The current version of the National Electricity Rules, as modified by these Regulations, is available at: http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/National-Electricity-Rules-(Northern-Territory)

NORTHERN TERRITORY OF AUSTRALIA

NATIONAL ELECTRICITY (NORTHERN TERRITORY) (NATIONAL UNIFORM LEGISLATION) (MODIFICATION) REGULATIONS 2016

As in force at 7 November 2026

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NORTHERN TERRITORY OF AUSTRALIA

As in force at 7 November 2026

NATIONAL ELECTRICITY (NORTHERN TERRITORY) (NATIONAL UNIFORM LEGISLATION) (MODIFICATION) REGULATIONS 2016

Regulations under the *National Electricity (Northern Territory) (National Uniform) Legislation Act 2015*

Part 1 Preliminary matters

1 Citation

These Regulations may be cited as the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016*.

2 Commencement

(1) Regulation 9 and Schedule 3 commence on 1 December 2016.

(2) The remaining provisions of these Regulations commence on 1 July 2016.

2A Definitions

In these Regulations:

2014 NT Network Price Determination, for Part 3, see regulation 4(1).

applicable regulatory instruments, for Part 3, see regulation 4(1).

local support, for Part 3, see regulation 4(1).

Part 2 Modifications to National Electricity Regulations

3 National Electricity Regulations modified

For section 13(2)(b) of the Act, the regulations in force from time to time under Part 4 of the *National Electricity (South Australia) Act 1996* (SA) are modified as set out in Schedule 1.

Part 3 Modifications to National Electricity Rules

4 Interpretation

(1) In this Part:

2014 NT Network Price Determination, see the National Electricity (NT) Rules, Chapter 10.

applicable regulatory instruments, see the 2014 NT Network Price Determination, Part B, Schedule 1, clause 1.1.

local support means credit support as defined in the 2014 NT Network Price Determination, Part B, Schedule 1, clause 1.1.

(2) An expression used in regulation 6, 6A or 7 that is italicised has the same meaning as it has in the National Electricity (NT) Rules.

5 National Electricity Rules modified

For section 13(2)(c) of the Act, the operation of the National Electricity Rules is modified as set out in this Part for the purpose of their having the force of law in this jurisdiction under section 9 of the National Electricity (NT) Law.

5A Application of Rules in this jurisdiction

(1) The following provisions of the National Electricity (NT) Rules have no effect in this jurisdiction:

(a) Chapter 1, rule 1.11;

(b) Chapters 2, 2A, 3 and 4;

(c) Chapter 5, clauses 5.2.3(a) and (k), 5.2.4(d) and (f), 5.2.5(c) and (e), 5.2.5A(c) and (e), 5.3.3(b2), (b3) and (b4), 5.3.4(b)(5) and (b1)(e) and (g), 5.3.4A, 5.3.4B, 5.3.4C, 5.3.5(e), 5.3.6(a2)(3), 5.3.7(c) and (g)(2)(i), (5) and (6), 5.3.7A, 5.3.8(b)(1), (2)(iv) and (e1), 5.3.9(a)(2), (a1), (b)(4), (c), (c1) and (f), 5.3.10(a1), (b)(3) and (c), 5.3.12, 5.3.13, 5.3A.3(b)(5) and (6)(xi), 5.3A.4(e)(2)(ii), 5.3A.8(h), 5.3A.9(e), (f) and (h), 5.3A.10(f), 5.3A.12, 5.3AA(h), (i) and (j), 5.4.3(c), 5.4.5(e)(4), 5.7.3A, 5.7.5(a)(2), 5.12.1(b)(3) and (7), 5.12.2(c)(6), (6A), (8)(ii) and (9A), 5.13.1(d)(5) and (6), 5.14.1(d)(3A), 5.14.3(b), 5.14.4, 5.15.1(b), 5.15.2(b1), 5.15A.1(e), 5.15A.2(a), 5.15A.3, 5.16.1, 5.16.2(a0), (d), (e), (f) and (g), 5.16.3(a)(8) to (11), 5.16.4(b)(4), 5.16A, 5.16B(b)(3), 5.17.2(a0), (d), (e), (f) and (g), 5.17.3(a)(7), 5.18A.3(d)(1), 5.19.4(c), 5.20 to 5.24, schedules 5.1a to 5.3a, schedule 5.4A, paragraphs (a)(9), (i1) and (o)(3), schedule 5.4B, paragraphs (e) and (e1)(2) and (3),

schedules 5.5, 5.5.3, 5.5.4 and 5.5.5, schedule 5.6, paragraphs (c2) and (c3), schedule 5.8, paragraphs (o) and (q) and schedule 5.9, paragraph (h);

(d) Chapter 5A, clauses 5A.A.2(a1), 5A.A.3 and 5A.E.1(b1);

(e) Chapter 6, clauses 6.4.4(e) 6.4.5(b), 6.17.2(c) and (d), 6.18.2(b)(6C), 6.18.7(e), 6.20.3A and Parts M and N;

(f) Chapters 6A, 6B and 7;

(g) Chapter 8, clauses 8.1.3(b)(5) and (7), 8.6.1(d) and (e), 8.6.2(l), 8.6.6, 8.6.7, 8.7.2(a)(2) and (4) and (b)(2) and 8.7.6, Parts B, E, G and H and clause 8.14(b)(4);

(h) Chapter 11, Parts A to ZZI, ZZK, ZZL, ZZN (except for clause 11.86.8), ZZO to ZZT, ZZV and ZZX.

(3) The following provisions of the National Electricity (NT) Rules have no effect in this jurisdiction until the National Energy Retail Law is applied as a law of this jurisdiction:

(a) Chapter 5A, clause 5A.C.1(c) and (d), the note to clause 5A.E.4(c) and clause 5A.F.5(b)(2);

(b) Chapter 6, clause 6.6.1(a1)(4), (c)(6)(iii), (l) and (m).

6 Modification to operation of clause 6.6.1 in relation to local events

(1) This regulation applies in relation to a *positive change event* that is a local event prescribed by regulation 10.

(2) Under clause 6.6.1(c) of the National Electricity (NT) Rules, the written statement in relation to the *positive change event* must specify evidence of:

(a) the amount to which the *Distribution Network Service Provider* is entitled under any relevant local support; and

(b) the maximum amount of local support (if any) that the *Distribution Network Service Provider* was entitled to request the *retailer* to provide under the applicable regulatory instruments; and

(c) any amount that the *Distribution Network Service Provider* is likely to receive on a winding-up of the *retailer*.

(3) For the purposes of calculating, under clause 6.6.1 of the National Electricity (NT) Rules, the *eligible pass through amount* in relation to the *positive change event*, the increase in costs is the *retailer* insolvency costs excluding:

(a) any amount recovered or recoverable from a *retailer* or a guarantor of a *retailer* under any relevant local support; and

(b) amounts that the *Distribution Network Service Provider* is likely to receive on a winding-up of the *retailer*; and

(c) any costs that are recoverable on account of the *retailer* insolvency under any retailer of last resort scheme established under the applicable regulatory instruments.

(4) The amount the *AER* determines, under clause 6.6.1 of the National Electricity (NT) Rules, should be passed through to *Distribution Network Users* in respect of the *positive change event* must be taken to be a cost that can be passed through and not a revenue impact of the event.

8 Further modifications to operation of Rules

Schedule 2 has effect.

9 Further modifications to operation of Rules commencing on 1 December 2017

Schedule 3 has effect.

9A Further modifications to operation of Rules commencing on 1 July 2019

Schedule 4 has effect.

Part 4 Matters prescribed for National Electricity (NT) Rules

10 Local event

(1) For clause 6.6.1(a1)(1AA) of the National Electricity (NT) Rules, a local event is either of the following:

(a) the failure of a *retailer* during a *regulatory control period*, to pay a *Distribution Network Service Provider* an amount to which the provider is entitled for the provision of *direct control services*, if:

(i) an insolvency official has been appointed in respect of that retailer; and

(ii) the provider is not entitled to payment of that amount in full under the terms of any local support in respect of that retailer;

(b) a circumstance in which the Power and Water Corporation is required to pay any amount under a cost recovery scheme determined by the Utilities Commission under section 44G of the *Electricity Reform Act 2000*.

(2) In this regulation:

2014 NT Network Price Determination, see the National Electricity (NT) Rules, Chapter 10.

local support means credit support as defined in the 2014 NT Network Price Determination, Part B, Schedule 1, clause 1.1.

(3) An expression used in subregulation (1) that is italicised has the same meaning as it has in the National Electricity (NT) Rules.

Part 5 Expiry of provisions

11 Expiry of certain provisions

(1) Schedule 2, clauses 64, 65, 71, 76 and 100 expire on 1 July 2019.

(2) The following expire on 1 July 2024:

(a) regulations 6A, 7 and 10A;

(b) Schedule 1, clause 3;

(c) Schedule 2, clauses 46, 48, 58, 59, 66, 67, 73 and 101.

(3) Schedule 2, clauses 77, 78, 80, 82 and 102 expire on 1 July 2029.

(4) The following expire when the National Energy Retail Law is applied as a law of this jurisdiction:

(a) regulations 6 and 10;

(b) Schedule 2, clauses 57 and 103.

(5) Regulations 2A and 4 expire on the later of the following:

(a) the day on which the National Energy Retail Law is applied as a law of this jurisdiction;

(b) 1 July 2024.

(6) This Part expires on the later of the following:

(a) the day on which the National Energy Retail Law is applied as a law of this jurisdiction;

(b) 1 July 2029.

Schedule 1 Modifications to National Electricity Regulations

regulation 3

Part 1 Preliminary matters

1 Regulations modified

This Schedule modifies the regulations mentioned in regulation 3.

Part 2 Modifications

2 Regulation 8 modified

After regulation 8(2)

insert

(2A) For the purposes of subregulation (1)(d), the reference to "the national electricity system" in the national electricity objective stated in section 7 of the new National Electricity Law must be regarded as including a reference to one or more, or all, of the local electricity systems, as the case requires.

3A Schedule 1 modified

Schedule 1, after "clause 7.16.2(c)"

insert

clause 7A.2(a)

clause 7A.3.2(a) – (b)

clause 7A.3.2(d) – (f)

clause 7A.6.1(a)

clause 7A.6.1(c)

clause 7A.6.2 (a)(1) – (11)

clause 7A.6.2(e) – (f)

clause 7A.6.5(a)(1) – (2)

clause 7A.6.6(c)

clause 7A.6.9(a)

clause 7A.6.9(d) – (e)

clause 7A.6.13(c)(1) – (3)

clause 7A.7.2(b)

clause 7A.7.2(e)

clause 7A.7.2(g) – (h)

clause 7A.7.3(a)

clause 7A.8.3(a)(3) – (4)

clause 7A.8.4

clause 7A.8.9(a) – (c)

clause 7A.9.3

clause 7A.13.2(a)

clause 7A.13.3(a) – (b)

clause 7A.13.3(d)

clause 7A.13.4

4 Schedule 2 modified

Schedule 2, clause 22, at the end

insert

However, this clause has no effect in this jurisdiction.

Schedule 2 Further modifications to operation of National Electricity Rules

regulation 8

Part 1 Preliminary matters

1 Rules modified

This Schedule modifies the operation of the National Electricity Rules.

Part 2 Modifications

2 Clauses 1.7.1A and 1.7.1B inserted

After clause 1.7.1

insert

1.7.1A Inconsistency with *National Measurement Act*

If there is an inconsistency between the *Rules* and the *National Measurement Act*, the *National Measurement Act* prevails to the extent of the inconsistency.

1.7.1B Instruments

(a) In an instrument made under the *Rules*:

(1) a reference to the "National Electricity Law", "Law" or "NEL" must be regarded as a reference to the National Electricity (NT) Law; and

(2) a reference to the "National Electricity Rules", "Rules" or "NER" must be regarded as a reference to the National Electricity Rules as defined in section 2(1) of the National Electricity (NT) Law.

(b) Paragraph (a) applies despite any provision to the contrary in an instrument.

(c) For the purposes of the application in this jurisdiction of an instrument made under the *Rules*:

(1) the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law must be regarded as a reference to one or more, or all, of the local electricity systems, as the case requires;

(2) if the context or subject matter indicates or requires, a reference in the instrument to:

(i) "regulatory control period" must be regarded as including a reference to the *2009-14 NT regulatory control period* and the *2014-19 NT regulatory control period*; and

(ii) "distribution determination" must be regarded as including a reference to the 2009 NT Network Price Determination and the *2014 NT Network Price Determination*; and

(3) the *AER* must interpret the instrument consistently with the objects of the application Act of this jurisdiction and the modifications made to the National Electricity Law and the *Rules* by or under that Act.

(d) In this clause:

2009 NT Network Price Determination means the "Final Determination – Networks Pricing: 2009 Regulatory Reset" made by the *Utilities Commission* under the *Utilities Commission Act* (NT), *Electricity Reform Act* (NT) and Chapter 6 of the *NT Network Access Code* that applied from 1 July 2009 to 30 June 2014.

3 Clause 1.8.1 modified

Clause 1.8.1(b)

omit

of *Registered Participants* maintained by *AEMO*

insert

kept by the Utilities Commission under section 37 of the *Electricity Reform Act* (NT)

3A Rule 1.9A inserted

After rule 1.9

insert

1.9A NTESMO's costs in connection with these Rules

Note

Costs for NTESMO are to be considered as part of the progressive application of the Rules in this jurisdiction.

Where, for any provision of these *Rules*, a corporate entity is both a *Network Service Provider* and *NTESMO*, any costs incurred by that corporate entity in complying with any requirements imposed on *NTESMO* under a provision where this clause applies are not to be recovered by that corporate entity as a *Network Service Provider* under Chapter 6.

4 Rule 1.11 modified

After rule 1.11, heading

insert

Note:

This rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

5 Chapters 2, 2A, 3 and 4 modified

After Chapters 2, 2A, 3, and 4, headings

insert

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of this Chapter will be revisited as part of the phased implementation of the Rules in this jurisdiction.

6 Clause 5.1.2 modified

(1) Clause 5.1.2(d), table

omit, insert

Connection Applicant	**Process**
A *Registered Participant* or a person intending to become a *Registered Participant* for a *generating plant connecting* to a *transmission network* or a person who is covered by an exemption from the requirement to hold a licence for operating in the electricity supply industry for a *generating plant connecting* to a *transmission network*	Rule 5.3 applies
A *Registered Participant* or a person intending to become a *Registered Participant* (or a person pursuant to clause 5.1A.1(c)) for a *load connecting* to a *transmission network*	Rule 5.3 applies
A *load connecting* to a *distribution network* where the *Connection Applicant* is a *Registered Participant* or a person intending to become a *Registered Participant* (and is not acting as the agent of a *retail customer*)	Rule 5.3 applies
A *distribution network connecting* to another *distribution network* or to a *transmission network* where the *Connection Applicant* is a *Registered Participant*, intending to become a *Registered Participant* or will obtain an exemption from registration	Rule 5.3 applies
A *Market Network Service Provider* or person intending to register as one seeking *connection* to a *distribution network* or a *transmission network*	Rule 5.3 applies
An *embedded generating unit connecting* to a *distribution network* where the *Connection Applicant* is a *Registered Participant* or a person intending to become a *Registered Participant*	Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules)
A non-registered embedded generator who makes an election for rule 5.3A to apply instead of Chapter 5A or a non-registered embedded generator above the relevant materiality threshold	Rules 5.3 and 5.3A apply (see clause 5.3.1A for the interaction between the two rules)

Connection Applicant	**Process**
A *Generator* wishing to alter a *connected generating plant* in the circumstances set out in clause 5.3.9	Clause 5.3.9 applies
A *Connection Applicant* for *prescribed transmission services* or *negotiated transmission services* that do not require the establishment or modification of a *connection* or alteration of a *connected generating plant* in the circumstances set out in clause 5.3.9	Rule 5.3 applies as modified by clause 5.2A.3(c)
An *Embedded Generator* or *Market Network Service Provider* applying for *distribution network user access*	Rule 5.3 or 5.3A (as applicable) and rule 5.3AA apply
A *load* or *generating plant connecting* to a *declared shared network*	Rule 5.3 as modified by clause 5.1A.1(d) to (g) and rule 5.3B apply
A *load* that is above the relevant materiality threshold *connecting* to a *distribution network* where the *Connection Applicant* is not a *Registered Participant* and is not intending to become a *Registered Participant* (unless it is acting as the agent of a *retail customer*)	Rule 5.3 applies
A *load* that is below the relevant materiality threshold *connecting* to a *distribution network* where the *Connection Applicant* is not a *Registered Participant* and is not intending to become a *Registered Participant* (unless it is acting as the agent of a *retail customer*) A non-registered embedded generator who does not make an election for Rule 5.3A to apply instead of Chapter 5A, other than a non-registered embedded generator above the relevant materiality threshold	Chapter 5A applies
A *retail customer* (or a *retailer* on behalf of that customer) *connecting* a micro embedded generator to a *distribution network*	Chapter 5A applies

(2) Clause 5.1.2(f)(1)

omit, insert

(1) the negotiating principles set out in Chapter 6, rather than schedule 5.11, will apply to negotiations between a *Transmission Network Service Provider* and a *Connection Applicant* for *negotiated transmission services* (as if they were *negotiated distribution services*);

(3) Clause 5.1.2(f)(3)

omit, insert

(3) disputes between a *Transmission Network Service Provider* and a *Connection Applicant* as to *terms and conditions of access* for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* will be determined under Chapter 6, rather than rule 5.5 (as if they were *negotiated distribution services*).

7 Clause 5.1.3 inserted

After clause 5.1.2

insert

5.1.3 Definitions

In this Chapter:

non-registered embedded generator has the same meaning as in clause 5A.A.1

relevant materiality threshold means a generation or load capacity threshold (for a local electricity system or part of a local electricity system), in MW, specified by a local instrument for the purposes of this definition.

Note

The requirements of this Chapter 5 relating to the materiality threshold will take effect in this jurisdiction when a threshold is specified by a local instrument.

8 Clause 5.1A.2 modified

(1) Clause 5.1A.2(c)

omit, insert

(c) the technical terms and conditions of *connection agreements* regarding standards of performance must be established in accordance with the requirements of *jurisdictional electricity legislation*, with the objective of ensuring that the *power system* operates securely and reliably and in accordance with any *system standard*;

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (c) will be requirements that correspond to the matters set out in schedules 5.1, 5.2 and 5.3 in the Rules applying in other participating jurisdictions. The system standards referred to in paragraph (c) are those that correspond to the system standards in schedule 5.1a in the Rules applying in other participating jurisdictions. The application of paragraph (c) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.1A.2(e)(2)

omit

AEMO

insert

NTESMO

9 Clause 5.1A.3 inserted

After clause 5.1A.2

insert

5.1A.3 Dedicated connection asset service providers

(a) A person must not engage in the activity of owning, controlling or operating a *dedicated connection asset* unless the person is a *Transmission Network Service Provider*, or a person who holds an exemption from the requirement to hold a licence under Part 3 of the *Electricity Reform Act 2000* (NT) to own or operate that *dedicated connection asset*.

(b) A person who holds an exemption from the requirement to hold a licence under Part 3 of the *Electricity Reform Act 2000* (NT) to own or operate a *large dedicated connection asset* must, in relation to that *dedicated connection asset*, comply with clause 5.2A(6)(c),

clause 5.2A.8 and rule 5.5 as if that person were a *Dedicated Connection Asset Service Provider*.

(c) A Dedicated Connection Asset Service Provider is:

(1) only required to comply with a rule that is expressed to apply to a *Network Service Provider* or a *Transmission Network Service Provider* in those capacities where the rule expressly provides that it applies to a *Dedicated Connection Asset Service Provider*; and

(2) required to comply with all rules which are expressed to apply to a *Registered Participant*.

(d) A *Transmission Network Service Provider* is taken to be a *Dedicated Connection Asset Service Provider* only in so far as its activities relate to any of its *dedicated connection assets*.

10 Clause 5.2.1 modified

Clause 5.2.1(b)(4)

omit

regions or partly combined *regions*, *intra-regional transmission* break-up

insert

network elements, or network break-up,

11 Clause 5.2.2 modified

(1) Clause 5.2.2(a)

omit, insert

(a) If requested to do so by a *Transmission Network User, Distribution Network User*, *NTESMO* or the AER, the *Utilities Commission* (in relation to a *dedicated connection asset*), a *Network Service Provider* and a *Transmission Network User* or *Distribution Network User* (as the case may be) must document the terms of any *network connection* arrangements made prior to 1 July 2019 and the resulting document will then be deemed to be a *connection agreement* for the purposes of the *Rules*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(2) Clause 5.2.2(b)(1) and (3)

omit

13 December 1998

insert

1 July 2019

12 Clause 5.2.3 modified

(1) After clause 5.2.3, heading

insert

Note

Paragraphs (a) and (k) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.2.3(b)(1)

omit

schedule 5.1

insert

jurisdictional electricity legislation

(3) Clause 5.2.3(b)

omit

between schedule 5.1

insert

between *jurisdictional electricity legislation*

(4) Clause 5.2.3(b)(3)

omit

schedule 5.1

insert

the *jurisdictional electricity legislation*

(5) After clause 5.2.3(b), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (b) will be requirements that correspond to the matters set out in schedule 5.1 in the Rules applying in other participating jurisdictions. The application of paragraph (b) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(6) Clause 5.2.3(c)

omit, insert

(c) Where the provisions of the *connection agreement* vary the technical requirements set out in *jurisdictional electricity legislation*, the relevant *Network Service Provider* must report on such variations to *NTESMO* on an annual basis.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (c) will be requirements that correspond to the matters set out in the schedules to Chapter 5 in the Rules applying in other participating jurisdictions. The application of paragraph (c) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(7) Clause 5.2.3(d)(3)

omit

schedule 5.1

insert

jurisdictional electricity legislation

(8) Clause 5.2.3(d)(9) and (10)

omit (all references)

AEMO

insert

NTESMO

(9) Clause 5.2.3(d)(11)

omit, insert

(11) provide to *NTESMO* the information required from *Generators* and *Customers* to support a *connection application* under these *Rules* and *jurisdictional electricity legislation*; and

(10) After clause 5.2.3(d)(11), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (d)(3) will be requirements that correspond to the matters set out in schedule 5.1, in the Rules applying in other participating jurisdictions. The information referred to in paragraph (d)(11) corresponds to the information required under schedule 5.2 or 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (d)(3) and (11) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(11) Clause 5.2.3(e)

omit

AEMO

insert

NTESMO

(12) Clause 5.2.3(j)

omit, insert

(j) If in NTESMO's reasonable opinion, there is a risk a Network Service Provider's plant or equipment will:

(1) adversely affect network capability, power system security, quality or reliability of supply, inter-regional power transfer capability; or

(2) adversely affect the use of a network by a Network User,

NTESMO may request the Network Service Provider to provide information relating to the protection systems and the control systems of the equipment, and following such a request, the Network Service Provider must provide the information to NTESMO and any other relevant Network Service Provider(s).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The application of paragraph (j) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(13) Clause 5.2.3(l)

omit, insert

(l) All information provided to *NTESMO* and the relevant *Network Service Provider*(s) under paragraph (j) must be treated as *confidential information* by those recipients.

13 Clause 5.2.4 modified

(1) After clause 5.2.4, heading

insert

Note

Paragraphs (d) and (f) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these provisions will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.2.4(b)(2)

omit

schedule 5.3

insert

any relevant technical requirements in *jurisdictional electricity legislation*

(3) After clause 5.2.4(b)

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (b)(2) will be requirements that correspond to the matters set out in schedule 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (b)(2) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(4) Clause 5.2.4(c)

omit, insert

(c) If in *NTESMO*'s reasonable opinion, there is a risk that a *Customer*'s *plant* will:

(1) adversely affect *network capability*, *power system security*, quality or reliability of *supply*, *inter-regional power transfer capability*; or

(2) adversely affect the use of a *network* by a *Network User*,

NTESMO may request a *Customer* to provide information relating to the *protection systems* and *control systems* of the equipment, and following such a request, the *Customer* must provide the information to *NTESMO* and the relevant *Network Service Provider*(s).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The application of paragraph (c) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(5) Clause 5.2.4(e)

omit, insert

(e) All information provided to *NTESMO* and the relevant *Network Service Provider*(s) under paragraph (c) must be treated as *confidential information* by those recipients.

14 Clause 5.2.5 modified

(1) After clause 5.2.5, heading

insert

Note

Paragraphs (c) and (e) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.2.5(b)(2)

omit

Schedule 5.2

insert

any relevant technical requirements in *jurisdictional electricity legislation*

(3) After clause 5.2.5(b)

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (b)(2) will be requirements that correspond to the matters set out in schedule 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (b)(2) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(4) Clause 5.2.5(d)

omit, insert

(d) If in *NTESMO*'s reasonable opinion, there is a risk that a *Generator's plant* will:

(1) adversely affect *network capability*, *power system security*, quality or reliability of supply, *inter-regional power transfer capability*; or

(2) adversely affect the use of a *network* by a *Network User*

NTESMO may request a *Generator* to provide information relating to the *protection systems* and the *control systems* of the equipment, and following such a request, the *Generator* must provide the information to *NTESMO* and the relevant *Network Service Provider*(s).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The application of paragraph (d) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(5) Clause 5.2.5(f)

omit, insert

(f) All information provided to *NTESMO* and the relevant *Network Service Provider*(s) under paragraph (d) must be treated as *confidential information by those recipients.*

14A Clause 5.2.5A modified

After clause 5.2.5A, heading

insert

Note

Paragraphs (c) and (e) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

15 Clause 5.2.7 modified

(1) Clause 5.2.7(a)

omit

Chapter 2

insert

jurisdictional electricity legislation

(2) After clause 5.2.7(a)

insert

Note

The jurisdiction electricity legislation that is relevant to the classification of a dedicated connection asset is the Electricity Reform Act 2000 (NT) and the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

16 Clause 5.2A.2 modified

(1) Clause 5.2A.2(a)

omit

registered

insert

responsible

(2) Clause 5.2A.2(a), table heading

omit

Registered

insert

Responsible

(3) Clause 5.2A.2(b)

omit, insert

(b) The intention of this rule 5.2A is that there is a responsible person for each asset connecting the *transmission network* to the *facilities* of the *Transmission Network User*.

17 Clause 5.2A.3 modified

(1) Clause 5.2A.3(a), table

omit (all references)

Chapter 6A

insert

Chapter 6

(2) Clause 5.2A.3(a), table, second row, after "Chapter 5"

insert

and economic regulation under Chapter 6

(3) Clause 5.2A.3(c)

omit

rules 5.3, 5.4 and 5.5 will apply with such modifications as is appropriate to the nature of the service requested

insert

rules 5.3 and 5.4 will apply with such modifications as is appropriate to the nature of the service requested, together with (if required) the provisions of Chapter 6 in relation to any dispute as to *terms and conditions of access* (as if the *prescribed transmission service* or the *negotiated transmission service* were a *negotiated distribution service*)

18 Clause 5.2A.6 modified

Clause 5.2A.6(a)

omit

the *negotiating principles*

insert

Chapter 6

19 Clause 5.2A.8 modified

(1) Clause 5.2A.8(d)

omit

Chapter 2

insert

in accordance with *jurisdictional electricity legislation*

(2) After clause 5.2A.8(d), note

insert

Note

The jurisdiction electricity legislation that is relevant to the classification of a dedicated connection asset is the Electricity Reform Act 2000 (NT) and the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

20 Clause 5.3.1 modified

(1) Clause 5.3.1(b)

omit, insert

(b) The following persons wishing to establish a *connection* to a *network* must follow the procedures in this rule 5.3:

(1) a *Registered Participant*;

(2) a person intending to become a *Registered Participant*;

(3) a person who is covered by an exemption from the requirement to hold a licence for operating in the electricity supply industry for a *generating plant connecting* to a *transmission network* or a *load connecting* to a *transmission network*;

(4) a person seeking to establish a *connection* to a *distribution network* for a *load* above the relevant materiality threshold.

(2) Clause 5.3.1(d)

omit

AEMO

insert

NTESMO

21 Clause 5.3.1A modified

(1) Clause 5.3.1A(a)

omit

(2) Clause 5.3.1A(c)(2)

omit, insert

(2) person who is required to apply to the *Utilities Commission* for an exemption from the requirement to hold a licence for operating in the electricity supply industry as a *Generator* in respect of an *embedded generating unit*;

(3) Clause 5.3.1A(c)(3)

omit

(c).

insert

(c); or

(4) After clause 5.3.1A(3)

insert

(4) non-registered embedded generator above the relevant materiality threshold for the relevant local electricity system, or part of a local electricity system,

22 Clause 5.3.2 modified

(1) Clause 5.3.2(f)

omit

schedule 5.1, 5.2, 5.3 or 5.3a

insert

jurisdictional electricity legislation

(2) After clause 5.3.2(f), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (f) will be requirements that correspond to the matters set out in schedules 5.1, 5.2, and 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (f) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

23 Clause 5.3.3 modified

(1) After clause 5.3.3, heading

insert

Note

Paragraphs (b2), (b3) and (b4) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.3(b1)(3), (4), (5) and (6)

omit, insert

(3) the access arrangements specified in the *jurisdictional electricity legislation*; and

(3) Clause 5.3.3(b5)

omit, insert

(b5) For a *connection point* for a proposed new *connection* of a *generating system* or *market network service facility*, within the time applicable under paragraph (b1), the *Network Service Provider* must provide the *Connection Applicant* with written details of the minimum *three phase fault level* at the *connection point*.

(4) Clause 5.3.3(c)(3)

omit

schedule 5.5

insert

jurisdictional electricity legislation

(5) Clause 5.3.3(c)(4)

omit

rules 6.21 and 6A.28

insert

rule 6.21

(6) Clause 5.3.3(c)(5)(i)

omit

AEMO and

(7) After clause 5.3.3(c), note

insert

Note

The type of information that will apply under jurisdictional electricity legislation for the purposes of paragraph (c)(3) will correspond to the type of information set out in schedule 5.5 in the Rules applying in other participating jurisdictions. The application of paragraph (c)(3) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

24 Clause 5.3.4 modified

(1) After clause 5.3.4, heading

insert

Note

Paragraphs (b)(5), (e) and (g) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.4(b1)(d)

omit (all references)

or *AEMO*

25 Clause 5.3.4A modified

After clause 5.3.4A, heading

insert

Note

Clause 5.3.4A has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25A Clause 5.3.4B modified

After clause 5.3.4B, heading

insert

Note

Clause 5.3.4B has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25AB Clause 5.3.4C modified

After clause 5.3.4C, heading

insert

Note

Clause 5.3.4C has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25B Clause 5.3.5 modified

(1) After clause 5.3.5, heading

insert

Note

Paragraph (e) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.5(a)

omit, insert

(a) The Network Service Provider to whom the application to connect is submitted must proceed to prepare an offer to connect in response in accordance with technical standards set out in jurisdictional electricity legislation.

(3) Clause 5.3.5(d) and (g)

omit (all references)

AEMO

insert

NTESMO

25C Clause 5.3.6 modified

(1) After clause 5.3.6, heading

insert

Note

Paragraph (a2)(3) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of paragraphs (a1) and (a2)(3) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.6(a1)

omit, insert

(a1) The *Network Service Provider* may amend the time period referred to in paragraph (a)(1) to allow for any additional time taken in excess of the period allowed in the *preliminary program* for the negotiation of access standards, where allowed under *jurisdictional electricity legislation*.

(3) Clause 5.3.6(b)(1)

omit, insert

(1) each technical requirement identified by the *Network Service Provider* under clause 5.3.3(b1); and

(4) Clause 5.3.6(b1)

omit

the applicable *minimum access standards*

insert

allowed under *jurisdictional electricity legislation*

(5) Clause 5.3.6(b2)(3)

omit

the *automatic access standard* or the negotiated access standard as determined in accordance with clause 5.3.4A

insert

the access standards determined in accordance with *jurisdictional electricity legislation*

(6) Clause 5.3.6(c)

omit, insert

(c) The offer to *connect* must be fair and reasonable and must be consistent with the safe and *reliable* operation of the *power system* in accordance with the *Rules* and any relevant *jurisdictional electricity legislation*. Without limitation, unless the parties otherwise agree, to be fair and reasonable an offer to *connect* must offer *connection* and *network services* consistent with any relevant *jurisdictional electricity legislation* and must not impose conditions on the *Connection Applicant* which are more onerous than those contemplated in relevant *jurisdictional electricity legislation*.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (c) will be requirements that correspond to the matters set out in schedules 5.1, 5.2 and 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (c) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(7) Clause 5.3.6(g)

omit, insert

(g) An offer to *connect* must define the basis for determining the *transmission service* charges in accordance with Chapter 6, including the prudential requirements set out in that Chapter, as if the *transmission service* charges were *distribution service* charges.

