

## Draft amendments to Code

### Proposed amendments to Part 1 of the Code

base case means a base case **publicised** by the **Authority** under clause 13.236B

disclosing participant means any of the following:

- (a) a **generator**;
- (b) a **retailer**;
- (c) a person who consumes **electricity** that is conveyed to the person directly from the national **grid**;
- (d) a person who buys **electricity** from the **clearing manager**.

island GWAP means the generation weighted average price for an **island** calculated in accordance with clause 1(2) of Schedule 13.3A

island scarcity pricing situation means a situation determined to be an island scarcity pricing situation by the **pricing manager** under clause 13.135A(3)

island shortage situation means a situation specified in a notice to be an island ~~wide shortage situation~~ by the **system operator** under clause ~~7(20C)5(1)(e)~~ of **Technical Code B** of Schedule 8.3

national GWAP means the generation weighted average price for both **islands** calculated in accordance with clause 2(2) of Schedule 13.3A

national scarcity pricing situation means a situation determined to be a national scarcity pricing situation by the **pricing manager** under clause 13.135A(4)

national shortage situation means a ~~concurrent island shortage situation in the North Island and South Island situation specified in a notice to be a national shortage situation by the system operator under clause 7(20D) of Technical Code B of Schedule 8.3~~

shortage situation means an **island shortage situation** or a **national shortage situation**

risk disclosure statement means a risk disclosure statement prepared and submitted under clause 13.236A

scarcity pricing situation means an **island scarcity pricing situation** or a **national scarcity pricing situation**

stress test means a stress test **publicised** by the **Authority** under clause 13.236B

## Proposed amendments to Technical Code B of Schedule 8.3 of the Code

### 1 Purpose and application

The purpose of this **technical code** is to set out the basis on which the **system operator** and **participants** must anticipate and respond to emergency events on the **grid** that affect the **system operator's** ability to plan to comply, and to comply with its **principal performance obligations**.

Compare: Electricity Governance Rules 2003 clause 1.1 technical code B schedule C3 part C

### 2 Application

This **technical code** applies to all **asset owners** except for **excluded generating stations**. If the **system operator** reasonably considers it necessary to assist the **system operator** in planning to comply and complying with the **principal performance obligations**, the **system operator** may require that an **excluded generating station** comply with some or all of the requirements of this **technical code**.

Compare: Electricity Governance Rules 2003 clause 1.2 technical code B schedule C3 part C

### 3 Obligations of all parties

The **system operator** and all **participants** must plan individually and, if appropriate, collectively, for a **grid emergency**, and act quickly and safely during a **grid emergency** in accordance with this **technical code**, so that the actual and potential impacts of any **grid emergency** are minimised.

Compare: Electricity Governance Rules 2003 clause 2 technical code B schedule C3 part C

### 4 Obligations of the system operator

The **system operator** must use reasonable endeavours to ensure that—

- (a) if necessary, each **participant** is advised of any independent action required of it if there is a **grid emergency**; and
- (b) facilities to be put in place by **grid owners** or other **asset owners** to manually disconnect **demand** at each **point of connection** are specified.

Compare: Electricity Governance Rules 2003 clause 3 technical code B schedule C3 part C

### 5 Formal notices and responses

- (1) The **system operator** must issue a notice either orally or in writing to relevant **participants** whenever, or as soon as practicable after, any of the following events has occurred:
  - (a) the ability of the **system operator** to plan to comply,

and to comply, with the **principal performance obligations** is at risk or is compromised (as set out in the **policy statement**):

- (b) public safety is at risk:
- (c) there is a risk of significant damage to **assets**:
- (d) independent action has been taken in accordance with this **technical code** to restore the **system operator's principal performance obligations**:

(1A) The **system operator** must issue a notice in writing to all participants whenever, or as soon as practicable after, an island wide instruction to disconnect **demand** has been issued, amended or revoked under clause 6.

