDAG, 15 March 2018

2. The safe harbours may facilitate and shelter some behaviour inconsistent with a HSOTC



- Non-pivotal plant is sheltered provided it complies with 1(a) and (b)
- Plant always pivotal also needs to comply with 1(c)(iii) or, depending on interpretation, 1(c)(i)
- Unlike plant that is sometimes subject to competition which has the option of 1(c)(i) or (ii) as well

3. The safe harbours may be difficult to apply in practice

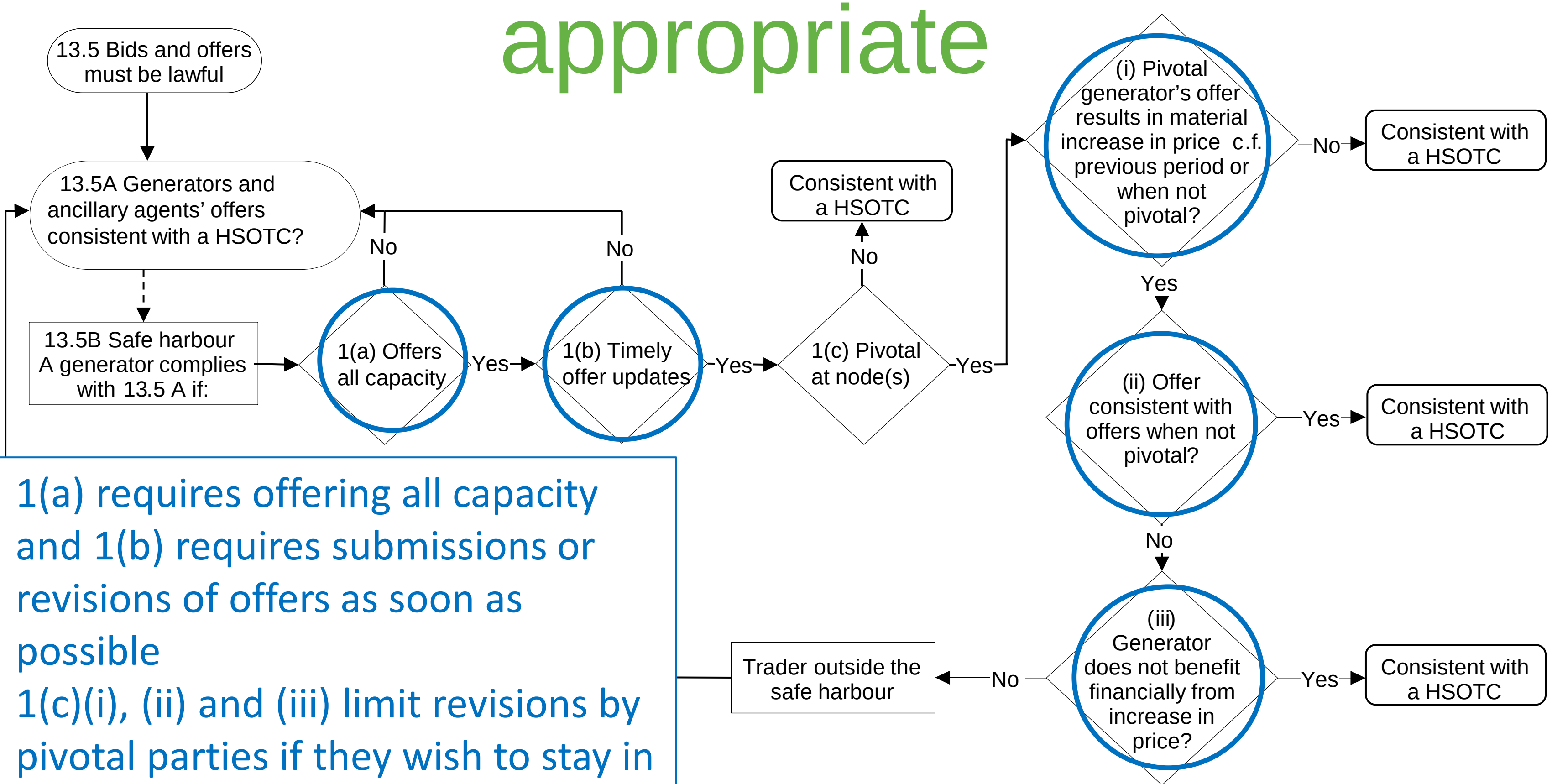


- 1(c)(ii) and, depending on interpretation, 1(c)(i) require comparison of offers when not pivotal but this is not possible for always pivotal plant

4. Code allows revisions to offers but with restrictions

- Clause 13.17(1) permits revisions of offers prior to gate closure
- Clauses 13.17(3) and (4) permit revisions of MW in an offer during gate closure in limited circumstances – basically when a plant’s physical capability is different to the original offer

4. No guidance in trading conduct provisions on when re-offering is appropriate



- 1(a) requires offering all capacity and 1(b) requires submissions or revisions of offers as soon as possible
- 1(c)(i), (ii) and (iii) limit revisions by pivotal parties if they wish to stay in the safe harbour
- No guidance on the circumstances under which a re-offer may be appropriate

Charts and illustrative scenarios about behaviour when generators are pivotal

Definition of ‘pivotal’