25D Clause 5.3.7 modified

(1) After clause 5.3.7, heading

insert

Note

Paragraphs (c) and (g)(2)(i), (5) and (6) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.7(b)

omit

schedules 5.2, 5.3 and 5.3a

insert

accordance with *jurisdictional electricity legislation*

(3) After clause 5.3.7(b)

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (b) will be requirements that correspond to the matters set out in schedules 5.2 and 5.3 in the Rules applying in other participating jurisdictions. The application of paragraph (b) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(4) Clause 5.3.7(d)

omit

or any *system strength connection works*

(5) Clause 5.3.7(g) and (h)

omit (all references)

AEMO

insert

NTESMO

(6) Clause 5.3.7(h)

omit

schedule 7.4

insert

schedule 7A.4

25DA Clause 5.3.7A modified

After clause 5.3.7A, heading

insert

Note

Clause 5.3.7A has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25E Clause 5.3.8 modified

(1) After clause 5.3.8, heading

insert

Note

Paragraphs (b)(1) and (2)(iv) and (e1) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these provisions will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.8(b) and (f)

omit (all references)

AEMO

insert

NTESMO

(3) Clause 5.3.8(b)(2)(iii)

omit

or *system strength connection works*

25F Clause 5.3.9 modified

(1) After clause 5.3.9, heading

insert

Note

Paragraphs (a)(2), (a1), (b)(4), (c), (c1) and (f) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.9(a)

omit, insert

(a) This clause 5.3.9 applies where a *Generator* proposes to alter a *connected generating system* or a *generating system* where that alteration would affect performance standards in an existing connection agreement and that alteration:

(1) will affect the performance of the *generating system* relative to any of the technical requirements set out in *jurisdictional electricity legislation* within the constraints allowed under *jurisdictional electricity legislation*; or

(2) will, in *AEMO's* reasonable opinion, have an *adverse system strength impact*; or

(3) will, in *NTESMO*'s reasonable opinion, adversely affect *network capability*, *power system security*, quality or reliability of *supply*, *inter-regional power transfer capability* or the use of a *network* by another *Network User*.

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (a)(1) will be requirements that correspond to the matters set out in clauses S5.2.5 to 5.2.8 in the Rules applying in other participating jurisdictions. The application of paragraph (a)(1) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(3) Clause 5.3.9(b)

omit

AEMO

insert

NTESMO

(4) Clause 5.3.9(b)(2)

omit

in accordance with the *Power System Model Guidelines*, *Power System Design Data Sheet* and *Power Setting Data Sheet*

(5) Clause 5.3.9(d)

omit, insert

(d) Without limiting paragraph (a), a proposed alteration to the following equipment is deemed to affect the performance of the *generating system* relative to technical requirements, thereby necessitating a submission under subparagraph (b)(3), unless *NTESMO* and the *Network Service Provider* otherwise agree:

(1) machinery windings;

(2) power converter;

(3) reactive compensation plant;

(4) excitation control system;

(5) voltage control system;

(6) governor control system;

(7) power control system;

(8) protection system;

(9) auxiliary supplies;

(10) remote control and monitoring system.

(6) Clause 5.3.9(e)

omit

other *Network Service Providers* and *AEMO*

insert

and other *Network Service Providers*

(7) Clause 5.3.9(g) and (h)

omit (all references)

AEMO

insert

NTESMO

25G Clause 5.3.10 modified

(1) After clause 5.3.10, heading

insert

Note

Paragraphs (a1), (b)(3) and (c) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3.10(a) and (b)

omit, insert

(a) A person to whom clause 5.3.9 applies must not commission altered *generating plant* until the *Network Service Provider* has advised the *Generator* that it is satisfied in accordance with paragraph (b).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) In relation to altered *generating plant*, the *Network Service Provider* must be satisfied that:

(1) the relevant person has complied with clause 5.3.9;

(2) each amended performance standard that has been submitted to the *Network Service Provider* meets the relevant technical requirements under *jurisdictional electricity legislation*; and

(3) any *system strength remediation scheme* satisfies clause 5.3.4B.

(3) Clause 5.3.10(c)

omit

AEMO

insert

NTESMO

25H Clause 5.3.11 modified

(1) Clause 5.3.11(a) and (b)

omit (all references)

AEMO

insert

NTESMO

(2) After clause 5.3.11(a)

insert

(a1) A request from a *Network Service Provider* to change *normal voltage* must be assessed in accordance with the *Rules consultation procedures.*

(3) After clause 5.3.11(b)

insert

Note

NTESMO's reasonable costs in assessing requests under this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25HA Clause 5.3.12 modified

After clause 5.3.12, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25HB Clause 5.3.13 modified

After clause 5.3.13, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25I Clause 5.3A.1 modified

(1) Clause 5.3A.1(c)(1)(ii)

omit, insert

(ii) person who is required to apply to the *Utilities Commission* for an exemption from the requirement to hold a licence for operating in the electricity industry as a *Generator* in respect of an *embedded generating unit*;

(2) Clause 5.3A.1(c)(1)(iii)

omit

clause 5A.A.2(c),

insert

clause 5A.A.2(c); or

(3) After clause 5.3A.1(c)(1)(iii)

insert

(iv) non-registered embedded generator above the relevant materiality threshold for the local electricity system (or part of the local electricity system),

25J Clause 5.3A.3 modified

(1) After clause 5.3A.3, heading

insert

Note

Paragraph (b)(5) and (6)(xi) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these provisions will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3A.3(b)(1)(vi)

omit, insert

(vi) the process for negotiating any access standards, where allowed under *jurisdictional electricity legislation* and a summary of the factors the *Distribution Network Service Provider* takes into account when considering proposed changes to access standards; and

(3) Clause 5.3A.3(b)(6)(x)

omit

requirements; and

insert

requirements;

(4) After clause 5.3A.3(b)(6)(xi)

insert

(xii) other technical matters relevant to any access standard under *jurisdictional electricity legislation*; and

25K Clause 5.3A.4 modified

After clause 5.3A.4, heading

insert

Note

Paragraph (e)(2)(ii) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25L Clause 5.3A.8 modified

After clause 5.3A.8, heading

insert

Note

Paragraph (h) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25M Clause 5.3A.9 modified

(1) After clause 5.3A.9, heading

insert

Note

Paragraphs (e), (f) and (h) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3A.9(a)

omit

clause 5.3.4A and clause 5.3.4B

insert

and clause 5.3.4A

25N Clause 5.3A.10 modified

(1) After clause 5.3A.10, heading

insert

Note

Paragraph (f) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.3A.10(a)

omit, insert

(a) The *Distribution Network Service Provider* to whom the *application to connect* is submitted under clause 5.3A.9(a) in accordance with the technical requirements set out under *jurisdictional electricity legislation* must proceed to prepare an offer to *connect* in response.

(3) Clause 5.3A.10(b) and (e)

omit (all references)

AEMO

insert

NTESMO

25O Clause 5.3A.12 modified

After clause 5.3A.12, heading

insert

Note

This clause 5.3A.12 has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25P Rule 5.3AA modified

(1) After rule 5.3AA, heading

insert

Note

Paragraphs (h), (i) and, (j) of this rule have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Rule 5.3AA(f)(4)(ii)(B)

omit

during a *trading interval*

25Q Clause 5.4.3 modified

After clause 5.4.3, heading

insert

Note

Paragraph (c) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25R Clause 5.4.5 modified

After clause 5.4.5, heading

insert

Note

Paragraph (e)(4) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25S Clause 5.5.1 modified

Clause 5.5.1(c)

omit, insert

(b1) Despite paragraph (b), for this jurisdiction, this rule 5.5 only applies to any dispute which may arise between a *Dedicated Connection Asset Service Provider* for a *large dedicated connection asset* (a ***provider***) and a person seeking *large DCA services* (an ***applicant***) as to *terms and conditions of access*, for the provision of *large DCA services* (a *large DCA services access dispute*).

(c) For the purposes of *large DCA services*, the *terms and conditions of access* are the price of, and the other terms and conditions for, the provision of those *large DCA services*, as determined under the *access policy*.

25T Clause 5.6.1 modified

(1) Clause 5.6.1(a)

omit

Tasmania; and

insert

Tasmania and the Northern Territory;

(2) Clause 5.6.1(b)

omit

Tasmania.

insert

Tasmania; and

(3) After clause 5.6.1(b)

insert

(c) 1 July 2019 in the case of installations located in the Northern Territory.

25U Clause 5.6.2 modified

Clause 5.6.2(a)(1)

omit

AEMO

insert

NTESMO

25V Clause 5.7.1 modified

(1) Clause 5.7.1(d)

omit, insert

(d) Neither a *Registered Participant* nor *NTESMO* may carry out an inspection under this rule 5.7 within 6 *months* of any previous inspection except for the purpose of verifying the performance of corrective action claimed to have been carried out in respect of a non-conformance observed and documented on the previous inspection or (in the case of *NTESMO*) for the purpose of reviewing an operating incident in accordance with any requirements under *jurisdictional electricity legislation*.

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (d) will be requirements that correspond to the matters set out in clause 4.8.15 in the Rules applying in other participating jurisdictions. The application of paragraph (d) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.7.1(h)

omit, insert

(h) *NTESMO* or any of its *representatives* may, in accordance with this rule 5.7, inspect a *facility* of a *Registered Participant* and the operation and maintenance of that *facility* in order to:

(1) assess compliance by the relevant *Registered Participant* with its operational obligations under *jurisdictional electricity legislation*;

(2) investigate any possible past or potential threat to *power system security*; or

(3) conduct any periodic familiarisation or training associated with the operational requirements of the *facility*.

Note

The operational obligations that will apply under jurisdictional electricity legislation for the purposes of paragraph (h)(1) will be operational obligations that correspond to those in Chapters 3 and 4 of the Rules applying in other participating jurisdictions. The application of paragraph (h)(1) be revisited as part of the phased implementation of the Rules in this jurisdiction.

(3) Clause 5.7.1(l)

omit (all references)

AEMO

insert

NTESMO

25W Clause 5.7.2 modified

(1) Clause 5.7.2(b) and (i)

omit (all references)

AEMO

insert

NTESMO

(2) Clause 5.7.2(g)

omit

A *Transmission Provider* must give *AEMO*

insert

A *Network Service Provider* must give *NTESMO*

25X Clause 5.7.3 modified

(1) After clause 5.7.3, heading

insert

Note

The application of paragraphs (a)(1), (c), (d) and (f)(1) of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.7.3(a)

omit, insert

(a) Each *Generator* must, in accordance with the time frames specified by *NTESMO*, provide evidence to any relevant *Network Service Provider* with which that *Generator* has a *connection agreement* and to *NTESMO*, that its *generating system* complies with:

(1) the applicable technical requirements under *jurisdictional electricity legislation*; and

(2) the relevant connection agreement including the performance standards.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (a)(1) will be requirements that correspond to the matters set out in clause S5.2.5 as applying in other participating jurisdictions.

(3) Clause 5.7.3(c)

omit

of clause S5.2.5

insert

under *jurisdictional electricity legislation*

(4) Clause 5.7.3(c)(1) and (2)

omit (all references)

AEMO

insert

NTESMO

(5) After clause 5.7.3(c), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (c) will be requirements that correspond to the matters set out in clause S5.2.5 as applying in other participating jurisdictions.

(6) Clause 5.7.3(d), (e) and (g)

omit (all references)

AEMO

insert

NTESMO

(7) Clause 5.7.3(d)

omit

of clause S5.2.5

insert

under *jurisdictional electricity legislation*

(8) After clause 5.7.3(d), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (d) will be requirements that correspond to the matters set out in clause S5.2.5 as applying in other participating jurisdictions.

(9) Clause 5.7.3(f)

omit, insert

(f) If *NTESMO*:

(1) is satisfied that a *generating system* is not complying with the relevant *performance standards* for that system in respect of one or more of the technical requirements set out in *jurisdictional electricity legislation* and the relevant *connection agreement*; and

(2) holds the reasonable opinion that the performance of the *generating system* is or will impede *NTESMO's* ability to carry out its role in relation to *power system security*,

NTESMO may direct the relevant *Generator* to operate the *generating system* at a particular *generated* output or in a particular mode until the relevant *Generator* submits evidence reasonably satisfactory to *NTESMO* that the *generating system* is complying with the relevant *performance standard*.

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (f)(1) will be requirements that correspond to the matters set out in clause S5.2.4, S5.2.5, S5.2.6, S5.2.7 or S5.2.8 as applying in other participating jurisdictions.

25Y Clause 5.7.3A modified

After clause 5.7.3A, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25Z Clause 5.7.4 modified

(1) After clause 5.7.4, heading

insert

Note

The application of paragraphs (a1) and (a2)(3) of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.7.4(a1)

omit

their performance requirements under schedule 5.1

insert

any performance requirements under *jurisdictional electricity legislation*

(3) After clause 5.7.4(a1), note

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (a1) will be requirements that correspond to the matters set out in Schedule 5.1 as applying in other participating jurisdictions.

(4) Clause 5.7.4(a2)(3)

omit

of schedule 5.3

insert

under *jurisdictional electricity legislation*

(5) After clause 5.7.4(a2)

insert

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (a2)(3) will be requirements that correspond to the matters set out in Schedule 5.1 as applying in other participating jurisdictions.

(6) Clause 5.7.4(a3)

omit

AEMO

insert

NTESMO

25ZA Clause 5.7.5 modified

(1) After clause 5.7.5, heading

insert

Note

Paragraph (a)(2) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.7.5(d) and (e)

omit (all references)

AEMO's

insert

NTESMO's

(3) Clause 5.7.5(e), (f), (g), (h) and (i)

omit (all references)

AEMO

insert

NTESMO

25ZB Clause 5.7.6 modified

(1) After clause 5.7.6, heading

insert

Note

The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.7.6(a)

omit

to determine analytic parameters for modelling purposes or

(3) Clause 5.7.6(b)

omit, insert

(b) If *NTESMO* reasonably considers that available information, including results from a previous test of a *generating unit* or *generating system*, are inadequate, *NTESMO* may direct a *Network Service Provider* to require a *Generator* to conduct a test under paragraph (a), and *NTESMO* may witness such a test.

(4) Clause 5.7.6(d), after "that are due to take place,"

insert

as instructed or approved by *NTESMO*,

(5) Clause 5.7.6(f1)

omit

, including model source code provided to *AEMO* under clause S5.2.4(b)(6)

(6) Clause 5.7.6(h)

omit, insert

(h) A *Generator* must provide the test records obtained from a test under paragraph (a) to the *Network Service Provider*.

(7) Clause 5.7.6(i)

omit

omit

AEMO

insert

NTESMO

25ZC Clause 5.8.2 modified

Clause 5.8.2

omit

AEMO

insert

NTESMO

25ZD Clause 5.8.3 modified

(1) After clause 5.8.3, heading

insert

Note

The application of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.8.3(b)(1) and (2) and (d)

omit (all references)

AEMO

insert

NTESMO

25ZE Clause 5.8.4 modified

Clause 5.8.4(a), (c), (d) and (e)

omit (all references)

AEMO

insert

NTESMO

25ZF Clause 5.8.5 modified

Clause 5.8.5(a) and (e)

omit (all references)

AEMO

insert

NTESMO

25ZG Clause 5.9.2 modified

Clause 5.9.2(b)

omit

AEMO

insert

NTESMO

25ZH Clause 5.9.3 modified

(1) Clause 5.9.3(a) and (c)

omit (all references)

AEMO

insert

NTESMO

(2) Clause 5.9.3(b)

omit, insert

(b) In all cases of *disconnection* by a *Network Service Provider* at *NTESMO's* direction during an emergency in accordance with clause 5.9.5, *NTESMO* must undertake a review under any relevant *jurisdictional electricity legislation* and *NTESMO* must then provide a report to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring such action.

Note

The requirements that will apply under jurisdictional electricity legislation for the purposes of paragraph (b) will be requirements that correspond to the matters set out in clause 4.8.15 in the Rules applying in other participating jurisdictions. The application of paragraph (b) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(3) Clause 5.9.3(d)

omit, insert

(d) A *Registered Participant's facilities* or *market load* may be disconnected from the *network* under an emergency frequency control arrangement if this is permitted under *jurisdictional electricity legislation*.

25ZI Clause 5.9.4 modified

Clause 5.9.4(a), (b) and (d)

omit (all references)

AEMO

insert

NTESMO

25ZJ Clause 5.9.4A modified

Clause 5.9.4A

omit

AEMO

insert

NTESMO

25ZK Clause 5.9.5 modified

(1) Clause 5.9.5(a) and (b)

omit (all references)

AEMO

insert

NTESMO

(2) Clause 5.9.5(a)(2)

omit

AEMO's

insert

NTESMO's

25ZL Clause 5.9.6 modified

(1) Clause 5.9.6(a) and (c)

omit (all references)

AEMO

insert

NTESMO

(2) Clause 5.9.6(a)(4)

omit, insert

(4) *NTESMO* determines that the requirements under *jurisdictional electricity legislation* for reconnection following disconnection under an emergency frequency control arrangement are satisfied.

(3) Clause 5.9.6(b)

omit, insert

(b) In carrying out its obligations under clause 5.9.6(a), *NTESMO* must, to the extent practicable, arrange for the implementation of an equitable sharing of the reconnection of *facilities* across the relevant local electricity system up to the *power transfer capability* of the *network* and, in performing these obligations, both *NTESMO* and the relevant *Network Service Provider* must, to the extent practicable, give priority to reconnection of sensitive loads.

25ZM Clause 5.10.1 modified

Clause 5.10.1(j2), note

omit

25ZN Clause 5.10.2 modified

Clause 5.10.2, definitions ***regulatory investment test for distribution application guidelines***, ***regulatory investment test for transmission application guidelines*** and ***reliability corrective action***

omit, insert

regulatory investment test for distribution application guidelines means the guidelines developed and *published* by the *AER* in accordance with clause 5.17.2, as in force on 31 July 2025.

regulatory investment test for transmission application guidelines means the guidelines developed and published by the AER in accordance with clause 5.16.2, as in force on 31 July 2025.

reliability corrective action means investment by a Transmission Network Service Provider or a Distribution Network Service Provider in respect of its transmission network or distribution network for the purpose of meeting the service standards linked to the technical requirements of jurisdictional electricity legislation or in applicable regulatory instruments and which may consist of network options or non-network options.

Note

*In the definition of **reliability corrective action**, the reference to the technical requirements of jurisdictional electricity legislation will be requirements that correspond to the matters set out in Schedule 5.1 in the Rules applying in other participating jurisdictions. This definition will be revisited as part of the phased implementation of the Rules in this jurisdiction.*

25ZO Clause 5.11.1 modified

Clause 5.11.1(d)

omit

AEMO

insert

NTESMO

25ZP Clause 5.11.2 modified

(1) After clause 5.11.2, heading

insert

Note

The application of paragraph (b) of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.11.2(b)

omit, insert

(b) if the analysis required by paragraph (a) indicates that any relevant technical limits of the *transmission or distribution systems* will be exceeded, either in normal conditions or following the contingencies specified in *jurisdictional electricity legislation*, notify any affected *Registered Participants* and *NTESMO* of these limitations; and

Note

The contingencies in jurisdictional electricity legislation referred to in paragraph (b) will be contingencies that correspond to the matters set out in Schedule 5.1 in the Rules applying in other participating jurisdictions. The specification of contingencies will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(3) Clause 5.11.2(c)

omit

AEMO

insert

NTESMO

25ZQ Clause 5.12.1 modified

After clause 5.12.1, heading

insert

Note

Paragraph (b)(3) and (7) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZR Clause 5.12.2 modified

(1) After clause 5.12.2, heading

insert

Note

Paragraph (c)(6), (6A), (8)(ii) and (9A) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these provisions, the rest of paragraph (c)(8), and paragraph (c)(9) and (10), will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.12.2(a) and (b)

omit, insert

(a) By 31 December each year all *Transmission Network Service Providers* must *publish* a *Transmission Annual Planning Report* setting out the results of the annual planning review conducted in accordance with clause 5.12.1.

(b) A Network Service Provider must publish its Transmission Annual Planning Report in the same document as its Distribution Annual Planning Report.

(3) Clause 5.12.2(c)(9)

omit

clause S5.1.8

insert

jurisdictional electricity legislation

(4) Clause 5.12.2(c)(10)

omit

clause S5.1.10

insert

jurisdictional electricity legislation

(5) After clause 5.12.2(c)

insert

Note

The emergency controls in jurisdictional electricity legislation referred to in subparagraph (9) will be emergency controls that correspond to clause S5.1.8 in the Rules applying in other participating jurisdictions. The facilities in jurisdictional electricity legislation referred to in subparagraph (10) will be facilities that correspond to clause S5.1.10 in the Rules applying in other participating jurisdictions.

25ZS Clause 5.13.1 modified

After clause 5.13.1, heading

insert

Note

Paragraph (d)(5) and (6) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZT Clause 5.13.2 modified

Clause 5.13.2(b), note

omit, insert

Note

Under clause 5.12.2(b), a Network Service Provider may publish its Transmission Annual Planning Report in the same document as its Distribution Annual Planning Report under this clause 5.13.2.

25ZU Clause 5.13.3 modified

After clause 5.13.3(d)

insert

(e) For the application of these *Rules* in this jurisdiction:

(1) a system limitation template developed and *published* by the *AER* and in operation immediately before 1 July 2019 is taken to have been developed and *published* by the *AER* on 1 July 2019; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (c) in developing and *publishing* the system limitation template.

25ZV Rule 5.13A modified

Rule 5.13A(a), definition ***ten year zone substation report***

omit

the commencement of this rule 5.13A

insert

1 July 2019

25ZW Clause 5.14.1 modified

(1) After clause 5.14.1, heading

insert

Note

Paragraph (d)(3A) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) Clause 5.14.1(c), after "*dual function assets*"

insert

or *transmission assets* that are regulated under Chapter 6

25ZWA Clause 5.14.4 modified

After clause 5.14.4, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZX Clause 5.14B.1 modified

Clause 5.14B.1, at the end

insert

(e) For the application of these *Rules* in this jurisdiction the *TAPR Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *TAPR Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

25ZY Clause 5.15.1 modified

(1) After clause 5.15.1, heading

insert

Note

Paragraph (b) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) Clause 5.15.1

omit

NEM

25ZZ Clause 5.15.2 modified

(1) After clause 5.15.2, heading

insert

Note

Paragraph (b1) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

2 Clause 5.15.2(b)(4)

omit

intra-regional or *inter-regional* trading of electricity

insert

trading of electricity within a local electricity system

25ZZAA Clause 5.15A.1 modified

(1) After clause 5.15A.1, heading

insert

Note

Paragraph (e) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 5.15A.1(e)

insert

(ea) For the application of these *Rules* in this jurisdiction the *regulatory investment test for transmission* that is in force in the other *participating jurisdictions* on 31 July 2025 is taken:

(1) to be the *regulatory investment test for transmission* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

25ZZAB Clause 5.15A.2 modified

After clause 5.15A.2, heading

insert

Note

Paragraph (a) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZAC Clause 5.15A.3 modified

After clause 5.15A.3, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZA Clause 5.16.1 modified

After clause 5.16.1, heading

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZB Clause 5.16.2 modified

(1) After clause 5.16.2, heading

insert

Note

Paragraphs (a0), (d), (e), (f) and (g) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 5.16.2(a)

insert

Note

Section 12A of the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015 applies to an instrument or decision made by the AER after the enactment of that Act and before the day on which this clause commences operation in the Northern Territory, in circumstances set out in that section. Guidelines developed and published by the AER under paragraph (a) constitute an instrument to which section 12A applies. Accordingly, for the purposes of this clause as it applies as part of the NT national electricity legislation of the Northern Territory, these guidelines are taken to be valid and to have effect from 1 July 2019.

(3) After clause 5.16.2(c)

insert

(ca) For the application of these *Rules* in this jurisdiction, the *regulatory investment test for transmission application guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *regulatory investment test for transmission application guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

25ZZC Clause 5.16.3 modified

After clause 5.16.3, heading

insert

Note

Paragraph (a)(8) to (11) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these provisions will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZD Clause 5.16.4 modified

(1) After clause 5.16.4, heading

insert

Note

Paragraph (b)(4) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.16.4(a), (c), (d)(1), (e), (f), (g), (j), (o)(1), (p), (q), (r), (s), (t), (u), (w)(1) and (x)

omit (all references)

AEMO

insert

NTESMO

25ZZE Clause 5.16.5 modified

Clause 5.16.5(a)

omit

AEMO

insert

NTESMO

25ZZEA Rule 5.16A modified

After rule 5.16A, heading

insert

Note

This rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZEB Rule 5.16B modified

After rule 5.16B, heading

insert

Note

Paragraph (b)(3) of this rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZF Clause 5.17.1 modified

(1) Clause 5.17.1(c)(4)(vi)

omit

NEM

insert

local electricity system

(2) After clause 5.17.1(e)

insert

(ea) For the application of these *Rules* in this jurisdiction, the *regulatory investment test for distribution* that is in force in the other *participating jurisdictions* on 31 July 2025 is taken:

(1) to be the *regulatory investment test for distribution* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

25ZZG Clause 5.17.2 modified

(1) After clause 5.17.2, heading

insert

Note

Paragraphs (a0), (d), (e), (f) and (g) of this clause have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 5.17.2(a)

insert

Note

Section 12A of the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015 applies to an instrument or decision made by the AER after the enactment of that Act and before the day on which this clause commences operation in the Northern Territory, in circumstances set out in that section. Guidelines developed and published by the AER under paragraph (a) constitute an instrument to which section 12A applies. Accordingly, for the purposes of this clause as it applies as part of the NT national electricity legislation of the Northern Territory, these guidelines are taken to be valid and to have effect from 1 July 2019.

(3) Clause 5.17.2(b)(2)(iii)

omit

NEM

insert

local electricity system

(4) After clause 5.17.2(c)

insert

(ca) For the application of these *Rules* in this jurisdiction, the *regulatory investment test for distribution application guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *regulatory investment test for distribution application guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

25ZZH Clause 5.17.3 modified

After clause 5.17.3, heading

insert

Note

Paragraph (a)(7) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZI Clause 5.17.4 modified

(1) After clause 5.17.4, heading

insert

Note

The application of paragraph (e)(4)(iv) of this clause will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.17.4(a)(1), (h) and (k)(1)

omit (all references)

AEMO

insert

NTESMO

(3) Clause 5.17.4(e)(4)(iv)

omit

clause 4.6.1

insert

jurisdictional electricity legislation

(4) After clause 5.17.4(e)(4)

insert

Note

The power system fault levels in jurisdictional electricity legislation referred to in subparagraph (4)(iv) will be power system fault levels that correspond to clause 4.6.1 in the Rules applying in other participating jurisdictions.

25ZZJ Clause 5.17.5 modified

Clause 5.17.5(a)

omit

AEMO

insert

NTESMO

25ZZK Rule 5.18 modified

After rule 5.18, heading

insert

Note

The application of paragraph (c) of this rule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZL Rule 5.18A modified

Rule 5.18A, heading

omit

Large generator connections

insert

Generator connections

25ZZM Clause 5.18A.1 modified

Clause 5.18A.1(a), definition ***large generator connection***

omit, insert

large generator connection means *generating units* that are owned, operated or controlled by a *Generator*, are *connected* to the *Transmission Network Service Provider's network*, and are above the relevant materiality threshold.

25ZZN Clause 5.18A.2 modified

(1) Clause 5.18A.2, heading

omit, insert

Register of generator connections

(2) Clause 5.18A.2(a)

omit, insert

(a) A *Transmission Network Service Provider* must establish, maintain and publish, on its website, a register of information regarding *Generator connections* on its *network* (a **connections register**), including but not limited to the following information in respect of each *Generator connection*:

(1) location of the *connection point* for the *Generator connection*;

(2) person who is licensed by the *Utilities Commission* as a *Generator* in respect of the *Generator connection* at that *connection point*;

(3) technology of the *generating units* (for example, hydro, open cycle gas turbine, and steam sub-critical);

(4) aggregate *nameplate rating* capacity of all *connected generating units*;

(5) date of cessation of a person's licence as *Generator* in respect of the *Generator connection*, or date of cessation of an exemption to hold such a licence applying in relation to a person, where relevant; and

(6) in the case of a large generator connection, the impact assessment of that large generator connection, prepared in accordance with clause 5.18A.3 (if any).

(3) Clause 5.18A.2(c)

omit, insert

(c) The *Transmission Network Service Provider* must:

(1) include in the first connections register the details contained in subparagraphs (a)(1) to (5), for all *Generator connections* on its *network* with a commissioning date after 1 July 2019; and

(2) by the TAPR date each year, update the connections register to include:

(i) the details contained in subparagraphs (a)(1) to (6) for all new *Generator connections* on its *network*; and

(ii) updated information for all *Generator connections* contained in the connections register where the information listed in subparagraphs (a)(1)-(5) has changed.

25ZZO Clause 5.18A.3 modified

(1) After clause 5.18A.3, heading

insert

Note

Paragraph (d)(1) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this paragraph will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Clause 5.18A.3(a)

omit, insert

(a) Following the commissioning date of a new large generator connection on a *Transmission Network Service Provider's network*, the *Transmission Network Service Provider* must:

(1) determine whether that large generator connection is likely to have a material impact on its transmission network; and

(2) if the Transmission Network Service Provider determines that large generator connection is likely to have a material impact on its *transmission network*, prepare an assessment of the impact of that large generator connection on its *network* by the assessment date (***impact assessment***)

(a1) If the *Transmission Network Service Provider* determines that that large generator connection is not likely to have a material impact on its *transmission network*, the *Transmission Network Service Provider* must outline the reasons for determining such impacts to be immaterial.

25ZZP Clause 5.18B.1 modified

Clause 5.18B.1(a), definition ***completed embedded generation projects***

omit, insert

completed embedded generation projects means all *embedded generating units* owned, operated or controlled by a *Generator* that are connected to the *Distribution Network Service Provider's network*.

25ZZPA Clause 5.19.4 modified

After clause 5.19.4, heading

insert

Note

Paragraph (c) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZQ Rule 5.20 modified

After rule 5.20, heading

insert

Note

This rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZR Rules 5.20A, 5.20B and 5.20C modified

After rules 5.20A, 5.20B and 5.20C, headings

insert

Note

This rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this rule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZS Rules 5.21, 5.22, 5.23 and 5.24 modified

After rules 5.21, 5.22, 5.23 and 5.24, headings

insert

Note

This rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZT Schedules 5.1a to 5.3a modified

After schedules 5.1a, 5.1, 5,2, 5.3 and 5.3a, headings

insert

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of this schedule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZU Schedule 5.4A modified

(1) After schedule 5.4A, heading and note

insert

Note

Paragraphs (a)(9), (i1) and (o)(3) of this schedule have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of these paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Schedule 5.4A(c)

omit, insert

(c) information relevant to each technical requirement of the proposed *plant* under *jurisdictional electricity legislation* and the *normal voltage* level, if it is expected to change from the *nominal voltage* level;

25ZZV Schedule 5.4B modified

(1) After schedule 5.4B, heading

insert

Note

Paragraphs (e) and (e1)(2) and (3) of this schedule have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of paragraphs (b), (e) and (e1) of this schedule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Schedule 5.4B(b)

omit, insert

(b) written details of each technical requirement relevant to the proposed *plant* under *jurisdictional electricity legislation*;

(3) Schedule 5.4B(g)

omit

rules 6.21 and 6A.28

insert

rule 6.21

25ZZW Schedules 5.5, 5.5.3, 5.5.4 and 5.5.5 modified

After Schedules 5.5, 5.5.3, 5.5.4 and 5.5.5, headings

insert

Note

This schedule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

25ZZX Schedule 5.6 modified

(1) After schedule 5.6, heading

insert

Note

Paragraphs (c2) and (c3) of this schedule have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of paragraphs (c), (c1) and (c3) of this schedule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

(2) Schedule 5.6, Part A(c1)

omit, insert

(c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement resulting from the application of the access provisions contained in *jurisdictional electricity legislation*;

Note

The access provisions in jurisdictional electricity legislation referred to in paragraph (c1) will be access provisions that correspond to schedules 5.1, 5.2 or 5.3 in the Rules applying in other participating jurisdictions.

25ZZY Schedule 5.8 modified

(1) After schedule 5.8, heading and note

insert

Note

The application of paragraph (m) of this schedule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

Paragraphs (o) and (q) of this schedule have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) Schedule 5.8(m)

omit, insert

(m) information on the *Distribution Network Service Provider's* investments in *metering* or information technology and communication systems which occurred in the preceding year, and planned investments in *metering* or information technology and communication systems related to management of *network* assets in the forward planning period; and

25ZZZ Schedule 5.9 modified

After schedule 5.9, heading and note

insert

Note

Paragraph (h) of this schedule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016). The application of paragraph (h) of this schedule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

25ZZZA Schedule 5.11 modified

(1) After schedule 5.11, heading

insert

The following provisions apply to the operation of this schedule:

(a) principles (1), (4), (8), (9) and (10) have no effect in this jurisdiction;

(b) principles (2), (3), (5), (6) and (7) only have effect for the purposes of schedule 12;

(c) principles (11), (12) and (13) only have effect for the purposes of Chapter 6, in relation to *negotiated transmission services.*

(2) Schedule 5.11, paragraph 3

omit, insert

3 If the *negotiated transmission service* is the provision of a *shared transmission service* that exceeds the *network* performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation,* then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service.

