Decisions paper

Amendment to the HHR switching process for AMI switch event meter readings

4 August 2015

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Executive summary

If an installation control point (ICP) switches from a losing trader to a gaining trader, the Electricity Industry Participation Code 2010 (Code) requires the losing trader to provide a meter reading to the gaining trader. If both traders use the same meter reading, electricity volumes invoiced to the customers and settled in the electricity market are contiguous.

However, if the gaining trader changes the settlement methodology from non half-hour (NHH) to half-hour (HHR), inaccuracies may occur if the meter reading is estimated. This inaccuracy may cause under- or over-consumer invoicing or market settlement, and may be a barrier to switching.

New entrant retailers, that intend to use only the HHR settlement methodology, advised the Authority that the accuracy of estimated switch event meter readings provided by the losing trader was a problem that impacted consumer invoices and electricity market settlements. These retailers suggested that the use of accurate advanced metering infrastructure (AMI) meter readings provided by the gaining trader would remove these issues.

In January 2015 the Authority published a consultation paper proposing a change to the requirements for a revision to a meter reading where a gaining trader chose to source a more accurate AMI meter reading.

This paper summarises the Authority's response to submissions received, and the Authority's decisions on the consultation.

Glossary of abbreviations and terms

Act	Electricity Industry Act 2010
AMI	Advanced metering infrastructure
Authority	Electricity Authority
Code	Electricity Industry Participation Code 2010
HHR	Half hour
MEP	Metering equipment provider
NHH	Non half hour

Contents

1. Introduction and purpose of this paper

1.1 Introduction

1.1.1 In December 2013, the Authority consulted on proposed amendments to the switching process in Schedule 11.3 of the Code. One of the proposed amendments required a losing trader to use a validated AMI meter reading for the switch event meter reading, if an AMI meter reading was available.

1.1.2 Most submitters disagreed with that proposed amendment. They advised it was not possible at that time to integrate the AMI meter readings that are being collected on a daily basis into their switching processes without incurring significant implementation costs.

1.1.3 However, new entrant retailers, which intended to only use the HHR settlement methodology, advised the Authority that the accuracy of switch event meter readings was a problem. Losing traders were continuing to use estimated meter readings despite accurate AMI meter readings being available. These inaccuracies impacted on consumers' invoices and electricity market settlements.

1.1.4 In January 2015 the Authority published a further consultation paper proposing a Code amendment (consultation paper). This consultation paper is available at http://www.ea.govt.nz/dmsdocument/18964

1.1.5 The proposal in the consultation paper was that if a losing trader could not provide an AMI switch event meter reading, and the gaining trader could, then the switching process should use the gaining trader's accurate AMI switch event meter reading.

1.1.6 In the consultation paper, the Authority noted that traders were already using an industry process for revising switch event meter readings, which traders could to give effect to the proposed Code amendment. A gaining trader could use this process to convey a revised AMI switch event meter reading to the losing trader.

2. The switching process can cause settlement and invoicing issues for gaining traders

2.1.1 On 9 October 2015, the Electricity Industry Participation Code Amendment (ICP Switching) 2014 will come into force, making several changes to the switching process set out in Schedule 11.3 of the Code.

2.1.2 That amendment introduces a new term “switch event meter reading”. For the switching process, this replaces the validated meter reading or a permanent estimate.

2.1.3 The switch event meter reading (or under the current Code, the validated meter reading or permanent estimate) forms a demarcation where the losing trader’s customer invoicing and electricity market settlements stops, and the gaining trader’s starts.

2.1.4 From 9 October, the Code will require the losing trader under a “standard switch” or “switch move” process, to provide a switch event meter reading to the gaining trader.

2.1.5 To reduce the time and cost of switching a consumer between traders under these two switching processes, from 9 October the Code will allow the losing trader to provide either a validated meter reading, a permanent estimate, or a reasonable estimated meter reading (if a validated meter reading is not available and the losing trader has been responsible for the ICP for less than 3 months). Current practice is to provide a validated meter reading or a permanent estimate, but there is no option for a reasonable estimate. As obtaining an actual meter reading can cause the losing trader to incur additional costs (for example, by having a meter reader visit the site or taking a special AMI read into their invoicing system) it is common practice for the losing retailer to provide an estimate.

2.1.6 From 9 October the Code will continue to require both the losing and gaining traders to use the same switch event meter reading. However, issues and inconsistencies can arise if the gaining trader wishes to use an actual reading, rather than the losing trader’s estimated reading. Further complexity is also added into these switching processes by traders’ ability to elect to use either NHH or HHR settlement for their purchases in the electricity market. AMI meters can return both NHH and HHR meter readings.

2.1.7 Most traders’ systems are based on their historic use of NHH settlement and only some traders use HHR settlement.

2.1.8 If the gaining trader uses NHH volumes in its customer invoicing or electricity market settlement process, there are limited issues resulting from any inaccuracy in the switch meter reading. The readings used by the gaining and losing traders are contiguous so there are no impacts on market settlement. The consumer also ultimately pays for all of their consumption, with the only potential issue being the allocation of their payments between the two traders.

2.1.9 However, if a gaining trader uses HHR volumes in either its customer invoicing or its electricity market settlement process, it requires an actual meter reading from the losing trader, accurate as at 00:00 hours (the start of trading period 1) to start its market settlement and customer invoicing process. The way the Code and reconciliation process operates means that the gaining trader must account for any difference between the losing trader's estimated meter reading and the gaining trader's actual meter reading.

3. Submissions

3.1.1 The Authority received 12 submissions on the consultation paper. The Authority has prepared a detailed summary of the submissions, which is available at http://www.ea.govt.nz/development/work-programme/retail/switch-re-engineering/consultations/#c14455.

3.1.2 The Authority received submissions from the following participants:

- Contact Energy Limited (Contact)
- Ecotricity
- Electric Kiwi
- EMH
- Flick
- Genesis
- Giving
- Meridian Energy Limited (Meridian)
- Mighty River Power Limited (MRP)
- Nova Energy Limited (Nova)
- Pulse Utilities New Zealand Limited (Pulse)
- Trustpower Limited (Trustpower).