Part 1 of the Code:

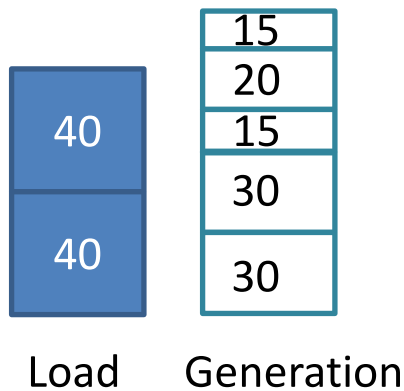
pivotal means—

(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

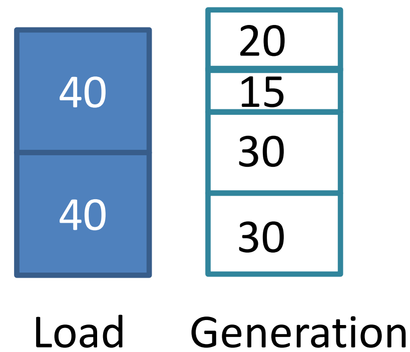
(b) in relation to an **ancillary service agent**, that the total **demand** in a **trading period** for an **ancillary service** supplied by the **ancillary service agent** in an **island** would not have been met if the **ancillary service agent** had not submitted **reserve offers** for all or any of its capacity to provide **instantaneous reserve** in the **island**

Illustration of 'pivotal'

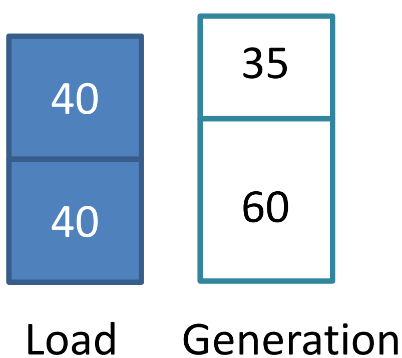
No generator is pivotal



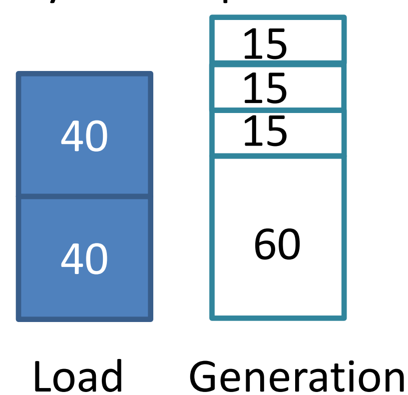
30, 30, 20 MW all pivotal



Both generators are pivotal



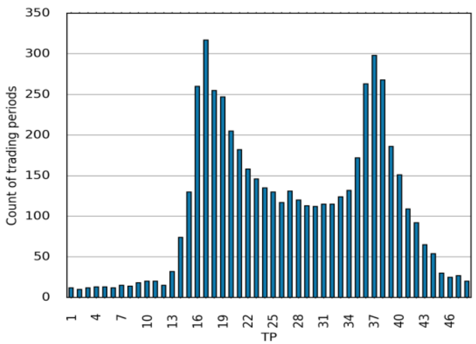
Only 60MW pivotal



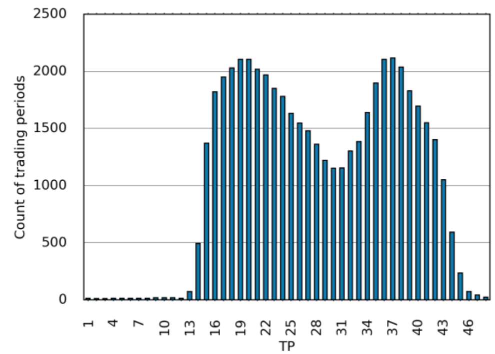
Generators often pivotal during peaks

- Modelled by setting prices to $30k for plant in region shown (eg Contact, South Island means setting Contact's SI plant to $30k)
- Graphs show the distribution of trading periods for which the supplier's generation in the region identified (ie North Island, South Island, across New Zealand) is required to meet national demand

