

Electricity Industry Participation Code Amendment (Extended Reserve) 2014

Pursuant to section 38 of the Electricity Industry Act 2010, and having complied with section 39 of that Act, I make the following amendments to the Electricity Industry Participation Code 2010.

At Wellington on the 4th day of July 2014



Dr Thomas Brent Layton
Chairperson
Electricity Authority

Certified in order for signature:



Barbara Sole
Senior Legal Counsel
Electricity Authority



Tony Dellow
Partner
Buddle Findlay

3 July 2014

3 July 2014

Contents

1	Title	3
2	Commencement	3
3	Code amended	3
4	Clause 1.1 amended (Interpretation)	3
5	Clause 8.1 amended (Contents of this Part)	4
6	Clause 8.5 amended (Restoration)	4
7	Clause 8.19 amended (Contributions to frequency support in under-frequency events)	4
8	Clause 8.29 amended (Right to apply for approval of equivalence arrangement or grant of dispensation)	4
9	New clauses 8.54A to 8.54T and subpart headings inserted	4
	Subpart 4—Interruptible load	
	8.54A Contents of this subpart	4
	8.54B Ancillary service agents to provide information about interruptible load	4
	Subpart 5—Extended reserve	
	8.54C Contents of this subpart	5
	8.54D System operator to review extended reserve	5

	8.54E Review of extended reserve technical requirements schedule	5
	8.54F Authority may require system operator to reconsider	6
	8.54G Preparation and publication of extended reserve selection methodology	7
	8.54H Principles for extended reserve selection methodology	7
	8.54I Review of extended reserve selection methodology	8
	8.54J Extended reserve manager to undertake extended reserve selection process	8
	8.54K Information required for extended reserve selection process	9
	8.54L Extended reserve manager to issue extended reserve procurement notices	9
	8.54M Asset owners to prepare implementation plans	9
	8.54N Terms and conditions applying to the provision of extended reserve	10
	8.54O System operator to publish and maintain extended reserve schedule	10
	8.54P System operator to issue statements of extended reserve obligations	10
	8.54Q System operator to notify clearing manager of dates	11
	8.54R System operator to report to the Authority	11
	8.54S New distributors and new grid owners to provide information	11
	8.54T Assignment of extended reserve obligations	12
10	New clause 8.54U and subpart heading inserted	12
	Subpart 6—Allocating costs	
	8.54U Contents of this subpart	12
11	Cross heading above clause 8.55 amended	12
12	Clause 8.55 amended (Identifying costs associated with each ancillary service)	12
13	New clause 8.67A inserted (Extended reserve costs allocated to distributors)	12
	8.67A Extended reserve costs allocated to distributors	13
14	Clause 8.68 amended (Clearing manager to determine amounts payable and receivable)	13
15	Clause 8.69 replaced (Clearing manager to determine wash up amounts payable and receivable)	14
	8.69 Clearing manager to determine wash up amounts payable and receivable	14
16	Schedule 8.3, Technical Code A, clause 8 amended	14
17	Cross heading in Schedule 8.3, Technical Code A, Appendix B, above clause 1 amended	14
18	Schedule 8.3, Technical Code A, Appendix B, clause 1 replaced	15
19	Schedule 8.3, Technical Code A, Appendix B, clauses 6 and 7 revoked	15
20	Schedule 8.3, Technical Code B, clause 6 amended	15
21	Schedule 8.3, Technical Code B, clause 7 replaced	15
22	New Schedule 8.5 inserted	17
23	Clause 13.82 amended (Dispatch instructions to be complied with)	17
24	Clause 14.1 amended (Contents of this Part)	17
25	Clause 14.14 amended (Amounts owing for ancillary services)	17
26	New clause 14.14A inserted (Amounts owing for extended reserve)	17
	14.14A Amounts owing for extended reserve	17
27	Clause 14.18 amended (Clearing manager to advise participant of amounts owing and payable)	17
28	Clause 14.19 amended (Amounts owing by participant to clearing manager)	17
29	Clause 14.20 amended (Amounts owing by clearing manager to participant)	17
30	Clause 14.56 amended (Calculation of revised amount owing for generation)	18
31	Clause 14A.18 amended (System operator to provide information)	18
32	Schedule 14A.1, clause 9 amended	18
33	Schedule 14A.1, clause 10 amended	18

34	Clause 17.45 revoked (Redistribution of automatic under-frequency load shedding)	18
35	New clauses 17.48A and 17.48B inserted	18
	17.48A Transitional provisions for extended reserve	18
	17.48B Transitional provisions for change to frequency limit in South Island	19
	Schedule	20
	New Schedule 8.5 inserted	

Amendment

- 1 Title**
This is the Electricity Industry Participation Code Amendment (Extended reserve) 2014.
- 2 Commencement**
 - (1) This amendment comes into force on 7 August 2014, except clauses 10 to 15 and 24 to 33.
 - (2) Clauses 10 to 15 and 24 to 33 come into force on 24 March 2015.
- 3 Code amended**
This amendment amends the Electricity Industry Participation Code 2010.
- 4 Clause 1.1 amended (Interpretation)**
 - (1) In clause 1.1(1), replace the definition of **automatic under-frequency load shedding** with:
"automatic under-frequency load shedding means a form of **extended reserve** in which electrical load is automatically shed when frequency falls below a preset frequency, or falls at a rate, specified by the **system operator** in the relevant **extended reserve provider's statement of extended reserve obligations**".
 - (2) In clause 1.1(1), revoke the definition of **expected interruption costs**.
 - (3) In clause 1.1(1), insert in their appropriate alphabetical order:
"extended reserve means services provided to restore frequency to the **normal band** after disturbances of a magnitude that make it impracticable or uneconomic to restore frequency using **ancillary services**
"extended reserve manager means the **market operation service provider** that is for the time being appointed as the **extended reserve manager** for the purposes of this Code, or if no regulations have been made establishing the **extended reserve manager** as a **market operation service provider**, the **Authority**
"extended reserve procurement notice means the notice given to an **asset owner** by the **extended reserve manager** under clause 8.54L
"extended reserve procurement schedule means the schedule **published** by the **extended reserve manager** under clause 8.54J
"extended reserve provider means an **asset owner** required to provide **extended reserve** under Schedule 8.3, **Technical Code B**, clause 7
"extended reserve schedule means the schedule **published** by the **system operator** under clause 8.54O
"extended reserve selection methodology means the methodology **published** by the **extended reserve manager** under clause 8.54G

"extended reserve technical requirements report means the report **published** by the **system operator** under clause 8.54D

"extended reserve technical requirements schedule means the schedule of requirements **published** by the **system operator** under clause 8.54D

"statement of extended reserve obligations, in relation to an **asset owner**, means the latest statement of obligation given to the **asset owner** by the **system operator** under clause 8.54P".