3.1.3 Both Nova and MRP agreed in full with the proposal.

3.1.4 Both Pulse and Trustpower disagreed in full with the proposal.

3.1.5 The balance of submitters either agreed or disagreed with specific items in the consultation or proposed a modification.

3.1.6 Individual submissions are available on the Authority's website at http://www.ea.govt.nz/development/work-programme/retail/switch-re-engineering/consultations/#c14455.

3.2 Key issues in submissions

3.2.1 The Authority notes that new technology is challenging traditional business models, with some traders' old, inflexible systems facing relatively high change costs unless the status quo is retained. Options enabled by new technology, such as accurate switch event meter readings and innovative service offerings, are helping to drive the development of the retail electricity market.

3.2.2 The key issues raised in submissions are each discussed below.

Time periods are insufficient:

3.2.3 *Contact proposed extending the time period for the losing trader to provide the meter reading to the gaining trader from 3 business days to 5 business days.*

3.2.4 Contact made its proposal as an alternative to the proposal included in the consultation paper. While Contact's proposal would increase the time available for the losing trader to provide a meter reading, which should support the objective of the proposal, it would not prevent the losing trader from providing an inaccurate reading. It therefore would not, in itself, have solved the issue being addressed by the proposed amendment.

3.2.5 The Authority considered Contact's recommendation would be pragmatic and reasonable, and has included this (and related consequential amendments to other clauses in Schedule 11.3) in the Code amendment.

3.2.6 *Ecotricity, EMH, Flick, Giving, and Electric Kiwi considered that 5 business days from the switch event date is insufficient time for a gaining trader to obtain and process AMI meter readings from a metering equipment provider (MEP) and recommended 10 business days.*

3.2.7 The Authority disagreed with this suggestion. The proposed 10 business day period would be too onerous on the losing trader and could cause significant disruption to their processes and systems. The Authority considered that gaining traders should be able to use commercial contract arrangements to encourage or require MEPs to provide AMI meter readings in sufficient time for a switch meter reading to be determined within 5 business days. Outside of this 5 business day period, the dispute process set out in clauses 6 and 12 of Schedule 11.3 applies.

Code amendment should apply to backdated switches

3.2.8 *Ecotricity and Flick suggested that the Code amendment should apply to, and enable, backdated switches. These may occur when a consumer moves into premises without advising a trader.*

3.2.9 The Authority agreed that this should be the most efficient process for these types of switches and has amended the proposed Code amendment in several places. The original proposal was that the period for the gaining trader to provide a switch event meter reading derived from an AMI interrogation would commence from the "switch event date". Where a switch was backdated (eg, move in switch) there may have been no time period available for the gaining trader to provide such a switch event meter reading. Under the final Code amendment, gaining traders have 5 business days to provide the switch event meter reading, but the time period commences on the date on which the gaining trader receives final information from the registry.

Code amendment wording was not clear

3.2.10 *Submitters considered the proposed Code amendment wording was not clear that a losing trader only had to accept a gaining trader's AMI switch event meter reading when the gaining trader was changing the settlement methodology at the time of the switch (from NHH to HHR).*

3.2.11 The Authority has clarified the Code (refer clauses 6 and 12 of Schedule 11.3).

Proposal is too expensive

3.2.12 *Meridian and Pulse considered the proposal in the consultation paper was too expensive and that the Authority's costs were too low.*

3.2.13 The Authority updated the cost-benefit analysis (CBA) using estimated costs provided by Meridian and Pulse and the current known switch rate of new-entrant retailers that provide half-hour submissions to the reconciliation manager. After updating the CBA using these costs, the Authority still considers the benefits of the proposal outweigh the costs.

Losing trader should also be able to provide a revised AMI switch event meter reading

3.2.14 *Genesis considered that instead of the proposed Code amendment, the losing trader should also be able to provide a revised AMI switch event meter reading, not just the gaining trader.*

3.2.15 The Authority considered that Genesis suggested this to allow the losing trader to revise its switch event meter reading, or to correct an alternate read provided by the gaining trader.

3.2.16 The Authority did not agree with this suggestion because:

(a) it would be a significant change to current industry practice that would require further consultation with all traders

(b) clause 11.2 of the Code already requires the gaining and losing trader to take all practicable steps to provide accurate information. If either trader becomes aware that the information they had provided was incorrect, they must correct it. This process can be carried out outside of the registry.

3.3 Alternatives identified in submissions would have been less effective than the proposed Code amendment

3.3.1 *Contact and Genesis proposed alternative approaches to the issue described in the consultation paper.*

3.3.2 As discussed in the analysis in paragraph 3.2.3 above, Contact's proposal to extend the timeline for the losing trader to provide the switch event meter reading is expected to improve the efficiency of market processes, but would not prevent the issue of inaccurate meter readings from occurring. As a result, although Contact's proposal is pragmatic (and has been incorporated into the final Code amendment), it would not, of itself, have achieved the objective of the proposed Code amendment.

3.3.3 As discussed in the analysis in paragraph 3.2.15 above, Genesis' proposed solution to expand upon the existing switch dispute process is expected to require more extensive changes to participants' systems than the proposed Code amendment. It would also have potentially prolonged the switching process by enabling a losing trader, who originally supplied an inaccurate, estimated meter reading to challenge the more accurate AMI meter reading provided by the gaining trader.

3.4 The benefits of the recommended Code amendment exceed the costs

3.4.1 The Authority reviewed the CBA provided in the consultation paper using the information provided in submissions and in light of current market activity. The CBA only considers the efficiency impacts of the proposed amendment. It is not possible to assess the competition effects, and any cost write-offs that the gaining traders may have to accept to retain their new customers are not included, as these represent wealth transfers.

Estimated costs to a gaining trader resulting from an inaccurate switch event meter reading (ie benefits of the proposal)

3.4.2 Assuming that:

(a) there are, on average, 250 ICP switches per month where the gaining trader wishes to change the submission type at the time of the switch

(b) it takes a gaining trader one hour to work through a correction process at a rate of $75/hour

(c) then the total cost to the gaining trader of an incorrect switch event meter reading is estimated as 250 x 1 x $75 = $18,750/month, or $225,000/year.