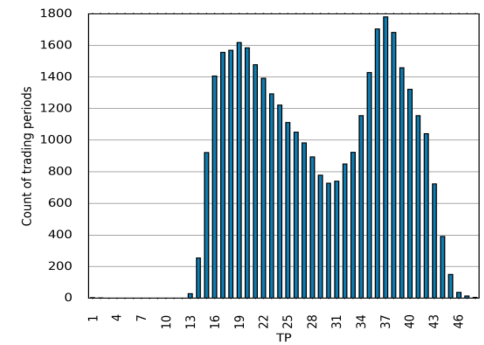
Contact,
South Island



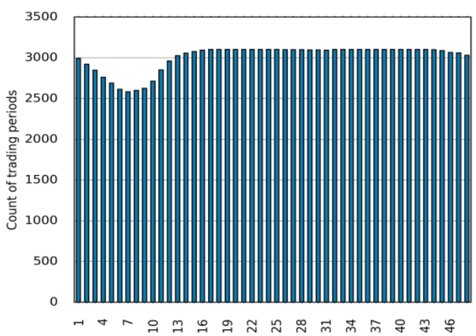
Contact,
New Zealand



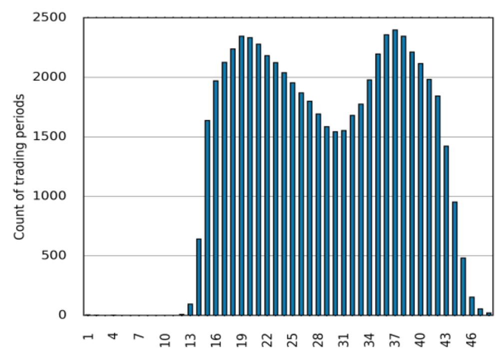
Contact,
North Island



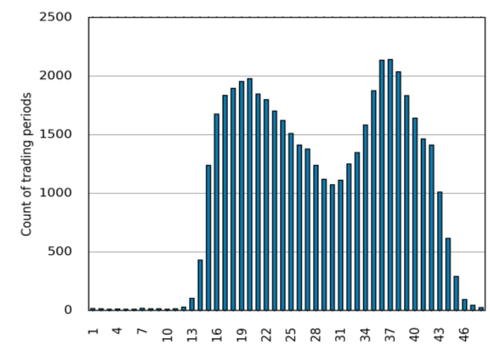
Meridian,
South Island