(1B) The **system operator** must provide any notice issued under clause 5(1A) to the **pricing manager** by 0730 hours on the following **trading day**:-

- (2) The **system operator** must ensure that a **formal notice** issued in accordance with subclause (1) includes the following:
  - (a) the electrical or geographical region affected by the notice:
  - (b) the potential consequences of the situation:
  - (c) the responses requested of **participants**:
  - (d) the **trading periods** to which the notice applies.
- (3) The **system operator** must record the issue of a **formal notice**, and each **participant** must record receipt of a **formal notice**.
- (4) If the **system operator** issues a request in accordance with this **technical code** to a **participant**, the **participant** must use reasonable endeavours to respond to the request.

Compare: Electricity Governance Rules 2003 clause 4 technical code B schedule C3 part C

## **6 Actions to be taken by the system operator in a grid emergency**

- (1) If insufficient generation and **frequency keeping** gives rise to a **grid emergency**, the **system operator** may, having regard to the priority below, if practicable, and regardless of whether a **formal notice** has been issued, do 1 or more of the following:
  - (a) request that a **generator** varies its **offer** and **dispatch** the **generator** in accordance with that **offer**, to ensure there is sufficient generation and **frequency keeping**:
  - (b) request that a **purchaser** or a **distributor** reduce **demand**:
  - (c) require a **grid owner** to reconfigure the **grid**:
  - (d) require the disconnection of **demand** in accordance with clause 7(~~19~~20):

- (e) take any other reasonable action to alleviate the **grid emergency**.
- (2) If insufficient transmission capacity gives rise to a **grid emergency**, the **system operator** may, having regard to the priority below, if practicable, and regardless of whether a **formal notice** has been issued, do 1 or more of the following:
    - (a) request that a **generator** varies its **offer** and **dispatch** the **generator** in accordance with that **offer**, to ensure that the available transmission capacity within the **grid** is sufficient to transmit the remaining level of **demand**;
    - (b) request that an **asset owner** restores its **assets** that are not in service;
    - (c) request that a **purchaser** or **distributor** reduces its **demand**;
    - (d) require the disconnection of **demand** in accordance with clause 7(19):
    - (e) take any other reasonable action to alleviate the **grid emergency**.
  - (3) If frequency is outside the **normal band** and all available **injection** has been **dispatched**, the **system operator** may require the disconnection of **demand** in accordance with clause 7(20) in appropriate block sizes until frequency is restored to the **normal band**.
  - (4) If any **grid** voltage reaches the minimum voltage limit set out in the table contained in clause 8.22(1), and is sustained at or below that limit, the **system operator** may require the disconnection of **demand** in accordance with clause 7(19) in appropriate block sizes until the voltage is restored to above the minimum voltage limit.
  - (5) The **system operator** may, if an unexpected event occurs giving rise to a **grid emergency**, take any reasonable action to alleviate the **grid emergency**.

Compare: Electricity Governance Rules 2003 clause 5 technical code B schedule C3 part C

## 7 Load shedding systems

- (1) Each North Island **distributor** must ensure, at all times, that an **automatic under-frequency load shedding** system is installed in accordance with subclause (6) for each **grid exit point** to which its **local network** is connected.
- (2) Every South Island **grid owner** must ensure, at all times, that an **automatic under-frequency load shedding** system is installed in accordance with subclause (6) for each **grid exit point** in the South Island.
- (3) Subject to subclause (8), each **distributor** and **grid owner** must use reasonable endeavours to ensure that at all times its