(3) Schedule 5.11, paragraph 8, after "principles (1) to (7)"

insert

(other than principles (1) and (4))

25ZZZB Schedule 5.12 modified

Schedule 5.12, paragraph 1, after "schedule 5.11"

insert

(other than principle 4)

26 Clause 5A.A.1 modified

Clause 5A.A.1, definition ***confidential information***

omit (all references)

AEMO

insert

NTESMO

27 Clause 5A.A.2 modified

(1) After clause 5A.A.2, heading

insert

Note

Paragraph (a1) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) Clause 5A.A.2(a)

omit

an *Intending Participant* unless the *Registered Participant* or *Intending Participant*

insert

a person intending to become a *Registered Participant* unless the *Registered Participant* or person intending to become a *Registered Participant*

28 Clause 5A.A.3 modified

After clause 5A.A.3, heading

insert

Note

Clause 5A.A.3 has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of clause 5A.A.3 will be revisited as part of the phased implementation of the Rules in this jurisdiction.

30 Clause 5A.B.3 modified

After clause 5A.B.3(b)

insert

(ba) For the purposes of paragraph (b)(1), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

31 Clause 5A.B.5 modified

After clause 5A.B.5(b)

insert

(ba) For the purposes of paragraph (b), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

33 Clause 5A.C.1 modified

After clause 5A.C.1, heading

insert

Note

Clause 5A.C.1(c) and (d) has no effect in this jurisdiction until the National Energy Retail Law is applied as a law of this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

34 Clause 5A.D.1A modified

(1) Clause 5A.D.1A

insert

relevant materiality threshold has the same meaning as in clause 5.1.3.

(2) Clause 5A.D.1A, definition ***completed non-registered embedded generation projects***, after "*Distribution Network Service Provider's network*"

insert

and that are below the relevant materiality threshold

35 Clause 5A.E.1 modified

After clause 5A.E.1, heading

insert

Note

Paragraph (b1) of this clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

38 Clause 5A.E.3 modified

After clause 5A.E.3(g)

insert

(ga) For the application of these *Rules* in this jurisdiction, the *connection charge guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *connection charge guidelines* in force in this jurisdiction; and

(2) to have been developed and *published* by the *AER* on 31 July 2025.

39 Clause 5A.E.4 modified

After clause 5A.E.4, heading

insert

Note

The note to clause 5A.E.4(c) has no effect in this jurisdiction until the National Energy Retail Law is applied as a law of this jurisdiction. The remaining provisions of clause 5A.E.4 have no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

41 Clause 5A.F.5 modified

After clause 5A.F.5, heading

insert

Note

Clause 5A.F.5(b)(2) has no effect in this jurisdiction until the National Energy Retail Law is applied as a law of this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

42 Rules 6.0 and 6.0A inserted

After Chapter 6, Part A, heading

insert

6.0 Operation of Chapter 6 in this jurisdiction

(a) This rule applies if a *Distribution Network Service Provider* owns, controls or operates more than one *distribution system* in this jurisdiction.

(b) Despite any other provision of this Chapter:

(1) for all of those *distribution systems* there must be, in respect of a particular *regulatory control period*, only one:

(i) draft distribution determination and final distribution determination;

(ii) *framework and approach paper*;

(iii) *building block proposal* and *building block determination*;

(iv) *regulatory proposal*;

(v) proposed and final *tariff structure statement*; and

(vi) regulatory asset base value; and

(2) all of those *distribution systems* must be treated as a single *distribution system* for the purposes of clause 6.5.1 and schedule 6.2.

6.0A Interpretation

(a) This rule applies in relation to the following:

(1) the provisions of this Chapter;

(2) the provisions of Chapters 11 and 11A, to the extent the provisions operate in relation to this Chapter;

(3) an instrument made under or for the purposes of this Chapter; and

(4) the definitions in Chapter 10, to the extent the definitions are mentioned in a provision or instrument mentioned in subparagraph (1), (2) or (3).

(b) Unless the context or subject matter otherwise indicates or requires:

(1) a *prescribed transmission service* will be taken to be a *direct control service* under a provision or instrument mentioned in paragraph (a); and

(2) a *negotiated transmission service* will be taken to be a *negotiated distribution service* under a provision or instrument mentioned in paragraph (a).

(c) Unless the context or subject matter otherwise indicates or requires, in a provision or instrument mentioned in paragraph (a):

(1) a reference to a "*distribution network*" must be regarded as including a reference to a "*transmission network*";

(2) a reference to a "*distribution system*" must be regarded as including a reference to a "*transmission system*";

(3) a reference to a "*Distribution Network User*" must be regarded as including a reference to a "*Transmission Network User*;

(4) a reference to a "*Distribution Network Service Provider*" must be regarded as including a reference to a "*Transmission Network Service Provider*";

(5) a reference to a "*distribution service*" must be regarded as including a reference to a "*transmission service*";

(6) a reference to an "*embedded generating unit*" must be regarded as a reference to a "*generating unit*";

(7) a reference to an "*Embedded Generator*" must be regarded as a reference to a "*Generator*"; and

(8) a reference to a "*Distribution Customer*" must be regarded as including a reference to a "*Transmission Customer*".

43 Clause 6.1.3 modified

(1) Clause 6.1.3(a)(2)

omit

Chapters 4, 5, this Chapter 6 and Chapter 7A of the Rules

insert

Chapters 5, 6 and 7A of the Rules and under *jurisdictional electricity legislation*

(2) After clause 6.1.3(a)

insert

Note:

The terms and conditions of access in jurisdiction electricity legislation will be terms and conditions that correspond to matters set out in Chapter 4 of the Rules applying in other participating jurisdictions. The application of paragraph (a) will be revisited as part of the phased implementation of the Rules in this jurisdiction.

44 Clause 6.2.1 modified

Clause 6.2.1, note

omit

Chapter 5A

insert

Chapters 5 and 5A

(3) Clause 6.2.5(d)(3)

omit, insert

(2A) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period* – the regulatory arrangements in the *2014 NT Network Price Determination*); and

(3) for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *1st regulatory control period* – the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and

(4) Clause 6.2.5(d), at the end

insert

Note:

The modifications to this paragraph expire on 1 July 2024.

45 Clause 6.2.3A modified

After clause 6.2.3A(c)

insert

(ca) For the application of these *Rules* in this jurisdiction, the *Distribution Service Classification Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Distribution Service Classification Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

47 Clause 6.4.1 modified

After clause 6.4.1(c)

insert

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *post-tax revenue model* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *post-tax revenue model* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been prepared and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (c) in preparing and *publishing* the *post-tax revenue model*.

49 Clause 6.4.4 modified

(1) After clause 6.4.4, heading

insert

Note:

Clause 6.4.4(e) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 6.4.4(e)

insert

(ea) For the application of these *Rules* in this jurisdiction, the *Shared Asset Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Shared Asset Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

50 Clause 6.4.5 modified

(1) After clause 6.4.5, heading

insert

Note

Clause 6.4.5(b) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 6.4.5(b)

insert

(ba) For the application of these *Rules* in this jurisdiction, the *Expenditure Forecast Assessment Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Expenditure Forecast Assessment Guidelines* in force in this jurisdiction; and

(2) to have been developed and *published* by the *AER* on 31 July 2025.

51 Rule 6.4A modified

After rule 6.4A(c)

insert

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *Capital Expenditure Incentive Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Capital Expenditure Incentive Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraph (b) in making and *publishing* the *Capital Expenditure Incentive Guidelines*.

51A Rule 6.4B.1 modified

After rule 6.4B.1(d)

insert

(e) For the application of these *Rules* in this jurisdiction, the *Asset Exemption Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Asset Exemption Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

52 Clause 6.5.1 modified

After clause 6.5.1(d)

insert

(da) For the application of these *Rules* in this jurisdiction:

(1) the *roll forward model* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *roll forward model* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (b), (d) and (e) in developing and *publishing* the *roll forward model*.

53 Clause 6.5.2 modified

After clause 6.5.2(q)

insert

(qa) For the application of these *Rules* in this jurisdiction:

(1) the *Rate of Return Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Rate of Return Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (m) and (n) in making and *publishing* the *Rate of Return Guidelines*; and

(3) despite paragraph (p)(1), the *AER* need only review the *Rate of Return Guidelines* when it is required to review the Guidelines in the other *participating jurisdictions*.

54 Clause 6.5.8 modified

After clause 6.5.8(d)

insert

(da) For the application of these *Rules* in this jurisdiction:

(1) the *efficiency benefit sharing scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *efficiency benefit sharing scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (c) in developing and *publishing* the *efficiency benefit sharing scheme*.

55 Clause 6.5.8A modified

After clause 6.5.8A(e)

insert

(ea) For the application of these *Rules* in this jurisdiction:

(1) the *capital expenditure sharing scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *capital expenditure sharing scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (b), (c) and (d) in developing the *capital expenditure sharing scheme*.

56 Clause 6.6.1 modified

After clause 6.6.1, heading

insert

Note:

Clause 6.6.1(a1)(4), (c)(6)(iii), (l) and (m) have no effect in this jurisdiction until the National Energy Retail Law is applied as a law of this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

57 Clause 6.6.1 modified (expires when NERL applied)

Before clause 6.6.1(a1)(1)

insert

(1AA) a local event prescribed by the *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations*;

Notes:

1 *See Part 3 of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations for modifications to the operation of this clause 6.6.1 in relation to a local event.*

2 *Subparagraph (1AA) expires when the National Energy Retail Law is applied as a law of this jurisdiction.*

60 Clause 6.6.2 modified

After clause 6.6.2(c)

insert

(ca) For the application of these *Rules* in this jurisdiction:

(1) the *service target performance incentive scheme* that is in force in the other *participating jurisdictions* on 1 July 2016 is taken:

(i) to be the *service target performance incentive scheme* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been developed and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a) and (b) in developing and *publishing* the *service target performance incentive scheme*.

61 Clause 6.6.3 modified

Clause 6.6.3(c)(3)

omit

in the *market*

insert

via a *transmission or distribution system* in this jurisdiction

62 Clause 6.6.4 modified

After clause 6.6.4(a)

insert

(ab) For the purposes of paragraph (a), the *AER* must regard the reference to "the national electricity system" in the national electricity objective stated in section 7 of the Law as including a reference to one or more, or all, of the local electricity systems, as the case requires.

63 Clause 6.6A.1 modified

Clause 6.6A.1(b)(2)(iii)

omit

$30

insert

$15

63A Clause 6.7.1 modified

(1) Clause 6.7.1(3)

omit, insert

(3) if the negotiated distribution service is the provision of a shared distribution service that exceeds the network performance requirements (if any) which that shared distribution service is required to meet under any jurisdictional electricity legislation, then the differential between the price for that service and the price for the shared distribution service which meets (but does not exceed) the network performance requirements under any jurisdictional electricity legislation should reflect the increase in the Distribution Network Service

Provider's incremental cost of providing that service;

(2) Clause 6.7.1(4)

omit

schedules 5.1a and 5.1

insert

jurisdictional electricity legislation

(3) After clause 6.7.1(4)

insert

Note:

The performance requirements in jurisdiction electricity legislation will be performance requirements that correspond to matters set out in schedules 5.1a and 5.1 of the Rules applying in other participating jurisdictions.

(4) Clause 6.7.1(8)(A)

omit

negotiated distribution services which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c)

insert

distribution services

(5) After clause 6.7.1(11)

insert

(12) in relation to *negotiated transmission services* that are taken to be *negotiated distribution services*, principles (11), (12) and (13) in schedule 5.11 that apply for the purposes of this Chapter.

63B Clause 6.7.2 modified

(1) Clause 6.7.2(b)(1)

omit

which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c)

(2) Clause 6.7.2(b)(2)

omit, insert

(2) rules 5.3 and 5.3A, when negotiating for the provision of *connection* services and the associated *connection service* charges in respect of the provision of *negotiated transmission services* that are taken to be *negotiated distribution services*;

(3) Clause 6.7.2(b)(3)

omit

which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c)

63C Clause 6.7.5 modified

(1) Clause 6.7.5(d)(1)

omit

which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c)

(2) Clause 6.7.5(d)(2)

omit, insert

(2) rules 5.3 and 5.3A, insofar as the *negotiating framework* applies to *negotiated transmission services* that are taken to be *negotiated distribution services*,

64 Clause 6.8.1B modified

After clause 6.8.1B(c)

insert

(ca) For the application of these *Rules* in this jurisdiction, the *Export Tariff Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Export Tariff Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

68 Rule 6.14A modified

After rule 6.14A(d)

insert

(da) For the application of these *Rules* in this jurisdiction the *Distribution Confidentiality Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are taken:

(1) to be the *Distribution Confidentiality Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

69 Clause 6.15.3 modified

After clause 6.15.3(e)

insert

(ea) For the application of these *Rules* in this jurisdiction:

(1) the *Cost Allocation Guidelines* that are in force in the other *participating jurisdictions* on 1 July 2016 are taken:

(i) to be the *Cost Allocation Guidelines* in force in this jurisdiction (subject to any amendment or replacement under these *Rules*); and

(ii) to have been made and *published* by the *AER* on 1 July 2016; and

(2) the *AER* is taken to have complied with the requirements of paragraphs (a), (b) and (e) in making and *publishing* the *Cost Allocation Guidelines*.

70 Clause 6.15.4 modified

Clause 6.15.4(a)

omit, insert

(a) Each *Distribution Network Service Provider* in this jurisdiction must submit to the *AER* for its approval a document setting out its proposed *Cost Allocation Method* within 6 months of being required to do so by the *AER*.

72 Clause 6.17.1B inserted

Before clause 6.17.2

insert

6.17.1B Application of Distribution Ring-Fencing Guidelines in this jurisdiction

Despite clause 6.17.1, in this jurisdiction:

(a) the following provisions of the *Distribution Ring-Fencing Guidelines* have no effect:

(1) clause 1.1.1, all words from "For the avoidance" to "**DNSP**s.";

(2) clause 1.4, definition ***non-distribution services***; and

(3) clauses 3.1, 4.2.1, 4.2.2 and 4.2.3; and

(b) a reference in the *Distribution Ring-Fencing Guidelines* to "**non-distribution services**" must be regarded as a reference to "**other services**"; and

(c) a reference in clause 3.2.1(a) of the *Distribution Ring-Fencing Guidelines* and the note to that paragraph to "**affiliated entities**" must be regarded as a reference to "**related electricity service providers**"; and

(d) a reference in clause 6.2.1(b)(iv) of the *Distribution Ring-Fencing Guidelines* to "**affiliated entity**" must be regarded as a reference to "**related electricity service provider**".

Note:

This clause, and the operation of the Distribution Ring-Fencing Guidelines in this jurisdiction, will be revisited in the event of the introduction of contestable services (including contestable metering services) in this jurisdiction.

73 Clause 6.17.2 modified

(1) After clause 6.17.2, heading

insert

Note

Clause 6.17.2(c) and (d) have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

(2) After clause 6.17.2(d)

insert

(e) For the application of these *Rules* in this jurisdiction, the *Distribution Ring-Fencing Guidelines* that are in force in the other *participating jurisdictions* on 31 July 2025 are, subject to clause 6.17.1B, taken:

(1) to be the *Distribution Ring-Fencing Guidelines* in force in this jurisdiction; and

(2) to have been made and *published* by the *AER* on 31 July 2025.

73A Clause 6.18.2 modified

After clause 6.18.2, heading

insert

Note:

Clause 6.18.2(b)(6C) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

73B Clause 6.18.7 modified

After clause 6.18.7, heading

insert

Note:

Clause 6.18.7(e) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

74 Clause 6.18.9 modified

After clause 6.18.9, heading

insert

Note:

Clause 6.18.9(a)(3) has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

75 Chapter 6, Parts M and N modified

After Chapter 6, Parts M and N headings

insert

Note:

This Part has no effect in this jurisdiction. The application of this Part will be revisited as part of the phased implementation of the Rules in this jurisdiction.

75A Rule 6.20.1 modified

(1) Clause 6.20.1(a)(2)

omit

a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter*

insert

schedule 7A.7

(2) Clause 6.20.1(b)

omit

(other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer*

insert

(other than a *Distribution Customer* who is *financially responsible* for its own connection point) incurs *distribution service charges*, the *Distribution Network Service Provider* must bill the *retailer*

(3) Clause 6.20.1(c)

omit

Market Customer

insert

retailer

(4) Clause 6.20.1(e)(1)

omit

that are *Market Generators*

insert

other than *Embedded Generators* whose sent out generation is not purchased in its entirety by a *Retailer* or *Customer* located at the same connection point

(5) Clause 6.20.1(e)(2)

omit

Market Customer

insert

Retailer

(6) Clause 6.20.1(e)(4)

omit

AEMO's

insert

NTESMO's

(7) Clause 6.20.1(e)(4)

omit

Market Customers

insert

Market Loads, Retailers

(8) Clause 6.20.1(e)(5)

omit

a *metrology procedure*

insert

schedule 7A.7

(9) Clause 6.20.1(e)(5)

omit

AEMO's

insert

NTESMO's

(10) Clause 6.20.1(e)(5)

omit

Market Customers

insert

Market Loads, *retailers*

(11) Clause 6.20.1(f)(1)

omit

that are not *Market Generators*

insert

whose sent out generation is not purchased in its entirety by a *Retailer* or *Customer* located at the same connection point

(12) Clause 6.20.1(f) and (g)

omit

Local Retailer

insert

Retailer

75AB Clause 6.20.3A modified

After clause 6.20.3A, heading

insert

Note:

Clause 6.20.3A has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

75B Rule 6.21.3 modified

Clause 6.21.3(a)

omit

13 December 1998

insert

1 July 2019

75C Rule 6.22.2 modified

(1) Clause 6.22.2(a)(2)

omit

Chapters 4, 5, this Chapter 6 and Chapter 7 and any other *applicable regulatory instrument*

insert

Chapter 5, this Chapter 6, Chapter 7A and any other *applicable regulatory instrument* including but not limited to *jurisdictional electricity legislation*

(2) Clause 6.22.2(a)(3)

omit, insert

(3) in relation to all *terms and conditions of access* (including price) the decisions of the *AER* where those decisions relate to those terms and conditions under Chapter 5, this Chapter 6, Chapter 7A and *jurisdictional electricity legislation* and are made under Chapter 5, this Chapter 6 and Chapter 7A.

(3) Clause 6.22.2(b)(2)

omit

AEMO

insert

NTESMO

(4) Clause 6.22.2(c)(2)

omit

Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*

insert

Chapter 5, this Chapter 6, Chapter 7A and *jurisdictional electricity legislation*

(5) Clause 6.22.2(c)(3)

omit, insert

(3) in relation to all *terms and conditions of access* (including price) the decisions of the *AER* where those decisions relate to those terms and conditions under Chapter 5, this Chapter 6, Chapter 7A and *jurisdictional electricity legislation* and are made under Chapter 5, this Chapter 6 and Chapter 7;

(6) Clause 6.22.2(d)(2)

omit

AEMO

insert

NTESMO

(7) Clause 6.22.2, at the end

insert

Note:

The terms and conditions of access in jurisdiction electricity legislation referred to in paragraphs (a)(2) and (3) and (c)(2) and (3) will be terms and conditions that correspond to matters set out in Chapter 4 of the Rules applying in other participating jurisdictions. The application of those paragraphs will be revisited as part of the phased implementation of the Rules in this jurisdiction.

77 Clause S6.1.1 modified

(1) Clause S6.1.1(6) and (7)

omit, insert

(5A) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period*:

(i) capital expenditure for each of the past years of the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*, and the expected capital expenditure for each of the last 2 years of the *2014-19 NT regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such year:

(A) margins paid or expected to be paid by the *Distribution Network Service Provider* in circumstances where those margins are referable to arrangements that do not reflect arm's length terms; and

(B) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that year; and

(ii) an explanation of any significant variations in the forecast capital expenditure from capital expenditure in the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*;

(5B) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *2nd regulatory control period*:

(i) capital expenditure for each of the past years of the *2014-19 NT regulatory control period* and each of the past *regulatory years* of the *1st regulatory control period*, and the expected capital expenditure for each of the last 2 *regulatory years* of the *1st regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such year:

(A) margins paid or expected to be paid by the *Distribution Network Service Provider* in circumstances where those margins are referable to arrangements that do not reflect arm's length terms; and

(B) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that year; and

(ii) an explanation of any significant variations in the forecast capital expenditure from capital expenditure in the *2014–19 NT regulatory control period* and *1st regulatory control period*;

(6) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last 2 *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast and separately identifying for each such *regulatory year*:

(i) margins paid or expected to be paid by the *Distribution Network Service Provider* in circumstances where those margins are referable to arrangements that do not reflect arm's length terms; and

(ii) expenditure that should have been treated as operating expenditure in accordance with the policy submitted under paragraph (8) for that *regulatory year*;

(7) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure; and

(2) Clause S6.1.1, at the end

insert

Note:

The modifications to this clause expire on 1 July 2029.

78 Clause S6.1.2 modified

Clause S6.1.2(7) and (8)

omit, insert

(6A) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *1st regulatory control period*:

(i) operating expenditure for each of the past years of the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*, and the expected operating expenditure for each of the last 2 years of the *2014-19 NT regulatory control period*, categorised in the same way as for the operating expenditure forecast; and

(ii) an explanation of any significant variations in the forecast operating expenditure from operating expenditure in the *2009-14 NT regulatory control period* and *2014-19 NT regulatory control period*;

(6B) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply during the *2nd regulatory control period*:

(i) operating expenditure for each of the past years of the *2014-19 NT regulatory control period* and each of the past *regulatory years* of the *1st regulatory control period*, and the expected operating expenditure for each of the last 2 *regulatory years* of the *1st regulatory control period*, categorised in the same way as for the operating expenditure forecast; and

(ii) an explanation of any significant variations in the forecast operating expenditure from operating expenditure in the *2014-19 NT regulatory control period* and the *1st regulatory control period*;

(7) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – operating expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last 2 *regulatory years* of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;

(8) in the case of a *building block proposal* for a distribution determination for a *Distribution Network Service Provider* in this jurisdiction that will apply after the *2nd regulatory control period* – an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

Note:

The modifications to this clause expire on 1 July 2029.

79 Clause S6.2.1 modified

(2) Clause S6.2.1(a), at the end

insert

However, this clause does not apply to the establishment of the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the *1st regulatory control period*.

Note:

See clause S6.2.3A for the establishment of the value of the regulatory asset base for a distribution system in this jurisdiction as at the beginning of the 1st regulatory control period. Also see rule 6.0(b)(2) for the treatment of distribution systems in this jurisdiction for the purposes of this schedule.

(3) Clause S6.2.1(b)

omit

S6.2.2 and S6.2.3

insert

S6.2.3 and S6.2.3A

80 Clause S6.2.1 modified

After clause S6.2.1(e)(3)

insert

(3A) However, in calculating the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the first *regulatory year* of the *2nd regulatory control period*, the previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of the *2014-19 NT regulatory control period* or *1st regulatory control period* where that estimated capital expenditure has been included in that value; and

(ii) the actual capital expenditure for that part of the 2014-19 NT regulatory control period or 1st regulatory control period.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

Note:

This subparagraph expires on 1 July 2029.

82 Clause S6.2.2A modified

After clause S6.2.2A(a1)

insert

(a2) However, for a decision on the regulatory asset base for a *distribution system* in this jurisdiction as at the commencement of the *2nd regulatory control period*, ***review period*** means only the previous control period (excluding the last 2 *regulatory years* of that previous control period).

Note:

This paragraph expires on 1 July 2029.

83 Clause S6.2.2B modified

After clause S6.2.2B, heading

insert

Note:

Clause S6.2.2B(b) and (c) has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

84 Clause S6.2.3A inserted

After clause S6.2.3

insert

S6.2.3A Establishment of opening regulatory asset base for distribution system in this jurisdiction for 1st regulatory control period

(a) **Application of this clause**

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* in this jurisdiction as at the beginning of the *1st regulatory control period*.

(b) **Roll forward model to comply with this clause**

The values to be used for completing the *roll forward model* must be established in accordance with this clause.

(c) **Previous value of regulatory asset base for distribution system in this jurisdiction**

For paragraph (d), the previous value of the regulatory asset base for all *distribution systems* in this jurisdiction that are owned, controlled or operated by the *Distribution Network Service Provider* mentioned in the table below is as set out in the table:

Jurisdiction	***Distribution Network Service Provider***	**Regulatory Asset Base ($m)**
Northern Territory	Power and Water Corporation ABN 15 947 352 360	860.65 (as at 1 July 2014 in July 2014 dollars)

(d) **Method of adjustment of value of regulatory asset base**

The value of the regulatory asset base for the *distribution systems* mentioned in paragraph (c) as at the beginning of the first *regulatory year* of the *1st regulatory control period* must be calculated by adjusting the previous value (the **previous value**) of the regulatory asset base for the *distribution systems* as specified in paragraph (c) as follows:

(1) The previous value of the regulatory asset base must be:

(i) increased by the amount of all capital expenditure incurred during the *2014-19 NT regulatory control period* (the ***previous control period***), including any capital

expenditure determined for that period under clause 3.2.4(d)(i)(A) of Part B of the *2014 NT Network Price Determination* where the Determination has been amended under clause 3.2.4(d)(iii) of the Determination (regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the Determination (if any) for that period); and

(ii) reduced by the amount of any capital expenditure that has been recovered by way of a pass through under clause 3.1 of Part B of the *2014 NT Network Price Determination* where the amount of that capital expenditure would otherwise have been included in the value of the regulatory asset base.

(2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *Utilities Commission* or *AER* for any part of the previous control period for which actual capital expenditure is not available.

(3) The previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of the *2009-14 NT regulatory control period* or *2014-19 NT regulatory control period* where that estimated capital expenditure has been included in that value; and

(ii) the actual capital expenditure for that part of the *2009-14 NT regulatory control period* or *2014-19 NT regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(4) The previous value of the regulatory asset base must only be increased by estimated or actual capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *NT equivalent services* in accordance with the Cost Allocation Methodology (as amended, varied or substituted from time to time) that is the subject of the *Utilities Commission's* final decision referred to in Chapter 5 of Part A of the *2014 NT Network Price Determination*.

(5) The previous value of the regulatory asset base must be reduced by the amount of depreciation of the regulatory asset base during the previous control period, calculated in accordance with the *2014 NT Network Price Determination*.

(6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous control period.

(7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *NT equivalent services* but, as a result of the classification of the asset under Part B, the asset is not to be used to provide *standard control services* for the *1st regulatory control period*.

(8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:

(i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and

(ii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

(iii) was not used to provide *NT equivalent services* in the previous control period but, as a result of a change to the classification of a particular service under Part B, is to be used to provide *standard control services* for the *1st regulatory control period*; or

(iv) was never previously used to provide *NT equivalent services* but is to be used to provide *standard control services* for the *1st regulatory control period*.

(e) An increase or reduction in the value of the regulatory asset base under paragraph (d)(7) or (8) is to be based on the portion of the value of the asset properly allocated, or formerly properly allocated, to *NT equivalent services* in accordance with the principles and policies set out in the Cost Allocation Methodology (as amended, varied or substituted from time to time) that is the subject of the *Utilities Commission's* final decision referred to in Chapter 5 of Part A of the *2014 NT Network Price Determination*. The value of the relevant asset is taken to be its value as shown in independently audited and published accounts.

85 Chapters 6A and 6B modified

After Chapters 6A and 6B, headings

insert

Note:

This Chapter has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of this Chapter will be revisited as part of the phased implementation of the Rules in this jurisdiction.

86 Chapter 7 modified

After Chapter 7, heading

insert

Note:

This Chapter has no effect in this jurisdiction but will take effect at a later date. Chapter 7A applies in this jurisdiction from 1 July 2019 in substitution for this Chapter.

Criteria for assessing when the transition to this Chapter will take effect will be considered as part of the phased implementation of the Rules in this jurisdiction.

87 Chapter 7A inserted

After Chapter 7

insert

Chapter 7A Metering

Note

Chapter 7A applies in substitution for Chapter 7 (which establishes the metering framework that applies in the other participating jurisdictions). Chapter 7A operates as a transitional framework until Chapter 7 takes effect in this jurisdiction.

Criteria for assessing when the transition to Chapter 7 will take effect will be considered as part of the phased implementation of the Rules in this jurisdiction.

The application of requirements in Chapter 7A relating to market and institutional arrangements will also be considered as part of the phased implementation of the Rules in this jurisdiction.

Part A Introduction

7A.1 Introduction to the Metering Chapter

7A.1.1 Purpose and application

This Chapter provides the framework for *metering* for local electricity systems by establishing the requirements for *metering installations* at *connection points* on *transmission networks* or *distribution networks*.

7A.1.2 Contents

This Chapter sets out provisions relating to:

(a) roles and responsibilities of financially responsible participants, *Metering Coordinators*, *NTESMO* and the *Utilities Commission* relating to metering;

(b) the appointment of, and the qualifications and requirements applying to, *Metering Providers* and *Metering Data Providers*;

(c) the appointment of *Metering Coordinators*;

(d) *metering installation* requirements;

(e) *metering data services* and the *metering database*;

(f) *metering register* requirements, the disclosure of *NMI* information, and the provision of *metering data* to *retail customers*;

(g) security of, and rights to access, *metering installations*, services provided by *metering installations*, *energy data* held in *metering installations* and *metering data* from *metering installations*; and

(h) relevant *metering* procedures.

7A.1.3 Definitions

In this Chapter:

actual meter reading means the collection of energy data from a metering installation by local access or remote acquisition.

data stream means a stream of metering data associated with a *connection point*, as represented by a *NMI*. A *NMI* may have multiple data streams (for example, from one or more *meters*, or one or more channels or registers that comprise a single *meter*). Each data stream is identified by a unique suffix associated with the *NMI* to which it belongs.

financially responsible participant means a person who is *financially responsible* for a *connection point*.

MDFF Specification means:

(a) the Metering Data File Format Specification published by *NTESMO* in a communication guideline under clause S7A.1.3; or

(b) if no Metering Data File Format Specification is published by *NTESMO* – the Metering Data File Format Specification NEM 12 and NEM 13, published by *AEMO*, with an effective date of 1 May 2022 (version 2.5).

Metering Data File Format means *metering data* that is in a form that complies with the MDFF Specification.

metering provision services means the provision, installation and maintenance of *metering installations*.

prepayment device means a *metering installation* that requires a prepayment for the supply of electricity prior to consumption.

scheduled meter reading means an actual meter reading performed in accordance with the usual reading cycle for the *meter*.

special meter reading means an actual meter reading performed outside of the usual reading cycle for the *meter*.

vending services means, for a *metering installation* at a *connection point* that is a prepayment device, services that allow the financially responsible participant to sell electricity that will flow through the prepayment device in the future for consumption, and to receive payment in advance for selling that electricity.

Note

The following are examples of vending services:

(a) services for prepayments made by credit card through a website or app, or over the telephone;

(b) services for prepayments made in person by cash or credit card to purchase a physical token or unique code that must be entered into a prepayment device.

7A.1.4 Inconsistency

(a) If there is an inconsistency between substantive Chapter 7A and the schedules to this Chapter, substantive Chapter 7A prevails to the extent of the inconsistency.

(b) In this clause:

substantive Chapter 7A means this Chapter other than the schedules to this Chapter.

Note

To the extent that there is an inconsistency between the Rules and the National Measurement Act, the Act prevails to the extent of the inconsistency: see Rule 1.7.1A.

Part B Roles and Responsibilities

7A.2 Role and responsibility of financially responsible participant

(a) Before participating in a *market* in respect of a *connection point*, and for so long as the financially responsible participant continues to participate in a *market*, the financially responsible participant for a *connection point* must ensure that:

(1) a *Metering Coordinator* is appointed in respect of the *connection point* in accordance with Part C of this Chapter;

(2) the *connection point* has a *metering installation* and information about the *metering installation* is provided to *NTESMO* for inclusion on the *metering register*, where this is required by clause 7A.10.1;

(3) a *NMI* has been obtained with respect to the *connection point*; and

(4) if information about the *metering installation* is required to be provided to *NTESMO* for inclusion on the *metering register* by clause 7A.10.1, the *NMI* is obtained prior to that information being provided to *NTESMO.*

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) *NTESMO* may refuse to permit a financially responsible participant to participate in a *market* in respect of a *connection point* used for the purposes of *settlements* if the financially responsible participant is not compliant with its obligation under paragraph (a) with respect to the *connection point*.

(c) Where, following a request made by a financially responsible participant in accordance with clause 7A.6.14, the *metering installation* at a *connection point* is a prepayment device, the financially responsible participant is responsible for ensuring that an arrangement for vending services is in place.