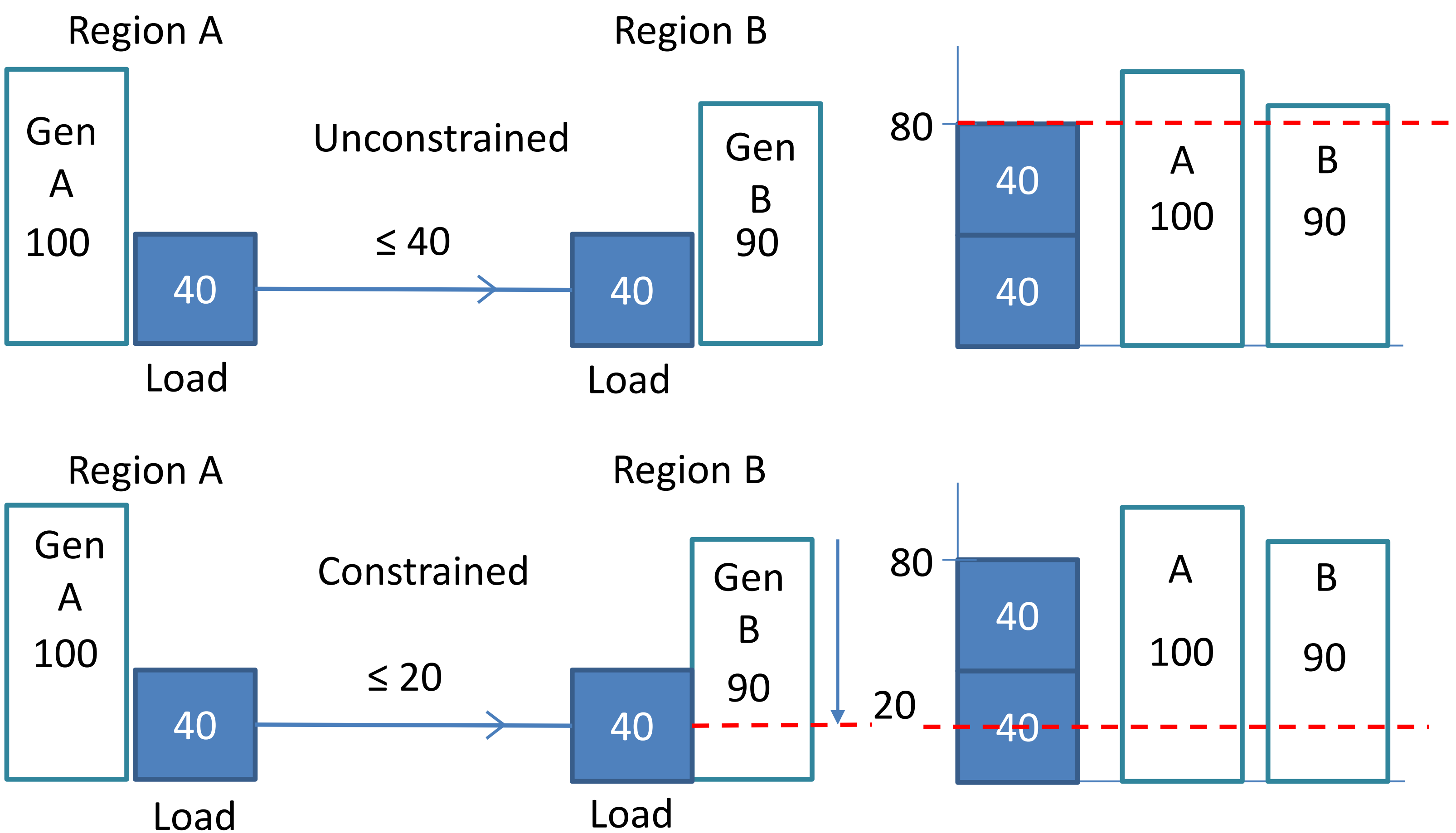
Genesis,
North Island



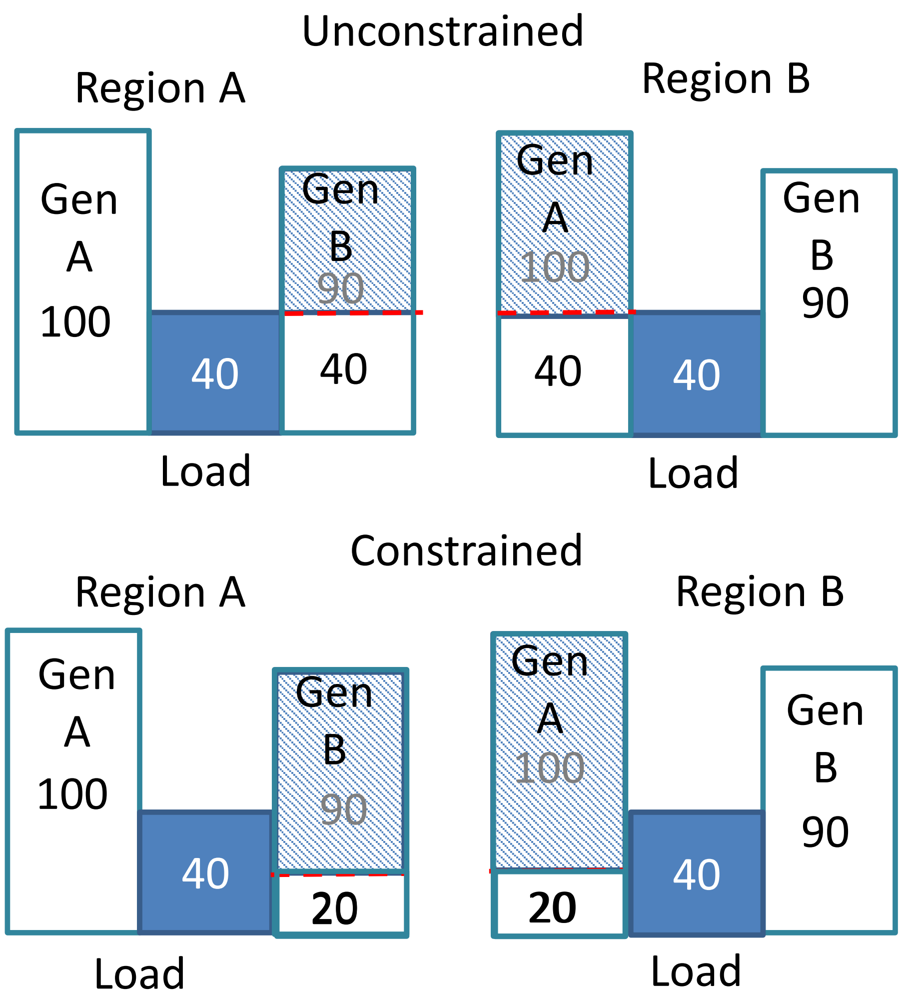
Mercury,
North Island



Illustrative scenario: identifying a high standard of trading conduct when pivotal



Illustrative scenario: identifying a high standard of trading conduct when pivotal