5 Clause 8.1 amended (Contents of this Part)

In clause 8.1, after **"ancillary services,"** insert **"extended reserve,"**.

6 Clause 8.5 amended (Restoration)

In clause 8.5(1)(a), replace **"generation and ancillary services"** with **"generation, ancillary services, and extended reserve"**.

7 Clause 8.19 amended (Contributions to frequency support in under-frequency events)

Replace clause 8.19(5) with:

"(5) Each extended reserve provider must provide extended reserve in accordance with Schedule 8.3, Technical Code B."

8 Clause 8.29 amended (Right to apply for approval of equivalence arrangement or grant of dispensation)

(1) In clause 8.29, replace **"If an asset owner"** with **"Subject to subclause (2), if an asset owner"**.

(2) In clause 8.29, insert as subclause (2):

"(2) The system operator may not grant a dispensation in relation to an obligation to provide extended reserve under clause 8.19(5) or Schedule 8.3, Technical Code B, clause 7."

9 New clauses 8.54A to 8.54T and subpart headings inserted

After clause 8.54, insert:

"Subpart 4—Interruptible load

"8.54A Contents of this subpart

This subpart provides for the provision of information relating to **interruptible load**.

"8.54B Ancillary service agents to provide information about interruptible load

"(1) Each ancillary service agent that contracts for interruptible load in a network must, within 10 business days of entering into the contract, give the following participants the information in subclause (2):

"(a) if the interruptible load is contracted on a local network, the distributor that operates the local network:

- "(b) if the **interruptible load** is contracted on an **embedded network**, the **distributor** that operates the **local network** to which the **embedded network** is connected;
 - "(c) if the **interruptible load** is contracted on the **grid**, the **grid owner** that owns or operates the part of the **grid** on which the **interruptible load** is contracted.
- "(2) The information required is—
- "(a) a list of the **ICPs** to which the contract relates; and
 - "(b) the maximum **MW** that can be interrupted under the contract; and
 - "(c) the commencement and expiry dates of the contract.
- "(3) If an **ancillary service agent** has given a **distributor** or **grid owner** information under subclause (1), the **distributor** or **grid owner** may require the **ancillary service agent** to provide further information about the **interruptible load** to which the contract relates.
- "(4) An **ancillary service agent** must comply with a requirement under subclause (3).

"Subpart 5—Extended reserve

"8.54C Contents of this subpart

This subpart provides for the procurement of **extended reserve**.

"8.54D System operator to review extended reserve

- "(1) The **system operator** must review the technical requirements for **extended reserve** in accordance with this clause.
- "(2) The **Authority** may, at any time, give the **system operator** principles outlining the **Authority's** expectations for the objectives of the review.
- "(3) As part of the review, the **system operator** must consider any principles given to the **system operator** by the **Authority** under subclause (2).
- "(4) On the basis of the review, the **system operator** must prepare and **publish**—
- "(a) an **extended reserve technical requirements report**; and
 - "(b) an **extended reserve technical requirements schedule**.
- "(5) The **extended reserve technical requirements report** must reflect the **system operator's** analysis of the technical requirements for **extended reserve** on which the **extended reserve technical requirements schedule** is based.
- "(6) The **extended reserve technical requirements schedule** must—
- "(a) specify the technical specifications for **extended reserve** that the **system operator** requires in order to be able to comply with the **principal performance obligations**; and
 - "(b) specify requirements for periodic testing that each **extended reserve provider** will be required to carry out in relation to the relevant **assets**.
- "(7) The consultation requirements in Part 1 of Schedule 8.5 apply to the preparation and **publication** of the **extended reserve technical requirements schedule**.

"8.54E Review of extended reserve technical requirements schedule

- "(1) The **system operator** must—

- "(a) review the **extended reserve technical requirements schedule** under this clause; and
 - "(b) as soon as practicable after completing the review, decide whether to propose a change to the schedule; and
 - "(c) advise the **Authority** of its decision.
- "(2) The review must be conducted so that the **system operator** advises the **Authority** of its decision no later than 5 years after the date on which the **system operator** advised the **Authority** of its decision on the previous review.
- "(3) The **Authority** may direct the **system operator** to review the **extended reserve technical requirements schedule** at a time that is sooner than required under subclause (2).
- "(4) If the **system operator** decides to propose a change to the **extended reserve technical requirements schedule** as a result of a review, the **system operator** must—
- "(a) prepare and **publish**—
 - "(i) an **extended reserve technical requirements report**; and
 - "(ii) an **extended reserve technical requirements schedule**; and
 - "(b) provide the following additional information when giving a draft of the revised schedule to the **Authority** under clause 2(2) of Schedule 8.5:
 - "(i) an explanation of the proposed change and a statement of the objectives of the proposed change;
 - "(ii) an evaluation of the costs and benefits of the proposed change;
 - "(iii) an evaluation of alternative means of achieving the objectives of the proposed change.
- "(5) Clause 8.54D(2), (3) and (5) to (7) applies to each review of the **extended reserve technical requirements schedule**.
- "(6) If the **system operator** advises the **Authority** that it does not intend to propose a change to the **extended reserve technical requirements schedule**, the **system operator** must give the **Authority** the findings of its review of the schedule.

"8.54F Authority may require system operator to reconsider

- "(1) The **Authority** may require the **system operator** to reconsider a decision made under clause 8.54E(1)(c) not to propose a change to the **extended reserve technical requirements schedule**.
- "(2) If the **Authority** requires the **system operator** to reconsider, the **Authority** must advise the **system operator** of—
- "(a) the **Authority's** reasons for requiring the **system operator** to reconsider; and
 - "(b) the date, determined after consulting with the **system operator**, by which the **system operator** must—
 - "(i) confirm its decision under clause 8.54E(1)(c); or
 - "(ii) provide a draft of the revised schedule to the **Authority** under clause 2(2) of Schedule 8.5.
- "(3) The **Authority** must as soon as practicable **publicise** the advice received from the **system operator** under clause 8.54E(1)(c) and any advice given by the **Authority** to the **system operator** under subclause (2).

"8.54G Preparation and publication of extended reserve selection methodology

- "(1) The **extended reserve manager** must prepare and **publish** an **extended reserve selection methodology**.
- "(2) The methodology must specify how the **extended reserve manager** will procure **extended reserve** according to the **extended reserve technical requirements schedule**.
- "(3) The methodology must—
 - "(a) be based on the principles specified in clause 8.54H; and
 - "(b) specify how the methodology applies to each **island**, including, if appropriate, specifying that the methodology does not apply to an **island**; and
 - "(c) identify the **asset owners** that are required to provide information during an **extended reserve** selection process; and
 - "(d) specify the information that the **asset owners** are required to provide; and
 - "(e) specify the time frame within which **asset owners** are required to provide the information; and
 - "(f) specify the basis on which the **extended reserve manager** selects **asset owners** to be **extended reserve providers**; and
 - "(g) include default terms and conditions specifying the basis on which **extended reserve** must be provided, including requirements for periodic testing of **assets**; and
 - "(h) specify how payments to **asset owners** for providing **extended reserve** are set.
- "(4) The consultation and approval requirements in Part 2 of Schedule 8.5 apply to the preparation and **publication** of the **extended reserve selection methodology**.