Estimated costs of the proposal

3.4.3 Assuming that:

(a) there are 21 traders that may be the losing trader in an ICP switch where the gaining trader changes the method of submission type at the time of the switch

(b) the cost of a one-off system change to automate this process is $30,000 (the lower bound of Pulse's indicative costs, and consistent with Meridian's submission)

(c) there are no on-going costs to losing traders as a result of the proposal (i.e. all of the traders automate their processes)

(d) then, the maximum total cost of implementing the final Code amendment is estimated as 21 x $30,000 = $630,000.

Estimated benefit of the proposal

3.4.4 Based on this analysis, the maximum simple payback period is approximately 2.8 years (ie $630,000/$225,000).

3.4.5 If the switching rate increases beyond 250/month the payback period will decrease. In the unlikely event that the switching rate for ICPs that transition NHH to HHR at the time of the switch drops to one third of that currently observed, the payback period will be 8.4 years.

3.4.6 In addition to the net benefit demonstrated by the CBA, staff expect that there will be a net efficiency benefit arising from the final Code amendment, as it:

(a) moves the problem of an inaccuracy in a switch event meter reading to the losing trader who causes the inaccuracy

(b) does not impact on losing traders that provide accurate estimates or that are prepared to use switch event meter readings derived from an AMI meter

(c) allows losing traders to retain their existing systems and processes

(d) only affects switches where the gaining trader changes the method of electricity market settlement.

4. Authority will proceed with modified Code amendments

4.1.1 After reviewing the submissions, the Authority has decided to proceed with the proposed Code amendments in a modified form. The move to using accurate AMI information is a natural market progression as new technology becomes available, and:

(a) provides traders with an opportunity to remove inaccuracy in the customer invoicing and market settlement processes when a customer chooses to switch traders

(b) makes the losing retailer responsible for the consequence of an inaccurate meter reading it provides

(c) reduces barriers to gaining traders offering innovative tariff products that require the use of HHR information in customer invoicing and electricity market settlement processes.

4.1.2 The Authority also notes that losing traders should be correcting any inaccurate information that they provide to any person.

Reasons to progress the Code amendment

4.1.3 The reasons for the Authority deciding to progress the Code amendment are that it will:

(a) address the Authority's concerns around the use of inaccurate switch event meter readings for consumer invoicing and market settlement

(b) address concerns expressed by submitters on the original proposal to make losing traders responsible for providing AMI switch meter readings. The amendment accommodates instances where the losing trader:

(i) does not have access to an AMI switch read (eg the losing trader may only have access to monthly meter readings or chooses to manually read the AMI meter)

(ii) chooses not to provide an AMI read as a switch event meter reading, and instead provides an estimate (current practice)

(c) remove a potential barrier to traders using the HHR settlement methodology, providing more efficient market processes

(d) remove a potential barrier to trader innovation

(e) encourage participants to use more accurate information.

4.1.4 The Authority notes that the impact of the Code amendment will be to:

(a) move the problem of an inaccuracy in a switch event meter reading from the gaining trader to the losing trader who causes the inaccuracy

(b) not impact on a losing trader that is prepared to use switch event meter readings derived from an AMI meter or to provide accurate estimates

(c) only be effective on switches where a gaining trader changes the method of electricity market settlement from NHH to HHR at the time of the switch

(d) allow the losing trader to retain the system and processes it currently has in place.

Code amendment as a result of consultation

4.1.5 The amendments to Schedule 11.3 of the Code as a result of submissions include the following:

(a) clause 6A: amend the reference to correctly refer to the gaining trader and amend the cross reference to clause 6 as a result of changes to that clause

(b) extend the period of 3 business days to 5 business days for the losing trader to provide final information

(c) allow a period of 5 business days after the receipt of the switch completion file for a gaining trader to provide a revised switch event meter reading derived from AMI information to the losing trader, and require the losing trader to use that revised switch event meter reading

(d) make it clear that a losing trader must accept a revised switch event meter reading from a gaining trader. This is on the condition that the gaining trader has derived the switch event meter reading from a certified AMI metering installation within 5 business days of receiving the switch completion file from the registry.

4.1.6 In all other cases the switch event meter reading change process will remain unchanged.

4.1.7 For clarity, the time requirements to complete a switch have not been changed as a result of this Code amendment.

Appendix A ICP Switching Code amendments – track changes

A.1 Please note:

A.1.1 These amendments are marked-up on the Code as at 27 July 2015. It does not take into account any amendments that may come into effect between that date and 9 October 2015.

A.1.2 Only the relevant clauses of the Parts are shown.

A.1.3 The changes are shown as follows:

(a) text inserted by the 2014 amendment – single underline

(b) text deleted by the 2014 amendment – single strikethrough

(c) text inserted by the 2015 amendment – double underline

(d) text deleted by the 2015 amendment – double strikethrough.

A.1.4 This means that if text has been inserted by the 2014 amendment but then deleted by the 2015 amendment, it will appear with both single underline and double strikethrough.

A.1.5 While we have made every effort to prepare this document accurately, if there are any inconsistencies between this document and the Code amendments, the Code amendments take precedence.

Part 1
Preliminary provisions

sustained instantaneous reserve means—
(a) for providers of **partly loaded spinning reserve** and **tail water depressed reserve**, the average additional output (in **MW**) provided during the first 60 seconds after a Contingent Event (as defined in the **policy statement**) that is sustained for at least 15 minutes after the Contingent Event (unless a new **dispatch instruction** is given before the expiry of that 15 minute period); and
(b) for providers of **interruptible load**, the average drop in load (in **MW**) that occurs over the first 60 seconds after the **grid** system frequency falls to or below 49.2 Hz that is sustained until instructed by the **system operator**

switch event meter reading, in relation to a **meter** or **data storage device** that is located at an **ICP** that is being switched under Schedule 11.3, means—
(a) a **validated meter reading**, if one is available; or
(b) a reasonable estimate of the **meter reading** based on the **meter reading** contained in the final information provided in the switch file that the losing **trader** received when it gained the **ICP** if—
    (i) a **validated meter reading** is not available; and
    (ii) the losing **trader** has been recorded in the **registry** as being responsible for the **ICP** for a period of less than 3 months; or
(c) in every other case, a **permanent estimate**

Schedule 11.3

cl 11.15

Switching

Overview

1A Overview of Schedule

This Schedule prescribes 3 processes for switching **ICPs** as follows:

(a) a standard switch process that applies in the circumstances described in clause 1(1):

(b) a switch move process that applies in the circumstances described in clause 8(1):

(c) a gaining **trader** switch process that applies in the circumstances described in clause 13(1).