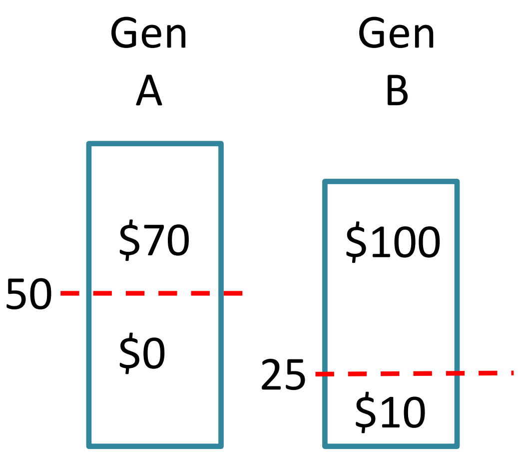


Neither A nor B are pivotal in region A or B

A is pivotal in region A
B is pivotal in region B

Illustrative scenario: 1 Unconstrained

Offer

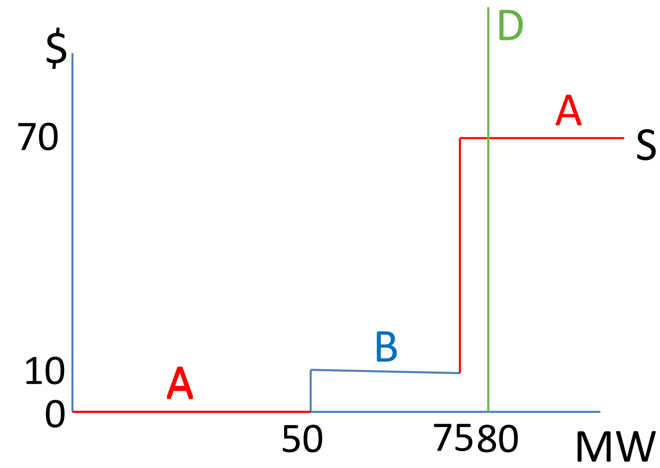


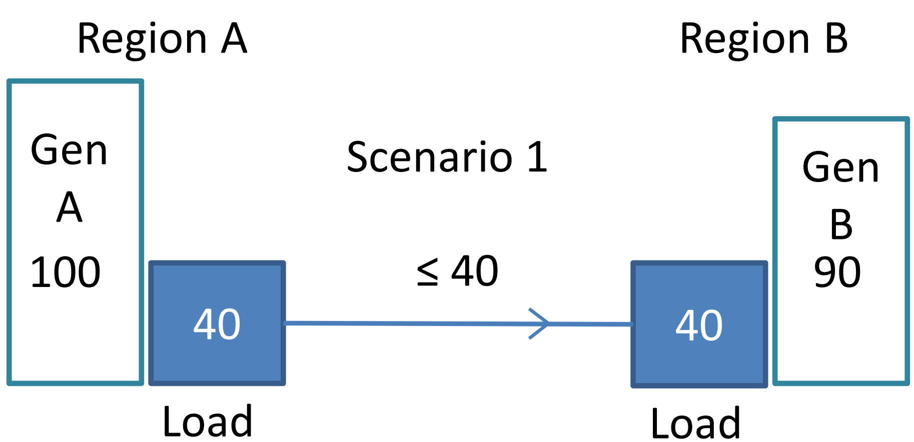
Dispatch

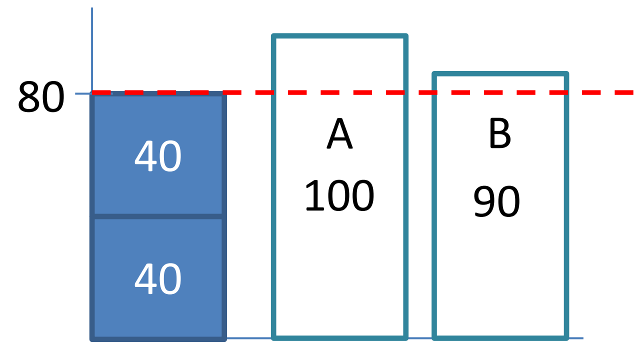
Flow A→B 15MW

Q A=55MW B=25MW

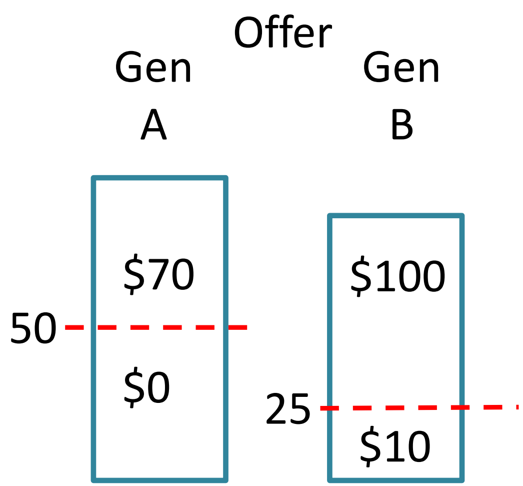