"8.54H Principles for extended reserve selection methodology

- "(1) The **extended reserve selection methodology** must give effect to the principles specified in subclause (2).
- "(2) The **extended reserve selection methodology** must—
 - "(a) reflect a balance of interests between potential **extended reserve providers**, and between such providers and the **system operator**; and
 - "(b) enable **extended reserve** to be procured cost-effectively, by setting out how to evaluate—
 - "(i) the expected cost of providing the **extended reserve** (including capital and operating costs); and
 - "(ii) in the case of **extended reserve** that involves the interruption of load, the expected cost of an interruption during an event that calls on **extended reserve**, taking into account opportunity cost and the performance characteristics of the relevant load; and
 - "(iii) the likely transaction costs associated with administering **extended reserve** and in providing **extended reserve**; and
 - "(c) seek an appropriate balance between certainty in the provision of **extended reserve** products and flexibility to accommodate changes in circumstances and technologies.

"8.54I Review of extended reserve selection methodology

- "(1) The **Authority** may direct the **extended reserve manager** to review the **extended reserve selection methodology**.
- "(2) Clause 8.54G applies to each review of the **extended reserve selection methodology**, except that the **extended reserve manager** must give a draft of the revised methodology to the **Authority** and the **system operator** under clause 5(2) of Schedule 8.5 no later than 40 **business days** after the date of the direction under subclause (1).

"8.54J Extended reserve manager to undertake extended reserve selection process

- "(1) The **extended reserve manager** must undertake an **extended reserve** selection process in accordance with the **extended reserve selection methodology** when directed to do so by the **Authority**.
- "(2) The **Authority** must make a direction under subclause (1) no later than 5 years after the **publication** of the current **extended reserve procurement schedule**.
- "(3) The **Authority** may direct the **extended reserve manager** as to the scope of a selection process.
- "(4) If the **Authority** directs the **extended reserve manager** to undertake a limited selection process under subclause (3), the **Authority** must give reasons for the direction.
- "(5) After completing a selection process, the **extended reserve manager** must prepare and **publish** an **extended reserve procurement schedule**.
- "(6) Subclause (5) does not require the **extended reserve manager** to **publish** any information the **publication** of which would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information.
- "(7) The **extended reserve procurement schedule** must—
 - "(a) set out the results of the selection process; and
 - "(b) identify the **asset owners** that are required to be **extended reserve providers**; and
 - "(c) specify the **extended reserve** to be provided; and
 - "(d) include information as to how the amounts payable (if any) to each **extended reserve provider** will be calculated; and
 - "(e) identify **asset owners** that have not been selected to be **extended reserve providers**.
- "(8) The consultation and approval requirements in Part 3 of Schedule 8.5 apply to the preparation and **publication** of the **extended reserve procurement schedule**.
- "(9) The **extended reserve manager** may undertake consultation additional to that required by Part 3 of Schedule 8.5 if the **extended reserve manager** considers it necessary to do so.
- "(10) As soon as practicable after receiving a direction from the **Authority** under subclause (2), the **extended reserve manager** must **publish** an indicative time frame within which the **extended reserve manager** expects to complete the selection process.

- "(11) The **publication** of an **extended reserve procurement schedule** relating to the provision of **extended reserve** for only part of an **island** must be disregarded for the purposes of determining the date by which the **Authority** must give a direction under subclause (2).

"8.54K Information required for extended reserve selection process

- "(1) During an **extended reserve** selection process, each **asset owner** identified in the **extended reserve selection methodology** must comply with a request from the **extended reserve manager** to provide any information described in the methodology.
- "(2) Each **asset owner** required to give information to the **extended reserve manager** must do so within the time frame specified in the **extended reserve selection methodology**.
- "(3) If the **extended reserve manager** considers that any information provided by an **asset owner** is incomplete or insufficient, the **extended reserve manager** may require that the **asset owner** provide further information.
- "(4) An **asset owner** must comply with a requirement under subclause (3) within the time frame specified by the **extended reserve manager**.

"8.54L Extended reserve manager to issue extended reserve procurement notices

- "(1) The **extended reserve manager** must issue an **extended reserve procurement notice** to each **asset owner** specified in the **extended reserve procurement schedule**.
- "(2) Each **extended reserve procurement notice** must—
- "(a) specify the information in the **extended reserve procurement schedule** relating to the **asset owner**; and
 - "(b) if an **asset owner** has been selected to be an **extended reserve provider**,—
 - "(i) specify the default terms and conditions (as specified in the **extended reserve selection methodology**) that apply to the provision of **extended reserve** by the **asset owner**; and
 - "(ii) include information as to how the amounts payable (if any) to each **extended reserve provider** will be calculated.
- "(3) The **extended reserve manager** must give each **asset owner** its **extended reserve procurement notice** no later than 5 **business days** after **publishing** the **extended reserve procurement schedule**.

"8.54M Asset owners to prepare implementation plans

- "(1) Each **asset owner** identified in an **extended reserve procurement schedule** must prepare an implementation plan specifying how the **asset owner** will implement the obligations allocated to it.
- "(2) Each **asset owner** must give its implementation plan to the **system operator** for approval no later than 40 **business days** after receiving its **extended reserve procurement notice**, or by such later date as may be agreed between the **asset owner** and the **system operator**.
- "(3) Each implementation plan must specify how the **asset owner** will implement the transition to complying with its obligations (if any) under its most recent

- extended reserve procurement notice** from complying with its obligations (if any) under its previous **extended reserve procurement notice**.
- "(4) Each implementation plan must specify 1 or more dates on which payments (if any) to the **asset owner** will commence or cease for all or part of the provision of **extended reserve** under the **asset owner's extended reserve procurement notice**.
 - "(5) Each date specified in an implementation plan under subclause (4) must be the date on which provision of the **extended reserve** to which the payment (if any) relates will commence or cease, as the case may be.
 - "(6) An **asset owner** may amend an implementation plan after giving it to the **system operator** under subclause (2) with the agreement of the **system operator**.
 - "(7) If the **system operator** requires that an **asset owner** make changes to an implementation plan given to the **system operator** under subclause (2), the **asset owner** must comply with the requirement.
 - "(8) The **system operator** must approve an implementation plan given to it by an **asset owner** under subclause (2) if the plan meets the requirements of this clause.