Standard switch~~ing~~ process

1 Standard switch~~ing~~ process for ICPs

(1) A standard switch process applies when a **trader** (the "gaining **trader**") has an arrangement with a **customer** or **embedded generator** to commence trading **electricity** with the **customer** or **embedded generator** at, or to otherwise assume responsibility under clause 11.18(1) for, an **ICP** at which another **trader** (the "losing **trader**") trades **electricity**, and the gaining **trader** switch process under clauses 13 to 16 does not apply.

~~This clause and clauses 2 to 7 apply if a **trader** (the "gaining **trader**") has an arrangement with a **customer** or **embedded generator** to—~~

~~(a) commence trading **electricity** with the **customer** or **embedded generator** at an **ICP** at which another **trader** (the "losing **trader**") supplies **electricity**, and the **ICP** is recorded on the **registry** with—~~

~~(i) a submission type of non **half hour**; or~~

~~(ii) a submission type of **half hour** and an AMI flag of "Y"; or~~

~~(b) assume responsibility under clause 11.18(1) for such an **ICP**.~~

(1A) This clause and clauses 2 to 7 apply to a standard switch process.

(2) If subpart 2 of Part 4A of the Fair Trading Act 1986 applies to an arrangement described in subclause (1),—

(a) the gaining **trader** must identify the period within which the **customer** or **embedded generator** may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986; and

(b) for the purpose of this Schedule, the arrangement is deemed to come into effect on the day after the expiry of the period.

Compare: Electricity Governance Rules 2003 clauses 1.1A and 1.1B schedule E2

Clause 1 Heading: amended, on 29 August 2013, by clause 11(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.

Clause 1(1)(a): substituted, on 29 August 2013, by clause 11(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.

Clause 1(2): amended, on 6 November 2014, by clause 7(3) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.

Clause 1(2)(a): amended, on 6 November 2014, by clause 7(4) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.

2 ~~Inform registry of switch request for ICPs~~ Gaining trader advises registry of standard switch request

(1) For each **ICP** to which a switch relates, the gaining **trader** must advise the **registry** of the switch no later than 2 **business days** after the arrangement with the **customer** or **embedded generator** comes into effect.

(2) The gaining **trader** must include in its advice to the **registry**—

~~(a) a proposed **event date**; and~~

(b) that the switch type is TR; and

(c) 1 or more **profile** codes of a **profile** at the **ICP**.

Compare: Electricity Governance Rules 2003 clause 1.1 schedule E2

3 Losing trader response to standard switch request

No later than 3 **business days** after receiving notification of a switch request from the **registry** under clause 22(a), the losing **trader** must,—

(a) either—

(i) acknowledge the switch request by providing the following information to the **registry**:

(A) the proposed **event date**; and

(B) a valid switch response code approved by the **Authority**; or

(ii) provide the final information specified in clause 5(a) to (c) to complete the switch; or

~~(a) acknowledge the switch request by providing the following information to the **registry**:~~

~~(i) the proposed **event date**; and~~

~~(ii) a valid switch response code approved by the **Authority**; or~~

~~(b) provide final information to complete the switch request in accordance with clause 5; or~~

(c) request that the switch be withdrawn in accordance with clause 17.

~~Within 3 **business days** after receipt of notification from the **registry** in accordance with clause 22, for each **ICP** the losing **trader** must establish an expected **event date** and must—~~

~~(a) provide acknowledgement of the switch request by—~~

~~(i) providing the expected **event date** to the **registry**; and~~

~~(ii) if relevant for that **ICP**, providing a valid switch response code approved by the **market administrator**, to the gaining **trader**; or~~

~~(b) provide final information to complete the switch by—~~

~~(i) providing confirmation of the actual **event date** to the **registry**; and~~

~~(ii) providing to the gaining **trader** confirmation of the actual **event date** and a switch meter read, comprising either the **validated meter reading** or a **permanent estimate**, as at the actual **event date**; or~~

~~(c) provide a request for withdrawal of the switch in accordance with clause 17.~~

Compare: Electricity Governance Rules 2003 clause 1.2 schedule E2

4 Event dates

(1) The losing **trader** must establish **event dates** ~~under clause 3~~ so that—

(a) no **event date** is more than 10 **business days** after the date of notification from the **registry** in accordance with clause 22(a); and

(b) in any 12 month period at least 50% of the **event dates** established by the losing **trader** are no more than 5 **business days** after the date of notification.

(2) When establishing ~~calculating~~ an **event date** under this clause, the losing **trader** must disregard every **event date** established by the losing **trader** for a **customer** who, at the time that the **event date** is established, has been a **customer** of the losing **trader** for less than 2 calendar months.

Compare: Electricity Governance Rules 2003 clause 1.2A schedule E2
Clause 4(1)(a): amended, on 15 May 2014, by clause 29 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

5 Losing trader must provide final information

If the losing **trader** has provided information under clause 3(a)(i) rather than under clause 3(a)(ii), no later than 5 ~~No later than 3~~ **business days** after the **event date**, the losing **trader** must complete the switch by providing final information to the **registry** ~~for the purposes of clause 3(b) and clause 4~~, including—

(a) the **event date**; and

(b) a **switch event meter reading** as at the **event date** for each **meter** or **data storage device** that is recorded in the **registry** with an accumulator type of C and a settlement indicator of Y; and

(c) if the **switch event meter reading** is not a **validated meter reading**, the date of the last **meter reading** of the **meter** or **data storage device** described in paragraph (b).