P A=$70 B=$70







Illustrative scenario: 2 Constrained

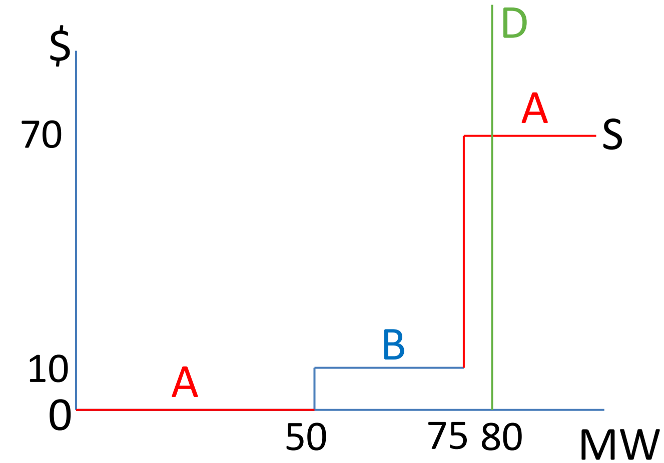


Dispatch

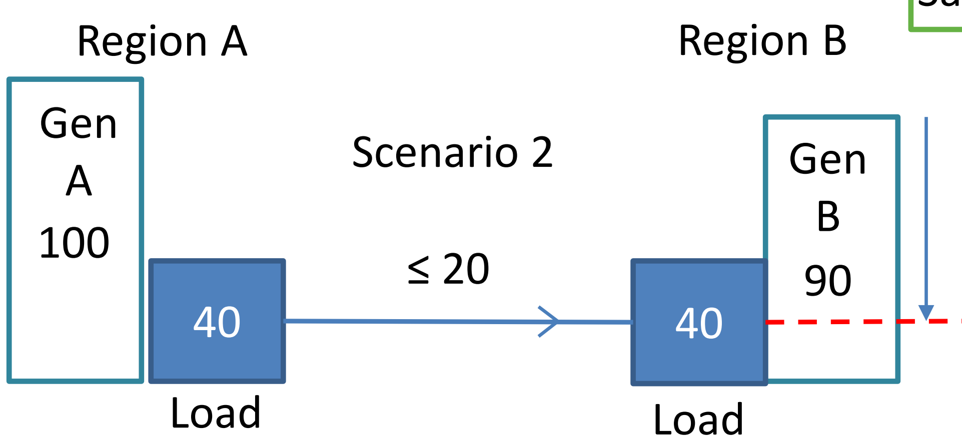
Flow A→B 15MW

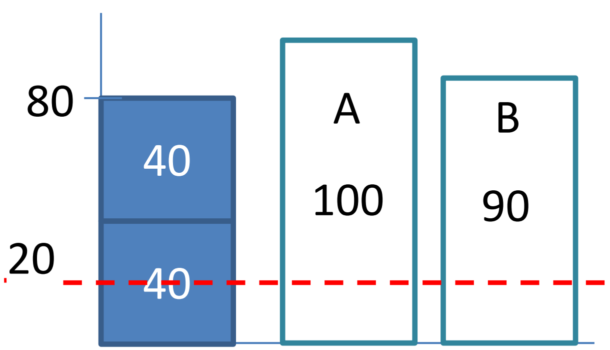
Q A=55MW
B=25MW

P A=$70
B=$70

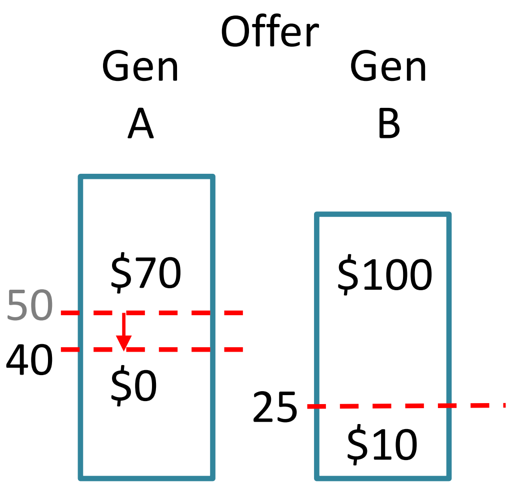


Both A and B are pivotal in their regions
Same outcome as unconstrained





Illustrative scenario 3: What if A moves volume up?