7A.3 Role and responsibility of Metering Coordinator

7A.3.1 Responsibility of the Metering Coordinator

For the term of its appointment in respect of a *connection point*, the *Metering Coordinator* is the person responsible for:

(a) the provision, installation and maintenance of a *metering installation* at the *connection point* in accordance with Part D of this Chapter;

(b) the collection of *metering data* with respect to the *metering installation*, the processing of that data, the retention of that data in the *metering data services database* and the delivery of that data to the *metering database* and other persons in accordance with Part E of this Chapter; and

(c) managing the security of and access to:

(1) the *metering installation*;

(2) services provided by the *metering installation*;

(3) *energy data* held in the *metering installation*; and

(4) *metering data* from the *metering installation*,

in accordance with Part F of this Chapter.

7A.3.2 Role of the Metering Coordinator

Appointment of a Metering Provider

(a) The *Metering Coordinator* at a *connection point*, other than a *connection point* with a type 7 *metering installation*, must appoint a person who is accredited to provide metering provision services in this jurisdiction to be the *Metering Provider* to provide metering provision services for the *connection point*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

Appointment of a Metering Data Provider

(b) The *Metering Coordinator* at a *connection point* must appoint a person who is accredited to provide *metering data services* in this jurisdiction to be the *Metering Data Provider* to provide *metering data services* for the *connection point*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

Metering installations

(c) The *Metering Coordinator* at a *connection point*, other than a *connection point* with a type 7 *metering installation*, must ensure that:

(1) the *metering installation* is provided, installed and maintained in accordance with the *Rules*;

(2) the components, accuracy and testing of the *metering installation* comply with the requirements of the *Rules*;

(3) the security control of the *metering installation* is provided in accordance with rule 7A.13;

(4) if *remote acquisition* is used or is to be used – a *communications interface* is installed and maintained to facilitate connection to the *telecommunications network*;

(5) *NTESMO* is provided (when requested) with any information required for the purposes of Schedule 7A.1 for any new or replacement *metering installation* or any altered *metering installation*; and

(6) the *Metering Provider* it appoints for the *connection point* complies with the obligations imposed on *Metering Providers* by this Chapter.

(d) A *Metering Coordinator* must not prevent, hinder or otherwise impede the *Local Network Service Provider* from locally accessing a *metering installation* or *connection point* for the purposes of *reconnecting* or *disconnecting* the *connection point*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

Metering data services

(e) The *Metering Coordinator* at a *connection point* must:

(1) ensure that the *Metering Data Provider* it appoints for the *connection point* complies with the obligations imposed on *Metering Data Providers* by this Chapter;

(2) ensure that *metering data services* are provided in accordance with the *Rules*; and

(3) arrange for the provision of relevant *metering data* to the *Metering Data Provider* if *remote acquisition*, if any, becomes unavailable.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

Access to type 4 metering installations

(f) The *Metering Coordinator* at a *connection point* with a type 4 *metering installation*:

(1) must ensure that access to the *metering installation*, the services provided by the *metering installation* and *energy data* held in the *metering installation* is only granted to persons entitled to access the *metering installation*, or the services provided by the *metering installation* or *energy data* held in the *metering installation*, in accordance with this Chapter;

(2) must not arrange a *disconnection* except:

(i) on the request of the financially responsible participant or *Local Network Service Provider*;

(ii) where the *disconnection* is effected via remote access; and

(iii) in accordance with *jurisdictional electricity legislation*;

(3) must not arrange a *reconnection* except:

(i) on the request of the financially responsible participant, *Local Network Service Provider* or incoming *retailer*;

(ii) where the *reconnection* is effected via remote access; and

(iii) in accordance with *jurisdictional electricity legislation*; and

(4) must not arrange a *retailer* planned interruption of the supply of electricity at the *metering installation* except:

(i) on the request of the *retailer*; and

(ii) in accordance with *jurisdictional electricity legislation*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.4 Qualification and requirements of Metering Providers and Metering Data Providers

7A.4.1 Metering Providers

(a) A *Metering Provider* must have an ISO 9000 series quality system in place.

(b) For a *connection point* in respect of which a type 1, 2 or 3 *metering installation* is installed, or is required to be installed under this Chapter:

(1) the *Local Network Service Provider* is taken to be accredited to provide metering provision services in this jurisdiction (including the services mentioned in the schedules in respect of which a *Metering Provider* requires accreditation); and

(2) the Metering Coordinator at the connection point is taken to have appointed the Local Network Service Provider as the Metering Provider for the connection point.

(c) For a *connection point* in respect of which a type 4, 4A, 5 or 6 *metering installation* is installed, or is required to be installed under this Chapter:

(1) the *Local Network Service Provider* is taken to be accredited to provide metering provision services in this jurisdiction (including the services mentioned in the schedules in respect of which a *Metering Provider* requires accreditation); and

(2) the Metering Coordinator at the connection point is taken to have appointed the Local Network Service Provider as the Metering Provider for the connection point.

(d) A *Metering Provider* may, in providing metering provision services under this Chapter, contract with another person to assist it in the provision of those services, if that person meets all relevant safety and technical requirements in any *applicable regulatory instruments* or other relevant law.

7A.4.2 Metering Data Providers

(a) A *Metering Data Provider* must have an ISO 9000 series quality system in place.

(b) For a *connection point* in respect of which a type 1, 2 or 3 *metering installation* is installed, or is required to be installed under this Chapter:

(1) the *Local Network Service Provider* is taken to be accredited to provide *metering data services* in this jurisdiction (including the services mentioned in the schedules in respect of which a *Metering Data Provider* requires accreditation); and

(2) the Metering Coordinator at the connection point is taken to have appointed the Local Network Service Provider as the Metering Data Provider for the connection point.

(c) For a *connection point* in respect of which a type 4, 4A, 5, 6 or 7 *metering installation* is installed, or is required to be installed under this Chapter:

(1) the *Local Network Service Provider* is taken to be accredited to provide *metering data services* in this jurisdiction (including the services mentioned in the schedules in respect of which a *Metering Data Provider* requires accreditation); and

(2) the Metering Coordinator at the connection point is taken to have appointed the Local Network Service Provider as the Metering Data Provider for the connection point.

(d) A *Metering Data Provider* may, in providing *metering data services* under this Chapter, contract with another person to assist it in the provision of those services, if that person meets all relevant safety and technical requirements in any *applicable regulatory instrument* or other relevant law.

Part C Appointment of Metering Coordinator

7A.5 Appointment of Metering Coordinator

(b) For a *connection point* in respect of which a type 1, 2 or 3 *metering installation* is installed, or is required to be installed under this Chapter, the financially responsible participant for the *connection point* is taken to have appointed the *Local Network Service Provider* as the *Metering Coordinator* for the *connection point*.

(c) For a *connection point* in respect of which a type 4, 4A, 5 or 6 *metering installation* is installed, or is required to be installed under this Chapter, the financially responsible participant for the *connection point* is taken to have appointed the *Local Network Service Provider* as the *Metering Coordinator* for the *connection point*.

(d) For a *connection point* with a type 7 *metering installation*, the financially responsible participant for the *connection point* is taken to have appointed the *Local Network Service Provider* as the *Metering Coordinator* for the *connection point*.

Part D Metering installation

7A.6 Metering installation arrangement

7A.6.1 Metering installation requirements

(a) The *Metering Coordinator* at a *connection point* must ensure that there is a *metering installation* at that *connection point*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) The *Metering Coordinator* at a *connection point* must ensure that *energy data* held in the *metering installation* is based on units of watthour (*active energy*) and where required varhour (*reactive energy*).

(c) Installation and maintenance of a *metering installation* must be carried out in a safe manner, and only by a *Metering Provider* appointed under clause 7A.3.2.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.6.2 Metering installation components

(a) A *Metering Provider* must, in accordance with the *Rules*, ensure that a *metering installation*, other than a type 7 *metering installation*:

(1) contains a device that has either a visible or an equivalently accessible display of the cumulative total *energy* measured by that *metering installation* (at a minimum);

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(2) is accurate in accordance with clause 7A.6.6;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(3) in the case of a type 1, 2, 3 or 4 *metering installation* – has *electronic data transfer facilities* from the *metering installation* to the *metering data services database*;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(4) includes a *communications interface* to meet the requirements of clause 7A.3.2(c)(4);

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(5) is secure in accordance with rule 7A.9;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(6) records energy data in a manner that enables metering *data* to be collated in accordance with clause 7A.8.6;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(7) is capable of separately recording *energy data* for *energy* flows in each direction where bi-directional *active energy* flows occur or could occur;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(8) has a *measurement element* for *active energy* and, if required in accordance with schedule 7A.4, a *measurement element* for *reactive energy*, with both measurements to be recorded;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(9) includes facilities for storing *interval energy data* for a period of at least 35 *days* if the *metering installation* is a type 1, 2, 3 or 4 *metering installation*;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(10) includes facilities for storing *interval energy data* for a period of at least 200 *days* or such other period as specified in schedule 7A.7 if the *metering installation* is a type 4A or 5 *metering installation*;

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(11) in the case of a type 6 *metering installation*, includes facilities capable of continuously recording the total accumulated *energy* supplied through it by a visible display in accordance with subparagraph (1), over a period of at least 12 months; and

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(12) is suitable for the range of operating conditions to which it will be exposed (for example temperature or impulse levels) and operates within the defined limits for its components.

(b) A *metering installation* may consist of combinations of:

(1) a *current transformer*;

(2) a *voltage transformer*;

(3) secure and protected wiring from the *current transformer* and the *voltage transformer* to the *meter*;

(4) *communications interface* equipment such as a modem, isolation requirements, telephone service, radio transmitter and data link equipment;

(5) auxiliary electricity supply to the *meter*;

(6) an alarm circuit and monitoring facility;

(7) a facility to keep the *metering installation* secure from interference;

(8) test links and fusing;

(9) summation equipment; and

(10) several *metering points* to derive the metering data for a connection point.

(c) The *Local Network Service Provider* or financially responsible participant may, with the agreement of the *Metering Coordinator* (which agreement must not be unreasonably withheld), arrange for a *metering installation* to contain features which are in addition to, or which enhance, the features specified in paragraph (b).

(d) The financially responsible participant for a *connection point* must:

(1) apply to the *Local Network Service Provider* for a *NMI*; and

(2) provide the *Metering Coordinator* at the *connection point* with the *NMI* for the *metering installation* within 5 business days of receiving the *NMI* from the *Local Network Service Provider*.

(e) The *Local Network Service Provider* must:

(1) issue a unique *NMI* for each *metering installation* on its *network* to the financially responsible participant; and

(2) provide information about the *NMI* to *NTESMO*, where this is required for the purposes of clause 7A.10.1.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(f) The *Metering Coordinator* must ensure that *NTESMO* is provided with the relevant details of the *metering installation* as specified in Schedule 7A.1 within 10 *business days* of receiving the *NMI* under paragraph (d)(2), where this is required for the purposes of clause 7A.10.1.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(g) Where a *metering installation* is used for operational purposes in addition to metrological purposes, the *Metering Coordinator* must:

(1) use reasonable endeavours to ensure that there will be no infringement of the requirements of the *Rules*; and

(2) co-ordinate with the persons who use the *metering installation* for such other purposes.

7A.6.3 Emergency management

Note

Emergency management will be considered as part of the phased implementation of the Rules in this jurisdiction.

7A.6.4 Network devices

Note

Network devices will be considered as part of the phased implementation of the Rules in this jurisdiction.

7A.6.5 Metering point

(a) The *Metering Coordinator* at a *connection point* must ensure that:

(1) the *metering point* is located as close as practicable to the *connection point*, but is in a position that allows safe and unimpeded access to the *metering installation* by the *Metering Provider*, *Metering Data Provider* and any other person required or permitted to have access to the *metering installation* under the *Rules* or any other law; and

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(2) any *instrument transformers* required for a *check metering installation* are located in a position that achieves a mathematical correlation with the *metering data*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) The financially responsible participant, the *Local Network Service Provider* and *NTESMO* must use their best endeavours to agree to adjust the *metering data* which is recorded in the *metering database* to allow for physical losses between the *metering point* and the relevant *connection point* where a *meter* is used to measure the flow of electricity in a power conductor.

7A.6.6 Metering installation types and accuracy

(a) The type of *metering installation* and the accuracy requirements for a *metering installation* are to be determined in accordance with schedule 7A.4.

Note

This Chapter 7A makes provision for type 7 metering installations and imposes requirements on type 7 metering installations, including obligations about calculating metering data. Those obligations will only apply in this jurisdiction in the event of a type 7 metering installation being available in this jurisdiction and after a 12 month transitional period allowing all participants to achieve compliance.

(b) A *check metering installation* is not required to have the degree of accuracy required of a *metering installation* but the *Metering Coordinator* must ensure that it has mathematical correlation with the *metering installation* and complies with the requirements of schedule 7A.4.

(c) The *Metering Coordinator* at a *connection point* must ensure that the accuracy of a type 6 *metering installation* is in accordance with regulations issued under the *National Measurement Act* or, in the absence of any such regulations, with schedule 7A.7.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.6.7 Functionality requirements for type 1, 2, 3 and 4 metering installations

(a) This clause applies in respect of a type 1, 2, 3 or 4 *metering installation*.

(b) The *Metering Coordinator* at a *connection point* must ensure that the *metering installation* complies with the functionality requirements specified in schedule 7A.5.

7A.6.8 Meter churn

(a) A *Metering Coordinator* may arrange to alter a type 5 or 6 *metering installation* to make it capable of *remote acquisition* if:

(1) the alteration is reasonably required to address operational difficulties; or

(2) the *Metering Coordinator* is the *Local Network Service Provider* and the alteration is reasonably required to enable the *Local Network Service Provider* to meet its obligations to provide a safe, reliable and secure *network*.

(b) An alteration of a *metering installation* by a *Metering Coordinator* in accordance with paragraph (a) does not alter the classification of that installation to a type 4 or 4A *metering installation*.

(c) For paragraph (a)(1), operational difficulties arise if the *metering installation* is difficult or unsafe to access because:

(1) it is on a remote property;

(2) it is within a secure facility;

(3) it is in close proximity to hazardous materials; or

(4) accessing or arranging access to it otherwise poses a risk to the safety and security of persons or property.

7A.6.9 Metering installation malfunctions

(a) Unless an exemption is obtained by the *Metering Coordinator* from *NTESMO* under this clause 7A.6.9, the *Metering Coordinator* must, if a *metering installation malfunction* occurs in respect of a *connection point* with a type 1, 2 or 3 *metering installation*, cause repairs to be made to the *metering installation* as soon as practicable but no later than 2 *business days* after the *Metering Coordinator* had been notified of the *metering installation malfunction*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) Unless an exemption is obtained by the *Metering Coordinator* from *NTESMO* under this clause 7A.6.9, if a *metering installation malfunction* occurs, the *Metering Coordinator* must, in respect of a *connection point* with:

(1) a type 4 *metering installation* – cause repairs to be made to the *metering installation* as soon as practicable but no later than 10 *business days* after the *Metering Coordinator* has been notified of the *metering installation malfunction*; or

(2) a *metering installation* other than the installations mentioned in paragraph (a) or subparagraph (1) – cause repairs to be made to the *metering installation* as soon as practicable but no later than 10 *business days* after the *Metering Coordinator* has been notified of the *metering installation malfunction*.

(c) *NTESMO* must establish, maintain and *publish* a procedure applicable to the provision of exemptions for the purposes of paragraphs (a) and (b).

(d) If an exemption is provided by *NTESMO* under this clause 7A.6.9, then the *Metering Provider* must provide *NTESMO* with a plan for the rectification of the *metering installation.*

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(e) A *Registered Participant*, *Metering Provider* or *Metering Data Provider* who becomes aware of a *metering installation malfunction* that cannot be rectified within the applicable timeframes as specified in paragraphs (a) and (b) must notify the *Metering Coordinator* of the *metering installation malfunction* within 1 *business day.*

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.6.10 Timeframes for meters to be installed – new connection

(a) Subject to paragraph (b), where a *new connection* is requested at a *retail customer's* premises, the relevant *retailer* must arrange a *meter* to be installed:

(1) by a date agreed with the *retail customer*; or

(2) failing agreement with the *retail customer*, on a date no later than 6 *business days* from the date the *retailer* is informed that the *connection service* (as defined in clause 5A.A.1) is complete.

(b) The timeframe under paragraph (a)(1) or (2) (as applicable) will not apply where:

(1) the *retail customer* has not entered into an agreement with the *retailer* for the meter to be installed;

(2) the proposed site for the meter at the *retail customer's* premises is not accessible or safe or ready for the *meter* to be installed, or the *connection service* (as defined in clause 5A.A.1) has not been completed; or

(3) installing the *meter* requires interrupting supply to another *retail customer.*

(c) Subject to the reapplication of paragraph (b), on and from the date that an exception under paragraph (b) ceases to apply, the *retailer* must arrange for the *meter* to be installed:

(1) by a new date agreed with the *retail customer*; or

(2) failing agreement, on a date no later than 5 *business days* from the date that the exception ceases to apply.

(d) A *retailer* must inform its *retail customers* of its obligations under this clause.

7A.6.11 Timeframes for meters to be installed – where a connection service is not required

(a) Subject to paragraph (b), if a *retail customer* has requested the *retailer* to install a *meter* at the customer's premises and a *connection service* (as defined in clause 5A.A.1) is not required, the *retailer* must arrange for the *meter* to be installed:

(1) by a date agreed with the *retail customer*; or

(2) failing agreement with the *retail customer*, on a date no later than 15 *business days* after the *retailer* received the request from the *retail customer* for the *meter* to be installed.

(b) The timeframe under paragraph (a)(1) or (2) (as applicable) will not apply where:

(1) the *retail customer* has not entered into an agreement with the *retailer* for the *meter* to be installed;

(2) the proposed site for the meter at the *retail customer's* premises is not accessible, safe, or ready for the *meter* to be installed; or

(3) installing the *meter* requires interrupting supply to another *retail customer.*

(c) Subject to the reapplication of paragraph (b), on and from the date that an exception under paragraph (b) ceases to apply, the *retailer* must arrange for the *meter* to be installed:

(1) by a new date agreed with the *retail customer*; or

(2) failing agreement, on a date no later than 15 *business days* from the date that the exception ceases to apply.

(d) For the avoidance of doubt, the timeframes for *meters* to be installed under this rule 7A.6.11 do not apply for a *retailer* initiated installation of a *meter*, or for a *new connection*.

(e) A *retailer* must inform its *retail customers* of its obligations under this clause.

7A.6.12 Timeframes for meters to be installed – where a connection alteration is required

(a) Subject to paragraph (b), if a *retail customer* has requested a *meter* to be installed at the customer's premises and a *connection alteration* is also required:

(1) the *retailer* must arrange for the *meter* to be installed:

(i) by a date agreed with the *retail customer* and the *Distribution Network Service Provider* where the *Distribution Network Service Provider* is providing the *connection alteration*; or

(ii) failing agreement, on a date no later than 15 *business days* after the *retailer* received the request from the *retail customer* for the *meter* to be installed; and

(2) where a *Distribution Network Service Provider* is providing the *connection alteration*, the *Distribution Network Service Provider* must co-ordinate the *connection alteration*, *with* the *retailer* and other relevant parties, in order to allow the *retailer* to comply with its obligation under subparagraph (1).

(b) The timeframe under paragraph (a)(1) (i) or (ii) (as applicable) will not apply where:

(1) the *retail customer* has not entered into an agreement with the *retailer* for the *meter* to be installed;

(2) the proposed site for the meter at the *retail customer's* premises is not accessible, safe, or ready for the *meter* to be installed;

(3) installing the *meter* requires interrupting supply to another *retail customer*;

(4) the *retail customer* has not met the conditions that it is required to comply with under its *connection contract*; or

(5) *augmentation* is required for the purposes of the *connection alteration* and has not yet been completed.

(c) Subject to the reapplication of paragraph (b), on and from the date that an exception under paragraph (b) ceases to apply:

(1) the *retailer* must arrange for the *meter* to be installed:

(i) by a new date agreed with the *retail customer* and the *Distribution Network Service Provider* where the *Distribution Network Service Provider* is providing the *connection alteration*; or

(ii) failing agreement, on a date no later than 15 *business days* from the date that the exception ceases to apply; and

(2) where a *Distribution Network Service Provider* is providing the *connection* alteration, it must co-ordinate the *connection alteration*, *with* the *retailer* and other relevant parties, in order to allow the *retailer* to meet its obligation under subparagraph (1).

(d) If the *retailer* receives a request from a *retail customer* for a *meter* to be installed at the customer's premises where a *connection alteration* is also required, the *retailer* must inform the *Distribution Network Service Provider* of the request no later than the next *business day* after receiving the request.

(e) For the avoidance of doubt, the timeframes for *meters* to be installed under this rule 7A.6.12 do not apply for a *retailer* initiated installation of a *meter*, or for a *new connection*.

(f) A *retailer* must inform its *retail customers* of its obligations under this clause.

7A.6.13 Changing a metering installation

(a) Subject to this clause, nothing in these *Rules* prevents the financially responsible participant (on its own behalf or, in the case of a *retailer*, on its own behalf or on behalf of a *retail customer*) or *Network Service Provider* in respect of a *connection point* from requesting the *Metering Coordinator* to arrange for:

(1) the alteration of the *metering installation* at that *connection point*; or

(2) the installation of a new *metering installation* at that *connection point*.

(b) The incremental costs of the alteration of the *metering installation* or the installation of the new *metering installation* must be borne by the person who requests the alteration of the *metering installation* or the installation of the new *metering installation*.

(c) The *Metering Coordinator* at a *connection point* must ensure that changes to parameters or settings within a *metering installation* are:

(1) implemented by a *Metering Provider*; and

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(2) confirmed by the *Metering Coordinator* within 2 *business days* after the alteration has been made; and

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(3) reported to *NTESMO* where required to enable *NTESMO* to record the changes in the *metering register* in accordance with clause 7A.10.2.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.6.14 Prepayment metering

(a) This clause applies if, in accordance with clause 7A.6.13, the financially responsible participant in respect of a *connection point* requests the *Metering Coordinator* to arrange for:

(1) the alteration of a *metering installation* so that it is a prepayment device; or

(2) the installation of a new *metering installation* that is a prepayment device.

(b) The Metering Coordinator must ensure that the Metering Provider:

(1) alters the *metering installation* so that it is a prepayment device, if so requested; or

(2) installs a new *metering installation* that is a prepayment device, if so requested.

7A.7 Maintenance, inspection, testing and auditing of metering installations

7A.7.1 Maintenance

The *Metering Coordinator* for a *connection point* must ensure that any maintenance (including inspection and testing) of a *metering installation* at the *connection point* is carried out in a safe manner by an appropriately qualified person.

7A.7.2 Responsibility for inspection and testing

(a) The *Metering Coordinator* for a *connection point* must ensure that any inspection or testing of a *metering installation* at the *connection point* is carried out in a safe manner by an appropriately qualified person.

(b) A person who arranges or carries out an inspection or testing of a *metering installation* under this clause must do so in accordance with:

(1) this clause; and

(2) the relevant inspection and testing requirements set out in schedule 7A.6.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(c) A *Registered Participant* may request that the *Metering Coordinator* make arrangements for the testing of a *metering installation* and, if the request is reasonable, the *Metering Coordinator*:

(1) must not refuse the request; and

(2) must make arrangements for the testing.

(d) The *Registered Participant* who requested the testing under paragraph (c) may make a request to the *Metering Coordinator* to witness the tests.

(e) The *Metering Coordinator* must not refuse a request received under paragraph (d) and must, no later than 5 *business days* prior to the testing, advise:

(1) the party making the request; and

(2) the financially responsible participant,

of:

(3) the location and time of the tests; and

(4) the method of testing to be undertaken.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(f) If the *Metering Coordinator* has arranged testing of a *metering installation* under this clause and schedule 7A.6, the *Metering Coordinator* must:

(1) inform the financially responsible participant that testing has been undertaken in respect of the *metering installation* in accordance with this clause; and

(2) make the test results available in accordance with paragraphs (g) and (h).

(g) If the test results mentioned in paragraph (f) indicate deviation from the technical requirements for the *metering installation*, the *Metering Coordinator* must ensure that the test results are provided as soon as practicable to the persons who receive the *metering data* for the *metering installation* under clause 7A.8.4.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(h) If the test results mentioned in paragraph (f) indicate compliance with the technical requirements for the *metering installation*, the *Metering Coordinator* must ensure that the test results are provided as soon as practicable:

(1) in circumstances where the tests were requested by a *Registered Participant*, to the *Registered Participant* and persons who receive the *metering data* for the *metering installation* under clause 7A.8.4; or

(2) to a *Registered Participant* if requested by that *Registered Participant*, if the tests are not the result of a request for testing.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(i) The *Utilities Commission* may check the test results recorded in the *metering register* by arranging for audits of *metering installations* to satisfy itself and *NTESMO* that the accuracy of each *metering installation* complies with the requirements of this Chapter 7A.

(j) The *Metering Coordinator* must store the test results in accordance with clause 7A.7.7 and provide a copy to the *Utilities Commission* on request or as part of an audit.

(k) The cost of any testing under paragraph (c) must be borne by:

(1) if paragraph (g) applies – the *Metering Coordinator*; or

(2) otherwise – the *Registered Participant* who requested the test.

7A.7.3 Actions in event of non-compliance

(a) If the accuracy of the *metering installation* does not comply with the requirements of the *Rules*, the *Metering Coordinator* must:

(1) advise *NTESMO* as soon as practicable of the errors detected and the possible duration of the existence of the errors;

(2) arrange for the accuracy of the *metering installation* to be restored within:

(i) 10 *business days*; or

(ii) if a timeframe is agreed with the financially responsible participant, in that timeframe; and

(3) correct the *metering data* and provide the corrected *metering data* to *NTESMO.*

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) *NTESMO* may make appropriate corrections to the *metering data* to take account of errors referred to it under paragraph (a) for the purposes of *settlements*.

7A.7.4 Audits of information held in metering installations

(a) The *Utilities Commission* is responsible for auditing *metering installations*.

(b) A *Registered Participant* or *NTESMO* may request the *Utilities Commission* to conduct an audit to determine the consistency between the data held in the *metering database* and the data held in the relevant *metering installation.*

(c) If there are inconsistencies between data held in a *metering installation* and data held in the *metering database*, the *Metering Coordinator* and *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by the *metering installation* must liaise together to determine the most appropriate way to resolve the discrepancy.

(d) If there are inconsistencies between data held in a *metering installation* and data held in the *metering database*, the data held in the *metering installation* is to be taken as prima facie evidence of the *connection point's energy data*, except if the *meter* or components of the *metering installation* are found to be non-compliant with the *Rules*.

(e) The cost of any audit conducted under paragraph (b) will be borne by:

(1) if paragraph (c) applies, the *Metering Coordinator*; or

(2) otherwise, the *Registered Participant* who requested the audit or *NTESMO*, as the case may be.

7A.7.5 Appointment of external auditor

(a) The *Utilities Commission* may, upon reasonable notice to the *Metering Coordinator*, appoint an independent auditor to audit *metering installations* to confirm compliance with the *Rules*.

(b) If the *Utilities Commission* appoints an independent auditor under paragraph (a):

(1) the *Utilities Commission* will nominate the standards and requirements and the auditor will report in accordance with those standards and requirements; and

(2) the *Metering Coordinator* must cooperate with any reasonable requests made by the independent auditor in undertaking the audit.

(c) The *Utilities Commission* will provide a copy of the auditor's report to:

(1) the *Metering Coordinator*;

(2) *NTESMO*; and

(3) the relevant financially responsible participant,

as soon as reasonably possible after it has been completed.

(d) The *Metering Coordinator* must ensure that the *Utilities Commission* (or its agents) have unrestricted access to *metering installations* for the purpose of carrying out external audits provided that the *Utilities Commission* agrees to comply with the *Metering Coordinator's* reasonable security and safety requirements and has first given the *Metering Coordinator* at least 2 *business days* notice of its intention to carry out an audit.

(e) A notice under paragraph (d) must include:

(1) the name of the representative who will be conducting the audit on behalf of the *Utilities Commission*; and

(2) the time when the audit will commence and the expected time when the audit will conclude.

(f) The *Metering Coordinator* will be responsible for the costs of undertaking the audit.

7A.7.6 Errors found in metering tests, inspections or audits

(a) Subject to paragraph (c), if a *metering installation* test, inspection or audit, carried out in accordance with this rule, demonstrates errors in excess of those prescribed in schedule 7A.4, the *Metering Coordinator* must ensure the *metering data* is substituted in accordance with this clause and clause 7A.8.1 as appropriate.

(b) If the *Metering Coordinator* is not aware of the time at which the error arose:

(1) the error is taken to have occurred at a time halfway between the time of the most recent test or inspection which demonstrated that the *metering installation* complied with the relevant accuracy requirement and the time when the error was detected; and

(2) the time that the error was taken to occur is to be used by the *Metering Data Provider* in performing substitution of the *metering data*.

(c) If a test of a *metering installation* demonstrates an error of measurement of less than 1.5 times the error permitted by schedule 7A.4, no substitution of readings is required.

(d) The *Metering Coordinator* must arrange for a suitable substation of the incorrect *metering data* to be undertaken in accordance with the substitution requirements of schedule 7A.7.

7A.7.7 Retention of test records and documents

(a) All records and documentation of tests prepared under or for this Chapter must be retained in accordance with this clause.

(b) The *Metering Coordinator* must ensure records and documentation are retained as follows:

(1) for a period of at least 7 years:

(i) sample testing of *meters* while the *meters* of the relevant style remain in service;

(ii) the most recent sample test results of the *meters* mentioned in subparagraph (i) after the *meters* are no longer in service;

(iii) non-sample testing of meters while the *meters* remain in service;

(iv) the most recent non-sample test results after the *meters* are no longer in service;

(v) the most recent sample test results of *instrument transformers* after *instrument transformers* of the relevant type are no longer in service;

(vi) the most recent non-sample test results of *instrument transformers* after they are no longer in service;

(vii) tests of new *metering* equipment of the relevant style while the equipment remains in service; and

(viii) tests of new *metering* equipment of the relevant style after the equipment is no longer in service;

(2) for a period of at least 10 years:

(i) sample testing of *instrument transformers* while *instrument transformers* of the relevant type remain in service; and

(ii) non-sample testing of *instrument transformers* while the *instrument transformers* remain in service.

(c) In addition, the *Metering Coordinator* must ensure records of type tests and pattern approvals carried out or obtained in accordance with clause S7A.4.5.1(f) are retained while *metering* equipment of the relevant type remains in service and for at least 7 years after it is no longer in service.

Part E Metering data

7A.8 Metering data services

7A.8.1 Metering data services

(a) *Metering Data Providers* must provide *metering data services*, including the following, in accordance with the *Rules*:

(1) collecting *energy data* by local access or *remote acquisition*;

(2) the validation and substitution of metering data for types 1, 2, 3 and 4 *metering installations*;

(3) the validation, substitution and estimation of *metering data* for types 4A, 5 and 6 *metering installations*;

(4) the calculation, estimation and substitution of *metering data* for type 7 *metering installations*;

(5) establishing and maintaining a *metering data services database* associated with each *metering installation* and providing access to the *metering data services database* in accordance with clause 7A.8.3;

(6) the delivery of *metering data* and relevant *NT NMI Data* for a *metering installation* in accordance with clause 7A.8.4;

(7) the delivery to *NTESMO* of the following for *settlements*:

(i) *metering data*;

(ii) any *metering register* data requested by *NTESMO*;

(8) the delivery to relevant financially responsible participants of *metering data* for *billing transactions*;

(9) ensuring the *metering data* and other data associated with the *metering installation* is kept secure and disclosed only in accordance with the *Rules*;

(10) maintaining the standard of accuracy of the time setting of the *metering installation* in accordance with clause 7A.8.8;

(11) notifying the *Metering Coordinator* of any *metering installation malfunction* in accordance with clause 7A.6.9;

(12) management and storage of *metering data* in accordance with clause 7A.8.3; and

(13) in respect of a *metering installation* that is a prepayment device, subject to paragraph (b), services required to support the energisation and de-energisation of the *metering installation*.

(b) *Metering Data Providers* are not responsible:

(1) for the provision of a prepayment device; or

(2) in relation to a *metering installation* that is a prepayment device, unless there is an agreement with the financially responsible participant to the contrary, for the provision of vending services.

Note

The installation of prepayment devices is dealt with in clause 7A.6.14.

The provision of vending services for prepayment devices is dealt with in rule 7A.2.

(c) *Metering Data Providers* may provide additional data services that exceed the minimum requirements of the *Rules* at the request of a relevant financially responsible participant provided that:

(1) the full cost of providing such additional data services is met by the financially responsible participant; and

(2) the provision of additional data services does not affect the provision of *metering data services*.

Note

For example, vending services for a prepayment device could be an additional service, if the financially responsible participant arranges for them to be provided by the Metering Data Provider, noting that in accordance with clause 7A.2(c) the financially responsible participant is responsible for ensuring that an arrangement for vending services is in place.

7A.8.2 Collection of energy data and estimation of metering data

(a) A *Metering Data Provider* must, in accordance with this rule, collect *energy data* from, and estimate *metering data* in respect of, a *metering installation* at a *connection point* for which it has been appointed the *Metering Data Provider*.