~~If the losing **trader** provides information to the **registry** in accordance with clause 3(a) and 4, then within 3 **business days** after the actual **event date**, the losing **trader** must—~~

~~(a) provide confirmation of the actual **event date** to the **registry**; and~~

~~(b) provide the actual **event date** and either the **validated meter reading** or a **permanent estimate** as at the actual **event date** to the gaining **trader**.~~

Compare: Electricity Governance Rules 2003 clause 1.3 schedule E2

6 Traders must use same reading

(1) The losing **trader** and the gaining **trader** must both use the same ~~**validated meter reading**~~ or ~~**permanent estimate**~~ **switch event meter reading** for the **event date** as determined by the following procedure:

(a) if the **switch event meter reading** ~~**validated meter reading**~~ or ~~**permanent estimate**~~ provided by the losing **trader** differs by less than 200 kWh from a value established by the gaining **trader**, the gaining **trader** must use the losing **trader's** **switch event meter reading** ~~**validated meter reading**~~ or ~~**permanent estimate**~~; or

(b) if the **switch event meter reading** ~~**validated meter reading**~~ or ~~**permanent estimate**~~ provided by the losing **trader** differs by 200 kWh or more from a value established by the gaining **trader**, the gaining **trader** may dispute the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~. ~~In this case, the **gaining trader** must, within 4 calendar months of the actual **event date**, provide to the losing **trader** a changed **validated meter reading** or a **permanent estimate** supported by 2 **validated meter readings**, and the losing **trader** must either,—~~

~~(i) within 5 **business days** after receiving the **validated meter readings** or **permanent estimate** from the gaining **trader**, the losing **trader**, if it does not accept the **validated meter readings** or **permanent estimate**, must **notify** the gaining **trader** (giving all relevant details); or~~

~~(ii) if the losing **trader** notifies its acceptance of the **validated meter readings** or **permanent estimate** received from the gaining **trader**, or does not provide any response, the losing **trader** must use the **validated meter readings** or **permanent estimate** supplied by the gaining **trader** in accordance with this paragraph.~~

(2) Despite subclause (1), subclause (3) applies if—

(a) the losing **trader** trades **electricity** at the **ICP** through a **metering installation** with a submission type of non **half hour** in the **registry**; and

(b) the gaining **trader** will trade **electricity** at the **ICP** through a **metering installation** with a submission type of **half hour** in the **registry**, as a result of the gaining **trader's** arrangement with the **customer** or **embedded generator**; and

(c) a **switch event meter reading** provided by the losing **trader** under subclause (1) has not been obtained from an **interrogation** of a **certified metering installation** with an AMI flag of Y in the **registry**.

(3) No later than 5 **business days** after receiving final information from the **registry** under clause 22(d),—

(a) the gaining **trader** may provide the losing **trader** with a **switch event meter reading** obtained from an **interrogation** of a **certified metering installation** with an AMI flag of Y in the **registry**; and

(b) the losing **trader** must use that **switch event meter reading**.

Compare: Electricity Governance Rules 2003 clause 1.4 schedule E2

6A Gaining ~~Losing~~ trader disputes reading

If a gaining ~~losing~~ **trader** disputes a **switch event meter reading** under clause 6(1)(b), the **gaining trader** must, no later than 4 months after the **event date**, provide to the losing **trader** a changed **switch event meter reading** supported by 2 **validated meter readings**, and the losing **trader** must either—

(a) if it does not accept the **switch event meter reading**, advise the gaining **trader** (giving all relevant details) no later than 5 **business days** after receiving the **switch event meter reading** from the gaining **trader**; or

(b) if it notifies its acceptance of the **switch event meter reading** received from the gaining **trader**, or does not provide any response, the losing **trader** must use the **switch event meter reading** supplied by the gaining **trader**.

7 Disputes

(1) A losing **trader** or a gaining **trader** may notify the other **trader** that it disputes a **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ notified under clauses 1 to 6.

(2) The dispute must be resolved in accordance with the disputes procedure in clause 15.29 (with all necessary amendments).

Compare: Electricity Governance Rules 2003 clause 1.5 schedule E2

Switch move process

8 Switch move process for ICPs

(1) A switch move process applies when a **trader** (the "gaining **trader**") has an arrangement with a **customer** or **embedded generator** to commence trading **electricity** with the **customer** or **embedded generator** at, or to otherwise assume responsibility under clause 11.18(1) for, an **ICP** for which no **trader** has an agreement to trade **electricity** and the gaining **trader** switch process under clauses 13 to 16 does not apply. ~~This clause and clauses 9 to 12 apply if a **trader** (the "gaining **trader**") has an arrangement with a **customer** or **embedded generator** to—~~

~~(a) commence trading **electricity** with the **customer** or **embedded generator** at an **ICP** for which no **trader** has an agreement to trade **electricity** and the **ICP** is recorded on the **registry** with—~~

~~(i) a submission type of non **half hour**; or~~

~~(ii) a submission type of **half hour** and AMI flag of "Y"; or~~

~~(b) assume responsibility under clause 11.18(1) for such an **ICP**.~~

(1A) This clause and clauses 9 to 12 apply to a switch move process.

(2) If subpart 2 of Part 4A of the Fair Trading Act 1986applies to an arrangement described in subclause (1)—

(a) the gaining **trader** must identify the period within which the **customer** or **embedded generator** may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986; and

(b) for the purpose of this Schedule, the arrangement is deemed to come into effect on the day after the expiry of the period.

Compare: Electricity Governance Rules 2003 clauses 2.1A and 2.1B schedule E2
Clause 8 Heading: amended, on 29 August 2013, by clause 12(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.
Clause 8(1)(a): substituted, on 29 August 2013, by clause 12(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.
Clause 8(2): amended, on 6 November 2014, by clause 15(2) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.
Clause 8(2)(a): amended, on 6 November 2014, by clause 15(3) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.