**automatic under-frequency load shedding** systems are maintained in accordance with subclause (6).

- (4) If, at any time, a **distributor** or **grid owner** believes that an **automatic under-frequency load shedding** system may not be capable of meeting the requirements of subclause (6), it must notify the **system operator** as soon as practicable and provide any information that the **system operator** reasonably requests.
- (5) Each South Island **distributor** must co-operate fully with any **grid owner** in relation to an **automatic under-frequency load shedding** system installed at any **GXPs** at which the **distributor's local network** is connected to the **grid**. Each South Island **distributor** must also provide the **grid owner** with any information relating to **automatic under-frequency load shedding** that the **grid owner** reasonably requests.
- (6) An **automatic under-frequency load shedding** system required to be provided in accordance with subclause (1), must enable, at all times, automatic disconnection of 2 blocks of **demand** (each block being a minimum of 16% of the total pre-event **demand**) at that **grid exit point** subject to subclause (8), with block one disconnecting **demand**—
  - (a) in the North Island, within 0.4 seconds after the frequency reduces to, and remains at or below, 47.8 Hertz; and
  - (b) in the South Island, within 0.4 seconds after the frequency reduces to, and remains at or below 47.5 Hertz;and block two disconnecting **demand**—
  - (c) in the North Island,—
    - (i) 15 seconds after the frequency reduces to, and remains at or below, 47.8 Hertz; or
    - (ii) within 0.4 seconds after the frequency reduces to, and remains at or below, 47.5 Hertz; and
  - (d) in the South Island,—
    - (i) 15 seconds after the frequency reduces to, and remains at or below, 47.5 Hertz; or
    - (ii) within 0.4 seconds after the frequency reduces to, and remains at or below, 45.5 Hertz.
- (7) To avoid doubt, **automatic under-frequency load shedding** blocks must not include any **interruptible load** procured by the **system operator**.
- (8) Subject to the **system operator's** agreement, which must not be unreasonably withheld, a **distributor** or a **grid owner** may redistribute **automatic under-frequency load shedding** quantities between **grid exit points**, if the overall **automatic under-frequency load shedding** quantity obligations in subclause (6) are met.

- (9) Each **distributor** and each **grid owner** must provide **automatic under-frequency load shedding** block **demand** profile information to the **system operator** if reasonably requested by the **system operator**. That information must be in a form that enables the **system operator** to make a reasonable assessment of the total amount of **demand** available to be disconnected if **automatic under-frequency load shedding** blocks operate in accordance with subclauses (6) to (8).
- (10) Subclauses (12) to (16) apply if a direction under clause 9.15 is in force.
- (11) When subclauses (12) to (16) apply, the **system operator** may give notice to 1 or more of the **participants** specified in subclause (14), specifying modifications to the extent to which subclauses (1) to (4) and (6) apply to the **participant** during any 1 or more periods, or in any 1 or more circumstances, specified in the notice.
- (12) The **system operator** must ~~log and keep a~~ record ~~of~~ each notice given under subclause (11).
- (13) When a notice under subclause (11) is in force in relation to a **participant**, the requirements of subclauses (1) to (4) and (6) are modified for that **participant** to the extent, and during the periods or in the circumstances (as the case may be), specified in the notice.
- (14) The **participants** to whom the **system operator** may issue a notice in accordance with subclause (11) are—
- (a) **distributors** in the North Island; and
  - (b) **grid owners** in the South Island.
- (15) The **system operator** may amend or revoke a notice, or revoke and substitute a new notice.
- (16) A notice under subclause (11) expires on the earlier of—
- (a) the ~~date-time~~ (if any) specified in the notice for its expiry; or
  - (b) the revocation or expiry of the direction referred to in subclause (10) ~~or subclause (15)~~.
- (17) The **system operator**, each **distributor**, each **grid owner** and relevant **retailers** must co-operate, if reasonably practicable, to ensure that any **interruptible load** contracted by the **system operator** that could affect the size of an **automatic under-frequency load shedding** block is identified to assist the **distributor** or the **grid owner** to meet its obligations in subclauses (5) to (9).
- (18) On the operation of an **automatic under-frequency load shedding** system, the **distributor** or **grid owner**—
- (a) must, as soon as practicable, advise the **system operator** of the operation of the **automatic under-frequency load shedding** system and, if reasonably