Scheduled meter reading

(b) The *Metering Data Provider* must use reasonable endeavours to ensure that *energy data* is collected from a *metering installation* by way of an actual meter reading at least once every 3 months or, where a greater frequency has been agreed with a financially responsible participant, at that greater frequency.

(c) Despite paragraph (b), the *Metering Data Provider* must ensure that *energy data* is collected from a *metering installation* by way of an actual meter reading at least once every 12 months.

Special meter reading

(d) The *Metering Data Provider* must perform a special meter reading (including a final *meter* reading) at the request of a financially responsible participant.

(e) The *Metering Data Provider* may charge the financially responsible participant or *retail customer* (as the case may be) for the collection of *energy data* under paragraph (d) to the extent that its costs of collection are higher than they would otherwise be.

Estimated metering data

(f) When *energy data* is not collected by the *Metering Data Provider* from a *metering installation* by way of an actual meter reading at the applicable *meter* reading frequency under paragraph (b), the *Metering Data Provider* must estimate *metering data* for that *metering installation* in accordance with schedule 7A.7.

(g) *Estimated metering data* for the purposes of paragraph (f) must be provided to the *retailer* within 10 *business days* of the scheduled meter reading date under paragraph (b).

Altering energy data

(h) The *energy data* in a *metering installation* must not be altered except when the *metering installation* is reset to zero as part of a repair or reprogramming.

7A.8.3 Data management and storage

(a) A Metering Data Provider must:

(1) retain *metering data* for all relevant *metering installations* in the *metering data services database*:

(i) in electronic format for at least 13 months; and

(ii) following the retention under subsubparagraph (i), in an accessible format for at least 7 years;

(2) archive, in an accessible format, for at least 7 years:

(i) *metering data* in its original form as collected from the *metering installation*; and

(ii) records of each substitution to *metering data* in respect of a *metering installation*;

(3) enable the persons mentioned in clause 7A.13.5(c)(1) to (6) to access or receive the *metering data* and *NT NMI data* in the *metering data services database*; and

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(4) except for the persons mentioned in clause 7A.13.3(c)(1) to (6), ensure that no person has access to the *metering data services database*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) A *Metering Data Provider* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* in accordance with schedule 7A.8 and clause 7A.8.4.

(c) *Check metering data*, where available, and appropriately adjusted for differences in *metering installation* accuracy, where applicable, must be used by the *Metering Data Provider* to validate *metering data*.

(d) If the *Metering Data Provider* becomes aware that the *metering data* that has been delivered into the *metering database* from a *metering data services database* is incorrect, then the *Metering Data Provider* must provide corrected *metering data* to the financially responsible participant and *NTESMO* within 1 *business day* of detection.

(e) *Metering data* may only be altered by a *Metering Data Provider*, except in the preparation of *settlements ready data*, in which case *NTESMO* may alter the *metering data* in accordance with clause 7A.9.2(c).

(f) A Metering Data Provider may only alter metering data in the metering data services database in accordance with schedule 7A.7.

(g) A *Metering Data Provider* must arrange with the *Metering Coordinator* to obtain the relevant *metering data* if *remote acquisition*, if any, becomes unavailable.

(h) A *Metering Data Provider's* rules and protocols for supplying *metering data services* must be approved by *NTESMO* and *NTESMO* must not unreasonably withhold such approval.

7A.8.4 Provision of metering data to certain persons

A *Metering Data Provider* must give *metering data* and relevant *NT NMI data* to the persons mentioned in clause 7A.13.5(c)(1) to (6) and clause 9A.13.5(g)(1) as required by, and in accordance with, the *Rules*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.8.5 Use of check metering data

Check metering data, if available and if it has been appropriately adjusted for differences in *metering installation* accuracy, must be used by *Metering Data Providers* or *NTESMO*, as the case may be, for:

(a) validation;

(b) substitution; and

(c) estimation,

of *metering data* as required by clause 7A.8.1.

7A.8.6 Periodic energy metering

(a) Subject to paragraph (b), a *Metering Data Provider* must:

(1) for type 1, 2, 3, 4, 4A and 5 *metering installations*, collate *metering data* relating to:

(i) the amount of *active energy*; and

(ii) *reactive energy* (where relevant) passing through a connection point,

in *recording intervals* within a *metering data services database*; and

(2) for type 6 *metering installations*, collate *accumulated energy data* relating to an interval of up to 3 months.

(b) However:

(1) in relation to paragraph (a)(1):

(i) for local electricity systems with a *market* administered by *NTESMO* – it may be agreed between *NTESMO* and the financially responsible participant that *metering data* may be recorded in sub-multiples of a *recording interval* where a *metering installation* is used for the purposes of *settlements*; and

(ii) for local electricity systems without a *market* administered by *NTESMO* – it may be agreed between the *Metering Coordinator* and the financially responsible participant that *metering data* may be recorded in sub-multiples of a *recording interval* where a *metering installation* is used for the purposes of *billing transactions*; and

(2) in relation to paragraph (a)(2):

(i) for local electricity systems with a *market* administered by *NTESMO* – it may be agreed between *NTESMO* and the financially responsible participant that some other period will apply either on an ongoing basis or once-off basis; and

(ii) for local electricity systems without a *market* administered by *NTESMO* – it may be agreed between the *Metering Coordinator* and the financially responsible participant that some other period will apply either on an ongoing basis or once-off basis.

(c) A *Metering Data Provider* must, for type 7 *metering installations*, prepare *estimated metering data* relating to the amount of *active energy* passing through a *connection point* in accordance with clause 7A.8.1(a)(4) in 3 months or, where a greater frequency has been agreed with a financially responsible participant, at that greater frequency within a *metering data services database*.

7A.8.7 Verification of metering data

Metering installations other than type 7 metering installations

(a) A *Metering Data Provider* responsible for a *metering installation*, other than a type *7 metering installation*, must ensure that the *metering data* collected from the installation is validated in accordance with schedule 7A.7.

(b) If validation under paragraph (a) demonstrates that there has been a failure of the *metering installation* or that a measurement error exists:

(1) the *metering data* must be substituted in accordance with schedule 7A.7;

(2) the *Metering Data Provider* must provide the quality flag of the *substituted metering data* to the financially responsible participant for its record in accordance with clause S7A.7.8.4; and

(3) for *connection points* associated with a *retail customer* – the *Metering Data Provider* must provide the *substituted metering data* to the *retailer* so that the *retailer* can meet its billing obligations.

(c) The Metering Data Provider:

(1) must make a separate record of any substitution made under this clause, including:

(i) the reasons for the substitution;

(ii) the methodology used for the substitution; and

(iii) the *substituted metering data*; and

(2) must maintain the record for at least 7 years and provide access to the record at reasonable times to the relevant financially responsible participant or *retail customer* (as the case may be).

Type 7 metering installations

Note

Obligations relating to type 7 metering installations, including requirements for calculating metering data under this clause, will only apply in this jurisdiction in the event of a type 7 metering installation being available in this jurisdiction and after a 12 month transitional period allowing all participants to achieve compliance.

(d) A *Metering Data Provider* responsible for a type 7 *metering installation* must ensure that the *metering data* for that installation:

(1) is calculated in accordance with the *Network Service Provider's* applicable procedure, which must be based on a methodology in, or otherwise be consistent with, schedule 7A.7; and

(2) is validated in accordance with schedule 7A.7.

(e) If validation under paragraph (d)(2) demonstrates that there has been a failure of the *metering installation* or that a measurement error exists, the *Metering Data Provider* must ensure the *metering data* is substituted in accordance with schedule 7A.7.

7A.8.8 Time settings

(a) The *Metering Provider* must set the times of clocks of all *metering installations* with reference to *Australian Central Standard Time* to a standard of accuracy in accordance with schedule 7A.4 relevant to the *load* through the *connection point* when installing, testing and maintaining *metering installations*.

(b) *NTESMO* must ensure that the *metering database* clock is maintained within ±1 second of *Australian Central Standard Time*.

(c) The Metering Data Provider must ensure that the metering data services database clock is maintained within ±1 second of Australian Central Standard Time.

(d) The Metering Data Provider must:

(1) check the accuracy of the clock of the *metering installation* with reference to *Australian Central Standard Time* to a standard of accuracy in accordance with schedule 7A.4 relevant to the *load* through the *connection point* on each occasion that the *metering installation* is accessed;

(2) reset the clock of the *metering installation* so that it is maintained to the required standard of accuracy in accordance with schedule 7A.4 relevant to the *load* through the *connection point* if the clock error of a *metering installation* does not conform to the required standard of accuracy on any occasion that the *metering installation* is accessed; and

(3) notify the *Metering Provider* if the *Metering Data Provider* is unable to reset the clock of the *metering installation* in accordance with subparagraph (2).

7A.8.9 Metering data performance standards

(a) Where required for the purposes of *settlements*, the *Metering Coordinator* must ensure that *metering data* is provided to *NTESMO* for all *recording intervals* where the *metering installation* has the capability for *remote acquisition* of *metering data*, and that the data is:

(1) derived from a *metering installation* compliant with clause 7A.6.5(a);

(2) provided within the timeframe for *settlements* required in accordance with *jurisdictional electricity legislation*;

(3) actual or substituted in accordance with schedule 7A.7; and

(4) provided in accordance with the performance standards specified in schedule 7A.7.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) Where:

(1) the metering installation is a type 4A metering installation, or does not have the capability for remote acquisition of metering data; and

(2) *metering data* is required for the purposes of *settlements*,

the *Metering Coordinator* must ensure that *metering data* is provided to *NTESMO* and that the data is:

(3) derived from a *metering installation* compliant with clause 7A.6.5(a);

(4) provided within the timeframe required for *settlements* in accordance with *jurisdictional electricity legislation*;

(5) actual, substituted or estimated in accordance with schedule 7A.7; and

(6) provided in accordance with the performance standards specified in schedule 7A.7.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(c) The *Metering Coordinator* must ensure that, for all *metering installations* used for *billing transactions*, *metering data* is provided to the financially responsible participant for all *recording intervals* where the *metering installation* has the capability for *remote acquisition* of *metering data*, and that the data is:

(1) derived from a *metering installation* compliant with clause 7A.6.5(a);

(2) provided to the financially responsible participant every 35 days for *billing transactions* unless it has been agreed between the *Metering Coordinator* and the financially responsible participant that some other timeframe will apply;

(3) actual or substituted in accordance with schedule 7A.7; and

(4) provided in accordance with the performance standards specified in schedule 7A.7.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(d) For type 6 *metering installations*, *metering data* relating to the amount of *active energy* passing through a *connection point* must be provided to the financially responsible participant:

(1) every 3 months; or

(2) where a greater frequency has been agreed with the financially responsible participant – at that greater frequency.

7A.9 Metering data and data base

7A.9.1 Metering database

(a) *NTESMO* must create, maintain and administer a *metering database* (either directly or under a contract for provision of the database) containing information for each *metering installation* registered with *NTESMO*.

(b) The *metering database* must include *metering data*, *settlements ready data*, and information for each *metering installation* registered with *NTESMO* in accordance with this rule 7A.9.

(c) *NTESMO*:

(1) must enable the persons referred to in clause 7A.13.5(c)(1) to (4) and clause 7A.13.5(f)(1) to access or receive data in the *metering database*; and

(2) except as specified in subparagraph (1), must ensure that no other person has access to the *metering database*.

(d) For all types of *metering installations*, the *metering database* must contain *metering data* that is:

(1) retained in an electronic format for at least 13 months; and

(2) following the retention under subparagraph (1), archived in an accessible format for an overall period of not less than 7 years.

(e) The *settlements ready data* held in the *metering data base* must be used by *NTESMO* for *settlement purposes*.

(f) The s*ettlements ready data* held in the *metering database* may be used by *Distribution Network Service Providers* for the purpose of determining *distribution service charges* in accordance with clause 6.20.1.

(g) *NTESMO* must retain *settlements ready data* for all *metering installations* for at least 7 years.

(h) Despite anything to the contrary in this *Rule*, *NTESMO* may provide the *energy ombudsman* with *metering data* relating to a *Registered Participant* from a *metering installation*, the *metering database*, or the *metering register*, if the *energy ombudsman* has received a complaint to which the data is relevant from a *retail customer* of the *Registered Participant*.

(i) *NTESMO* must notify the relevant *Registered Participant* of any information requested by the *energy ombudsman* under paragraph (h) and, if it is requested by that *Registered Participant*, supply the *Registered Participant* with a copy of any information provided to the *energy ombudsman*.

7A.9.2 Data validation, substitution and estimation

(a) If *NTESMO* in the preparation of *settlements ready data* detects *metering data* that fails validation *NTESMO* must notify the *Metering Data Provider* within 1 *business day* of detection.

(b) Where a *Metering Data Provider* receives notification under paragraph (a), the *Metering Data Provider* must use its best endeavours to provide corrected *metering data* to *NTESMO* within 1 *business day* or advise *NTESMO* that this time limit cannot be achieved, and the reason for delay, in which case the parties must agree on a revised time limit by which the corrected *metering data* will be provided.

(c) Where *metering data* fails validation by *NTESMO* in the preparation of *settlements ready data* and replacement *metering data* is not available within the time required for *settlements* then *NTESMO* must prepare a substitute value in accordance with schedule S7A.7.

7A.9.3 Changes to energy data or to metering data

(a) The *Metering Coordinator* must ensure that *energy data* held in a *metering installation* is not altered except when the *meter* is reset to zero as part of a repair or reprogramming.

(b) If an on-site test of a *metering installation* requires the injection of current, the *Metering Coordinator* must ensure that:

(1) the *energy data* stored in the *metering installation* is inspected;

(2) if necessary following the inspection under subparagraph (1), alterations are made to the *metering data*, to ensure that the *metering data* in the *metering data services database* and the *metering database* is not materially different from the *energy* consumed at that *connection point* during the period of the test.

(c) If a *Metering Coordinator* considers alterations are necessary under paragraph (b)(2), the *Metering Coordinator* must:

(1) for local electricity systems with a *market* operated by *NTESMO*, notify *NTESMO* that alteration to the *metering data* is necessary; and

(2) advise the financially responsible participant of the need to change the *metering data*, and the *Metering Coordinator* must arrange for the *Metering Data Provider* to:

(i) alter the *metering data* for the *connection point* held in the *metering data services database* in accordance with the validation, substitution and estimation procedures in schedule 7A.7; and

(ii) provide the altered *metering data* to the persons who receive that *metering data* under clause 7.13.5(c).

(d) If a test referred to in paragraph (b) is based on actual *connection point loads*, no alteration is required.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.10 Register of metering information

7A.10.1 Metering register

(a) As part of the metering database, NTESMO must maintain a metering register of all metering installations and check metering installations which provide metering data for settlements.

(b) The *metering register* referred to in paragraph (a) must contain the information specified in Schedule 7A.1.

7A.10.2 Metering installation registration process

(a) For the purpose of maintaining the *metering register*, *NTESMO* must establish, maintain and publish a registration process in respect to the following (where *metering data* provided is used for *settlements*):

(1) new *metering installations*;

(2) modifications to existing *metering installations*; and

(3) decommissioning of *metering installations*.

7A.10.3 Metering register discrepancy

(a) If the information in the *metering register* indicates that the *metering installation* or the *check metering installation* does not comply with the requirements of the *Rules*, *NTESMO* must advise affected *Registered Participants* of the discrepancy.

(b) The *Metering Coordinator* must arrange for the discrepancy to be corrected within 2 *business days* of receipt of notification under paragraph (a) unless otherwise agreed by *NTESMO*.

Discrepancies between database and other data

(c) If there is a discrepancy between *energy data* held in a *metering installation* and *data* held in the *metering database*:

(1) the affected *Metering Coordinator* and *NTESMO* must liaise together to determine the most appropriate way to resolve the discrepancy; and

(2) for the purposes of this Chapter the *energy data* for the *metering point* in the *metering installation* is to be taken to be correct, unless it is proven to be incorrect.

(d) If there is a discrepancy between information held in a *metering register* and the same category of information in any other database, then for the purposes of this Chapter the information recorded in the *metering register* is to be taken to be correct, unless it is proven to be incorrect.

Metering Coordinators must keep the registry accurate

(e) If a *Metering Coordinator* becomes aware of a change to, or an inaccuracy in, information in the *metering register*, then it must as soon as practicable and no later than 2 *business days* after the *day* it becomes aware of the change or inaccuracy notify *NTESMO* and provide details of the change to, or inaccuracy in, the information.

NTESMO may amend metering register

(f) If *NTESMO* is notified of an inaccuracy in information by a *Metering Coordinator* or other *Registered Participant* in relation to the *connection point* it is financially responsible for, *NTESMO* must undertake investigations to the standard of good industry practice to determine whether the *metering register* should be updated.

(g) If *NTESMO* determines that the *metering register* should be updated as a result of an investigation conducted in accordance with paragraph (a), *NTESMO* must update the *registry* to reflect the change to, or correct the inaccuracy in, the information.

(h) If information for a *connection point* is updated in the *metering register*, *NTESMO* must, within 2 *business days* after the update, notify the update to:

(1) the financially responsible participant; and

(2) if the financially responsible participant is a *retailer* and there was a change in *retailer*, the previous *retailer* where that updated information relates to a period or periods when the previous *retailer* was the *retailer* for that *connection point*.

Note

In paragraph (h)(2), references to "previous retailer" means a retailer who was previously recorded in the metering register as the financially responsible participant for the connection point referred to in paragraph (h).

7A.11 Disclosure of information

7A.11.1 Provision of data to retailers

NMI and NMI checksum

(a) A *Distribution Network Service Provider* must, at the request of a *retailer*, and within 1 *business day* of the date of the request, provide the *retailer* with the *NMI* and *NMI* checksum for premises identified in the request by reference to:

(1) a unique meter identifier held by the *Distribution Network Service Provider*;

(2) a street address; or

(3) the code used by Australia Post to provide a unique identifier for postal addresses.

(b) If a computer search by the *Distribution Network Service Provider* does not produce a unique match for the information provided by the *retailer*, the *Distribution Network Service Provider* must provide the *retailer* with any computer matches achieved up to a maximum of 99.

NT NMI Data

(c) A *Distribution Network Service Provider* must, at the request of a *retailer*, and within 2 *business days* of the date of the request, provide the *retailer* with the *NT NMI Data* for premises identified in the request by reference to the *NMI* for the premises.

7A.12 Metering data provision to retail customers

Note

The application of this rule will be revisited as part of the phased implementation of the Rules in this jurisdiction.

Part F Security of metering installations and energy data

7A.13 Security of metering installations, energy data and metering data

7A.13.1 Confidentiality of data

(a) *Energy data*, *metering data*, *NT NMI data*, information in the *metering register* and passwords are confidential and must be treated as *confidential information* in accordance with the *Rules*.

(b) For the purposes of clause 8.6.2(c), *metering data* from a *metering installation* at a *retail customer's connection point* is deemed to have been provided by the *retail customer*.

7A.13.2 Security of metering installations

General security

(a) The *Metering Coordinator* at a *connection point* must ensure that the *metering installation* is secure and that associated links, circuits and information storage and processing systems are protected by appropriate security mechanisms.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) In respect of a *connection point* used for *settlements*, *NTESMO* may override any of the security mechanisms fitted to a *metering installation* with prior notice to the *Metering Coordinator*.

Broken seals

(c) If a *Network Service Provider*, financially responsible participant, *Metering Provider* or *Metering Data Provider* becomes aware that a seal protecting *metering* equipment has been broken, it must notify the *Metering Coordinator* within 5 *business days*.

(d) If a broken seal has not been replaced by the person who notified the *Metering Coordinator* under paragraph (c), the *Metering Coordinator* must ensure that the broken seal is replaced no later than:

(1) the first occasion on which the metering equipment is visited to take a reading; or

(2) 100 days,

after receipt of notification that the seal has been broken.

(e) The costs of replacing broken seals as required by paragraph (d) are to be borne by:

(1) the financially responsible participant if the seal was broken by a *retail customer* of the financially responsible participant;

(2) a *Registered Participant* if the seal was broken by the *Registered Participant*;

(3) the *Metering Provider* if the seal was broken by the *Metering Provider*;

(4) the *Metering Data Provider* if the seal was broken by the *Metering Data Provider*; or

(5) otherwise by the *Metering Coordinator*.

(f) If it appears that, as a result of, or in connection with, the breaking of a seal mentioned in paragraph (c) the relevant *metering* equipment may no longer meet the relevant minimum standard, the *Metering Coordinator* must ensure that the *metering* equipment is tested in accordance with clause 7A.7.2.

7A.13.3 Security controls for energy data

(a) The *Metering Coordinator* at a *connection point* must ensure that *energy data* held in the *metering installation* is protected from local access and remote access by suitable password and security controls.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(b) The *Metering Provider* must keep records of passwords secure.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

(c) The *Metering Provider* must allocate suitable passwords to the *Metering Data Provider* to enable the *Metering Data Provider* to collect the *energy data* and maintain the clock of the *metering installation* in accordance with clause 7A.8.7.

(d) The *Metering Data Provider* must keep all *metering installation* passwords secure and not make the passwords available to any other person.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.13.4 Additional security controls for type 4 metering installations

In respect of a type 4 *metering installation*:

(a) the *Metering Coordinator* must ensure that access to *energy data* held in the *metering installation* is given only:

(1) to a person who is permitted to have access to it under the *Rules*; and

(2) for a purpose that is permitted under the *Rules*;

(b) the *Metering Coordinator* must ensure that access to services provided by the *metering installation* and *metering data* from the *metering installation* is given only:

(1) in respect of:

(i) a remote *disconnection* service and the *metering data* in connection with that service – to the *Local Network Service Provider* and the financially responsible participant;

(ii) a remote *reconnection* service and the *metering data* in connection with that service – to the *Local Network Service Provider*, the financially responsible participant and the incoming *retailer*;

(iii) a remote on-demand *meter* reading service and the *metering data* in connection with that service – to *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation* and a person to whom a *retail customer* has given its consent under subparagraph (3)(ii);

(iv) a remote scheduled *meter* reading service and the *metering data* in connection with that service – to *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation* and a person to whom a *retail customer* has given its consent under subparagraph (3)(ii);

(v) a *metering installation* inquiry service and the *metering data* in connection with that service – to the *Local Network Service Provider*, the financially responsible participant and a person to whom a *retail customer* has given its consent under subparagraph (3)(ii); and

(vi) an advanced *meter* reconfiguration service and the *metering data* in connection with that service – to the *Local Network Service Provider* and the financially responsible participant;

(2) to a person who is permitted to have access to it under the *Rules* and for a purpose that is permitted under the *Rules*; or

(3) except as otherwise specified in subparagraph (1) or (2):

(i) to the *Local Network Service Provider*, but only to the extent that, in the *Metering Coordinator's* reasonable opinion, the access is reasonably required by the *Local Network Service Provider* to enable it to meet its obligations to provide a safe, reliable and secure *network*; or

(ii) to a person and for a purpose to which the *retail customer* has given prior consent;

(c) the *Metering Coordinator* must ensure that the services provided by the *metering installation* are protected from local access and remote access by suitable password and security controls in accordance with paragraph (e);

(d) the *Metering Provider* must keep records of passwords secure; and

(e) the Metering Provider must:

(1) forward a copy of a password allowing local access and a copy of a password allowing remote access to the *metering installation*, services provided by the *metering installation* and *energy data* held in the *metering installation*, to the *Metering Coordinator*, *Metering Data Provider* and *NTESMO*; and

(2) ensure that no other person receives or has access to a copy of a password allowing local access or remote access to the *metering installation*, services provided by the *metering installation* or *energy data* held in the *metering installation*.

Note

This provision is classified as a civil penalty provision under the National Electricity (NT) Regulations. (See regulation 6(1) and Schedule 1 of the National Electricity (NT) Regulations.)

7A.13.5 Access to data

(a) Access to *energy data* recorded by a *metering installation* must only be given if passwords are allocated in accordance with clause 7A.13.3.

(b) The *Metering Coordinator* must ensure that access to *energy data* from the *metering installation* is scheduled appropriately to ensure that congestion does not occur.

(c) Subject to this clause, the only persons entitled to access or receive *metering data*, *settlements ready data*, *NT NMI data* or data from the *metering register* for a *metering installation* are:

(1) the financially responsible participant in respect of the *connection point* for the *metering installation* and any other *Registered Participant* with a financial interest in the *metering installation* or the *energy* measured by the *metering installation*;

(2) the Metering Coordinator appointed in respect of the connection point for the metering installation;

(3) the *Metering Provider* appointed with respect to the *metering installation*;

(4) the *Metering Data Provider* appointed with respect to the *metering installation*;

(5) *NTESMO* and its authorised agents;

(6) the *Local Network Service Provider* associated with the *connection point*; and

(7) the *AER* and the *Utilities Commission*.

(d) In addition to the persons mentioned in paragraph (c), the following persons may access or receive *metering data* in accordance with the *Rules*:

(1) a *retail customer* or *customer authorised representative*, upon request by that *retail customer* or its *customer authorised representative* to the *retailer* or *Distribution Network Service Provider* in relation to that *retail customer's metering installation*;

(2) the *energy ombudsman*.

(e) A *retailer* or *Distribution Network Service Provider* must, upon request by a *retail customer* or its *customer authorised representative* under paragraph (d)(1), provide information about the *retail customer's energy* consumption for the previous 2 years.

(f) Without limiting this clause:

(1) a *retailer* is entitled to access or receive *NT NMI data*;

(2) a *customer authorised representative* may receive *metering data*; and

(3) a *retailer* or a *Distribution Network Service Provide*r may access or receive *metering data* or provide *metering data* to a *customer authorised representative*,

after having first done whatever may be required, if relevant, under any applicable privacy legislation and clause 7A.9.5 including, if appropriate, making relevant disclosures or obtaining relevant consents from *retail customers*.

(g) For the avoidance of doubt and without limiting this clause:

(1) a *Metering Data Provider* must provide relevant *NT NMI data* to a *Distribution Network Service Provider* to the extent that *NT NMI data* is required for the *Distribution Network Service Provider* to fulfil its obligations under this Chapter 7A of the *Rules*; and

(2) a *Distribution Network Service Provider* is authorised to, and must provide, relevant *NT NMI data* to a *Metering Data Provider* to the extent that *NT NMI data* is required for the *Metering Data Provider* to fulfil its obligations under this Chapter 7A of the *Rules.*

Schedule 7A.1 Metering register

S7A.1.1 General

The *metering register* forms part of the *metering database* and holds static *metering* information associated with *metering installations* defined by the *Rules* that determine the validity and accuracy of *metering data*.

S7A.1.2 Metering register information

Metering information to be contained in the *metering register* must include, but is not limited to, the following:

(a) serial numbers;

(b) the *metering installation* identification name; and

(c) the information required to assign loss factors.

S7A.1.3 Communication guideline

(a) *NTESMO* must develop, maintain and *publish* a communication guideline in accordance with the *Rules consultation procedures*.

(b) A communication guideline must be in place at all times.

(c) The communication guideline is intended to set out specific details as to how *metering* and *energy data* and other information exchange processes will be implemented.

(d) The communication guideline must:

(1) specify, or incorporate by reference, detailed technical specifications (including file formats, protocols and timeframes) as to how data and information communication is to be processed, and how the necessary information systems are to be designed and developed; and

(2) be sufficient to enable a *Registered Participant* to design and commission the information systems necessary for it to engage in communications with *NTESMO* for the purposes of the *Rules*.

(e) The communication guideline may include types of *metering* information that must be included in the *metering register*.

Schedule 7A.2 Metering provider

Note

The detail of this schedule will be considered as part of the phased implementation of the Rules in this jurisdiction.

Schedule 7A.3 Metering data provider

Note

The detail of this schedule will be considered as part of the phased implementation of the Rules in this jurisdiction.

Schedule 7A.4 Types and accuracy of metering installations

S7A.4.1 General requirements

This schedule sets out the minimum requirements for *metering installations*.

S7A.4.2 Accuracy requirements for metering installations

Table S7A.4.2.1 Overall accuracy requirements of metering installation components

Type	Volume limit per annum per connection point	Maximum allowable overall error (±%) at full load (Item 6)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to ACST
		active	reactive		
1	greater than 1 000GWh	0.5	1.0	0.2CT/VT/*meter* Wh 0.5 *meter* varh	±5
2	100 to 1 000GWh	1.0	2.0	0.5CT/VT/*meter* Wh 1.0 *meter* varh	±7
3	0.75 to less than 100 GWh	1.5	3.0	0.5CT/VT 1.0 *meter* Wh 2.0 *meter* varh (Item 1)	±10
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 *meter* Wh; or whole current general purpose *meter* Wh meets requirements of clause 7A.6.2(a)(9) and 7A.8.9(a) (Item 1)	±20
4A	less than x MWh (Item 3)	1.5	3.0	Either 0.5 CT and 1.0 *meter* Wh; or whole current general purpose *meter* Wh meets requirements of clause 7A.6.2(a)(10) and 7A.8.9(b)	±20

Type	Volume limit per annum per connection point	Maximum allowable overall error (±%) at full load (Item 6)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to ACST
		active	reactive		
5	less than x MWh (Item 3)	1.5	n/a	Either 0.5 CT and 1.0 *meter* Wh; or whole current connected general purpose *meter* Wh meets requirements of clause 7A.6.2(a)(10) and 7A.8.9(b). (Item 1)	'±/-20'
6	less than y MWh (Item 4)	2.0	n/a	CT or whole current general purpose *meter* Wh recording *accumulated energy data* only. Processes used to convert the *accumulated metering data* into *recording interval metering data* and *estimated metering data* where necessary are included in schedule 7A.7. (Item 1)	
7	volume limit not specified (Item 5)	(Item 6)	n/a	No *meter*. The *metering data* is *calculated metering data* determined in accordance with schedule 7A.7.	n/a

Item 1: (a) For a type 3, 4, 4A, 5 and 6 *metering installation*, whole current *meters* may be used if the *meters* meet the requirements of the relevant *Australian Standards* and International Standards identified in schedule 7A.7.

(b) The *metering installation* types referred to in paragraph (a) must comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

Item 2: *High voltage* customers that require a *voltage transformer* and whose annual consumption is below 750 MWh, must meet the relevant accuracy requirements of Type 3 *metering* for *active energy* only.

Item 3: In relation to a type 4A and type 5 *metering installation*, the value of ‘x' in this jurisdiction is 0 MWh per annum.

Item 4: The following requirements apply in relation to a type 6 *metering installation*:

(1) the value of ‘y' in this jurisdiction is 750 MWh per annum;

(2) devices within the *metering installation* may record *accumulated energy data* in predetermined daily time periods where such time periods are specified in schedule 7A.7.

Item 5: (a) A type 7 *metering installation* classification applies where a *metering installation* does not require a *meter* to measure the flow of electricity in a power conductor and accordingly there is a requirement to determine by other means the *metering data* that is deemed to correspond to the flow of electricity in the power conductor.

(b) The condition referred to in paragraph (a) will only be allowed for a *connection point* if:

(1) the operation of an unmetered device at the *connection point* results in a type of unmetered *load* that is authorised under the terms of a *local instrument*; and

(2) *NTESMO* in consultation with *Metering Coordinator* determines:

(i) that the *load* pattern is predictable;

(ii) that, for the purposes of *settlements*, the *load* pattern can be reasonably calculated by a relevant method set out in schedule S7A.7; and

(iii) that it would not be cost effective to meter the *connection point* taking into account:

(A) the small magnitude of the *load*;

(B) the *connection* arrangements; and

(C) the geographical and physical location.

Note

The effect of paragraph (b) is that if a type of unmetered load is authorised under a local instrument, a connection point with that type of unmetered load may be used for the purposes of settlements, and be eligible for a type 7 metering installation, if NTESMO makes a determination under (b)(2) in relation to that connection point.

The *National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016* are an example of a local instrument.

(c) A *connection point* that meets the condition for classification as a type 7 *metering installation* does not prevent that *connection point* from being subject to *metering* in the future.

Item 6: The maximum allowable overall error (±%) at different *loads* and *power factors* is set out in Tables S7A.4.2.2 to S7A.4.2.6.