9 Gaining trader informs registry of switch request

(1) For each **ICP** to which a switch relates, the gaining **trader** must advise the **registry** of the switch request ~~type and the proposed~~ ~~**event date**~~ no later than 2 **business days** after the arrangement with the **customer** or **embedded generator** comes into effect.

(2) The gaining **trader** must include in its advice to the **registry**—

(a) a proposed **event date**; and

(b) that the switch type is MI; and

(c) 1 or more **profile** codes of a **profile** at the **ICP**.

Compare: Electricity Governance Rules 2003 clause 2.1 schedule E2

~~10 Losing trader provides information~~

~~Within 3 **business days** after receipt of notification from the **registry** in accordance with clause 22(a), the **trader** who is recorded on the **registry** as being responsible for the **ICP** (the "losing **trader**") must confirm the proposed **event date** or set another expected **event date** (that must not precede the gaining **trader's** proposed **event date** and must be no more than 10 **business days** after the date of such notification), and must—~~

~~(a) provide acknowledgement for the switch move by—~~

~~(i) providing confirmation of the expected **event date** to the **registry**; and~~

~~(ii) if relevant for the **ICP**, provide a valid switch response code approved by the **Authority** to the gaining **trader**; or~~

~~(b) provide final information to complete the switch move by—~~

~~(i) providing confirmation of the actual **event date** to the **registry**; and~~

~~(ii) providing, either the **validated meter reading** or a **permanent estimate** as at the actual **event date** to the gaining **trader**, and if a **permanent estimate** is supplied, the date of the last **validated meter reading** at the **ICP**; or~~

~~(c) providing a request for withdrawal of the switch in accordance with clause 17.~~

~~Compare: Electricity Governance Rules 2003 clause 2.2 schedule E2~~

~~11 Losing trader must provide final information~~

~~If the losing **trader** has provided information to the **registry** in accordance with clause 10(a), then within 3 **business days** after the later of the actual **event date** or date of receipt of the switch request, the losing **trader** must—~~

~~(a) provide confirmation of the actual **event date** to the **registry**; and~~

~~(b) provide the actual **event date** and either the **validated meter reading** or a **permanent estimate** as at the actual **event date** to the gaining **trader**.~~

~~Compare: Electricity Governance Rules 2003 clause 2.3 schedule E2~~

10 Losing trader response to switch move request

(1) After receiving notification of a switch request from the **registry** under clause 22(a), the **trader** that is recorded on the **registry** as being responsible for the **ICP** (the "losing **trader**") must, no later than 5 **business days** after receiving the notification,—

(a) if the losing **trader** accepts the **event date** proposed by the gaining **trader**, complete the switch by providing to the **registry**—

~~(i) no later than 3 **business days** after receiving the notification,—~~

~~(A) confirmation of the **event date**; and~~

~~(B) a valid switch response code approved by the **Authority**; and~~

(ia) confirmation of the **event date**; and

(ib) a valid switch response code approved by the **Authority**; and

(ii) final information in accordance with clause 11; or

(b) if the losing **trader** does not accept the **event date** proposed by the gaining **trader**, ~~no later than 3 **business days** after receiving the notification,~~ acknowledge the switch request to the **registry** and determine a different **event date** that—

(i) is not earlier than the gaining **trader's** proposed **event date**; and

(ii) is no later than 10 **business days** after the date of the notification; or

(c) ~~no later than 3 **business days** after receiving the notification,~~ request that the switch be withdrawn in accordance with clause 17.

(2) If the losing **trader** determines a different **event date** under subclause (1)(b), the losing **trader** must also complete the switch by providing to the **registry** the information described in subclause (1)(a), but in that case the **event date** is the **event date** determined by the losing **trader**.

11 Losing trader must provide final information

~~If the losing **trader** has provided information to the **registry** in accordance with clause 10(1)(a)(i), then no later than 3 **business days** after the **event date**, the~~ The losing **trader** must provide final information to the **registry** for the purposes of clause 10(1)(a)(ii), including—

(a) the **event date**; and

(b) a **switch event meter reading** as at the **event date** for each **meter** or **data storage device** that is recorded in the **registry** with an accumulator type of C and a settlement indicator of Y; and

(c) if the **switch event meter reading** is not a **validated meter reading**, the date of the last **meter reading** of the **meter** or **data storage device** described in paragraph (b).

12 Gaining trader may change switch event meter reading ~~validated meter reading or permanent estimate~~

(1) The gaining **trader** may use the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ supplied by the losing **trader** or may, at its own cost, obtain its own **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~.

(2) If the gaining **trader** elects to use the new **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~, the gaining **trader** must **notify** the losing **trader** of the new **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ and the ~~actual~~ **event date** to which it refers as follows:

- (a) if the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ established by the gaining **trader** differs by less than 200 kWh from that provided by the losing **trader**, both **traders** must use the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ provided by the gaining **trader** ~~as the **validated meter reading** or **permanent estimate**~~; or
- (b) if the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ provided by the losing **trader** differs by 200 kWh or more from a value established by the gaining **trader**, the gaining **trader** may dispute the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~.

(2A) Despite subclauses (1) and (2), subclause (2B) applies if—

- (a) the losing **trader** trades **electricity** at the **ICP** through a **metering installation** with a submission type of non **half hour** in the **registry**; and
- (b) the gaining **trader** will trade **electricity** at the **ICP** through a **metering installation** with a submission type of **half hour** in the **registry**, as a result of the gaining **trader's** arrangement with the **customer** or **embedded generator**; and
- (c) a **switch event meter reading** provided by the losing **trader** under subclause (1) has not been obtained from an **interrogation** of a **certified metering installation** with an AMI flag of Y in the **registry**.

(2B) No later than 5 **business days** after receiving final information from the **registry** under clause 22(d),—

- (a) the gaining **trader** may provide the losing **trader** with a **switch event meter reading** obtained from an **interrogation** of a **certified metering installation** with an AMI flag of Y in the **registry**; and
- (b) the losing **trader** must use that **switch event meter reading**.