"8.54N Terms and conditions applying to the provision of extended reserve

In the case of an **asset owner** that has been selected to be an **extended reserve provider**, the terms and conditions in the **asset owner's extended reserve procurement notice** apply to the provision of **extended reserve** by the **asset owner** but may be amended by agreement in writing between the **asset owner** and the **system operator**.

"8.54O System operator to publish and maintain extended reserve schedule

- "(1) The **system operator** must **publish** an **extended reserve schedule**.
- "(2) Subclause (1) does not require the **system operator** to **publish** any information the **publication** of which would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information.
- "(3) The **extended reserve schedule** must specify the obligations of each **asset owner** identified in the **extended reserve procurement schedule**, based on information from—
 - "(a) the latest **extended reserve procurement schedule**; and
 - "(b) each approved implementation plan; and
 - "(c) any amendment to terms and conditions applying to an **extended reserve provider** agreed under clause 8.54N; and
 - "(d) any other information held by the **system operator** that describes the obligations of an **extended reserve provider** to provide **extended reserve**.
- "(4) The **system operator** must amend the **extended reserve schedule** to reflect any change to any information described in subclause (3), so that the schedule is kept up to date.

"8.54P System operator to issue statements of extended reserve obligations

- "(1) The **system operator** must issue to each **asset owner** identified in the **extended reserve schedule** a **statement of extended reserve obligations** under this clause.

- "(2) Each **statement of extended reserve obligations** must specify the obligations of the **asset owner** to which it relates, as specified in the **extended reserve schedule** as at the date on which it is issued.
- "(3) The **system operator** must issue a **statement of extended reserve obligations** to an **asset owner** at each of the following times:
 - "(a) as soon as practicable after the **asset owner's** implementation plan is approved under clause 8.54M;
 - "(b) as soon as practicable after it makes an amendment to the schedule under clause 8.54O(4) that relates to the **asset owner's** obligations under this subpart;
 - "(c) as soon as practicable after the **system operator** becomes aware of any other information to which clause 8.54O(3)(d) applies that relates to the obligations of the **asset owner**.

"8.54Q System operator to notify clearing manager of dates

- "(1) The **system operator** must notify the **Authority** and the **clearing manager** of all dates on which **extended reserve providers** will provide, or cease to provide, **extended reserve**, as set out in the **extended reserve schedule**.
- "(2) If an amendment to an implementation plan made under clause 8.54M(6) or (7) results in an **extended reserve provider** providing, or ceasing to provide, any **extended reserve** on a date that is different from the relevant date specified in the implementation plan, in each case the **system operator** must—
 - "(a) update the **extended reserve schedule** with the new date; and
 - "(b) notify the **Authority** and the **clearing manager** of the new date.

"8.54R System operator to report to the Authority

In its monthly report given to the **Authority** under clause 3.14, the **system operator** must include information about any use of **extended reserve**.

"8.54S New distributors and new grid owners to provide information

- "(1) The purpose of this clause is to require new **distributors** and new **grid owners** to provide information so that their obligations under this subpart can be determined.
- "(2) No later than 20 **business days** after a **distributor** commences taking **electricity** from the **grid**, it must give the **Authority** either—
 - "(a) historical records of the quantity of **electricity** consumed in the **distributor's network** or by the **distributor**; or
 - "(b) if the **Authority** advises the **distributor** that it is not satisfied with the records given under paragraph (a), or if there are no such records, a bona fide **business plan** that permits a realistic estimate to be made of the amount of **electricity** to be consumed in the **distributor's network** or by the **distributor**.
- "(3) No later than 20 **business days** after a **grid owner** starts to convey **electricity** on the **grid**, it must give the **Authority** either—
 - "(a) historical records of the quantity of **electricity** conveyed by the **grid owner** on the **grid**; or

- "(b) if the **Authority** advises the **grid owner** that it is not satisfied with the records given under paragraph (a), or if there are no such records, a bona fide **business** plan that permits the **Authority** to make a realistic estimate of the amount of **electricity** to be conveyed by the **grid owner** on the **grid**.

"8.54T Assignment of extended reserve obligations

- "(1) An **extended reserve provider** that proposes to assign **assets** that it uses to provide **extended reserve** may apply to the **Authority** by notice in writing for approval to assign its obligations to provide **extended reserve** that relate to those **assets**.
- "(2) The **Authority** may, on receiving an application under subclause (1),—
- "(a) approve the assignment; or
- "(b) approve the assignment with conditions; or
- "(c) decline to approve the assignment.
- "(3) Before giving an **extended reserve provider** approval to assign its obligations under subclause (2), the **Authority** must consult with the **system operator**.
- "(4) If the **Authority** gives an **extended reserve provider** approval to assign its obligations under subclause (2), the **Authority** must notify the **system operator**.
- "(5) An assignment of an **extended reserve provider's** obligations is not effective except as approved by the **Authority** under subclause (2)."

10 New clause 8.54U and subpart heading inserted

After clause 8.54T, insert:

"Subpart 6—Allocating costs

"8.54U Contents of this subpart

This subpart provides for the allocation of costs relating to **ancillary services** and **extended reserve**."

11 Cross heading above clause 8.55 amended

In the cross heading above clause 8.55,—

- (a) delete "*ancillary services*"; and
- (b) after "*costs*", insert "*for ancillary services and extended reserve*".

12 Clause 8.55 amended (Identifying costs associated with each ancillary service)

- (1) In the heading to clause 8.55, replace "**each ancillary service**" with "**ancillary services and extended reserve**".
- (2) In clause 8.55, insert as subclause (2):
- "(2) The **allocable costs** for **extended reserve** are the actual amounts (if any) that **extended reserve providers** are entitled to receive for providing **extended reserve** under the current **extended reserve procurement schedule**."

13 New clause 8.67A inserted (Extended reserve costs allocated to distributors)

After clause 8.67, insert:

"8.67A Extended reserve costs allocated to distributors

If there are **allocable costs** for **extended reserve** in a **billing period**, each **distributor** must pay a charge for **extended reserve** for the **billing period** in accordance with the following formula:

$$\text{Extended reserve charge}_D = \left(\text{TERAC}_{\text{NI}} \times \frac{L_{\text{NI}, D}}{L_{\text{NI}, \text{TOT}}} \right) + \left(\text{TERAC}_{\text{SI}} \times \frac{L_{\text{SI}, D}}{L_{\text{SI}, \text{TOT}}} \right)$$

where

Extended reserve charge_D is the **extended reserve** charge owing by the **distributor** for the **billing period**

TERAC_{NI} is the sum of all payments for **extended reserve** provided in the North Island for the **billing period**

L_{NI, D} is the **distributor's** total **offtake** (in MWh) at **grid exit points** in the North Island in the **billing period**

L_{NI, TOT} is the total **offtake** (in MWh) by all **distributors** at **grid exit points** in the North Island in the **billing period**

TERAC_{SI} is the sum of all payments for **extended reserve** provided in the South Island for the **billing period**

L_{SI, D} is the **distributor's** total **offtake** (in MWh) at **grid exit points** in the South Island in the **billing period**

L_{SI, TOT} is the total **offtake** (in MWh) by all **distributors** at **grid exit points** in the South Island in the **billing period**."