Table S7A.4.2.2 Type 1 installation – Annual energy throughput greater than 1 000GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	Active	Active	Reactive	Active	Reactive	Reactive
10	1.0%	1.0%	2.0%	n/a	n/a	1.4%
50	0.5%	0.5%	1.0%	0.7%	1.4%	1.0%
100	0.5%	0.5%	1.0%	n/a	n/a	1.0%

Table S7A.4.2.3 Type 2 installation – Annual energy throughput between 100 and 1 000GWh

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	Active	Active	Reactive	Active	Reactive	Reactive
10	2.0%	2.0%	4.0%	n/a	n/a	2.8%
50	1.0%	1.0%	2.0%	1.5%	3.0%	2.0%
100	1.0%	1.0%	2.0%	n/a	n/a	2.0%

Table S7A.4.2.4 Type 3 installation – Annual energy throughput from 0.75 GWh to less than 100 GWh **and Type 4A installation – annual energy throughput less than 0.75 GWh**

% Rated Load	Power Factor					
	Unity	0.866 lagging		0.5 lagging		Zero
	Active	Active	Reactive	Active	Reactive	Reactive
10	2.5%	2.5%	5.0%	n/a	n/a	4.0%
50	1.5%	1.5%	3.0%	2.5%	5.0%	3.0%
100	1.5%	1.5%	3.0%	n/a	n/a	3.0%

Table S7A.4.2.5 Type 4 or 5 installation – annual energy throughput **less than 0.75GWh**

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	Active	Active	Active
10	2.5%	2.5%	n/a
50	1.5%	1.5%	2.5%
100	1.5%	1.5%	n/a

Table S7A.4.2.6 Type 6 installation – annual energy throughput less than 0.75 GWh

% Rated Load	Power Factor		
	Unity	0.866 lagging	0.5 lagging
	Active	Active	Active
10	3.0%	n/a	n/a
50	2.0%	n/a	3.0%
100	2.0%	n/a	n/a

Notes to Tables S7A4.2.2 to S7A4.2.6

All measurements in Tables S7A4.2.2 to S7A4.2.6 are to be referred to 24 degrees Celsius.

(a) The method for calculating the overall error is the vector sum of the errors of each component part (that is, a + b + c) where:

a = the error of the voltage transformer and wiring;

b = the error of the current transformer and wiring; and

c = the error of the meter.

(b) If compensation is carried out then the resultant metering data error must be as close as practicable to zero.

S7A.4.3 Check metering

(a) Where a *check metering installation* is in place, it is to be applied in accordance with the following Table:

Metering Installation Type in accordance with Table S7A.4.2.1	Check Metering Requirements
1	*Check metering installation*
2	Partial check *metering*
3	No requirement
4, 4A, 5 and 6	No requirement

(b) Where a *check metering installation* is not in place, and a financially responsible participant requests the installation of a *check metering installation* at a *connection point*, the *Metering Coordinator* at the *connection point* must arrange for the installation of a *check metering installation* that complies with the requirements of this schedule.

(c) A *check metering installation* involves either:

(1) the provision of a separate *metering installation* using separate *current transformer* cores and separately fused *voltage transformer* secondary circuits, preferably from separate secondary windings; or

(2) if *NTESMO*, in its absolute discretion, considers it appropriate, in the case of a metering installation located at the *facility* at one end of the *two-terminal link*, a *metering installation* located at the *facility* at the other end of a *two-terminal link*.

(d) Where the *check metering installation* duplicates the *metering installation* and accuracy level, the average of the 2 validated data sets will be used to determine the *energy* measurement.

(e) Partial *check metering* involves the use of other *metering data* or operational data available in 30 min electronic format as part of a validation process in accordance with Schedule 7A.7.

(f) *Check metering installations* may be supplied from secondary circuits used for other purposes and may have a lower level of accuracy than the *metering installation*, but must not exceed twice the level prescribed for the *metering installation*.

(g) The physical arrangement of partial check metering will be determined by the *Metering Coordinator*.

S7A.4.4 Resolution and accuracy of displayed or captured data

Programmable settings available within a *metering installation* of any peripheral device, which may affect the resolution of displayed or stored data, must:

(a) meet the requirements of the relevant *Australian Standards* and International Standards specified in schedule 7A.7; and

(b) comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

S7A.4.5 General design standards

S7A.4.5.1 Design requirements

Without limiting the scope of detailed design, the following requirements must be incorporated in the design of each *metering installation*:

(a) for *metering installations* greater than 1 000 GWh pa per *connection point*, the *current transformer* core and secondary wiring associated with the *meter(s)* must not be used for any other purpose;

(b) for *metering installations* less than 1 000 GWh pa per *connection point*, the *current transformer* core and secondary wiring associated with the *meter(s)* may be used for other purposes (for example, local *metering* or protection) provided the *Metering Coordinator* is able to demonstrate that the accuracy of the *metering installation* is not compromised and suitable procedures/measures are in place to protect the security of the *metering installation*;

(c) where a *voltage transformer* is required, if separate secondary windings are not provided, then the *voltage* supply to each *metering installation* must be separately fused and located in an accessible position as near as practical to the *voltage transformer* secondary winding;

(d) secondary wiring must be by the most direct route and the number of terminations and links must be kept to a minimum;

(e) the incidence and magnitude of burden changes on any secondary winding supplying the *metering installation* must be kept to a minimum;

(f) *meters* must:

(1) meet the requirements of relevant *Australian Standards* and International Standards (if any) specified in schedule 7A.7; and

(2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate;

(g) new *instrument transformers* must:

(1) meet the requirements of relevant *Australian Standards* and International Standards (if any) specified in schedule 7A.7; and

(2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate;

(h) suitable *isolation* facilities are to be provided to facilitate testing and calibration of the *metering installation*;

(i) suitable drawings and supporting information, detailing the *metering installation*, must be available for maintenance purposes.

S7A.4.5.2 Design guidelines

In addition to the design requirements specified in clause S7A.5.1, the following guidelines should be considered for each *metering installation*:

(a) the provision of separate secondary windings for each *metering installation* where a *voltage transformer* is required;

(b) a voltage changeover where more than one *voltage transformer* is available.

Schedule 7A.5 Metering functionality requirements for type 1, 2, 3 and 4 metering requirements

S7A.5.1 Introduction

S7A.5.1.1 Purpose

This schedule specifies the *meter* functionality requirements for type 1, 2, 3 and 4 *metering installations* in this jurisdiction.

S7A.5.1.2 Definitions

In this schedule:

communications network means all communications equipment, processes and arrangements that lie between the *meter* and the NMS.

end user customer means the customer or retail customer who consumes electricity at the point of use.

export means the delivery of *energy* from the *network* to an end-use customer.

import means the delivery of *energy* from an end-use customer into a *distribution network*.

local disconnection means the operation of the supply contactor to effect a *disconnection* of *supply* performed locally at the *meter* by alternative electronic means.

metering system means the installed *metering installation*, communications network or infrastructure, and any other systems required under this schedule.

NMS (Network Management System) means the component of a metering system that manages the communications network.

remote disconnection means the utilisation of the communication system to *disconnect* the end-use customer's *supply* at the *meter* by the operation of a contactor.

supply contactor means the contactor in the *meter* that, when opened, causes the *supply* to be *disconnected* and, when closed, allows the *supply* to become *connected*.

total accumulated energy means the total or accumulated amount of *energy* measured and recorded per channel of a *meter* since the installation of the *meter* or the resetting of the value.

S7A.5.2 Functionality Requirements for Meters in Type 1, 2, and 3 metering installations

S7A.5.2.1 Application

Clause S7A.5.2 applies to *meters* in type 1, 2 and 3 *metering installations*.

S7A.5.2.2 Applicable meter configurations

(a) The configuration for a *meter* must be:

(1) three phase Low Voltage *CT* connect (excluding supply contactor); or

(2) three phase *CT*/*VT*.

(b) *Meters* must meet the relevant requirements of *AS* 62052.11, *AS* 62053.22 and *AS* 62053.21, and any pattern approval requirements of the National Measurement Institute.

S7A.5.2.3 Metrology

Meters must comply with the following requirements:

(a) three phase *meters* must be four quadrant *meters* and must be able to separately record *active energy* and *reactive energy*, import and export in *recording intervals*;

(b) *meters* must record total accumulated energy for each recorded channel of interval data;

(c) the resolution for collection of *interval energy data* must be at least 0.1 kWh for *active energy* and 0.1 kVArh for *reactive energy*;

(d) *meters* must have a minimum storage of 35 *days* per channel of *interval energy data*;

(e) all channels of *interval energy data* must be able to be read locally as well as remotely read;

(f) it must be possible to remotely and locally select or configure whether import *interval energy data* is recorded or not;

(g) it must be possible to remotely and locally select or configure whether *reactive energy interval energy data* is recorded from three phase *meters* or not.

S7A.5.3 Functionality Requirements for Meters in Type 4 metering installations

S7A.5.3.1 Application

Clause S7A.5.3 applies to *meters* in type 4 *metering installations*.

S7A.5.3.2 Applicable meter configurations

(a) The configuration for a *meter* must be:

(1) single phase, single element;

(2) single phase, two element;

(3) three phase direct connect; or

(4) three phase *CT* connect (excluding supply contactor).

(b) *Meters* must meet the relevant requirements of *AS* 62052.11, *AS* 62053.22 and *AS* 62053.21, and any pattern approval requirements of the National Measurement Institute.

S7A.5.3.3 Metrology

Meters must comply with the following requirements:

(a) single phase *meters* must be two quadrant *meters* and must be able to separately record *active energy* for import and export in *recording intervals*;

(b) three phase *meters* must be four quadrant *meters* and must be able to separately record *active energy* and *reactive energy*, import and *export* in *recording intervals*;

(c) *meters* must record total *accumulated energy data* for each recorded channel of *interval energy data*;

(d) the resolution for collection of *interval energy data* must be at least 0.1 kWh for *active energy* and 0.1 kVArh for *reactive energy*;

(e) the resolution of *energy* consumption displayed on a *meter's* display must be at least 0.1 kWh and 0.1 kVArh for direct connected *meters*;

(f) *meters* must have a minimum storage of 200 *days* per channel of *interval energy data*;

(g) all channels of *interval energy data* must be able to be read locally as well as by *remote acquisition*;

(h) the values that must be recorded for *import* and *export* are the actual values at the *connection point* for direct connect *meters*;

(i) it must be possible to remotely and locally select or configure whether *import interval energy data* is recorded or not;

(j) it must be possible to remotely and locally select or configure whether *reactive energy interval energy data* is recorded from three phase *meters* or not.

Note:

Export is when energy is exported from the network to a customer and import is when the customer delivers energy into the network. See clause S7A5.1.2.

S7A.5.3.4 Remote and local reading of meters

(a) If a *meter* is remotely read:

(1) the *meter's* total *accumulated energy data* per collected channel must be able to be collected once every 24 hours; and

(2) the *interval energy data* per collected channel must be able to be collected once every 24 hours.

(b) If a *meter* is locally read, the *meter's* total accumulated energy per collected channel and the *interval energy data* per collected channel must be able to be collected.

(c) For individual reads of *meters*, it must be possible to select up to 35 *days* of *interval energy data* to be collected per channel.

S7A.5.3.5 Supply disconnection and reconnection

S7A.5.3.5.1 General requirements

(a) *Meters* excluding *CT* connected *meters* must have a supply contactor.

(b) *Meters* must support both local and remote disconnect, and local and remote *reconnection* of end-use customer *supply* via the supply contactor. When a *meter* performs a *disconnection* operation, all outgoing circuits from the *meter* must be *disconnected*.

(c) To confirm the current state of a *meter*, the *meter* must support "on-demand" remote polling of the *meter* to determine whether the supply contactor is open or closed.

(d) A *meter* must provide clear local visual indication of the status (open/closed) of the supply contactor.

S7A.5.3.5.2 Disconnection

(a) A *meter* must support both local and remote end-use customer supply disconnection functionality.

Local disconnection

Note:

The circumstances in which local disconnection may occur include where:

(a) a technician is already on-site performing works and it is most efficient for the technician to perform the disconnection; or

(b) a meter that is capable of remote reading is installed; however the communications infrastructure has not been rolled out or has failed.

(b) Local disconnection via the *meter* must only be able to be performed by an authorised technician. Unauthorised persons must be physically prevented from operating the supply contactor to *disconnect supply*.

(c) A *meter* must support the following:

(1) opening of the supply contactor performed locally;

(2) remote communication of the status (open/closed) of the supply contactor (if communications are active) from the *meter* to the NMS;

(3) event logging of the local disconnection at that *meter*.

Remote disconnection

(d) A *meter* must support the following:

(1) opening of the *supply contactor* performed remotely;

(2) remote communication of the status (open/closed) of the *supply contactor* (if communications are active) from the *meter* to the NMS;

(3) event logging of the *remote disconnection* at that meter.

S7A.5.3.5.3 Reconnection

(a) A *meter* must support both local and remote end-use customer *supply reconnection* functionality.

Local reconnection

(b) *Reconnection* via the *meter* must only be able to be performed locally by an authorised technician. Unauthorised persons must be physically prevented from operating the supply contactor to *reconnect supply*.

(c) A *meter* must support the following:

(1) closing of the supply contactor performed locally;

(2) remote communication of the status (open/closed) of the supply contactor (if communications are active) from the *meter* to the NMS;

(3) event logging of local *reconnection* at that *meter*.

Remote reconnection

(d) A *meter* must support the following:

(1) closing of the supply contactor performed remotely;

(2) remote communication of the status (open/closed) of the supply contactor from the *meter* to the NMS; and

(3) event logging of remote *reconnection*.

S7A.5.3.6 Time clock synchronisation

Date and time within *meters* must be maintained within 20 seconds of *Australian Central Standard Time*.

S7A.5.3.7 Quality of Supply and other event recording

(a) A *meter* must support the recording of Quality of Supply (QoS) events and other events that occur at each *meter* as detailed as follows:

ID	Events
1	Import energy detected
2	Supply contactor opened – local
3	Supply contactor opened – remote
4	Supply contactor closed – local
5	Supply contactor closed – remote
6	Undervoltage event
7	Overvoltage event
8	Tamper detected
9	Whenever there is a change of meter settings locally

Undervoltage and overvoltage recording

(b) A *meter* must support the recording of undervoltage and overvoltage events. The thresholds shall be remotely and locally settable for undervoltage in the range of at least -5% to -20% in 1% steps and for overvoltage in the range of at least +5% to +20% in 1% steps.

Tamper detection

(c) A *meter* must support the detection and recording of an attempt to tamper with the *meter* as an event.

S7A.5.3.8 Tamper detection

A *meter* must support the detection and *recording* as an event attempts to tamper with the *meter*.

S7A.5.3.9 Communications and data security

All device elements must contain the necessary security to prevent unauthorised access or modification of data.

S7A.5.3.10 Remote firmware upgrades

Meters must have the capability for their firmware to be remotely upgraded. It must be possible to remotely change firmware without impacting the metrology functions of the *meter*.

S7A.5.3.11 Remote arming

Meters must have the capability to be remotely armed.

Schedule 7A.6 Inspection and testing requirements

S7A.6.1 General

(a) The *Metering Coordinator* must ensure that equipment comprised in a purchased *metering installation* has been tested to the required class accuracy with less than the uncertainties set out in Table S7A.6.1.1.

(b) The *Metering Coordinator* must ensure appropriate test certificates of the tests referred to in paragraph (a) are retained.

(c) The *Metering Coordinator* (or any other person arranging for testing) must ensure that testing of the *metering installation* is carried out:

(1) in accordance with:

(i) clause 7A.7.2 and this schedule; or

(ii) an asset management strategy that defines an alternative testing practice (other than time based) determined by the *Metering Coordinator* and approved by *NTESMO*;

(2) in accordance with a test plan that has been registered with *NTESMO*;

(3) to the same requirements as for new equipment where equipment is to be recycled for use in another site; and

(4) so as to include all data storage and processing components specified in schedule 7A.7.

(d) The testing intervals may be increased if the equipment type/experience proves favourable.

(e) The maximum allowable level of testing uncertainty (±) for all *metering* equipment must be in accordance with Table S7A.6.1.1.

Table S7A.6.1.1 Maximum allowable level of testing uncertainty (±)

Description		**Metering Equipment Class**				
		Class 0.2	**Class 0.5**	**Class 1.0**	**General Purpose**	**Class 2.0**
In Laboratory	CTs ratio phase	0.05% 0.07 crad	0.1% 0.15 crad	n/a	n/a	n/a
	VTs ratio Phase	0.05% 0.05 crad	0.1% 0.1 crad	n/a	n/a	n/a
	Meters Wh	0.05/cosφ%	0.1/cosφ%	0.2/cosφ%	0.2/cosφ%	n/a
	Meters varh	n/a	0.2/sinφ%	0.3/sinφ%	n/a	0.4/sinφ %
In Field	CTs ratio Phase	0.1% 0.15 crad	0.2% 0.3 crad	n/a	n/a	n/a
In Field	CTs ratio Phase	0.1% 0.15 crad	0.2% 0.3 crad	n/a	n/a	n/a
	VTs ratio	0.1%	0.2%	n/a	n/a	n/a

Description		Metering Equipment Class				
		Class 0.2	Class 0.5	Class 1.0	General Purpose	Class 2.0
	Phase	0.1 crad	0.2 crad			
	Meters Wh	0.1/cosφ%	0.2/cosφ%	0.3/cosφ%	0.3/cosφ%	n/a
	Meters varh	n/a	0.3/sinφ%	0.4/sinφ%	n/a	0.5/sinφ %

Where cosφ is the *power factor* at the test point under evaluation.

Table S7A.6.1.2 Maximum Period Between Tests

Unless the *Metering Coordinator* has developed an approved asset management strategy that defines practices that meet the intent of this schedule, the maximum period between tests must be in accordance with Table S7A.6.1.2.

Description	Metering Installation Type				
	Type 1	Type 2	Type 3	Type 4 & 4A	Types 5 & 6
CT	10 years	10 years	10 years	10 years	10 years
VT	10 years	10 years	10 years		n/a
Burden tests	When *meters* are tested or when changes are made				
CT connected meter (electronic)	5 years	5 years	5 years	5 years	5 years
CT connected meter (induction)	2.5 years	2.5 years	5 years	5 years	5 years
Whole current meter	The testing and inspection requirements must be in accordance with an approved asset management strategy. Guidelines for the development of an asset management strategy are set out in Schedule 7A.7				

Table S7A.6.1.3 Period between inspections

Unless the *Metering Coordinator* has developed an approved asset management strategy that meets the intent of this schedule and is approved by *NTESMO*, the maximum period between inspections must be in accordance with Table S7A.6.1.3.

Description	**Metering Installation Type**			
	Type 1	**Type 2**	**Type 3**	**Type 4, 4A, 5 & 6**
Metering installation equipment inspection	2.5 years	12 months (2.5 years if check metering installed)	> 10 GWh: 2 years 2≤ GWh ≤ 10: 3 years <2 GWh: when *meter* is tested.	When *meter* is tested.

S7A.6.2 Technical guidelines

(a) *Current transformer* and *voltage transformer* tests are primary injection tests, or other approved testing procedures as approved by *NTESMO*.

(b) The calculations of accuracy based on test results are to include all reference standard errors.

(c) An "estimate of testing uncertainties" must be calculated in accordance with the ISO "Guide to the Expression of Uncertainty for Measurement".

(d) Where operational *metering* is associated with *settlements metering* then a shorter period between inspections is recommended (but is not mandatory).

(e) For sinφ and cosφ, refer to the ISO "Guide to the Expression of Uncertainty in Measurement", where cosφ is the *power factor*.

(f) A typical inspection may include:

(1) check the seals;

(2) compare the pulse counts;

(3) compare the direct readings of *meters*;

(4) verify *meter* parameters and physical connections; and

(5) *current transformer* ratios by comparison.

Schedule 7A.7 Metrology procedure

Part A

S7A.7.1 Introduction

S7A.7.1.1 General

(a) This schedule applies to *NTESMO*, *Registered Participants*, *Metering Coordinators*, *Metering Providers*, *Metering Data Providers* and the *Utilities Commission* in relation to *connection points* in this jurisdiction.

(b) This schedule provides information on the application of *metering installations* to *connection points* and sets out provisions for *metering installations* and *metering data services*.

(c) For service provision at *connection points* where:

(1) the *Metering Provider* and the *Metering Data Provider* are part of the same company; and

(2) *metering installation*, provision or maintenance work is performed using internal processes and procedures,

those internal processes and procedures will be taken to be compliant with this schedule if the *metering* work satisfies the performance and quality outcomes of this schedule.

S7A.7.1.2 Definitions

In this schedule:

accumulation meter means a *meter* where the *energy data* recorded in the *meter* represents a period in excess of a *recording interval*.

estimated reading means:

(a) an estimate of a *meter* reading where an *actual meter reading* has not occurred; or

(b) a *substitute* of a *meter* reading used for the purposes of transferring a *retail customer* to a new *Retailer* where an *actual meter reading* has not occurred.

final reading means the last *actual meter* reading for a *retail customer* when they vacate an address or change *retailer* or the

last *actual meter* reading taken before all or any part of a metering *installation* is removed or modified and where the modification affects the *energy data* in the *metering installation*.

ILAC means International Laboratory Accreditation Cooperation.

inventory table means a table of devices for unmetered *loads* associated with each *NMI* as described in clauses S7A.7.14.2(c) and S7A.7.14.3(c).

load table means a table of unmetered device *loads* as described in clause S7A.7.14.1.

on/off table means a table recording the switching status (On = 1, Off = 0) for each *recording interval* for the unmetered *loads* associated with a *NMI* as described in Part B of this schedule.

physical inventory means a physical count of devices.

public holiday means a day that is a public holiday, as defined in section 17 of the *Interpretation Act 1978* (NT), that is observed in the City of Darwin, other than a public holiday that is part of a day.

routine testing, for the purposes of this schedule, includes the ongoing and regular maintenance testing, compliance testing and in-service testing of *metering installation* components initiated by the *Metering Coordinator* or *Metering Provider* to fulfil their obligations in accordance with schedule 7A.6.

Sample Test Plan means a statement of the sample size or sizes to be taken, the frequency of sample testing and the required accuracy.

scheduled reading date means the date of the next scheduled meter reading.

unmetered means a *load* or a *connection point* at which a *meter* is not necessary under schedule 7A.6.

S7A.7.1.3 Relevant retailer

In this schedule, a reference to the relevant *retailer* is a reference to Power Retail Corporation (trading as Jacana Energy) ABN 65 889 840 667.

Part B

S7A.7.2 Purpose and scope

S7A.7.2.1 Purpose

The purpose of this Part is to set out:

(a) the obligations of the *Metering Coordinator*, in relation to *metering installations* that are referred to in the *Rules*;

(b) the obligations of *Metering Providers* in relation to the provision, installation, routine testing and maintenance of a *metering installation*; and

(c) the obligations of *Metering Data Providers* in relation to the provision of *metering data services.*

S7A.7.2.2 Scope

This schedule provides information on the application of *metering installations* to *connection points*. In particular, this schedule sets out provisions for *metering installations* and *metering data services* relating to:

(a) *Metering Providers*, which include:

(1) the type of *metering installation* permitted for the measurement of *active energy*;

(2) the provision, installation, testing, inspection and maintenance of *metering installations*;

(3) the components of each type of *metering installation*; and

(4) storage of, and access rights to, *energy data* in the *metering installation*; and

(b) *Metering Data Providers*, which include:

(1) the collection or calculation, processing and delivery of *metering data*; and

(2) storage of metering data in the metering data services database and rights of access to metering data.

S7A.7.3 Metering provision

S7A.7.3.1 Responsibility for metering provision

(a) *Metering Coordinators* must use *Metering Providers* to provide, install, test and maintain the relevant components, characteristics and service requirements of the *metering installation* as specified in the *Rules*.

(b) *Metering Coordinators* are responsible for the design of a *metering installation* and warrant that the design complies with the components, characteristics and service requirements specified in the *Rules*.

(c) *Metering Coordinators* must ensure the components have been selected, installed, tested and commissioned by the *Metering Providers* so that the *metering installation* satisfies the relevant accuracy and performance requirements in the *Rules*.

S7A.7.3.2 Metering installation components

(a) *Meters* used in type 1, 2, 3, 4, 4A, 5 and 6 *metering installations* must comply with any applicable specifications or guidelines (including transitional arrangements) specified by the National Measurement Institute, under the *National Measurement Act*, and must also meet the relevant requirements of *Australian Standards* and International Standards:

(1) for type 1, 2, 3, 4, 4A, and 5 (including type 3 and 4 whole current) *metering installation measurement elements*: *AS* 62052.11, *AS* 62053.21 and *AS* 62053.22; and

(2) for type 6 *metering installation measurement elements*: AS 1284.1, AS 62053.21 and AS 62052.11.

(b) *Current transformers* for type 1, 2, 3, 4, 4A, 5 and 6 *metering installations* must meet the relevant requirements of *AS* 60044.1 and must also comply with any applicable specifications or guidelines (including transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act.*

(c) *Voltage transformers* for type 1, 2, 3, 4, 4A, 5 and 6 *metering installations* must meet the relevant requirements of *AS 60044.2*, *AS* 60044.3, *AS* 60044.5 and *AS* 1243 and must also comply with any applicable specifications or guidelines (including transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

(d) New *current transformers* and *voltage transformers* must comply with current *Australian Standards*.

(e) In-service *current transformers* and *voltage transformers* must comply with the *Australian Standard* that applied at the time of installation.

(f) Unless otherwise permitted by the *Rules*, the *Metering Coordinator* must ensure that new *meters* and related equipment used at a *connection point* have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate issued by a *NATA* accredited laboratory or a body recognised by *NATA* under the ILAC mutual recognition scheme. Relevant approval certificates must be provided to the *Utilities Commission* on request.

(g) A visible display must be provided to display, at a minimum, the cumulative total *energy* for each register measured by that *metering installation*.

(h) Any programmable settings available within the metering *installation*, or any peripheral device, which may affect the resolution of displayed or stored data, must meet the relevant requirements of *AS* 62052.11, *AS* 62053.21 and *AS* 62053.22 and must comply with any applicable specifications or guidelines (including transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

S7A.7.3.3 Use of optical ports and pulse outputs

(a) Where requested by a financially responsible participant, the *Metering Coordinator* must provide pulse output facilities representing the quantity of electricity measured in accordance with the relevant *Australian Standard* for that *meter* within a reasonable time of receiving the request.

(b) For type 1, 2, 3, 4, 4A and 5 *metering installations* with a pulse output, the *measurement element* pulse output must provide a number of energy pulses in each integrating period commensurate with the accuracy class of the *metering installation* when operating at the top of the range of measurement of the *metering installation* but may be set at a lower rate where the anticipated operating range is significantly lower than the top of the range of measurement of the *metering installation.*

(c) A type 4A or 5 *metering installation* must have an optical port that meets the *AS* 1284.10.2 or *AS* 62056.21 or a computer serial port to facilitate downloading of 90 *days* of *interval energy data* for each *meter* associated with the *metering installation* in 35 seconds or less.

S7A.7.3.4 Load control equipment

Where the *metering installation* includes equipment for load control or the measurement of *reactive energy*, the installation and operation of that equipment will be governed by an instrument other than the *Rules*, for example, a 'use of system' agreement between the *Local Network Service Provider* and the financially responsible participant.

S7A.7.3.5 Data storage requirements for meters

Note

No specific requirements are included under this heading for this jurisdiction at this stage. The clause may be used as part of the phased implementation of the Rules in this jurisdiction.

S7A.7.3.6 Metering installation clock

(a) A type 4A, 5 or 6 *metering installation* clock is to be reset to within ± 20 seconds of *Australian Central Standard Time* on each occasion that the *metering installation* is accessed in the circumstances referred to in paragraphs (b) and (c), and the maximum drift in the type 4A or 5 *metering installation* clock permitted between successive meter readings is ± 300 seconds.

(b) A *Metering Provider* must reset a type 4A, 5 or 6 *metering installation* clock when inspecting, maintaining or commissioning the *metering installation*.

(c) A *Metering Data Provider* must reset a type 4A, or 5 *metering installation clock* when *interval metering data* is collected from the *metering installation*.

(d) For type 6 *metering installations* with different time of day rates, the *metering installation* must meet *AS* 62054.11, *AS* 62054.21 and *AS* 62052.21, or have the switching between the different rates controlled by a frequency injection relay or time clock operated by the *Local Network Service Provider.*

S7A.7.3.7 Interval meters

Where a *metering installation* records *interval energy data* the interval periods must be based on *recording intervals* or parts of a *recording interval* in accordance with the following requirements:

(a) the end of each interval for a 15-minute interval period must be on the hour, on the half-hour and on each quarter of an hour (*ACST*);

(b) the end of each interval for a 30-minute interval period must be on the hour and on the half-hour (*ACST*);

(c) for other sub-multiple intervals –where agreed with *NTESMO* (in respect of a *metering installation* that is used for the purposes of *settlements*), the *Local Network Service Provider* and the relevant financially responsible participant, provided that the ends of the intervals correspond each and every exact hour (*ACST*) and half-hour (*ACST*).

S7A.7.3.8 Alarm settings

(a) Where an *interval meter* supports alarm functionality, the *Metering Provider* is required to enable the following alarms:

(1) power failure/*meter* loss of supply for instrument transformer connected *metering installations* only;

(2) *voltage transformer* or phase failure;

(3) pulse overflow;

(4) cyclic redundancy check error; and

(5) time tolerance.

(b) Where there are alarm sensitivity settings, these must be set at appropriate levels to ensure meaningful alarm outputs (for example, for contestable supplies a voltage drop of -15% is nominally appropriate).

S7A.7.3.9 Summation metering

(a) If summation *metering* is achieved by paralleling *current transformer* secondary circuits, the overall *metering system* must meet the minimum standards for a new *metering installation* under all load combinations of the individual *current transformer* secondaries.

(b) If summation *metering* is achieved by the arithmetic sum of data registers or the accumulation of pulses, each individual *metering point* must meet the minimum standards for a new *metering installation* and the *Metering Coordinator* must on request demonstrate that the summation techniques reliably and accurately transfer data.

(c) *Current transformer* secondaries can only be paralleled using appropriate arrangements of links; this must not be done at the *meter* terminals.

(d) For type 2 *metering installations* only – direct summation, in which secondary wiring from a multiple number of feeders are connected directly into the terminals of a *meter,* or summation *current transformers*, are permitted provided that the overall errors of the installation are considered.

S7A.7.3.10

Note

No requirements are included in this clause for this jurisdiction at this stage. The clause may be used as part of the phased implementation of the Rules in this jurisdiction.

S7A.7.3.11 Routine testing and inspection of metering installations

(a) Unless a *Metering Coordinator* has an Asset Management Strategy approved by *NTESMO*, *metering installations* must be tested and inspected in accordance with rule 7A.7 and schedule 7A.6. Paragraphs (b) to (f) provide guidelines that:

(1) the *Metering Coordinator* will need to take into consideration when seeking approval of an Asset Management Strategy; and

(2) *NTESMO* will need to take into consideration in approving a proposed Asset Management Strategy.

(b) An acceptable alternative testing practice or test plan for in-service *meter* performance must demonstrate compliance with *Australian Standard* "*AS* 1284.13: Electricity Metering in-service compliance testing".

(c) Unless the *Metering Coordinator* has developed an alternative accuracy assessment method for type 5 and 6 *metering installations* that meets the intent of Tables S7A.4.2.5 and S7A.4.2.6 and is approved by *NTESMO*, the overall *metering installation* error is calculated by the vector sum of the errors of each *metering installation* component, being a + b + c where:

a = error of VT and wiring

b = error of CT and wiring

c = error of *meter*.

(d) Where the *Metering Coordinator* is not testing and inspecting *metering installations* in accordance with rule 7A.7 and schedule 7A.6 (that is, not time-based), the *Metering Coordinator* must include in its Asset Management Strategy an alternative inspection practice that meets the requirements of schedule 7A.6.

(e) The *Metering Coordinator* must provide a copy of the Asset Management Strategy to each relevant *Metering Provider*.

(f) For those *meters* for which new or amended pattern approval has been received from the National Measurement Institute or, in the absence of pattern approval, new or amended type testing has been undertaken by a *NATA* accredited laboratory or a body recognised by *NATA* under the ILAC mutual recognition scheme, the *Metering Coordinator* must ensure that the Sample Test Plan stipulates that this population of *meter* is tested at least once in the first three years of being placed in service.

S7A.7.3.12 Requests for testing type 1 – 6 metering installations

(a) If requested by a *Registered Participant* with a financial interest in the *metering installation* or the *energy* measured by the *metering installation*, the *Metering Coordinator* must make arrangements for the testing of the *metering installation* in accordance with clause 7A.7.2 of the *Rules*.

(b) If requested by a *Registered Participant* with a financial interest in the *metering installation,* the *Utilities Commission* must make arrangements in accordance with clause 7A.7.4 of the *Rules* to determine the consistency of *metering data* held in the *metering data services database* and the *energy data* held in the type 1, 2, 3, 4, 4A, 5 and 6 *metering installation*.

(c) Where the *Registered Participant* requests a *metering installation* test in accordance with paragraphs (a) and (b):

(1) the *Metering Coordinator* or the *Utilities Commission* (as applicable) must use *reasonable endeavours* to conduct the test within 15 *business days* of the request;

(2) if the requirement under subparagraph (1) would prevent the *Registered Participant's* customer witnessing the test, then the *Metering Coordinator* or the *Utilities Commission* may agree to a mutually convenient time to conduct the test; and

(3) the *Metering Coordinator* or the *Utilities Commission* (as applicable) must, if requested, provide an estimate of costs associated with the test prior to any test being undertaken.