(3) If the gaining **trader** disputes a **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ under subclause (2)(b), the gaining **trader** must, no later than 4 months after ~~within 4 calendar months of~~ the actual **event date**, provide to the losing **trader** a changed **switch event meter reading** ~~**validated meter reading** or a **permanent estimate**~~ supported by 2 **validated meter readings**, and the losing **trader** must either,—

- (a) no later than ~~within~~ 5 **business days** after receiving the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ from the gaining **trader**, the losing **trader**, if it does not accept the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~, must **notify** the gaining **trader** (giving all relevant details), and the losing **trader** and the gaining **trader** must use reasonable endeavours to resolve the dispute in accordance with the disputes procedure contained in clause 15.29 (with all necessary amendments); or

(b) if the losing **trader** notifies its acceptance of the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ received from the gaining **trader**, or does not provide any response, the losing **trader** must use the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ supplied by the gaining **trader** ~~in accordance with this clause~~.

Compare: Electricity Governance Rules 2003 clause 2.4 schedule E2

~~Half-hour switching~~ Gaining trader switch process

13 ~~Half-hour switching~~ Gaining trader switch processes

(1) ~~This clause and clauses 14 to 16 apply if~~ A gaining **trader** switch process applies when a **trader** (the "gaining **trader**") has an arrangement with a **customer** or **embedded generator** to—

(a) trade **electricity** through—

(i) a **half-hour metering installation** (not being a **category 1 metering installation** or a **category 2 metering installation**) at an **ICP** with a submission type of **half hour** on the **registry** and an AMI flag of "N" at which another **trader** (the "losing **trader**") trades **electricity** through a **half-hour metering installation** with the same submission type and AMI flag ~~with the **customer** or **embedded generator** with a submission type of **half hour** on the **registry** and an AMI flag of "N"~~; or

(ii) a **half-hour metering installation** at an **ICP** with a submission type of **half hour** on the **registry** and an AMI flag of "N" at which another **trader** (the "losing **trader**") trades **electricity** through a non **half-hour metering installation** with the **customer** or **embedded generator** with a submission type of non **half hour** on the **registry** and an AMI flag of "N"; or

(iii) a non **half-hour metering installation** at an **ICP** at which another **trader** (the "losing **trader**") trades **electricity** through a **half-hour metering installation** with an AMI flag of "N" with the **customer** or **embedded generator**; or

(b) assume responsibility under clause 11.18(1) for ~~such~~ an **ICP** described in paragraph (a).

(1A) This clause and clauaes 14 to 16 apply to a gaining **trader** switch process.

(2) If subpart 2 of Part 4A of the Fair Trading Act 1986 applies to an arrangement described in subclause (1)—

(a) the gaining **trader** must identify the period within which the **customer** or **embedded generator** may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986; and

(b) for the purpose of this Schedule, the arrangement is deemed to come into effect on the day after the expiry of the period.

Compare: Electricity Governance Rules 2003 clauses 3.1 and 3.1A schedule E2
Clause 13(1)(a): substituted, on 29 August 2013, by clause 13 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.

Clause 13(2): amended, on 6 November 2014, by clause 20(5) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.
Clause 13(2)(a): amended, on 6 November 2014, by clause 20(6) of the Electricity Industry Participation Code Amendment (ICP Switching) 2014.

14 Gaining trader informs registry of switch request

(1) For each **ICP** to which ~~the~~ a switch relates, the gaining **trader** must advise the **registry** of the switch request ~~expected~~ ~~**event date**~~ ~~and switch type~~ no later than 3 **business days** after the arrangement with the **customer** or **embedded generator** comes into effect.

(2) The gaining **trader** must include in its advice to the **registry**—

(a) a proposed **event date**; and

(b) that the switch type is HH.

(3) Unless subclause (4) applies, the proposed **event date** must be a date that is after the date on which the gaining **trader** advises the **registry**.

(4) The proposed **event date** may be a date that is before the date on which the gaining **trader** advises the **registry**, if—

(a) the proposed **event date** is in the same month as the date on which the gaining **trader** advises the **registry**; or

(b) the proposed **event date** is no more than 90 days before the date on which the gaining **trader** advises the **registry**, and the losing **trader** and gaining **trader** agree on the proposed **event date**.

Compare: Electricity Governance Rules 2003 clause 3.2 schedule E2

15 Losing trader provides information

~~Within~~ No later than 3 **business days** after the losing **trader** receives information from the **registry** in accordance with clause 22(a), ~~and if relevant for that~~ ~~**ICP**,~~ the losing **trader** must ~~(if relevant to that~~ ~~**ICP**)~~ —

(a) provide ~~to~~ the **registry** with a valid switch response code approved by the **Authority**; or

(b) ~~provide a request for withdrawal of the switch~~ request that the switch be withdrawn in accordance with clause 17.

Compare: Electricity Governance Rules 2003 clause 3.3 schedule E2

16 Gaining trader obligations ~~to notify registry~~

(1) The gaining **trader** must ~~notify~~ complete the switch by advising the **registry** of the ~~actual~~ **event date** no later than 3 **business days** after ~~the actual~~ ~~**event date**~~ receiving a valid switch response code from the **registry** under clause 22(c).

(2) If the **ICP** is being **de-energised** or if **metering** equipment is being removed, the gaining **trader** must either—

(a) give the losing **trader** or the **metering equipment provider** for the **ICP** an opportunity to **interrogate** the **metering installation** immediately before the **ICP** is **de-energised** or the **metering** equipment is removed; or

(b) carry out an **interrogation** and, no later than 5 **business days** after the **metering installation** is **de-energised** or removed, advise the losing **trader** of—
   (i) the results of the **interrogation**; and
   (ii) the **metering component** numbers for each data channel in the **metering installation**.

Compare: Electricity Governance Rules 2003 clause 3.4 schedule E2

Withdrawing a switch request

17 Withdrawal of switch requests

A losing **trader** or gaining **trader** may request that a switch request be withdrawn at any time until the expiry of 2 ~~**calendar months**~~ months after the **event date** ~~of the switch~~.