- required by the **system operator** to plan to comply, or to comply, with its **principal performance obligations**, a reasonable estimate of the amount of **demand** that has been disconnected; and
- (b) may restore **demand** only when permitted to do so by the **system operator**; and
  - (c) must ensure **demand** restored in accordance with paragraph (b) complies with subclause (6); and
  - (d) must report to the **system operator** if **demand** is moved between **points of connection**; and
  - (e) may request permission to restore **demand** from the **system operator** if no instruction to restore **demand** is received from the **system operator** within 15 minutes of the frequency returning to the **normal band**; and
  - (f) may cautiously and gradually restore the **demand** disconnected through the **automatic under-frequency load shedding** system if there is a **loss of communication**, after 15 minutes of the **loss of communication** occurring. This restoration must be done only while the frequency is within the **normal band** and the voltage is within the required range. Each **distributor** must immediately cease the restoration of **demand** and, to the extent necessary, disconnect **demand**, if the frequency drops below the **normal band** or the voltage moves outside the required range. As soon as practicable after communications are restored, each **distributor** or each **grid owner** must report to the **system operator** on the status of load restoration and the status of re-arming the automatic under-frequency relays.
- (19) Each **distributor** must maintain an up to date process for the disconnection of **demand** for **points of connection**, including the specification of the **participant** who will effect the disconnection of **demand**. The **distributor** must obtain agreement for the process from the **system operator** and each **grid owner** (such agreement not to be unreasonably withheld). Each **distributor** must advise the **system operator** of the agreed process in addition to any changes to a process previously advised.
- (20) If the **system operator** requires the disconnection of **demand** in accordance with this **technical code**, the **system operator** must instruct **distributors** and **grid owners** (as the case may be) in accordance with the agreed process in subclause (19) to disconnect **demand** for the relevant **point of connection**. If the **system operator** and a **distributor** or **grid owner** (as the case may be) have not agreed on a process for disconnection of **demand** at a **point of connection**, the **system operator** must instruct **grid owners**

to disconnect **demand** directly at the relevant **point of connection**. To the extent practicable, the **system operator** must use reasonable endeavours when instructing the disconnection of **demand**, to ensure equity between **distributors**.

~~(20A) If the **system operator** requires the disconnection of **demand** under clause 6(1)(d) or clause 6(2)(d), or amends or revokes an instruction to disconnect **demand**, the **system operator** must, as soon as practicable, **publish** the following:~~

~~(a) a notice of the instruction to disconnect **demand** that sets out all details of the instruction;~~

~~(b) a notice of the amendment or revocation of the instruction to disconnect **demand** that sets out all details of the amendment or revocation;~~

~~(20B) The **system operator** must log and record all instructions to disconnect **demand** that are issued, amended, or revoked in a **trading day** and provide the record to the **pricing manager** by 0730 hours on the following **trading day**.~~

~~(20C) The **system operator** must, as soon as practicable, **publish** notice of an **island shortage situation** if~~

~~(a) the **system operator** requires the disconnection of **demand** under clause 6(1)(d); and~~

~~(b) in the **trading period** in which the disconnection of **demand** is required~~

~~(i) there is no **binding constraint** in an **island** (excluding the **HVDC link**) in which the **demand** is required to be disconnected; and~~

~~(ii) there is a **binding constraint** on the **HVDC link** or the **HVDC link** is out of service.~~

~~(20D) The **system operator** must, as soon as practicable, **publish** notice of a **national shortage situation** if~~

~~(a) the **system operator** requires the disconnection of **demand** under clause 6(1)(d); and~~

~~(b) in the **trading period** in which the disconnection of **demand** is required~~

~~(i) there is no **binding constraint** in either **island**; and~~

~~(ii) the **HVDC link** is in service and there is no **binding constraint** on the **HVDC link**.~~

~~(20E) The **system operator** must~~

~~(a) revoke a notice of a **shortage situation** when the instruction to disconnect **demand** is revoked; and~~

~~(b) **publish** notice of the revocation as soon as practicable after the notice is revoked.~~

~~(20F) The **system operator** must provide a notice **published** under subclause (20C), subclause (20D), or subclause (20E) in a **trading day** to the **pricing manager** by 0730 hours on the following **trading day**.~~

- (21) Each **distributor** or **grid owner** must act as instructed by the **system operator** operating in accordance with clauses 6 and 7.

Compare: Electricity Governance Rules 2003 clause 6 technical code B schedule C3 part C

## Proposed amendments to Part 13 of the Code

### 13. 13.1 to 13.58

*[No changes]*

### 13.59 Contents of each pre-dispatch schedule *[Note: the proposed amendments to the Code relating to DSBF and dispatchable demand propose to alter this clause. If those changes are approved before the changes below, the changes may be incorporated into the amended clause 13.59. However, the proposed amendments may make the proposed paragraphs below redundant, in which case they will be removed]*

Each **pre-dispatch schedule** prepared by the **system operator** must specify, for each **trading period** in the **schedule period**,—