14 Clause 8.68 amended (Clearing manager to determine amounts payable and receivable)

- (1) In clause 8.68(1), delete "All amounts payable under this clause are subject to the priority order of payments set out in clause 14.47."
- (2) After clause 8.68(2), insert:
 - "(3) The **clearing manager** must determine the amount owing by each **distributor** for **extended reserve** in accordance with clause 8.67A.
 - "(4) The **clearing manager** must determine the amount owing to each **extended reserve provider** for the provision of **extended reserve** in accordance with—
 - "(a) the **extended reserve schedule**; and
 - "(b) any relevant notice received from the **system operator** under clause 8.54Q(2).
 - "(5) The **clearing manager** must collect the amounts determined under subclause (3) and pay the amounts determined under subclause (4) by including the relevant amounts in the invoices issued by the **clearing manager** under Part 14.

"(6) All amounts owing under this clause are subject to the priority order of payments set out in clause 14.56."

15 Clause 8.69 replaced (Clearing manager to determine wash up amounts payable and receivable)

Replace clause 8.69 with:

"8.69 Clearing manager to determine wash up amounts payable and receivable

"(1) The **clearing manager** must determine the following amounts owing as a result of **washups** under subpart 6 of Part 14:

"(a) the amount owing to the **system operator** by each **grid owner, purchaser, generator and distributor** for **ancillary services** under clauses 8.55 to 8.67:

"(b) the amount owing to each **grid owner, purchaser, generator and distributor** by the **system operator** for **ancillary services** under clauses 8.55 to 8.67:

"(c) the amount owing by each **distributor** for **extended reserve** under clause 8.67A:

"(d) the amount owing to each **extended reserve provider** for **extended reserve** under clause 8.68.

"(2) On behalf of the **system operator** the **clearing manager** must collect or pay the amounts owing for **ancillary services**, and any amounts advised by the **system operator** as payable to it under clauses 8.6 and 8.31(1)(a) by including the relevant amounts advised by the **clearing manager** as owing under Part 14.

"(3) To enable the **clearing manager** to determine the amounts payable for **ancillary services**, the **system operator** must provide to the **clearing manager** the **allocable cost** for each **ancillary service** and any additional information required to carry out the recalculations under clauses 8.55 to 8.67 that is not otherwise provided by the **reconciliation manager** or the **pricing manager** under Part 13.

"(4) All amounts owing under this clause are subject to the priority order of payments set out in clause 14.47."

16 Schedule 8.3, Technical Code A, clause 8 amended

In Schedule 8.3, Technical Code A, clause 8, replace subclause (2) with:

"(2) In addition to the requirements for commissioning or testing in clause 2(6) to (8), each **asset owner** must carry out periodic testing—

"(a) of its **assets** in accordance with Appendix B; and

"(b) in the case of an **asset owner** that is an **extended reserve provider**, of **assets** specified in its **statement of extended reserve obligations** in accordance with that statement."

17 Cross heading in Schedule 8.3, Technical Code A, Appendix B, above clause 1 amended

In Schedule 8.3, Technical Code A, Appendix B, in the cross heading above clause 1, delete "*and automatic under-frequency load shedding systems*".

18 Schedule 8.3, Technical Code A, Appendix B, clause 1 replaced

In Schedule 8.3, Technical Code A, Appendix B, replace clause 1 with:

"1 Periodic tests to be carried out

- "(1) This Appendix sets out periodic tests required for the purposes of clause 8(2) of **Technical Code A**.
- "(2) Each **asset owner** may be legally required, other than under this Code, to carry out additional tests to ensure that their **assets** are safe and reliable.
- "(3) For the purposes of this Appendix, **generating unit** does not include a **generating unit** for which wind is the primary power source."

19 Schedule 8.3, Technical Code A, Appendix B, clauses 6 and 7 revoked

In Schedule 8.3, Technical Code A, Appendix B, revoke clauses 6 and 7.

20 Schedule 8.3, Technical Code B, clause 6 amended

- (1) In Schedule 8.3, Technical Code B, clause 6(1)(d), (2)(d), and (4), replace "clause 7(19)" with "clause 7A".
- (2) In Schedule 8.3, Technical Code B, clause 6(3), replace "clause 7(20)" with "clause 7A".

21 Schedule 8.3, Technical Code B, clause 7 replaced

In Schedule 8.3, Technical Code B, replace clause 7 with:

"7 Extended reserve providers to provide extended reserve

- "(1) Each **extended reserve provider** must provide **extended reserve** at all times in accordance with its current **statement of extended reserve obligations** issued by the **system operator** under clause 8.54P.
- "(2) An **extended reserve provider** must notify the **system operator** as soon as practicable if the **extended reserve provider** is unable to comply with subclause (1).

"7A Emergency load shedding

- "(1) Each **distributor** must maintain a process for disconnection of **demand** for **points of connection**.
- "(2) The process must specify the **participant** that will effect the disconnection of **demand**.
- "(3) The **distributor** must obtain agreement for the process from the **system operator** and each **grid owner**.
- "(4) Each **distributor** must advise the **system operator** of the agreed process in addition to any changes to a process previously advised.
- "(5) If the **system operator** requires the disconnection of **demand** under this **technical code**, the **system operator** must instruct **distributors** and **grid owners** in accordance with the agreed process under subclause (3) to disconnect **demand** for the relevant **point of connection**.
- "(6) If the **system operator** and a **distributor** or **grid owner** 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**.

"(7) To the extent practicable, the **system operator** must use reasonable endeavours when instructing the disconnection of **demand** to ensure equity between **distributors**.

"(8) Each **distributor** or **grid owner** must act as instructed by the **system operator** operating under clause 6.

"7B Obligations of extended reserve providers in relation to automatic under-frequency load shedding

"(1) On the operation of **extended reserve** that is an **automatic under-frequency load shedding** system, an **extended reserve provider**—

"(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 under paragraph (b) complies with the obligations in its **statement of extended reserve obligations**; 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** with the **system operator**, 15 minutes after the **loss of communication** occurred.

"(2) An **extended reserve provider** may restore **demand** only while frequency is within the **normal band** and voltage is within the required range.

"(3) Each **extended reserve provider** 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.

"(4) As soon as practicable after communications are restored, each **extended reserve provider** must report to the **system operator** on the status of load restoration and the status of re-arming the **automatic under-frequency load shedding** system.