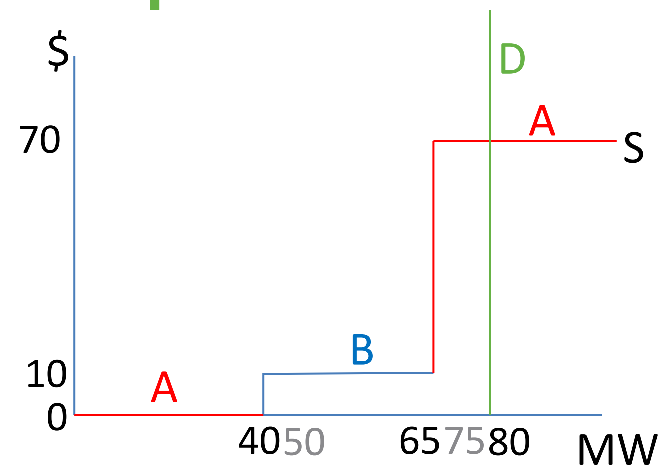


Dispatch

Flow A→B 15MW

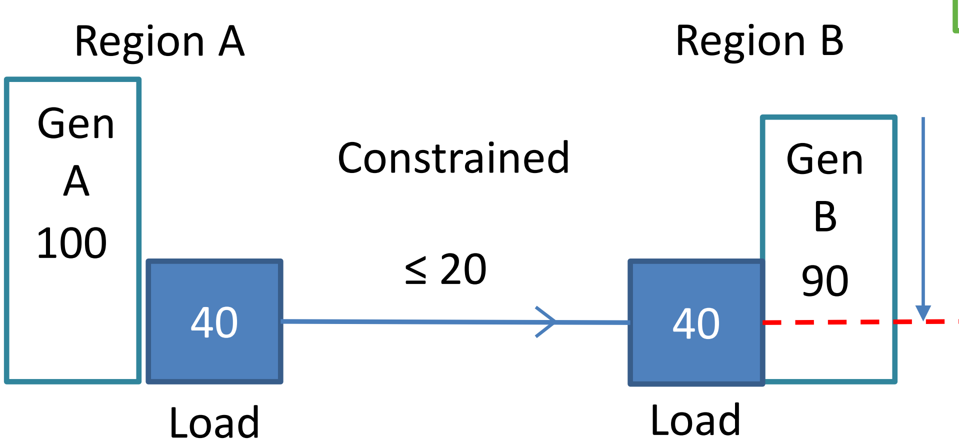
Q A=55MW B=25MW

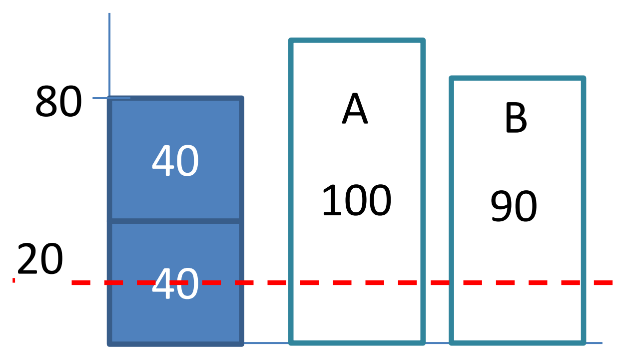
P A=$70 B=$70



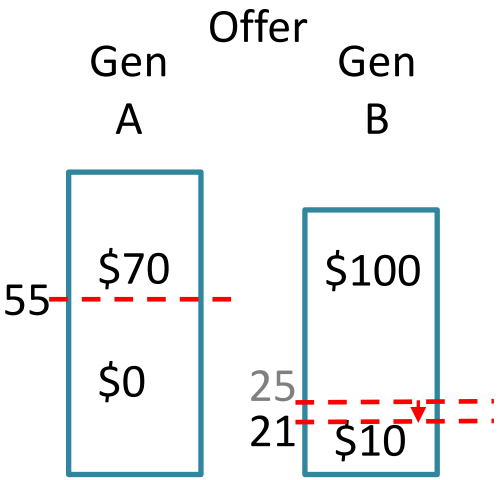
Same outcome as previously because A is not pivotal in region B

Is this good conduct?





Illustrative scenario 3: What if B moves 4MW volume up?

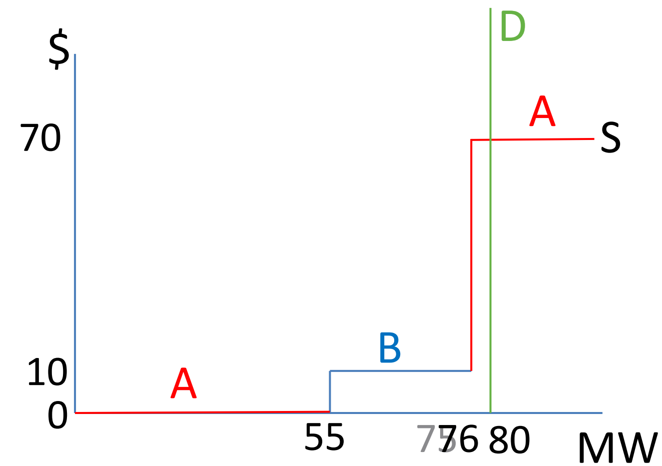


Dispatch

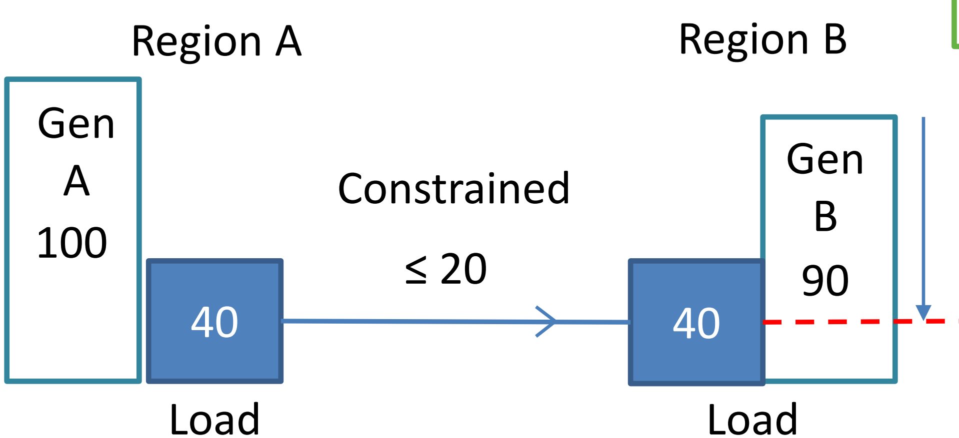
Flow A→B 19MW

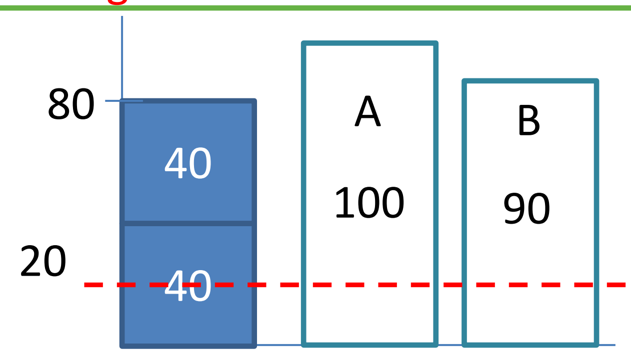
Q A=59MW
B=21MW

P A=$70
B=$70

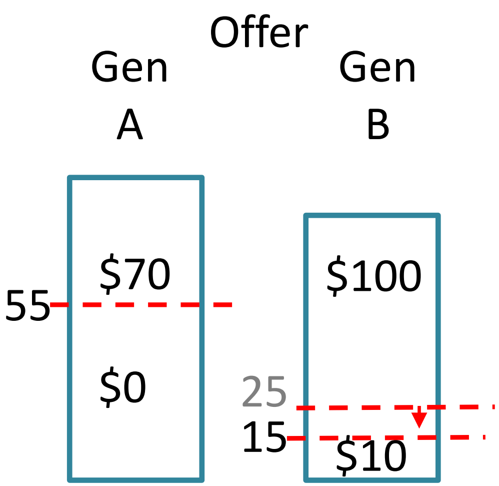


B is pivotal in region B
Price does not change from previously
Is this good conduct?