- (a) the expected average level of **electricity** output for each **generating plant** or **generating unit**; and
- (b) the expected average level of **interruptible load** and **instantaneous reserve** for each **generating plant** or **generating unit**; and
- (c) the indicative **frequency keeping generating stations** for each **island** at the time of preparation of each **pre-dispatch schedule**; and
- (d) the expected average level of demand at each **grid exit point**; and
- (e) **forecast prices** for each **grid injection point**, each **grid exit point**, and the **reference points**; and
- (f) **forecast reserve prices** for each **island**; and
- (g) **forecast marginal location factors** for each **grid injection point** and each **grid exit point**; and
- (h) the expected largest single reserve risk for each **island**; and
- (i) the expected level of **fast instantaneous reserve** and **sustained instantaneous reserve** required in each **island**; and
- (j) a stack of **reserve offers** for each **island** (ranking in price order from lowest to highest), and for each **island** separate stacks must be provided for **fast instantaneous reserve** and **sustained instantaneous reserve**; and
- (k) a stack of all **reserve offers** for each **island** (ranking in price order from lowest to highest) adjusted for the expected level of energy output for each **generating plant** or **generating unit**

related to the **pre-dispatch schedule**, and for each **island** separate stacks must be provided for **fast instantaneous reserve** and **sustained instantaneous reserve**; and

- (l) the expected **HVDC component flows**; and
- (m) the expected **HVDC risk offsets**; and
- (n) the expected deficit quantities for energy, fast instantaneous reserve, and sustained instantaneous reserve (if any); and
- (o) the expected binding transmission security constraints in each island; and
- (p) the expected binding constraints limiting the flow of electricity on the HVDC link or whether the HVDC link is out of service.

Compare: Electricity Governance Rules 2003 rule 3.5 section III part G

*System operator to publish information*

**13.103 System operator responsible for co-ordinating publication**  
*[No changes]*

**13.104 Information to be published** [*Note: the proposed amendments to the Code relating to DSBF and dispatchable demand propose to alter this clause. If those changes are approved before the changes below, the changes may be incorporated into the amended clause 13.104. However, the proposed amendments may make the proposed paragraphs below redundant, in which case they will be removed*]

- (1) When the **system operator** has completed a **pre-dispatch schedule**, the **system operator** must **publish**, for each **trading period** in the **schedule period**—
  - (a) the aggregate supply curve at each **reference point** incorporating all **offers** from **generators** with prices adjusted for **forecast marginal location factors**; and
  - (b) the aggregate demand curve at each **reference point** incorporating all **bids** from **purchasers** with prices adjusted for **forecast marginal location factors**; and
  - (c) the **grid injection points** and **grid exit points** that are **disconnected** and the **grid injection**

- points and grid exit points** where an **infeasibility situation** has occurred; and
- (d) the expected largest single reserve risk for each **island** as prepared by the **system operator** in accordance with clause 13.59(h); and
  - (e) the **instantaneous reserve** levels for each **island** prepared by the **system operator** in accordance with clause 13.59(i); and
  - (f) the **reserve offer** stacks for each **island** prepared by the **system operator** in accordance with clause 13.59(j); and
  - (g) the adjusted **reserve offer** stacks for each **island** prepared by the **system operator** in accordance with clause 13.59(k); and
  - (h) the indicative **frequency keeping generating stations** for each **island**; and
  - (i) the expected **HVDC component flows**; and
  - (j) the expected **HVDC risk offsets**; and
  - (k) the expected deficit quantities for energy, fast instantaneous reserve, and sustained instantaneous reserve (if any); and
  - (l) the expected binding transmission security constraints in each island; and
  - (m) the expected binding constraints limiting the flow of electricity on the HVDC link or whether the HVDC link is out of service.
- (2) At the same time that the **system operator publishes** the information required under subclause (1), the **system operator** must—
- (a) send to each **purchaser** information from the current **pre-dispatch schedule** relating to that **purchaser's demand** for the **trading periods** covered by the **schedule period**; and
  - (b) send to each **generator** information from the current **pre-dispatch schedule** relating to that **generator's generating plants** for the **trading periods** covered by the **schedule period**.