S7A.7.4 Installation of meters and de-commissioning

S7A.7.4.1 General installation requirements

The *Metering Coordinator* must use reasonable endeavours to ensure that, at the time of installation, a *metering installation* is:

(a) protected against damage;

(b) installed in such a way that it allows safe and unimpeded access to the *retail customer* or any person whose obligation it is to test, adjust, maintain, repair, or replace the *metering installation*, or to collect *metering data* from the *metering installation*; and

(c) available to the *retail customer* or any person whose obligation it is to test, adjust, maintain, repair, or replace the *metering installation*, or to collect *metering data* from the *metering installation* via safe, convenient and unhindered access when it is not located at the site.

S7A.7.4.2 Type 4A, 5 and 6 metering installations

The *Metering Coordinator* must ensure that when each type 4A, 5 or 6 *metering installation* is installed at a *connection point*, it is checked such that it has the optical port, communications port and visual display located so that the optical port, communications port, or visual display can be readily accessed for meter reading.

S7A.7.4.3 Preliminary de-commissioning and removal of metering equipment requirements

(a) Before de-commissioning all or any part of an existing *metering installation* the *Metering Provider* undertaking the work must ensure that:

(1) arrangements are put in place to ensure a final reading is taken at the time of de-commissioning of all *metering data* maintained in the existing *meter*; and

(2) the ownership of the existing *meter* is ascertained and arrangements made for the *meter* to be returned to its owner within 10 *business days* unless otherwise agreed with the asset owner.

(b) Where the *metering data* from the final reading is not transferred to the relevant *Metering Data Provider* at the time of de-commissioning, the owner must ensure the *metering data* or final reading (as applicable), is provided to that *Metering Data Provider* within 2 *business days* of receipt of the *meter*.

S7A.7.4.4

Note

No requirements are included in this clause for this jurisdiction at this stage. The clause may be used as part of the phased implementation of the Rules in this jurisdiction.

S7A.7.5

Note

No requirements are included in this clause for this jurisdiction at this stage. The clause may be used as part of the phased implementation of the Rules in this jurisdiction.

S7A.7.6 Responsibility for metering data services

S7A.7.6.1 Metering data storage

Note

No requirements are included in this clause for this jurisdiction at this stage. The clause may be used as part of the phased implementation of the Rules in this jurisdiction.

S7A.7.6.2 Verification of metering data for type 4, 4A, 5, 6 and 7 installations

To facilitate the verification of *metering data* for type 4, 4A, 5, 6 and 7 *metering installations*:

(a) each *Metering Coordinator* must ensure that a Sample Test Plan is established and maintained in accordance with *Australian Standards* "AS 1199: Sampling procedures for inspection by attributes – Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection" or "AS 2490: Sampling Procedures and Charts for Inspection by Variables for Percent Nonconforming" to validate that all *metering data* stored in the *metering data services database* is consistent with the *energy data* stored in the *metering installation* or the physical inventory (as applicable);

(b) verification tests must be conducted in accordance with the Sample Test Plan, which must not be less than once every 12 months;

(c) the *calculated metering data* stored in a *metering data services database* for a *NMI* is consistent with the physical inventory if the error associated with calculating the *energy* value for the sample, that is:

$$\frac{\sum_{i=1}^{n} (\text{Agreed } \textit{load} \text{ per device type as per } \textit{load table})_i * (\text{Actual number of device type in the sample geographic area})_i}{\sum_{i=1}^{n} (\text{Agreed } \textit{load} \text{ per device type as per } \textit{load table})_i * (\text{Number of device type in the sample geographic area as per } \textit{inventory table})_i} - 1$$

where i = device type

is within ± 2.0%; and

(d) if there is an inconsistency between the inventory table held in a *metering data services database* for a type 7 *metering installation* and the physical inventory, the physical inventory is to be taken as prima facie evidence of the actual number of unmetered devices.

Note

Provisions relating to type 7 metering installations will only apply in this jurisdiction in the event of a type 7 metering installation being available in this jurisdiction and after a 12 month transitional period allowing all participants to achieve compliance.

S7A.7.6.3 Metering installation type 7 – sample testing

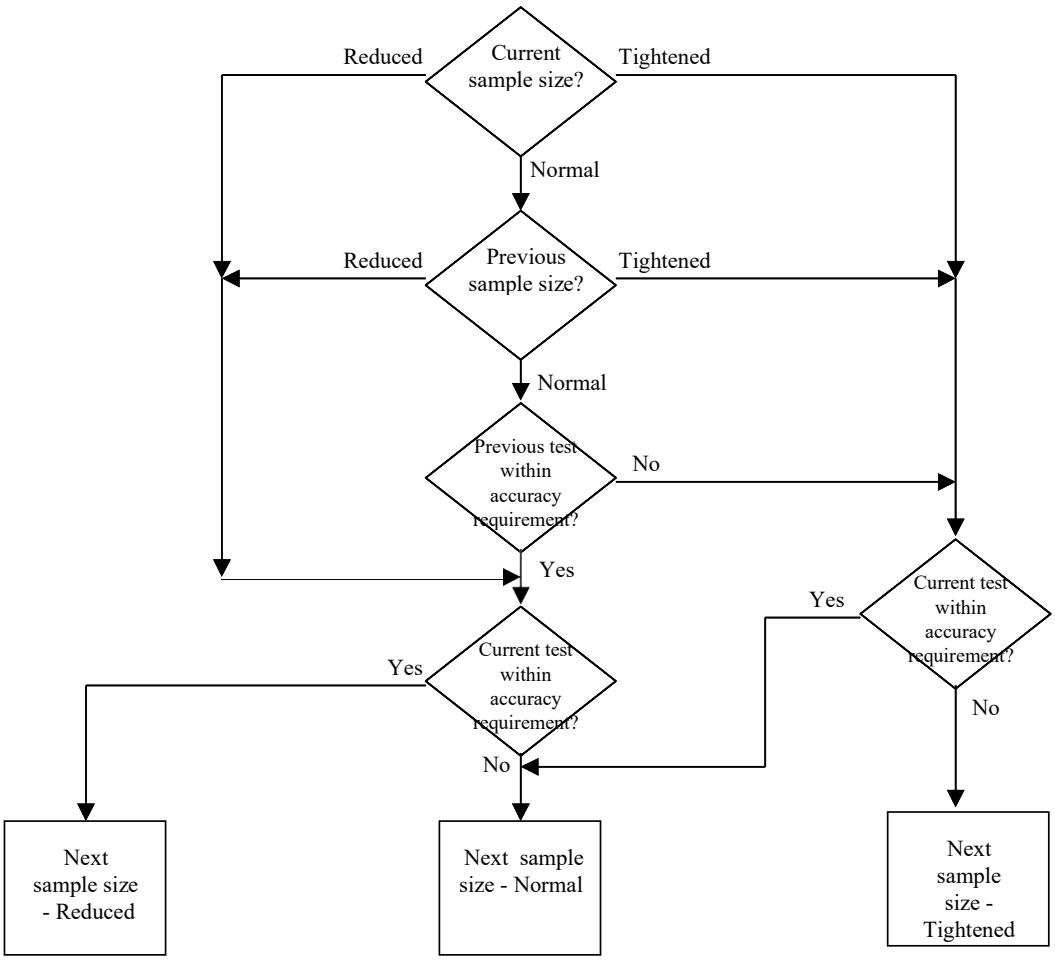
(a) For the purposes of sample testing type 7 *metering installations*, the *Metering Coordinator* must ensure that the sample size is determined using Table S7A.7.5.3.1. The sample is to be selected from unmetered devices in the inventory table for a *Metering Coordinator*.

(b) The *Metering Coordinator* must ensure that the sample size for the first two validation tests is based on a 'normal' sample size indicated in Table S7A.7.5.3.1.

Table S7A.7.5.3.1 —Unmetered devices in inventory table

Number of Unmetered Devices in Inventory Table	Sample Size		
	Reduced	Normal	Tightened
2 to 8	2	2	3
9 to 15	2	3	5
16 to 25	3	5	8
26 to 50	5	8	13
51 to 90	5	13	20
91 to 150	8	20	32
151 to 280	13	32	50
281 to 500	20	50	80
501 to 1200	32	80	125
1201 to 3200	50	125	200
3201 to 10000	80	200	315
10001 to 35000	125	315	500
35001 to 150000	200	500	800
150001 to 500000	315	800	1250
500001 to over	500	1250	2000

(c) The *Metering Coordinator* must ensure that the sample size for subsequent variation tests is based on the following:



(d) The *Metering Coordinator* must select sample unmetered devices for a validation test from random geographic areas depending on the sample size. The selection of the geographic area must be such that each unmetered device has an equal chance of being included in the sample.

(e) The *Metering Coordinator* must ensure that the validation test is conducted at least once every 6 months, commencing from the first validation test.

(f) Should the results of two consecutive validation tests, based on a reduced sample size, be within the accuracy requirements for that test, the *Metering Coordinator* must ensure that the next validation test is conducted at least once every 12 months.

S7A.7.6.4 Request for text of calculated metering data

If requested to test a type 7 *metering installation* by a *Registered Participant* under clause 7A.7.2, the *Metering Coordinator* must:

(a) arrange to test that the *calculated metering data* stored in the *metering data services database* reflects the physical inventory for the type 7 *metering installation*;

(b) use reasonable endeavours to conduct the test within 15 *business days* of the request; and

(c) prior to any test being undertaken, provide an estimate of costs associated with the test.

S7A.7.6.5 NTESMO's metering data substitution obligations

(a) Where *metering data* has been substituted, *NTESMO* must advise affected *Registered Participants* at the same time as that *metering data* is sent to financially responsible participants for *settlements*.

(b) If *metering data* has not been transferred to *NTESMO* to meet the *settlements* time frames or such *metering data* has been transferred but is unusable, *NTESMO* must, in accordance with clause 7A.9.2:

(1) take action to obtain the *metering data*; or

(2) request the *Metering Coordinator* take action to obtain the metering data.

Part C

S7A.7.7 Purpose and scope

S7A.7.7.1 Purpose

The purpose of this Part is to set out obligations concerning the validation, substitution and forward estimation of *metering data* to satisfy the *Rules*.

S7A.7.7.2 Scope

(a) This Part applies to *Metering Data Providers*, *NTESMO* and *Metering Coordinators*.

(b) This Part must be read in conjunction with Schedule 7A.8 Part B.

S7A.7.8 Principles for validation, substitution and estimation

S7A.7.8.1 General validation, substitution and estimation requirements

The principles to be applied to validation, substitution and estimation include the following:

(a) the *Metering Coordinator* must coordinate the resolution of issues arising from the non-performance of *metering systems*, including any liaison with associated *Registered Participants, Metering Providers and Metering Data Providers*, and the *Metering Coordinator* must respond promptly to requests for remedial action from the *Metering Data Provider* or *NTESMO*;

(b) the *Metering Data Provider* must identify *metering data* errors resulting from data collection and processing operations using validation processes in accordance with this Part.

S7A.7.8.2 Substitution requirements

(a) The *Metering Data Provider* must undertake substitutions on behalf of *NTESMO* or the *Metering Coordinator,* as appropriate, in a manner consistent with this Part.

(b) Substitutions may be required in the following circumstances:

(1) where the system or equipment supporting the remote or manual collection of *metering data* has failed or is faulty;

(2) where the *metering installation* for a *connection point* has failed or is removed from service;

(3) to enable timely provision of *metering data* to financially responsible participants or *NTESMO* for *billing transactions* or *settlements* purposes, as relevant;

(4) in situations where *metering data* has been irretrievably lost;

(5) where the *metering data* is found to be erroneous or incomplete;

(6) where *metering data* has not completed validation as part of the registration or transfer of a *connection point*;

(7) where *metering data* has failed or has not completed the validation process;

(8) where *metering data* cannot be obtained in the performance timeframes required for the data period in question:

(i) *metering data* for *metering installations* with *remote acquisition* must be substituted if *metering data* cannot be obtained to meet either *settlements* or *billing transactions* timeframes, as relevant, or the required performance in Schedule 7A.8 Part C; and

(ii) *metering data* for manually read *metering installations* must be substituted if *metering data* cannot be obtained on or within the expected timeframe of the next scheduled reading date for a *connection point*, and any historical or previous *estimated metering data* must be replaced with *substituted metering data*;

(9) when an inspection or test on the *metering installation* establishes that a measurement error exists due to a *metering installation* fault;

(10) when the affected financially responsible participant, the relevant *retailer* and *Local Network Service Provider* have all agreed and subsequently informed the *Metering Data Provider* that a previous substitution was inaccurate and that a re-substitution of *metering data* is required;

(11) where the *metering data* calculation has failed the validation tests for a *metering installation* with *calculated metering data*;

(12) in response to customer transfers authorised in this jurisdiction;

(13) in situations involving meter churn.

S7A.7.8.3 Estimation requirement

(a) The *Metering Data Provider* must undertake estimations on behalf of the *Metering Coordinator* in a manner consistent with this Part.

(b) Estimations may be required in the following circumstances:

(1) routinely for a period equal to or just greater than the period to the next scheduled reading date or another forward period;

(2) in response to customer transfers authorised in this jurisdiction;

(3) where the current published scheduled reading date has changed due to a revised scheduled reading route and the existing *estimated metering data* does not extend to or beyond

the revised next scheduled reading date, and in this case the *Metering Data Provider* must adjust the *estimated metering data* for the revised next scheduled reading date.

S7A.7.8.4 Metering data quality flags

(a) The *Metering Data Provider* must assign the relevant *metering data* quality flags to *metering data* as follows:

Quality Flag	Description
A	Actual *metering data*.
S	For any *substituted metering data* that is considered temporary and may be replaced by actual *metering data*. Substitutions apply to historical date/time periods at the time of substitution.
E	For any *estimated metering data* that is considered temporary and may be replaced by actual *metering data* or *substituted metering data*. Estimations apply to a period that has an end date/time in the future.
F	For substitutions that are of a permanent or final nature and, subject to paragraph S7A.7.8.5(b) and (e), the *metering data* would not be replaced by actual *metering data* at any time.
N	This quality flag is only utilised within the *interval metering data* file for instances where no *metering data* exists in the *metering data services database* for the periods concerned.

(b) Unless specified otherwise in this Part, *Metering Data Providers* must apply the following quality flag rules in the *metering data services database*:

(1) ‘A' *metering data* can only be replaced with ‘A', ‘S' or ‘F' *metering data*;

(2) ‘S' *metering data* can only be replaced with ‘A', ‘S' or ‘F' *metering data*;

(3) ‘E' *metering data* can only be replaced with ‘A', ‘E', ‘S' or ‘F' *metering data*;

(4) ‘F' *metering data* can only be replaced with ‘F' *metering data* as per paragraph S7A.7.8.5(f) or ‘A' *metering data* as per paragraph S7A.7.8.5(b) or S7A.7.8.5(h).

S7A.7.8.5 Final substitution

The *Metering Data Provider* must undertake final substitutions in the following circumstances:

(a) where a notice has been received from either the *Metering Coordinator* or the *Metering Provider* detailing a failure of the *metering installation* that affects the quality of the *energy data*;

(b) if actual *metering data* is unexpectedly recovered from the *metering installation* and a final substitution has been undertaken in accordance with paragraph (1), and in this case the *Metering Data Provider* must replace the final *substituted metering data* with the actual *metering data* and maintain a record of the reason;

(c) where the *Metering Data Provider* must undertake final substitutions following a meter churn;

(d) where the *Metering Data Provider* has received a notice that the affected financially responsible participant, the relevant *retailer* and *Local Network Service Provider* have agreed that the *metering data* is erroneous and that a final substitution is required;

(e) where *NTESMO* requests the provision of substitutions and final readings in response to customer transfers authorised in this jurisdiction where required for the purposes of *settlements*;

(f) where the *Metering Data Provider* may undertake to replace existing final *substituted metering data* with new final *substituted metering data* in accordance with this Part;

(g) where the *Metering Data Provider* has found actual *metering data* to be erroneous;

(h) where the *Metering Data Provider* is replacing type 6 final *substituted metering data* with *accumulated metering data* that spans consecutive *meter* readings on agreement with the financially responsible participant, the relevant *retailer* and the *Local Network Service Provider*.

S7A.7.9 Substitution for acquisition of metering data from remotely read metering installations

S7A.7.9.1 Application of S7A.7.9

(a) For *metering installations* with *remote acquisition* installed in accordance with paragraph 7A.6.8(a), the *Metering Data Provider* may perform substitutions in accordance with clause S7A.7.10.

(b) For all other *metering installations* with *remote acquisition*, the *Metering Data Provider* must perform substitutions in accordance with clause S7A.7.9.

S7A.7.9.2 Substitution rules

The *Metering Data Provider* must apply the following rules when performing a substitution:

(a) the *Metering Data Provider* must obtain clear and concise identification as to the cause of any missing or erroneous *metering data* for which substitutions are required;

(b) the *Metering Data Provider* must undertake to do a type 11 substitution and use *metering data* obtained from any *check metering installation* associated with the *connection point* as the first choice considered for the source of *metering data* for any substitutions undertaken;

(c) SCADA data, where available, may be used by the *Metering Data Provider* as *check metering data* for substitutions;

(d) the *Metering Data Provider* may only undertake substitution type 13 where substitution types 11 and 12 are not applicable or cannot be carried out;

(e) for *connection points* where the financially responsible participant is a *generator*:

(1) the *Metering Data Provider* may directly undertake type 11, type 12 or type 13 substitutions if *metering data* has failed validation;

(2) the *Metering Data Provider* may undertake type 16 or 18 substitutions following consultation and agreement with the affected *generator* that the *substituted metering data* is an accurate reflection of the *interval metering data* concerned;

(3) if *metering data* cannot be collected from a *metering installation* or substituted within the required timeframes,

the *Metering Data Provider* must undertake type 19 substitutions as an interim until *metering data* can be collected from the *metering installation* or substituted;

(f) the *Metering Data Provider* may only undertake substitution types 14, 15, 16, 17, 18, or 19 where substitution types 11, 12 and 13 are not applicable or cannot be carried out;

(g) the *Metering Data Provider* may perform all substitution types except type 16 or 18 without the agreement of the affected financially responsible participant, *Local Network Service Provider* or relevant *retailer* and the *Metering Data Provider* may change the quality flag to an existing type 16 or 18 substitution without seeking further agreement from those parties;

(h) the *Metering Data Provider* must notify the *Local Network Service Provider*, relevant *retailer* and the financially responsible participant for the *connection point* of any substitution within two *business days* of the substitution being carried out, and this notification is to be achieved via the participant *metering data* file as detailed in the MDFF Specification;

(i) where there is a *metering installation malfunction* that cannot be repaired within the periods specified in clause 7A.6.9*,* the *Metering Data Provider* must:

(1) where the *metering installation malfunction* is due to a failure of the *meter* to correctly record *interval energy data* and the *Metering Coordinator* has been granted an exemption to repair the *metering installation,* substitute the missing *metering data* in accordance with this Part;

(2) for type 1-3 *metering installations* and other *instrument transformer* connected *metering installations*, and where a *metering installation malfunction* is due to a failure of the *remote acquisition* system, arrange for an alternative method for the collection of *metering data* from the *metering installation* in a timeframe that ensures the *Metering Data Provider* complies with *metering data* delivery requirements; or

(3) for non-*instrument transformer* connected *metering installations*, and where a *metering installation malfunction* is due to a failure of the *remote acquisition* system, substitute the missing *metering data* in accordance with this Part;

(j) the *Metering Data Provider* must ensure that all *substituted metering data* is replaced with actual *metering data* when it becomes available.

S7A.7.9.3 Substitution types

Type 11 – Check data

(a) To perform a type 11 substitution, the *Metering Data Provider* must use *interval metering data* obtained from the *check metering installation* for that *metering point* where:

(1) the *metering installation* and *check metering installation* are installed at the same *connection point*;

(2) the *metering installation* and *check metering installation* are installed on different ends of a *transmission* line where the difference due to *transmission line* losses can be accurately determined; or

(3) the *metering installation* and the *check metering installation* are installed across a parallel set of feeders having similar line impedances between a common set of busbars.

Type 12 – Calculated

(b) To perform a type 12 substitution, the *Metering Data Provider* must calculate the *interval metering data* to be substituted where they relate to a single unknown feed to a node based on the other known *energy* flows to or from that node.

Type 13 – SCADA

(c) To perform a type 13 substitution:

(1) the *Metering Data Provider* must use SCADA data provided by *NTESMO* in the agreed format for substitution purposes, which originates from a similar measurement point as the *meter*;

(2) where SCADA data is inferior in accuracy or resolution and in a dissimilar format to the *metering data*, (for example, 30 Min. demand values). the *Metering Data Provider* may have to adjust the data in both magnitude and form so that the substitution is valid; and

(3) where SCADA data is to be used for Substitution, both the provided ‘E' channel and ‘B' channel SCADA data streams must be used.

Type 14 – Like day

(d) To perform a type 14 substitution, the *Metering Data Provider* must substitute missing or erroneous *metering data* using the nearest equivalent day or like day method, as detailed in Table 1.

Table 1

TYPE 14	
Substitution day	**Nearest equivalent day or like day (in order of availability)**
Monday	Monday ##
Tuesday	Tuesday## Wednesday## Thursday## Wednesday# Thursday#
Wednesday	Wednesday## Tuesday# Thursday## Thursday# Tuesday##
Thursday	Thursday## Wednesday# Tuesday# Wednesday## Tuesday##
Friday	Friday##
Saturday	Saturday##
Sunday	Sunday##

Substitutions for **like day** to be as detailed above, unless:

(a) No *metering data* is available on the first listed day, the next listed preferred day is to be used. If there is no other suitable listed day, or no *metering data* is available on any of the listed days type 15 substitution must be used.

(b) The substitution day was a public holiday, in which case the most recent Sunday is to be used.

(c) The substitution day was not a public holiday and the listed day is a public holiday, then the next listed preferred day that is not a public holiday is to be used.

Occurring in the same week as the substitution day.

Occurring in the week preceding that in which the substitution day occurs.

Type 15 – Average like day

(e) To perform a type 15 substitution, the *Metering Data Provider* may substitute missing or erroneous *metering data* using the average like day method, as detailed in Table 2.

Table 2

TYPE 15
The *interval metering data* to be substituted will be calculated using an average of the *metering data* from each corresponding interval from the preceding 4 weeks, or any part of those. This averaging technique may be applied in either of the following ways: (a) where the averaged *interval metering data* is used to provide the value for the *metering data* requiring substitution; (b) where the averaged *interval metering data* is used to provide the *profile* and is scaled to a pre-determined consumption value for the *metering data* to be substituted. Type 15 substitutions must not be used for public holidays.

Type 16 – Agreed method

(f) Where the *Metering Data Provider* is required to undertake substitution for any period greater than seven *days* for type 1 – 3 *metering installations* or greater than 15 *days* for other *metering installation* types, the *Metering Data Provider* must consult and use reasonable endeavours to reach an agreement with the financially responsible participants, relevant *retailer* and the *Local Network Service Provider* for the *connection point*. This may include changes to existing substitutions for any period where those affected parties have directed that as a result of site or end user information, the original substitutions are in error and a correction is required.

Type 17 – Linear interpolation

(g) To perform a type 17 substitution, the *Metering Data Provider* may substitute *metering data* for consecutive intervals up to, but not exceeding two hours, by using simple linear interpolation.

Type 18 – Alternative

(h) To perform a type 18 substitution, the *Metering Data Provider* may use an alternative method of substitution subject to agreement with the financially responsible participants, relevant *retailer* and the *Local Network Service Provider* for the *connection point*. The specifics of this substitution type may involve a globally applied method or a method where an adjusted *profile* is used to take into account local conditions that affect consumption (for example, local holiday or end user shutdown), or where alternative *metering data* may be available for quality checks, such as using *metering register* data.

Type 19 – Zero

(i) The *Metering Data Provider* must undertake substitutions of ‘zero' where:

(1) the *Local Network Service Provider* or the *Metering Provider* has informed the *Metering Data Provider* of a de-energised *connection point* or an inactive *meter* and the consumption is reasonably believed to be zero; or

(2) substitutions are applicable for *connection points* where the financially responsible participant is a *Generator* in accordance with clause S7A.7.9.2.

S7A.7.10 Substitution and estimation for manually read interval metering installations

S7A.7.10.1 Application of S7A7.10

(a) The substitution and estimation requirements in this clause S7A.7.10 are only to be used for *metering installations* where:

(1) *interval metering data* is manually collected as a scheduled meter reading; or

(2) the *metering installations* have been installed with *remote acquisition* in accordance with paragraph 7A.6.8(a).

(b) Where *remote acquisition* of *metering data* has failed at the *metering installation* and manual collection of *interval metering data* is required, the substitution requirements specified in clause S7A.7.9 apply.

S7A.7.10.2 Substitution and estimation rules

(a) The *Metering Data Provider* must ensure that all *substituted metering data* and *estimated metering data* are replaced with actual *metering data* when it becomes available.

(b) The *Metering Data Provider* must obtain clear and concise identification as to the cause of any missing or erroneous *metering data* for which substitutions are required.

(c) Where there is a *metering installation malfunction* that cannot be repaired within the periods specified in clause 7A.6.9*,* the *Metering Data Provider* must substitute the missing *metering data* in accordance with this Part.

(d) The *Metering Data Provider* must only apply the following substitution and estimation types:

(1) substitutions may be type 51, 52, 53, 54, 55, 56, 57 or 58;

(2) estimations may be type 51, 52, 56, 57 or 58.

(e) The *Metering Data Provider* must only use type 56 or 57 substitutions or estimations where the historical data does not support the application of a type 51 or 52 substitution or estimation.

(f) The *Metering Data Provider* must notify the *Local Network Service Provider*, the relevant *retailer* and the financially responsible participant for the *connection point* of any substitution or estimation within 2 *business days* of the substitution.

(g) *Metering Data Providers* must not perform type 53 or 55 substitutions or type 56 substitutions or estimations without the agreement of the *Local Network Service Provider*, the relevant *retailer* and the financially responsible participant for the *connection point*. *Metering Data Providers* may change the quality flag to an existing type 53 or 55 substitution or type 56 substitution or estimation without seeking further agreement from those parties.

S7A.7.10.3 Substitution and estimation types

Type 51 – Previous years method (nearest equivalent day or like day method)

(a) To perform a type 51 substitution, the *Metering Data Provider* must provide a substitute or estimate using the *metering data* from the nearest equivalent *day* or like *day* from the same, or similar, *meter* reading period in the previous year. The nearest equivalent *day* or like *day* is to be determined from Table 3.

Type 52 – Previous meter reading method (nearest equivalent day or like day method)

(b) To perform a type 52 substitution, the Metering Data Provider must provide a substitute or estimate using the metering data from the nearest equivalent day or like day from the previous meter reading period. The nearest equivalent day or like day is to be determined from Table 3.

Table 3

TYPE 51 or 52	
Substitution day	**Nearest equivalent day or like day (in order of availability)**
Monday	Monday ## Monday#
Tuesday	Tuesday## Wednesday## Tuesday# Wednesday#
Wednesday	Wednesday## Tuesday## Thursday## Wednesday# Thursday# Tuesday#
Thursday	Thursday## Wednesday## Tuesday## Thursday# Wednesday# Tuesday#
Friday	Friday## Friday#
Saturday	Saturday## Saturday#
Sunday	Sunday## Sunday#
Substitutions or estimations for like day to be as detailed above, unless:	
(a) no *metering data* is available on the first listed day, in which case the next listed preferred day is to be used. If there is no other suitable day, or no metering data is available on any of the listed days, type 52 must be used;	
(b) the substitution or estimation day was a public holiday, in which case the most recent Sunday is to be used; or	
(c) the substitution or estimation day was not a public holiday and the listed day is a public holiday, in which case the next listed preferred day that is not a public holiday, Saturday or Sunday is to be used.	
## For type 51 utilise *metering data* from the corresponding week in the previous year.	
## For type 52 utilise *metering data* from the corresponding week of the previous *meter* reading period.	
# For type 51 utilise *metering data* from the week preceding the corresponding week in the previous year.	
# For type 52 utilise *metering data* occurring in the week preceding the corresponding week of the previous *meter* reading period.	

(c) Alternatively, the *Metering Data Provider* must provide *substituted metering data* or *estimated metering data* using the average like day method, as detained in Table 4.

Table 4

TYPE 52 (Alternative)
The *interval metering data* for which substitution or estimation is to be carried out will be calculated using an average of the *metering data* from each corresponding interval from any part, or all, of the preceding 4 weeks. This averaging technique may be applied in either of the following ways: • where the averaged *interval metering data* is used to provide the value for the *metering data* requiring substitution or estimation; • where the averaged *interval metering data* is used to provide the *profile* and are scaled to a pre-determined consumption value for the *metering data* that are the subject of substitution or estimation. Type 52 substitutes or estimates must not be used for public holidays.

Type 53 – Revision of substituted metering data

(d) To perform a type 53 substitution, the *Metering Data Provider* must re-substitute or change *substituted metering data* to collecting an actual *meter* reading~~,~~ where the financially responsible participant, the relevant *retailer* and the *Local Network Service Provider* have agreed, on the basis of site or end user information, that the original *substituted metering data* is in error and a correction is required.

Type 54 – Linear interpolation

(e) To perform a type 54 substitution, the *Metering Data Provider* may substitute *metering data* for intervals up to, but not exceeding 2 hours, by using simple linear interpolation.

Type 55 – Agreed substitution method

(f) To perform a type 55 substitution, the *Metering Data Provider* may undertake to use another method of substitution (which may be a modification of an existing substitution type), where none of the existing substitution types apply, subject to using reasonable endeavours to form an agreement with the financially responsible participant, the relevant *retailer* and *Local Network Service Provider* for the *connection point.* The specifics of this substitution type may involve a globally applied method.

Type 56 – Prior to first reading – agreed method

(g) Prior to the first actual *meter* reading and where no historical data exists for the *connection point*, the *Metering Data Provider* may provide a substitution or estimation for the *interval metering data* using a method agreed between the financially responsible participant, the relevant *retailer* and *Local Network Service Provider*.

Type 57 – Prior to first reading – customer class method

(h) [**Not used**]

Type 58 – Zero

(i) The *Metering Data Provider* must undertake substitutions or estimations of ‘zero' where either the *Local Network Service Provider* or the *Metering Provider* has informed the *Metering Data Provider* of a de-energised *connection point* or an inactive *meter* and where the consumption is known to be zero.

S7A.7.11 Substitution and estimation for metering installations with accumulated metering data

S7A.7.11.1 Substitution and estimation rules

(a) The Metering Data Provider must replace all estimated metering data with either actual metering data or substituted metering data when:

(1) actual *metering data* covering all or part of the estimation period is obtained;

(2) the scheduled *meter* reading could not be undertaken, by replacing the *estimated metering data* with *substituted metering data* with a quality flag of ‘F'; or

(3) the scheduled *meter* reading could not be undertaken, by replacing the *estimated metering data* with *substituted metering data* with a quality flag of ‘F' unless it was identified that the *metering installation* no longer has an accumulation *meter* installed, in which case a quality flag of ‘S' may be used.

(b) Any final *substituted metering data* provided by the *Metering Data Provider* must be re-validated, updated or re-calculated by the *Metering Data Provider* when:

(1) the value of the *metering data* obtained at the next actual *meter* reading is found to be less than the previous final substitution; or

(2) the final substituted value is disputed and following consultation and agreement with the financially responsible participant, the relevant *retailer* and the *Local Network Service Provider* for the *connection point*, the new agreed value will be determined using type 64 substitution.

(c) The *Metering Data Provider* must obtain clear and concise identification as to the cause of any missing or erroneous *metering data* for which substitutions are required.

(d) The *Metering Data Provider* may apply the following substitution and estimation types:

(1) substitutions may be type 61, 62, 63, 64, 65, 66, 67 or 68;

(2) estimations may be type 61, 62, 63, 65 or 68.

When to use Type 62 substitution

(e) Where the scheduled *meter* reading cycle is less frequent than monthly, the *Metering Data Provider* may only use a type 62 substitution or estimation method when *metering data* from the same, or similar, *meter* reading period last year (that is, type 61) is not available.

When to use Type 63 substitution

(f) The *Metering Data Provider* may use type 63 substitutions or estimations only when the *metering data* from the same, or similar, *meter* reading period last year and *metering data* from the previous *meter* reading period is not available (that is, when type 61 and type 62 substitution or estimation methods cannot be used).

When to use Type 65 substitution

(g) The *Metering Data Provider* may use type 65 substitutions or estimations only when the *metering data* from the same, or similar, *meter* reading period last year or the *metering data* from the previous *meter* reading period is not available (that is, when type 61 and type 62 substitution or estimation methods cannot be used).

When to use Type 67 substitution

(h) The *Metering Data Provider* must only use a type 67 substitution when:

(1) directed by the *Metering Coordinator*;

(2) not expressly disallowed in this *jurisdiction*;

(3) the *retail customer*-provided *meter* reading meets the validation rules for that data stream; or

(4) the Metering Data Provider has no actual metering data.

When to use Type 64 or 66 substitution

(i) *Metering Data Providers* must not perform type 64 or 66 substitutions without seeking the agreement of the financially responsible participant, the relevant *retailer* and the *Local Network Service Provider* for the *connection point*. *Metering Data Providers* may, however, undertake to change the quality flag to an existing type 64 or 66 substitution without seeking further agreement from those parties.