Illustrative scenario 4: What if B moves 10MW volume up?

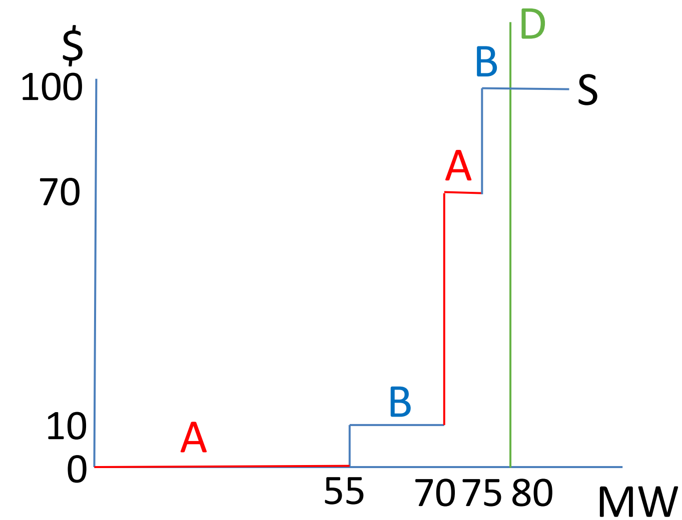


Dispatch

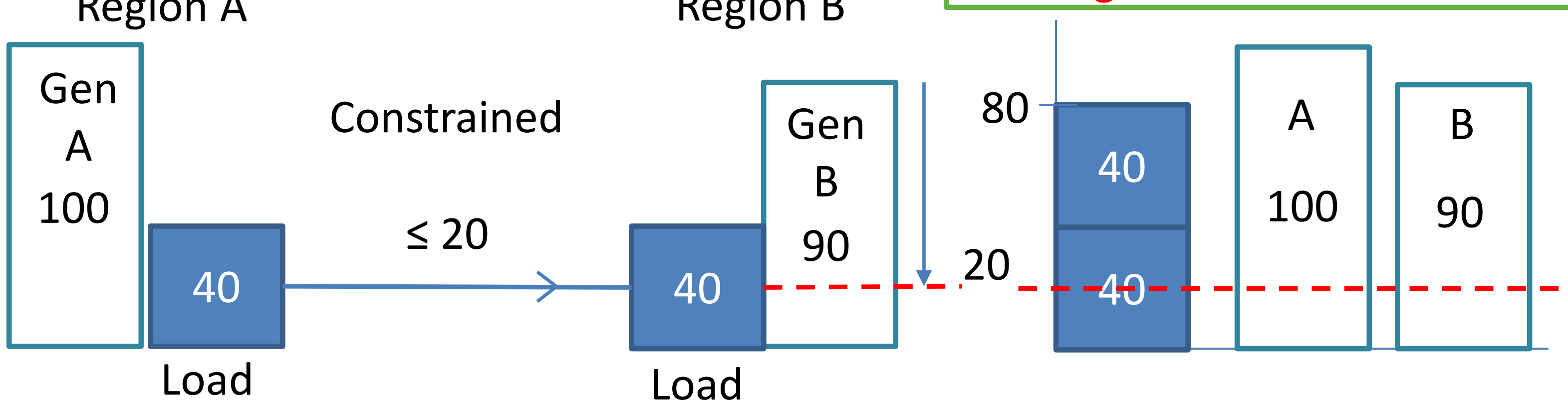
Flow A→B 20MW

Q A=60MW
B=20MW

P A=$70
B=$100



B is pivotal in B
Price separates between A and B
Is this good conduct?



Identifying a way forward on ‘pivotal’

The WAG's suggestion for determining if a pivotal supplier's high prices were efficient

The WAG noted: "Inefficiency will only arise if spot prices in an area subject to pivotal supply diverge from the marginal value of electricity or reserve at that time and location – ie the value that would be established in a workably competitive market" *WAG Discussion paper: Pricing in Pivotal situations,* p.6

Further: "One approach [to determining whether high prices in a pivotal supplier situation are efficient] is to consider a scenario where the pivotal supplier was notionally a number of separate competing entities. If the spot price outcomes observed in practice were broadly similar to those expected under this scenario, there are unlikely to be particular efficiency concerns." *WAG Discussion paper,* p.7.

Recommendation

It is **recommended** MDAG direct the secretariat to provide an updated draft discussion paper for consideration at the 5 December 2018 MDAG meeting.

In order to progress development of the problem definition it is proposed the paper would set out the group's views on whether the following actions are consistent with a high standard of trading conduct:

- When a generator is pivotal whether it is appropriate for them to alter offers:
  - so as to alter the price outcomes of a potential constraint, either upstream or downstream of the constraint
  - in one market (energy or IR), time period or location to recover a loss in another market (energy or IR), time period or location
  - in the spot market (energy or IR) to manipulate outcomes in other markets (e.g. forward contract prices and indexation, option premiums, prudential security requirements, retail)
  - in the spot market in a way that inhibits competition (eg, collusion, withholding information, economically withholding capacity, cartel-like behaviour).