Compare: Electricity Governance Rules 2003 rule 10.2 section III part G

**13.105 to 13.130**

*[No changes]*

Subpart 4—Pricing

**13.131 Contents of this subpart**

*[No changes]*

**13.132 Purpose of the pricing process**

The purpose of the pricing process is to achieve an appropriate balance between certainty and accuracy of **final prices** and **final reserve prices** for each **trading period**. As part of the process—

- (a) the **system operator**, the **pricing manager**, a **grid owner**, or a **generator** must take certain steps under this subpart if a **provisional price situation** or [shortage situation](#) exists; and
- (b) after any **provisional price situation** is resolved, but before **publishing final prices** or **final reserve prices**, the **pricing manager** must **publish interim prices** and **interim reserve prices**; and
- (c) if an **error claimant** claims that a **pricing error** has been made, the **pricing manager** must consider the claim and resolve any **pricing error** that has occurred; and
- (d) the **pricing manager** must produce **final prices** and send them to the **clearing manager**, who will then use them in the clearing and settlement processes; and
- (e) the **pricing manager** must produce **final reserve prices**.

Compare: Electricity Governance Rules 2003 rule 2 section V part G

**13.133 Trigger ratio for high spring washer price situation**  
*[No changes]*

**13.134 Methodology to resolve high spring washer price situation**  
*[No changes]*

*Rules governing the preparation of provisional, interim, and final prices*

**13.135 Methodology used to prepare provisional, interim, and final prices**

To calculate **provisional prices, provisional reserve prices, interim prices, interim reserve prices, final prices and final reserve prices** the **pricing manager** must use—

- (a) the **input information** in clause 13.141; and
- (b) the methodology in Schedule 13.3.

Compare: Electricity Governance Rules 2003 rule 3.1 section V part G

**13.135A Notice of scarcity pricing situation**

- (1) This clause applies if the **pricing manager**, in relation to a **trading period**, gives notice in accordance with clause 13.144(1) that a **shortage situation** exists.
- (2) If this clause applies, the **pricing manager** must determine whether a **scarcity pricing situation** exists in the relevant trading period.
- (3) An **island scarcity pricing situation** exists if the **pricing manager** gives notice that an **island shortage situation** existed~~s~~ and the **input information** or revised data shows that—
  - (a) for the relevant **trading period**, there is no **binding constraint** in an **island** (excluding the **HVDC link**) in which an **island shortage situation** declaration is made; and
  - (b) for the relevant **trading period**—
    - (i) the **HVDC link** is in service and—
      - (A) if the **island** in which the **island shortage situation** declaration ~~is~~was made ~~is~~was the South Island, the price at the Benmore **node** is higher than the price at the Haywards **node**;
      - or
      - (B) if the **island** in which the **island shortage situation** declaration ~~is~~was made ~~is~~was the North Island, the

price at the Haywards node is higher than the price at the Benmore node;

or

(ii) the HVDC link is out of service.

(4) A national scarcity pricing situation exists if the pricing manager gives notice that a national shortage situation exists and the input information or revised data shows that, for the relevant trading period,—

(a) there is no binding constraint in either island; and

(b) the HVDC link is in service and there is no binding constraint on the HVDC link.

(5) If the pricing manager determines that a scarcity pricing situation exists, the pricing manager must—

(a) publish notice of the scarcity pricing situation; and

(b) specify in the notice each trading period affected by the scarcity pricing situation; and

(c) in relation to each trading period affected by a scarcity pricing situation, specify in the notice whether the scarcity pricing situation is an island scarcity pricing situation or a national scarcity pricing situation.

#### 13.135B Methodology to prepare interim prices if scarcity pricing situation exists

Subject to clause 13.135C, if a scarcity pricing situation exists in a trading period, the pricing manager must—

(a) calculate interim prices and interim reserve prices in the affected island or islands for that trading period in accordance with the methodology set out in Schedule 13.3A; and

(b) publish interim prices and interim reserve prices for the previous trading day by—

(i) if no provisional price situation is notified, 1200 hours; or

(ii) if a provisional price situation is notified, 2.5 hours after the provisional price situation is resolved.