"7C Obligations of extended reserve providers in security of supply situations

"(1) This clause applies if a direction under clause 9.15 is in force.

"(2) The **system operator** may give notice to 1 or more of the **participants** specified in subclause (5), specifying modifications to the **participant's statement of extended reserve obligations** during any 1 or more periods, or in any 1 or more circumstances, specified in the notice.

"(3) The **system operator** must keep a record of each notice given under subclause (2).

- "(4) When a notice under subclause (2) is in force in relation to a **participant**, the requirements of the **participant's statement of extended reserve obligations** 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.
- "(5) The **participants** to whom the **system operator** may issue a notice in accordance with subclause (2) are—
 - "(a) **distributors** in the North Island; and
 - "(b) **grid owners** in the South Island.
- "(6) The **system operator** may amend or revoke a notice, or revoke and substitute a new notice.
- "(7) A notice under subclause (2) expires on the earlier of—
 - "(a) the date (if any) specified in the notice for its expiry; and
 - "(b) the revocation or expiry of the direction referred to in subclause (1)."

22 New Schedule 8.5 inserted

After Schedule 8.4, insert the Schedule 8.5 set out in the Schedule of this amendment.

23 Clause 13.82 amended (Dispatch instructions to be complied with)

In clause 13.82(2)(g)(ii), replace "clause 7(20)" with "clause 7A".

24 Clause 14.1 amended (Contents of this Part)

In clause 14.1(b), after "**ancillary services**," insert "**extended reserve**,".

25 Clause 14.14 amended (Amounts owing for ancillary services)

In clause 14.14, replace "8.55, and 8.68" with "8.55(1), and 8.68(1)".

26 New clause 14.14A inserted (Amounts owing for extended reserve)

After clause 14.14, insert:

"14.14A Amounts owing for extended reserve

The **clearing manager** must determine amounts owing in respect of **extended reserve** in accordance with clauses 8.55(2), 8.67A, and 8.68(3) and (4)."

27 Clause 14.18 amended (Clearing manager to advise participant of amounts owing and payable)

In clause 14.18(3), replace "**electricity or ancillary services**" with "**electricity, ancillary services, extended reserve**,".

28 Clause 14.19 amended (Amounts owing by participant to clearing manager)

(1) In clause 14.19(2)(f), replace "8.68" with "8.68(1)".

(2) After clause 14.19(2)(f), insert:

"(fa) **extended reserve** under clauses 8.67A, and 8.68(3):".

29 Clause 14.20 amended (Amounts owing by clearing manager to participant)

After clause 14.20(2)(f), insert:

"(fa) **extended reserve** under clause 8.68(4):".

- 30 **Clause 14.56 amended (Calculation of revised amount owing for generation)**
After clause 14.56(1)(a), insert:
"(ab) to satisfy any amount owing to **extended reserve providers** for **extended reserve** under clauses 8.55(2) and 8.68(4):".
- 31 **Clause 14A.18 amended (System operator to provide information)**
In clause 14A.18(a), after "**ancillary services**", insert "or **extended reserve**".
- 32 **Schedule 14A.1, clause 9 amended**
In Schedule 14A.1, after clause 9(1)(a), insert:
"(ab) the amount owing to or by the **participant** in relation to **extended reserve**:".
- 33 **Schedule 14A.1, clause 10 amended**
In Schedule 14A.1, after clause 10(1)(a), insert:
"(ab) **extended reserve**:".
- 34 **Clause 17.45 revoked (Redistribution of automatic under-frequency load shedding)**
Revoke clause 17.45.
- 35 **New clauses 17.48A and 17.48B inserted**
After clause 17.48, insert:
"17.48A Transitional provisions for extended reserve
"(1) If the **system operator** takes any action before clause 8.54D comes into force that, if that clause had been in force at the time of the action, would have contributed to complying with that clause, the action is deemed to have been taken when that clause was in force.
"(2) The **system operator** must comply with clause 8.54D, for the first time after that clause comes into force, so that it gives a draft of the **extended reserve technical requirements schedule** to the **Authority** under clause 2(2) of Schedule 8.5 no later than 40 **business days** after clause 8.54D comes into force.
"(3) The **system operator** must conduct the first review of the **extended reserve technical requirements schedule** under clause 8.54E so that the **system operator** advises the **Authority** of its decision under clause 8.54E(1) no later than 5 years after the first **extended reserve technical requirements schedule** was **published** under clause 8.54D.
"(4) No later than 40 **business days** after the **system operator publishes** the initial **extended reserve technical requirements schedule** under clause 8.54D, the **extended reserve manager** must, under clause 5(2) of Schedule 8.5, give the **Authority** and the **system operator**—
"(a) a draft of the **extended reserve selection methodology**; and
"(b) one or more worked examples of an **extended reserve procurement schedule**, created using—
"(i) the draft **extended reserve selection methodology**; and
"(ii) data specified by the **system operator**."

- "(5) In the case of the first selection process after clause 8.54J comes into force, the **Authority** must make a direction under clause 8.54J(1) no later than 5 **business days** after the initial **extended reserve selection methodology** is **published**.
- "(6) The first implementation plan that an **asset owner** gives the **system operator** under clause 8.54M(2) must specify how the **asset owner** will implement the transition from complying with its obligations (if any) under Schedule 8.3, Technical Code B, clause 7 as before that clause came into force, to complying with its **extended reserve procurement notice**.
- "(7) The first **statement of extended reserve obligations** that the **system operator** issues to each **asset owner** under clause 8.54P must specify the date on which it comes into force.
- "(8) Despite the revocation of Schedule 8.3, **Technical Code A**, Appendix B, clause 6, and the replacement of Schedule 8.3, **Technical Code B**, clause 7 by the Electricity Industry Participation Code Amendment (Extended reserve) 2014, each North Island **distributor** that was required to comply with those clauses before the commencement of this clause must continue to comply with those clauses as if the Electricity Industry Participation Code Amendment (Extended reserve) 2014 had not been made until the earlier of—
 - "(a) 7 August 2024; or
 - "(b) the date on which the first **statement of extended reserve obligations** issued under clause 8.54P comes into force in respect of the **distributor**.
- "(9) Despite the revocation of Schedule 8.3, **Technical Code A**, Appendix B, clause 7, and the replacement of Schedule 8.3, **Technical Code B**, clause 7 by the Electricity Industry Participation Code Amendment (Extended reserve) 2014, each South Island **grid owner** that was required to comply with those clauses before the commencement of this clause must continue to comply with those clauses as if the Electricity Industry Participation Code Amendment (Extended reserve) 2014 had not been made until the earlier of—
 - "(a) 7 August 2024; or
 - "(b) the date on which the first **statement of extended reserve obligations** issued under clause 8.54P comes into force in respect of the **grid owner**.
- "(10) However, subclause (9) applies as if Schedule 8.3, **Technical Code B**, clause 7(6)(d)(ii) was amended from 7 May 2015 by replacing "45.5 Hertz" with "46.5 Hertz".
- "(11) Clause 8.29(2) does not apply in respect of an application for a dispensation from a South Island **grid owner** until 7 August 2024.