Compare: Electricity Governance Rules 2003 clause 3A schedule E2

18 Withdrawing a switch request

If a **trader** requests the withdrawal of a switch under clause 17, the following provisions apply:

(a) the **Authority** must determine the valid codes for withdrawing a switch request ("withdrawal advisory codes"):
(b) the **Authority** must **publish** the withdrawal advisory codes:
(c) for each **ICP**, the **trader** withdrawing the switch request must provide the **registry** with the following information:
   (i) the **participant identifier** of the **trader**; and
   (ii) the withdrawal advisory code **published** by the **Authority** in accordance with paragraph (b):
(d) ~~within~~ no later than 5 **business days** after receiving a notification from the **registry** in accordance with clause 22(b), the **trader** receiving the withdrawal must notify the **registry** that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the **trader** who received the withdrawal:
(e) on receipt of a rejection notification from the **registry** in accordance with paragraph (d), a **trader** may re-submit a switch withdrawal request for an **ICP** in accordance with paragraph (c). All switch withdrawal requests must be resolved ~~within~~ no later than 10 **business days** after the date of the initial switch withdrawal request:
(f) if a **trader** requests that a switch request be withdrawn and the resolution of that switch withdrawal request results in the switch proceeding, ~~within~~ no later than 2 **business days** after receipt of notification from the **registry** in accordance with clause 22(b), the losing **trader** must comply with clauses 3, 5, 10 and 11 (whichever is appropriate) and the gaining **trader** must comply with clause 16.

Compare: Electricity Governance Rules 2003 clause 4 schedule E2
Clause 18(b): amended, on 21 September 2012, by clause 16(1) of the Electricity Industry Participation (Minor Amendments) Code Amendment 2012.

Clause 18(c)(i): amended, on 21 September 2012, by clause 16(2) of the Electricity Industry Participation (Minor Amendments) Code Amendment 2012.

Exchange of information

19 Participants to use file formats

Participants who exchange information in accordance with this Schedule must use the file formats determined and **published** by the **Authority**.

Compare: Electricity Governance Rules 2003 clause 5.1 schedule E2

20 Method of exchanging files

(1) The **Authority** may, from time to time, after consultation with **participants**, do all or any of the following:

(a) determine the method by which **participants** exchange information:

(b) determine the file formats that **participants** must use to exchange information:

(c) alter the file formats or the method by which **participants** exchange information.

(2) The **Authority** must **publish** the file formats.

Compare: Electricity Governance Rules 2003 clause 5.2 schedule E2
Clause 20(1): substituted, on 15 May 2014, by clause 30 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

21 Metering information

For each ~~an~~ **interrogation** or **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ carried out in accordance with this Schedule,—

(a) the **trader** who carries out the **interrogation** or **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ must ensure that the **interrogation** is as accurate as possible, or that the **switch event meter reading** ~~**validated meter reading** or **permanent estimate**~~ is fair and reasonable (as the case may be); and

~~(b) the cost of each **interrogation** or **validated meter reading** or **permanent estimate** carried out in accordance with clauses 5(b) or 10(b)(ii) must be met by the losing **trader**; and~~

~~(c) the costs of every other **interrogation** or **validated meter reading** or **permanent estimate** must be met by the gaining **trader**.~~

(b) the cost of each **interrogation** or **switch event meter reading** must be met as follows:

(i) for each **interrogation** or **switch event meter reading** carried out in accordance with clauses 5(b) or 11(b) or (c), the cost must be met by the losing **trader**; and

(ii) in every other case, the cost must be met by the gaining **trader**.

Compare: Electricity Governance Rules 2003 clause 5.3 schedule E2

22 Registry notifications

The **registry** must provide notifications to **participants** required by this Schedule as follows:

(a) on receipt of information about a switch request in accordance with clauses 2, 9 and 14, the **registry** must notify the losing **trader** of the information received:

(b) on receipt of information about a withdrawal request in accordance with clauses 18(c) and (d), the **registry** must notify the other relevant **trader** of the information received:

(c) on receipt of information about a switch acknowledgement in accordance with clauses 3(a) and 15, the **registry** must notify the gaining **trader** of the information received:

(d) on receipt of information about a switch completion in accordance with clauses 3(a)(ii), 5, 10 and 16, the **registry** must notify the gaining **trader**, the losing **trader**, the **metering equipment provider**, and the relevant **distributor** of the information received.

Compare: Electricity Governance Rules 2003 clause 5.4 schedule E2

Clause 22(d): amended, on 29 August 2013, by clause 14 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2013.

Schedule 15.2 Collection of volume information

cl 15.5

~~**6 Non half hour meter readings apply from end of day**~~

~~Non **half hour meter readings** are deemed to apply from 0000 hours on the day after the last **meter interrogation** up to and including 2400 hours on the day of the **meter interrogation**.~~

6 When non half hour meter readings apply

Non **half hour meter readings** are deemed to apply—

(a) if the non **half hour meter reading** is also a **switch event meter reading**—

(i) for the gaining **trader**, from 0000 hours on the day of the relevant **event date**; and

(ii) for the losing **trader**, at 2400 hours at the end of the day before the relevant **event date**; or

(b) in all other cases, from 0000 hours on the day after the last **meter interrogation** up to and including 2400 hours on the day of the **meter interrogation**.

Compare: Electricity Governance Rules 2003 clause 5.2 schedule J2

Part 17
Transitional provisions

17.101 Registry notifications

A notification provided by the registry to participants under clause 5.4 of schedule E2 of part E of the **rules** that was in force immediately before this Code came into force, is deemed to be a notice provided by the registry to participants under clause 22 of Schedule 11.3.

17.101A Switching under Schedule 11.3

(1) This clause applies to an arrangement between a **trader** and a **customer** or **embedded generator** to carry out a switch in relation to an **ICP** under Schedule 11.3.

(2) If the arrangement came into effect before 9 October 2015 and the relevant switch had not been completed by that date, the switch must be completed in accordance with Schedule 11.3 as amended by the Electricity Industry Participation Code Amendment (ICP Switching) 2014 and the Electricity Industry Participation Code Amendment (ICP Switching) 2015.