#### [OPTION A – Scaled pricing:

**13.135C Limitation on number of trading periods affected by a scarcity pricing situation**

Clause 13.135B does not apply if there has been a scarcity pricing situation affecting prices in an island in 32 trading periods of the previous 336 trading periods.]

**[OPTION B – Flat pricing:**

**13.135C Limitation on number of trading periods affected by a scarcity pricing situation**

Clause 13.135B does not apply if the sum of the island GWAPs in the previous 336 trading periods exceeds \$168,000.]

*Generators to give pricing manager half-hour metering information*

**13.136 to 13.141**

*[No changes]*

**13.142 Pricing manager to publish interim prices unless provisional price situation ~~or shortage scarcity pricing situation~~ notified**

- (1) The **pricing manager** must implement the process set out in clauses 13.143 to 13.185 and resolve the **provisional price situation** ~~or shortage scarcity pricing situation~~ if, by 1000 hours on a **trading day**, 1 of the following notices has been **published** for the previous **trading day**:
  - (a) a notice **published** by a **grid owner**, in accordance with clause 13.143, which specifies that a **SCADA situation** exists:
  - (b) a notice **published** by the **pricing manager**, in accordance with clause 13.144(1), which specifies that an **infeasibility situation** or a **metering situation** or a **high spring washer price situation** ~~or a scarcity pricing shortage situation~~ exists.
- (2) However, if by 1000 hours on a **trading day** a notice specified in subclause (1) has not been **published** for the previous **trading day**, the **pricing manager** must **publish interim prices** and **interim reserve prices** for the previous **trading day** by 1200 hours.

Compare: Electricity Governance Rules 2003 rule 3.4 section V part G

**13.143 Grid owners to notify SCADA situation**

*[No changes]*

**13.144 Pricing manager to give notice of infeasibility situation, metering situation, or high spring washer price situation, ~~or scarcity pricing shortage situation~~**

- (1) Subject to subclause (2), if the **pricing manager** receives **input information** that yields an **infeasibility situation**, or a **metering situation**, or a **high spring washer price situation**, ~~or receives notice of a **scarcity pricing shortage situation** in accordance with clause 7(20F) of Technical Code B of Schedule 8.3~~, the **pricing manager** must, no later than 0900 hours on the day that the **pricing manager** receives the **input information** ~~or notice~~,—
  - (a) **publish** notice of the **infeasibility situation**, or **metering situation**, or **high spring washer price situation**, ~~or **scarcity pricing shortage situation**~~; and
  - (b) specify in the notice each **trading period** affected by the **infeasibility situation**, or **metering situation**, or **high spring washer price situation**, ~~or **scarcity pricing shortage situation**~~; and
  - (c) in relation to each **trading period** affected by a **high spring washer price situation**, specify in the notice each **transmission security constraint** that has **bound** in the relevant **trading period** or **trading periods**; ~~and~~
  - ~~(d) in relation to each **trading period** affected by a **scarcity pricing shortage situation**, specify in the notice whether the **scarcity pricing shortage situation** is an **island scarcity pricing shortage situation** or a **national scarcity pricing shortage situation**.~~
- (2) The **pricing manager** must not give notice of a **high spring washer price situation** ~~or **scarcity pricing shortage situation**~~ in accordance with subclause (1) in relation to a **trading period** if an **infeasibility situation**, or a **metering situation**, or a **SCADA situation** exists in that **trading period** and has not been resolved.