"17.48B Transitional provisions for change to frequency limit in South Island

- "(1) No later than 7 February 2015, each South Island **grid owner** must prepare and give the **system operator** a plan for complying with Schedule 8.3, Technical Code A, clause 7(6)(d)(ii), as modified by clause 17.48A(10).
- "(2) The **system operator** must approve a plan received under subclause (1) subject to any changes that the **system operator** considers necessary.
- "(3) A South Island **grid owner** does not breach Schedule 8.3, **Technical Code B**, clause 7(6)(d)(ii) if the **grid owner** complies with a plan approved by the **system operator** under subclause (2)."

Schedule
New Schedule 8.5 inserted
Schedule 8.5

cl 22

cl 8.54D(7), 8.54E(4)(b), 8.54F(2)(b)(ii),
8.54G(4), 8.54I(2), 8.54J(8), (9)

**Consultation and approval requirements for extended reserve
procurement documents**

Part 1

Consultation on extended reserve technical requirements schedule

1 Application of this Part

This Part sets out the consultation requirements that apply to the **extended reserve technical requirements schedule**.

2 Publication of extended reserve technical requirements schedule

- (1) The **system operator** must prepare a draft of the **extended reserve technical requirements schedule**.
- (2) The **system operator** must give the draft schedule to the **Authority** for comment, along with the **extended reserve technical requirements report**.
- (3) The **Authority** must provide comments on the draft schedule to the **system operator** as soon as practicable after receiving it.
- (4) The **system operator** must consider the **Authority's** comments.
- (5) After the **system operator** has considered the **Authority's** comments, the **system operator** must—
 - (a) consult with persons that the **system operator** thinks are representative of the interests of persons likely to be substantially affected by the draft schedule; and
 - (b) consider submissions made on the draft schedule.
- (6) The **system operator** must give a copy of each submission made to it and a copy of the draft schedule that the **system operator** proposes to **publish** to the **Authority**.
- (7) The **Authority** must provide comments on the draft schedule as soon as practicable after receiving it.
- (8) The **system operator** must consider the **Authority's** comments.
- (9) Following the consultation required by this clause, the **system operator** must finalise and **publish** the draft schedule.

3 Technical and non-controversial changes

- (1) The **system operator** may at any time make a change to the **extended reserve technical requirements schedule** that it considers is technical and non-controversial.
- (2) If the **system operator** makes a change to the **extended reserve technical requirements schedule** under subclause (1), the **system operator** is not required to comply with clause 2 of this Schedule.
- (3) The **system operator** must notify the **Authority** of any changes to the **extended reserve technical requirements schedule** made under this clause.

Part 2

Consultation on extended reserve selection methodology

4 Application of this Part

This Part sets out the consultation and approval requirements that apply to the **extended reserve selection methodology**.

5 Preparation of and consultation on extended reserve selection methodology

- (1) The **extended reserve manager** must prepare a draft of the **extended reserve selection methodology**.
- (2) The **extended reserve manager** must give the draft methodology to the **Authority** and the **system operator** for comment, along with one or more worked examples of an **extended reserve procurement schedule**, created using—
 - (a) the draft **extended reserve selection methodology**; and
 - (b) data specified by the **system operator**.
- (3) The **Authority** and the **system operator** must provide comments on the draft methodology to the **extended reserve manager** as soon as practicable after receiving it.
- (4) The **extended reserve manager** must consider the comments provided by the **Authority** and the **system operator**.
- (5) After the **extended reserve manager** has considered the comments provided by the **Authority** and the **system operator**, the **extended reserve manager** must—
 - (a) consult with persons that the **extended reserve manager** thinks are representative of the interests of persons likely to be substantially affected by the draft methodology; and
 - (b) consider submissions made on the draft methodology.

6 Approval of extended reserve selection methodology

- (1) The **extended reserve manager** must give the **Authority** and the **system operator**—
 - (a) a copy of each submission made on the draft **extended reserve selection methodology**; and
 - (b) a response to each issue raised in each submission; and
 - (c) a copy of the draft methodology that the **extended reserve manager** proposes to **publish**.
- (2) As soon as practicable, but no later than 15 **business days** after receiving a copy of the draft methodology, the **system operator** must—
 - (a) give the **Authority** any comments it wishes to make on the draft methodology; or
 - (b) advise the **Authority** that it does not wish to make any comments.
- (3) As soon as practicable after receiving the **system operator's** comments, or advice that the **system operator** does not wish to make any comments, the **Authority** must, by notice in writing to the **extended reserve manager** and the **system operator**,—
 - (a) approve the draft methodology; or
 - (b) decline to approve the draft methodology.
- (4) If the **Authority** declines to approve the draft methodology, the **Authority** must either—
 - (a) **publicise** the changes that the **Authority** wishes the **extended reserve manager** to make to the draft methodology; or

- (b) require the **extended reserve manager** to prepare a new draft methodology.

7 Consultation on proposed changes

- (1) When the **Authority publicises** changes that the **Authority** wishes the **extended reserve manager** to make to the draft **extended reserve selection methodology** under clause 6(4), the **Authority** must notify the **extended reserve manager** and interested parties of the date by which submissions on the changes must be made to the **Authority**.
- (2) Each submission on the changes to the draft methodology must be made in writing to the **Authority** and be received by the date specified by the **Authority**.
- (3) The **Authority** must—
 - (a) give a copy of each submission made to the **extended reserve manager**; and
 - (b) **publicise** the submissions.
- (4) The **extended reserve manager** may make its own submission on the changes to the draft methodology and the submissions made in relation to the changes.
- (5) The **Authority** must **publicise** the **extended reserve manager's** submission when it is received.
- (6) The **Authority** must consider the submissions made to it on the changes to the draft methodology and prepare a revised draft methodology incorporating any amendments that the **Authority** proposes be made to the methodology.
- (7) The **Authority** must give the revised draft methodology prepared under subclause (6) to the **system operator**, and clause 6(2) applies as if the revised draft methodology was the draft methodology prepared under clause 5.
- (8) As soon as practicable after receiving the **system operator's** comments, or advice that the **system operator** does not wish to make any comments, the **Authority** must,—
 - (a) by notice in writing to the **extended reserve manager** and the **system operator**,—
 - (i) approve the revised draft methodology; or
 - (ii) amend the revised draft methodology to address any comments received from the **system operator**, and approve it; or
 - (b) **publicise** a further revised draft methodology, and notify the **extended reserve manager** and interested parties of the date by which submissions on the changes must be made to the **Authority**.
- (9) If the **Authority publicises** a further revised draft methodology under subclause (8)(b), subclauses (2) to (8) apply as if the further revised draft methodology was the revised draft methodology.