Compare: Electricity Governance Rules 2003 rules 3.6 and 3.6A section V part G

**13.145 Grid owner to give notice that estimated data given**  
*[No changes]*

**13.146 Requirements if provisional price situation or**  
**scarcity pricing shortage situation exists**

- (1) If notice is given by—
  - (a) a **grid owner** to the **pricing manager** of a **SCADA situation** in accordance with clause 13.143; or
  - (b) the **pricing manager** of a **metering situation** in accordance with clause 13.144(1); or
  - (c) the **pricing manager** of an **infeasibility situation** in accordance with clause 13.144(1)—  
the relevant **grid owner**, and, in the case of an **infeasibility situation**, the **system operator**, must exercise reasonable endeavours to resolve the **provisional price situation** and to provide revised data to the **pricing manager**.
- (2) If notice is given of a **high spring washer price situation** in accordance with clause 13.144(1), the **system operator** must apply the **high spring washer price relaxation factor** in accordance with the **high spring washer price situation methodology** and provide revised data to the **pricing manager**.
- (2A) If notice is given of a **scarcity pricing shortage situation** in accordance with clause 13.144(1), the **pricing manager** must determine whether a **scarcity pricing situation** exists in accordance with clause 13.135A and, if a **scarcity pricing situation** does exist, calculate **interim prices** and **interim reserve prices** in accordance with clause 13.135B.
- (3) The revised data required by subclauses (1) and (2) must be provided to the **pricing manager**—
  - (a) if the **provisional price situation** arose on a **business day**, by 1000 hours on that day; and
  - (b) if the **provisional price situation** arose on a day other than a **business day**, by 1200 hours on the 2<sup>nd</sup> **business day** after the **provisional price situation** arose.
- (4) If a **generator** does not supply **half-hourly metering information** to the **pricing manager** or to a **grid owner** in accordance with clauses 13.136 to 13.140, and the **pricing manager** has notified a **metering situation** in accordance with clause 13.144(1), the **generator** must use reasonable endeavours to assist the **grid owner** to resolve the **provisional price situation**.

Compare: Electricity Governance Rules 2003 rule 3.8 section V part G

**13.147 to 13.166**

*[No changes]*

**13.166A Pricing manager to recalculate and publish interim prices if infeasibility situation caused by a shortage of instantaneous reserve**

- (1) If an infeasibility situation that has been resolved under this subpart was caused by a shortage of instantaneous reserve, the pricing manager must recalculate and publish interim prices for the relevant trading period by adding a virtual provider of fast instantaneous reserve and sustained instantaneous reserve, at the price as specified in subclause (2), that provides sufficient fast instantaneous reserve and sustained instantaneous reserve so that prices for fast instantaneous reserve and sustained instantaneous reserve do not exceed that greatest price.**
- (2) The price referred to in subclause (1) for a trading period is the greater of—**

  - (a) the highest offer scheduled in the relevant island during the trading period according to the revised data provided to the pricing manager under this subpart; or**
  - (b) the highest reserve offer scheduled in the relevant island during the trading period according to the revised data provided to the pricing manager under this subpart.**

*Interim pricing period*

**13.167 to 13.182**

*[No changes]*

*Publication of final prices*

**13.183 to 13.185**

*[No changes]*

*Miscellaneous requirements relating to calculation of prices*

**13.186 to 13.191**

*[No changes]*

*Calculation of constrained off amounts*

**13.192 to 13.201**

*[No changes]*

*Calculation of constrained on amounts*

**13.202 Constrained on situations may occur**

**(1) Subject to subclause (2), a constrained on situation**

occurs when—

- (a) a **generator** is given a **dispatch instruction** by the **system operator** and the price **offered** by the **generator** for that dispatched quantity of **electricity** at the relevant **grid injection point** and **trading period** is higher than the **final price** at that **grid injection point** in the relevant **trading period**; or
- (b) in relation to a **block dispatch group** or **station dispatch group**, a **generator** is given a **dispatch instruction** by the **system operator** and the price **offered** by the **generator** for that aggregate dispatched quantity of **electricity** from that **block dispatch group** or **station dispatch group** in the relevant **trading period** is higher than the **final price** in the relevant **trading period**; or
- (c) an **ancillary service agent** is given a **dispatch instruction** by the **system operator** and the price **offered** by the **ancillary service agent** for the dispatched **instantaneous reserve** in the relevant **trading period** is higher than the **final reserve price** of the dispatched **instantaneous reserve** in the relevant **trading period**.

**(2) If a scarcity pricing situation occurs in a trading period, a constrained on situation is deemed not to have occurred in that trading period.**

Compare: Electricity Governance Rules 2003 rule 5.1 section V part G

**13.203 to 13.212**

*[No changes]*

*Pricing manager's reporting obligations*

**13.213 to 13.216**

*[No changes]*

Subpart 5—Hedge arrangement disclosure

**13.217 to 13.236**

*[No changes]*

Schedules 13.1 to 13.3 and 13.4

*[No changes]*