8 Technical and non-controversial changes

- (1) The **extended reserve manager** may at any time propose a change to the **extended reserve selection methodology** that it considers is technical and non-controversial by giving a draft methodology to the **Authority** together with an explanation of the proposed change.
- (2) If the **extended reserve manager** gives a draft methodology to the **Authority** under subclause (1) the **extended reserve manager** is not required to comply with clauses 5 and 6 of this Schedule.

- (3) The **Authority** must notify the **system operator** of any proposed change to the **extended reserve selection methodology** that it receives under subclause (1).
 - (4) The **Authority** must, as soon as practicable after receiving a draft methodology and the information required by subclause (1), by notice in writing to the **extended reserve manager** and the **system operator**—
 - (a) approve the draft methodology; or
 - (b) decline to approve the draft methodology, giving reasons.
- 9 Publication of extended reserve selection methodology**
- As soon as practicable after the **Authority** approves the **extended reserve selection methodology** under clause 6(3)(a), 7(8)(a), or 8(4)(b), the **extended reserve manager** must **publish** the methodology.

Part 3

Consultation on extended reserve procurement schedule

- 10 Application of this Part**
- This sets out the consultation and approval requirements that apply to the **extended reserve procurement schedule**.
- 11 Preparation of and consultation on extended reserve procurement schedule**
- (1) The **extended reserve manager** must prepare a draft of the **extended reserve procurement schedule**.
 - (2) The **extended reserve manager** must—
 - (a) give the draft to the **Authority** and the **system operator** for comment; and
 - (b) if requested, give the **Authority** or the **system operator** the information used by the **extended reserve manager** to prepare the draft.
 - (3) The **Authority** and the **system operator** must provide comments on the draft procurement schedule to the **extended reserve manager** as soon as practicable after receiving it.
 - (4) The **extended reserve manager** must consider the comments provided by the **Authority** and the **system operator**.
 - (5) After the **extended reserve manager** has considered the comments provided by the **Authority** and the **system operator**, the **extended reserve manager** must—
 - (a) consult with persons that the **extended reserve manager** thinks are representative of the interests of persons likely to be substantially affected by the draft procurement schedule; and
 - (b) consider submissions made on the draft procurement schedule.
- 12 Approval of extended reserve procurement schedule**
- (1) The **extended reserve manager** must give the **Authority** and the **system operator**—
 - (a) a copy of each submission made on the draft **extended reserve procurement schedule**; and
 - (b) a response to each issue raised by each submission; and
 - (c) a copy of the draft procurement schedule that the **extended reserve manager** proposes to **publish**.

- (2) As soon as practicable, but no later than 15 **business days** after receiving a copy of the draft procurement schedule, the **system operator** must—
 - (a) give the **Authority** any comments it wishes to make on the draft procurement schedule; or
 - (b) advise the **Authority** that it does not wish to make any comments.
- (3) As soon as practicable after receiving the **system operator's** comments, or advice that the **system operator** does not wish to make any comments, the **Authority** must, by notice in writing to the **extended reserve manager** and the **system operator**,—
 - (a) approve the draft procurement schedule; or
 - (b) decline to approve the draft procurement schedule.
- (4) If the **Authority** declines to approve the draft procurement schedule, the **Authority** must either—
 - (a) **publicise** the changes that the **Authority** wishes the **extended reserve manager** to make to the draft procurement schedule; or
 - (b) require the **extended reserve manager** to prepare a new draft procurement schedule.

13 Consultation on proposed changes

- (1) When the **Authority** **publicises** changes that the **Authority** wishes the **extended reserve manager** to make to the draft **extended reserve procurement schedule** under clause 12(4), the **Authority** must notify the **extended reserve manager** and interested parties of the date by which submissions on the changes must be made to the **Authority**.
- (2) Each submission on the changes to the draft procurement schedule must be made in writing to the **Authority** and be made by the date notified by the **Authority**.
- (3) The **Authority** must—
 - (a) give a copy of each submission made to the **extended reserve manager**; and
 - (b) **publicise** the submissions.
- (4) The **extended reserve manager** may make its own submission on the changes to the draft procurement schedule and the submissions made in relation to the changes.
- (5) The **Authority** must **publicise** the **extended reserve manager's** submission when it is received.
- (6) The **Authority** must consider the submissions made to it on the changes to the draft procurement schedule and prepare a revised draft procurement schedule incorporating any amendments that the **Authority** proposes be made to the schedule.
- (7) The **Authority** must give the revised draft procurement schedule prepared under subclause (6) to the **system operator**, and clause 12(2) applies as if the revised draft procurement schedule was the draft procurement schedule prepared under clause 11.
- (8) As soon as practicable after receiving the **system operator's** comments, or advice that the **system operator** does not wish to make any comments, the **Authority** must,—
 - (a) by notice in writing to the **extended reserve manager** and the **system operator**,—
 - (i) approve the revised draft procurement schedule; or
 - (ii) amend the revised draft procurement schedule to address any comments received from the **system operator**, and approve it; or

- (b) **publicise** a further revised draft procurement schedule, and notify the **extended reserve manager** and interested parties of the date by which submissions on the changes must be made to the **Authority**.
- (9) If the **Authority publicises** a further revised draft procurement schedule under subclause (8)(b), subclauses (2) to (8) apply as if the further revised draft procurement schedule was the revised procurement schedule.

14 Publication of extended reserve procurement schedule

As soon as practicable after the **Authority** approves the **extended reserve procurement schedule** under clause 12(3)(a) or 13(8)(a), the **extended reserve manager** must **publish** the schedule.

Explanatory Note

This note is not part of the amendment, but is intended to indicate its general effect.

This amendment to the Electricity Industry Participation Code 2010 comes into force on 7 August 2014, except clauses 10 to 15 and 24 to 33, which come into force on 24 March 2015.

The amendment significantly changes the manner in which the ability to drop large blocks of electrical load in response to extreme under-frequency events on the grid is managed (currently known as automatic under-frequency load shedding (AUFLS)). Specifically, the amendment—

- (a) takes account of the possibility of new technology being developed for addressing under-frequency events, including by introducing the wider term "extended reserve" to replace "AUFLS";
- (b) enables a new technical approach to extended reserve to be implemented, which will involve (among other features) providers being selected based on the suitability of their load;
- (c) implements a new method for procuring extended reserve, including introducing a new market operation service provider (the extended reserve manager) to oversee the process; and
- (d) enables extended reserve providers to be compensated from charges to distributors (including direct consumers).

Date of notification in the *Gazette*: 10 July 2014