(j) The *Metering Data Provider* must notify the relevant parties for the *connection point* of any substitution or estimation within 2 *business days* of the substitution or estimation. Notification must comply with the obligations set out in S7A.8.9.11.

S7A.7.11.2 Substitution and estimation types

Type 61 – Previous year method (average daily consumption method

(a) To perform a type 61 substitution, the *Metering Data Provider* must provide a substitution or estimation of the *meter* reading by calculating the *energy* consumption as per the following formula:

Energy Consumption = ADC_{LY} * number of days required

where

ADC_{LY} = average daily consumption from the same or similar *meter* reading period last year.

Type 62 – Previous meter reading method (average daily consumption method)

(b) To perform a type 62 substitution, the *Metering Data Provider* must provide a substitution or estimation of the *meter* reading by calculating the *energy* consumption as per the following formula:

Energy Consumption = ADC_{PP} * number of days required.

where

ADC_{PP} = average daily consumption from the previous *meter* reading period.

Type 63 – Customer class method

(c) To perform a type 63 substitution, the *Metering Data Provider* must provide a substitution or estimation by calculating the *energy* consumption as per the following formula:

Energy Consumption = ADC_{CC} * number of days required

where

ADC_{CC} = average daily consumption for this customer class with the same type of usage.

Type 64 – Agreed method

(d) To perform a type 64 substitution, the *Metering Data Provider* may undertake to use another method of substitution (which may be a modification of an existing substitution type), where none of the existing substitution types are applicable, subject to using reasonable endeavours to form an agreement with the financially responsible participant, the relevant *retailer* and *Local Network Service Provider* for the *connection point.* The specifics of this substitution type may involve a globally applied method.

Type 66 – ADL method

(e) [**Not used**]

Type 66 – Revision of substituted metering data

(f) To perform a type 66 substitution, the *Metering Data Provider* must re-substitute or change *substituted metering data* prior to collecting an actual *meter* reading where the financially responsible participant, the relevant *retailer* and the *Local Network Service Provider* for the *connection point* have agreed to revise the original *substituted metering data*, on the basis of site or end user specific information.

Type 67 – Customer reading

(g) Unless the *Metering Data Provider* is required to apply a type 68 substitution, the *Metering Data Provider* must substitute any previously *substituted metering data* or *estimated metering data* based directly on a *meter* reading provided by an end user.

Type 68 – Zero

(h) The *Metering Data Provider* must undertake substitutions or estimations of ‘zero' where either the *Local Network Service Provider* or *Metering Provider* has informed the *Metering Data Provider* of a de-energised *connection point* or an inactive *meter*

and where the consumption is known to be zero.

S7A.7.12 Substitution and estimation for calculated metering data

S7A.7.12.1 Substitution rules

(a) The Metering Data Provider must:

(1) obtain clear and concise identification as to the cause of any missing or erroneous *calculated metering data* for which *substituted metering data* are required;

(2) ensure that all *substituted metering data* and *estimated metering data* are based on *calculated metering data* and not on any previous substitutions or estimations (as applicable);

(3) base *calculated metering data* for type 7 *metering installations* on inventory table data as follows:

(i) where the inventory table has not been updated for the period concerned, *calculated metering data* must be based on the most recent available information and provided as an estimate; and

(ii) where the inventory table is correct for the period concerned, the *calculated metering data* must be flagged as ‘A' *metering data*, however, when the inventory table is subsequently updated for the period concerned, the *calculated metering data* must be flagged as ‘F' *metering data*;

(4) notify the *Local Network Service Provider,* the relevant *retailer* and the financially responsible participant for the *connection point* of any substituted *calculated metering data* within 2 *business days* of the substitution, and this notification is achieved via the Participant *metering data* file as detailed within Schedule 7A.8; and

(5) flag all *calculated metering data* substitutions as ‘F'.

(b) The *Metering Data Provider* may apply the following substitution and estimations types:

(1) substitutions may be type 71, 72, 73, or 74;

(2) estimations may be type 75.

S7A.7.12.2 Substitution and estimation types

Type 71 – Recalculation

(a) To perform a type 71 substitution, the *Metering Data Provider* must substitute *calculated metering data* with the *calculated metering data* obtained by a recalculation based on the current inventory tables, load tables and on/off tables.

Type 72 – Revised tables

(b) Where the error in the *calculated metering data* is due to errors in the inventory table, load table and on/off table, the *Metering Data Provider* must substitute *calculated metering data* by a recalculation based on the most recent inventory tables, load tables and on/off tables in which there were no errors.

Type 73 – Revised algorithm

(c) Where the error in the *calculated metering data* is due to an error in its calculation, the *Metering Data Provider* must substitute the most recent *calculated metering data* for which there was no error.

Type 74 – Agreed method

(d) The *Metering Data Provider* may use another method of *calculated metering data* substitution (which may be a modification of an existing substitution type), where none of the existing substitution types is applicable, subject to using reasonable endeavours to form an agreement between the financially responsible participant, the relevant *retailer* and *Local Network Service Provider* for the *connection point.* The specifics of this substitution type may involve a globally applied method.

Type 75 – Existing table

(e) The *Metering Data Provider* must provide an estimate for the *calculated metering data* based on the most recent inventory table until such time as an updated inventory table is received for the period concerned.

S7A.7.13 Data validation requirements

S7A.7.13.1 Validation requirements for all metering installations

Metering Data Providers must manage systems and processes on the basis that:

(a) stored *metering data* held in the *meter* buffer might be subject to installation measurement error;

(b) data delivered by reading systems, (for example, remote reading systems, hand-held readers and conversion software) might not be recovered from the *meters* without corruption; and

(c) auditable validation procedures are of critical importance and can have a direct impact on disputes. It is essential that *Metering Data Providers* comply with these validation procedures and that all *metering data* is subject to validation prior to delivery to *NTESMO*, *Registered Participants* and financially responsible participants.

S7A.7.13.2 Validation of interval metering data alarms

(a) The *Metering Data Provider* must validate *interval metering data* against the following *meter* alarms when these are provided in the *meter*:

(1) power failure/*meter* loss of supply;

(2) *voltage transformer* or phase failure;

(3) pulse overflow;

(4) cyclic redundancy check error; and

(5) time tolerance.

(b) Where *interval metering installations* assign alarms to the data channel and the *interval metering data* concerned, the *Metering Data Provider* must process the alarm along with the *metering data* as part of the required validation.

(c) The *Metering Data Provider* must ensure that all *metering data* alarm reports are signed off and dated by the person actioning the data exception report review as part of the validation.

(d) The *Metering Data Provider* must validate all *interval metering data* with all *metering data* alarms prior to providing to *NTESMO*, *Registered Participants* or financially responsible participants.

(e) All *Metering Data Provider* exception reports must provide, for all instances where the *interval metering data* was found to be corrupted, an indication of the subsequent actions undertaken by the *Metering Data Provider*.

S7A.7.13.3 Validation within the meter reading process for manually read metering installations

Validations during collection of interval metering data

(a) The validations to be performed by *Metering Data Providers* responsible for the collection of *interval metering data* from manually read *metering installations* are as follows:

(1) the *meter* serial number matches the recorded *meter* serial number;

(2) the security of the *metering installation* is intact, for example, *meter* seals are in place and in good order;

(3) the time synchronisation of the *metering installation* is correct to *ACST* inclusive of any *load* control devices.

Validations during collection of accumulated metering data

(b) The validations to be performed by *Metering Data Providers* responsible for the collection of *accumulated metering data* are as follows:

(1) the value of *metering data* from the current *meter* reading ≥ the value of *metering data* from the previous *meter* reading;

(2) the value of *metering data* from the current *meter* reading is valid against an expected minimum value;

(3) the value of *metering data* from the current *meter* reading is valid against an expected maximum value;

(4) the *meter* serial number matches the recorded *meter* serial number;

(5) the security of the *metering installation* is intact, for example, *meter* seals are in place and in good order;

(6) the time synchronisation of the *metering installation* is correct to *ACST* inclusive of any *load* control devices;

(7) the dial capacity is checked against the recorded dial capacity.

S7A.7.13.4 Validation as part of the registration process

General requirements

(a) *Metering Data Providers* must confirm information about the *NMI* is provided to *NTESMO*, where this is required in accordance with clause 7A.10.1, after any installation or change to a *metering*

installation prior to the provision of any *metering data* to *NTESMO* or *Registered Participants* for the purposes of *settlements.*

Validation of metering data from remotely read metering installations

(b) *Metering Data Providers* must carry out the following validations after any installation or change to a *metering installation* with *remote acquisition* of *metering data* prior to the distribution of any *interval metering data* to *NTESMO*, *Registered Participants* or financially responsible participants for the purposes of *settlements* or *billing transactions*:

(1) for instrument transformer connected *metering installations*, the *metering installation* is recording *metering data* correctly, in conjunction with the *Metering Provider*;

(2) for whole current *metering installations*, the *metering data* correctly pertains to the registered *metering installation*;

(3) all data streams are captured.

Validation of interval metering data from manually read metering installations

(c) The *Metering Data Provider* must carry out the following validations in conjunction with the *Metering Provider* for manually read interval *metering installations* after any changes to a *metering installation* prior to the provision of any *interval metering data* to *NTESMO, Registered Participants* or financially responsible participants for the purposes of *settlements* or *billing transactions*:

(1) the *metering data* correctly pertains to the registered *metering installation*;

(2) all data streams are captured.

Validation of accumulated metering data from manually read metering installations

(d) *Metering Data Providers* must carry out the following validations, following any changes to a *metering installation* and prior to the provision of any *accumulated metering data* to *NTESMO, Registered Participants* or financially responsible participants for the purposes of *settlements* or *billing transactions*:

(1) the *metering data* correctly pertains to the registered *metering installation*;

(2) all data streams are captured.

Validation of type 7 metering installations

(e) *Metering Data Providers* must validate the *calculated metering data* on registration of all *metering installations* to verify that the inventory tables, load tables and on/off tables are complete and correct for the specifics of the *metering installation*.

S7A.7.13.5 Validation of metering data

General

(a) For *metering installations* with *remote acquisition* installed in accordance with paragraph 7A.6.8(a), the *Metering Data Provider* may perform validation in accordance with clauses S7A.7.14.4 and S7A.7.14.5, instead of clause S7A.7.14.2.

Validations for remotely read metering installations

(b) Metering Data Providers must, as a minimum, undertake the following validations within the metering data services database for metering installation types with remote acquisition of metering data:

(1) a check of all *interval metering data* against a nominated maximum value:

(i) this validation is to ensure that erroneous *interval metering data* spikes are trapped and substituted;

(ii) this check may additionally be performed in the polling software;

(2) a check of the maximum value of *active energy* and *reactive energy*:

(i) for *current transformer metering installations*, the maximum value is to be initially determined by the connected *current transformer* ratio of the *metering installation*;

(ii) for whole current *metering installations* the maximum rating of the *meter* is to be used;

(3) a check against a nominated minimum value or, alternatively, a 'zero' check that tests for an acceptable number of zero intervals values per day to be derived from the site's historical *metering data*;

(4) a check for null (no values) *metering data* in the *metering data services database* for all data streams:

(i) the aim of this check is to ensure that there is a 100% *metering data* set (and substitution for any missing *interval metering data* is undertaken);

(ii) the minimum check required is to ensure that there is at least one non-null *active energy* or *reactive energy* value per interval per *metering data stream*;

(5) a check for the *meter* alarms referred to in clause S7A.7.13.2 and ensure:

(i) that a process is in place that captures these *meter* alarms within the validation and ensures that any *meter* alarm occurrences are retained as part of the *metering data* audit trail;

(ii) the provision of details of the occurrences of *meter* alarms to relevant *Registered Participants* within the *metering data* file in accordance with the MDFF Specification.

Validations for metering installations with checking metering or partial check metering

(c) *Metering Data Providers* must undertake the following validations by comparing the *metering data* and *check metering data* for all *metering installations* that have associated *check metering installations* or partial *check metering installations*:

(1) for *metering installations* where the *check metering installation* duplicates the *metering installation* accuracy, the *Metering Data Provider* must validate the *metering installation* data streams and *check metering data* streams on a per interval basis, and the average of the two validated *metering data* sets will be used to determine the energy measurement;

(2) for installations where the *check metering data* validation requires a comparison based on nodal balance (comparing the sum energy flow to the busbar against energy flow from the busbar):

(i) the *Metering Data Provider* must construct a validation algorithm within the *metering data services database* that will facilitate comparison of *interval metering data* for each *energy* flow on a per interval basis;

(ii) the *Metering Data Provider* must conduct an analysis of the historical *metering* data for each *connection point* to ascertain whether error differences in nodal balance are acceptable;

(iii) the *Metering Data Provider* should use this information to refine its validation algorithms to minimise the error difference for each *connection point*, based on historical *metering* data;

(iv) the maximum error difference considered acceptable for any *connection point* is 1% on a per interval basis, and the *Metering Data Provider* should minimise this for each *connection point*, based on historical *metering* data;

(3) where the *check metering installation* is remote from the *metering installation* (for example, at the other end of a *transmission line* or the other side of a *transformer*):

(i) the *Metering Data Provider* must construct a validation algorithm within the *metering data services database* that will facilitate comparison of *interval metering data* from the *metering installation* and the *check metering installation* on a per interval basis with adjustment for respective *transformer* or *transmission line* losses;

(ii) the *Metering Data Provider* must conduct an analysis of the historical *metering* data for each *connection point* to ascertain whether the error differences between the *metering data* from the *metering installation* and *check metering installation* are acceptable;

(iii) the *Metering Data Provider* should use this information to refine its validation algorithms to minimise the error difference for each *connection point*, based on historical *metering* data;

(iv) the maximum error difference considered acceptable for any *connection point* is 5% on a per interval basis, and the *Metering Data Provider* should minimise this for each *connection point*, based on historical *metering* data;

(4) for *connection points* where SCADA data is made available by *NTESMO* for the purposes of validation, the *Metering Data Provider* must validate the *metering data* by comparison of the *interval metering data* against the SCADA data as provided by *NTESMO* in the agreed format:

(i) the *Metering Data Provider* must construct a validation algorithm within the *metering data services database*

that will facilitate comparison of *interval metering data* from the *metering installation* and the SCADA data on a per interval basis;

(ii) the *Metering Data Provider* must conduct an analysis of the historical *metering* data for each *connection point* to ascertain whether error differences between the *interval metering data* from the *metering installation* and the SCADA data are acceptable;

(iii) the *Metering Data Provider* should use this information to refine its validation algorithms to minimise the error difference value for each *connection point*, based on historical *metering* data;

(iv) the *Metering Data Provider* must construct an appropriate validation algorithm as the SCADA data may be derived from a different measurement point, have a different interval collection period or have a different base unit of measurement, (for example, power not *energy* value) with allowances for a larger error of measurement;

(5) the *Metering Data Provider* is only required to undertake validation of *metering data* against the SCADA data on the primary data channel i.e. only 'B' channel validation where the financially responsible participant is a *Generator* and only 'E' channel validation for *loads,* such as pumps.

Validations for interval metering data from manually read metering installations with current transformers

(d) *Metering Data Providers* must, as a minimum, undertake the following validations on *interval metering data* from *manually read metering installations* with *current transformers* within the *metering data services database*:

(1) a check of all *interval metering data* against a nominated maximum value:

(i) this validation is to ensure that erroneous *interval metering data* spikes are trapped and substituted;

(ii) this check may additionally be performed in the collection software;

(2) a check of the maximum value of *active energy*, which must initially be determined by the connected *current transformer* ratio of the *metering installation* (maximum *reactive energy* checks may also be performed as an option);

(3) a check against a nominated minimum value or, alternatively, a ‘zero' check that tests for an acceptable number of zero interval values per day to be derived from the site's historical *metering data*;

(4) a check for null (no values) *metering data* in the *metering data services database* for all *metering* data streams:

(i) the aim of this check is to ensure that there is a 100% *metering data* set (and that substitution for any missing *interval metering data* is undertaken);

(ii) the minimum check required is to ensure that there is at least one non-null *active energy* or *reactive energy* value per interval per *metering* data stream;

(5) a check for *meter* alarms referred to in clause S7A.7.13.2 and ensure that:

(i) a process is in place that captures these *meter* alarms within the validation and ensures that any *meter* alarm occurrences are retained as part of the *metering data* audit trail; and

(ii) the relevant *Registered Participants* are notified of the occurrences of these *meter* alarms within the *metering data* file in the MDFF specification;

(6) where supported by the *meter(s)*, validation for a given period of *interval metering data* by comparison of the totalised *interval energy data* (accumulation register reading) and the change in the *meter* cumulative registers (*energy* tolerance); it is acknowledged that this check would not identify *current transformer* ratio changes that have occurred after initial commissioning and have not been advised to the *Metering Data Provider*;

(7) a check of the *metering data* for continuity and reasonability over the *meter* reading period:

(i) check that no gaps in the *metering data* exist;

(ii) check that *metering data* for the expected period has been delivered based on the scheduled meter reading date.

Validations for interval metering data from whole current manually read metering installations

(e) *Metering Data Providers* must, as a minimum, undertake the following validations on *metering data* from whole current manually read interval *metering installations* within the *metering data services database*:

(1) a check of all *interval metering data* against a nominated maximum value:

(i) this validation is to ensure that erroneous *interval metering data* spikes are trapped and substituted;

(ii) this check may additionally be performed in the collection software;

(2) a check of the maximum value of *active energy* (maximum *reactive energy* checks may also be performed as an option), and the maximum value is to be initially set to the rating of the *meter*;

(3) a check for null (no values) *metering data* in the *metering data services database* for all *metering* data streams:

(i) the aim of this check is to ensure that there is a 100% *metering data* set (and that substitution for any missing *interval metering data* is undertaken);

(ii) the minimum check required is to ensure that there is at least one non-null *active energy* or *reactive energy* value per interval per *metering* data stream;

(4) a check for *meter* alarms referred to in clause S7A.7.13.2 and the *Metering Data Provider* is not required to validate the *interval metering data* for power outage or power failure alarms, but must ensure that:

(i) a process is in place that captures these *meter* alarms within the validation and ensures that any *meter* alarm occurrences are retained as part of the *metering data* audit trail;

(ii) the relevant *Registered Participants* are notified of the occurrences of these *meter* alarms within the *metering data* file in accordance with the MDFF specification;

(5) where supported by the *meter(s)*, validation for a given period of *interval metering data* by comparison of the totalised *interval energy data* (accumulation register reading) and the change in the *meter* cumulative registers (*energy* tolerance);

(6) a check of the *metering data* for continuity and reasonability over the *meter* reading period:

(i) check that no gaps in the *metering data* exist;

(ii) check that *metering data* for the expected period has been delivered based on the scheduled meter reading date.

Validations for accumulation metering data from manually read metering installations

(f) *Metering Data Providers* must undertake the following validations within the *metering data services database* for *metering installations* with *accumulated metering data*:

(1) a check against a nominated minimum value of *metering data* collected from the *metering installation*;

(2) a check against a nominated maximum value of *metering data* collected from the *metering installation*, and this is to be applied to both the *metering data* collected from the *metering installation* and the calculated *energy* consumption values;

(3) the current value of *metering data* collected from the *metering installation* ≥ previous value of *metering data* collected from the *metering installation*;

(4) the current value of *metering data* collected from the *metering installation* is numeric and ≥ 0;

(5) the current date that *metering data* is collected from the *metering installation* > the previous date that *metering data* was collected from the *metering installation*;

(6) a check for null (no values) *metering data* in the *metering data services database* for all *metering* data streams, and the aim of this check is to ensure that there is a 100% *metering data* set and substitution for any missing *metering data* is undertaken.

Validations for type 7 metering installations

(g) *Metering Data Providers* must undertake the following validations of *calculated metering data* within the *metering data services database*:

(1) a check against a nominated maximum *calculated metering data* value;

(2) for subparagraph (1), *calculated metering data* value is numeric and ≥ 0;

(3) a check for null (no values) *calculated metering data* for all *metering* data streams, and the aim of this check is to ensure that there is a 100% *calculated metering data* set (and substitution for any missing *calculated metering data* has been undertaken);

(4) a check of the inventory tables, load tables and on/off tables using a process approved by the *Metering Coordinator* to ensure that the correct version of these tables is being used for the production of *calculated metering data*;

(5) a check against a nominated minimum value, or alternatively, a ‘zero' check that tests for an acceptable number of zero Interval values per day;

(6) *calculated metering data date* > previous *calculated metering data* date.

S7A.7.14 Determination of metering data for unmetered loads

Note

Obligations for determination of metering data for unmetered load, including requirements and methodologies for calculating metering data and associated responsibilities, will be considered in the event of a type 7 metering installation being available in this jurisdiction and after a 12 month transitional period allowing all participants to achieve compliance.

S7A.7.14.1 Load table

Note

Responsibility for developing, maintaining and publishing the load table will be considered in the event of a type 7 metering installation being available in this jurisdiction and after a 12 month transitional period allowing all participants to achieve compliance.

(a) The load table must set out:

(1) for each controlled unmetered device, its *load* (which includes any associated control gear, in watts) for use in calculating *interval metering data* in accordance with clause S7A.7.14.2; and

(2) for each uncontrolled unmetered device, its annual *energy* consumption in accordance with clause S7A.7.14.3. The annual *energy* consumption is used to calculate the calculated device wattage (in watts) which is used to calculate the *interval metering data* for each device type as follows:

$$\left(\text{Calculated device wattage}\right)_i = \frac{\left(\text{device annual energy consumption}\right)_i}{365 * 24}$$

Where *i* = Uncontrolled unmetered device type *i*.

(b) Proposals to add a new unmetered device *load* to the load table must include load measurement tests conducted by a *NATA* accredited laboratory or an overseas equivalent.

(c) Agreement for an unmetered device *load* to be added to the load table does not replace any obligation for an interested party to obtain appropriate approvals related to the performance and acceptance of use of the unmetered device.

S7A.7.14.2 Controlled unmetered devices

Metering data calculation

(a) The *Metering Coordinator* must ensure that the *interval metering data* for controlled unmetered devices classified as a type 7 *metering installation* are calculated in accordance with the following algorithm:

Interval metering data for TIj for *NMI* (in watt hours) =

$$\frac{\sum_{i=1}^{n}(k) * \left(\text{Device wattage}\right)_i * \left(\text{Device count for NMI}\right)_i * \left(\text{Period load is switched on}\right)_j * \left(\text{Recording interval}\right)}{60}$$

where:

i = device type

j = TI

k = proportion of device attributable to that *NMI*

TI is in minutes.

Unmetered device wattage/device wattage is determined from the load table.

Unmetered device count/device count is determined from the inventory table.

Period load is switched on is determined from the on/off table.

Inventory table

(b) For each *NMI*, a separate inventory table is required that identifies each unmetered device type that forms part of the *load* and for each unmetered device type lists:

(1) the unmetered device type;

(2) the form of on/off control – photoelectric cell control, timer control, ripple control or other control;

(3) if timer control or ripple control, the on/off times for the timer control or the ripple control system;

(4) if other control, the on/off times;

(5) if an unmetered device is shared with another *NMI*, the proportion of *load* that is agreed by affected *Registered Participants* to be attributable to that *NMI* (k), and each k factor will be less than 1 and the sum of the k factors for a shared unmetered device across each respective *NMI* must be equal to 1;

(6) if an unmetered device is not shared with another *NMI*, the k factor must be equal to 1;

(7) the number of such unmetered devices installed;

(8) the effective start date – the first day on which that record in the inventory table is to be included in the calculation of *metering data* for that *NMI*;

(9) the effective end date – the last day on which that record in the inventory table is to be included in the calculation of *metering data* for that *NMI*; and

(10) the last change date – the date that record in the inventory table was most recently created or modified.

(c) Each unmetered device in the inventory table is a unique combination of physical hardware, time control classification and shared portion. For example, if an unmetered device is shared with another *NMI*, the individual portions of the unmetered device(s) must be included in the inventory table as a separate unmetered device type on each *NMI*.

(d) Each *Metering Coordinator* must develop the initial inventory table for the *NMI*s for which it is responsible. The initial inventory table must be agreed by each affected *Registered Participant* and the relevant end user.

(e) Each *Metering Coordinator* must update the inventory table for the *NMIs* for which it is responsible on at least a monthly basis to ensure that the accuracy requirements in clause S7A.7.6.2 are met. Any changes to the inventory table may only be made on a retrospective basis where:

(1) agreed by the *Metering Coordinator and the affected Registered Participants*; or

(2) necessary to comply with clause 7A.7.4.

(f) The *Metering Coordinator* must communicate any material changes to the inventory table to the affected *Registered Participants*.

(g) The *Metering Coordinator* must provide the inventory table to relevant *Registered Participants* when requested.

On/off table

(h) The form of on/off control may be:

(1) photoelecetric;

(2) timer control, or ripple control; or

(3) other control.

Photoelectric cell control

(i) The *Metering Coordinator* must ensure that the appropriate sunset times and sunrise times are obtained from the Australian Government Geoscience website (www.ga.gov.au/geodesy/astro/sunrise.jsp), based on the longitude and latitude of the relevant town and *Australian Central Standard Time*.

(j) The *Metering Coordinator* must ensure that the period that the *load* is switched on during a *recording interval* is calculated as follows:

Recording interval	Period load is switched on
For the *recording intervals* commencing after sunset and finishing prior to sunrise	Period *load* is switched on = 1
For the *recording intervals* commencing after sunrise and finishing prior to sunset	Period *load* is switched on = 0
For the *recording interval* during which the sunset occurs	(Period *load* is switched on) = $\frac{(\text{End time of recording interval}) - (\text{Time of sunset})}{30}$
For the *recording interval* during which the sunrise occurs	(Period *load* is switched on) = $\frac{(\text{Time of sunset}) - (\text{Start time of recording interval})}{30}$

Timer control

(k) If the on/off times for an unmetered device is controlled by a timer or ripple injection system:

(1) On time = ON time set on timer or ripple injection system;

(2) Off time = OFF time set on timer or ripple injection system.

(l) The *Metering Coordinator* must ensure that the period that the *load* is switched on during a *recording interval* is calculated as follows:

Recording interval	Period load is switched on
For the *recording intervals* commencing after on time and finishing prior to off time	Period *load* is switched on = 1
For the *recording intervals* commencing after off time and finishing prior to on time	Period *load* is switched on = 0
For the *recording interval* during which the on time occurs	(Period *load* is switched on)= $\frac{(\text{End time of recording interval}) - (\text{On time})}{30}$
For the *recording interval* during which the off time occurs	(Period *load* is switched on)= $\frac{(\text{Off time}) - (\text{Start time of recording interval})}{30}$

Other control

(m) Where the on/off times for an unmetered device are not in accordance with paragraphs (i) to (m), the following alternative forms of control may be used:

(1) On time = sunset time + ON delay or ON time set on timer or ripple injection system;

(2) Off time = sunrise time + OFF delay or OFF time set on timer or ripple injection system or a fixed duration after ON time.

(n) Where sunrise or sunset times are used, the time is determined in accordance with paragraph (j).

(o) The *Metering Coordinator* must ensure that the period that the *load* is switched on during a *recording interval* is calculated as follows:

Recording interval	Period load is switched on
For the *recording intervals* commencing after on time and finishing prior to off time	Period *load* is switched on = 1
For the *recording intervals* commencing after off time and finishing prior to on time	Period *load* is switched on = 0

Recording interval	Period load is switched on
For the *recording interval* during which the on time occurs	(Period *load* is switched on)= $\frac{(\text{End time of recording interval}) - (\text{On time})}{30}$
For the *recording interval* during which the off time occurs	(Period *load* is switched on)= $\frac{(\text{Off time}) - (\text{Start time of recording interval})}{30}$

S7A.7.14.3 Uncontrolled unmetered devices

(a) [Not used]

Energy calculation

(b) The *Metering Coordinator* must ensure that the *interval metering data* for other unmetered *loads*, which have been classified as a type 7 metering installation, is calculated in accordance with the following algorithm:

$$\frac{\sum_{i=1}^{n}(k) * (\text{Device wattage})_i * (\text{Device count for NMI})_i * (\text{Period load is switched on})_j * (\text{Recording interval})}{60}$$

Inventory table

(c) For each *NMI*, a separate inventory table is required that identifies each device type that forms part of the *NMI load* and for each device type lists:

(1) the device type;

(2) the form of on/off control (24 hours per day);

(3) if a device is shared with another *NMI*, the proportion of *load* that is agreed by relevant financially responsible participants to be attributable to that *NMI* (k), and each k factor will be less than 1 and the sum of the k factors for a shared unmetered device across each respective *NMI* must be equal to 1;

(4) if a device is not shared with another *NMI*, the k factor must be equal to 1;

(5) the number of such devices installed;

(6) the effective start date – the first day on which that record in the inventory table is to be included in the calculation of *metering data* for that *NMI*;

(7) the effective end date – the last day on which that record in the inventory table is to be included in the calculation of *metering data* for that *NMI*; and

(8) the last change date – the date that record in the inventory table was most recently created or modified.

(d) Each device in the inventory table is a unique combination of physical hardware, time control classification and shared portion. For example, if a device is shared with another *NMI*, the individual portions of the device(s) must be included in the inventory table as a separate device type on each NMI.

(e) Each *Metering Coordinator* must develop the initial inventory table for the *NMIs* for which it is responsible. The initial inventory table must be agreed by the relevant financially responsible participants and the relevant end-use customer.

(f) Each *Metering Coordinator* must use reasonable endeavours to update the inventory table, for the *NMIs* for which it is responsible, on at least a monthly basis for any additions, deletions and modifications to ensure that the accuracy requirements in clause S7A.7.6.2 are met. Such additions, deletions or modifications to the inventory table may only be made on a retrospective basis where:

(1) agreed by the *Metering Coordinator* and the relevant financially responsible participants; or

(2) necessary to comply with clause 7A.7.6.

(g) The *Metering Coordinator* must communicate any material changes to the inventory table to the relevant financially responsible participants.

(h) The *Metering Coordinator* must provide the inventory table to relevant financially responsible participants when requested.

On/off table

(i) Other unmetered *loads* are assumed to operate 24 hours per day.

(j) For each *recording interval* period *load* is switched on = 1.

Schedule 7A.8 Service level procedures

Part A Introduction

S7A.8.1 Introduction

S7A.8.1.1 Purpose and scope

(a) This schedule applies to *Metering Providers* and *Metering Data Providers*.

(b) This schedule sets out:

(1) the requirements for the provision, installation and maintenance of *metering installations* by *Metering Providers*;

(2) requirements for the systems and processes for the collection, processing and delivery of *metering data* by *Metering Data Providers*;

(3) the performance levels associated with the collection, processing and delivery of *metering data*;

(4) the data formats that must be used for the delivery of *metering data*;

(5) the requirements for the management of relevant *NT NMI Data*; and

(6) the requirements for the processing of *metering data* associated with *connection point* transfers and the alteration of *metering installations* where one or more devices are replaced.

S7A.8.1.2 Definitions

In this schedule:

collect, collection, collected mean a process undertaken by the *Metering Data Provider* to obtain *metering data* from a *meter* or *metering installation*.

Service Providers means *Metering Data Providers*, *Metering Providers* and *Local Network Service Providers*.

Part B Metering provider services

S7A.8.2 Introduction

S7A.8.2.1 Purpose and exclusions

(a) Part B of this schedule:

(1) details the obligations, technical requirements, measurement process and performance requirements that are to be performed, administered and maintained by a *Metering Provider*;

(2) details the obligations and technical/operational requirements in the provision, installation and maintenance of the *metering installation* by a *Metering Provider*;

(3) relates to *Metering Providers* who undertake the provision, installation and maintenance of various *metering installation* types as stipulated; and

(4) sets out minimum requirements for *Metering Providers*.

(b) For service provision at *connection points* where:

(1) the *Metering Provider* and the *Metering Data Provider* are part of the same company; and

(2) *metering installation* provision or maintenance work is performed using internal processes and procedures,

those internal processes and procedures will be deemed to be compliant with this Part if the *metering* work satisfies the performance and quality outcomes of this Part.

S7A.8.2.2 Services

The *Metering Provider* is responsible for the provision of metering provision services, including but not limited to:

(a) maintaining the ongoing *metering installation* compliance with the *Rules*;

(b) the provision and maintenance of physical *metering installation* security controls;

(c) the provision, installation and maintenance of the *metering installation*;

(d) the maintenance of metering *installation* password security; and

(e) the development and maintenance of an Asset Test Plan.

S7A.8.3 General requirements

S7A.8.3.1 Metering Provider capability and competency

Metering Providers must:

(a) employ personnel with the skills, knowledge and expertise necessary for the discharge of the responsibilities under Chapter 7A and have procedures for ensuring that personnel maintain their knowledge and understanding of the requirements of the *Rules*;

(b) maintain a register of employees, which for each employee must include:

(1) skills, knowledge and expertise;

(2) qualifications, registrations and accreditations where applicable to the discharge of *Metering Provider* duties;

(3) training undertaken and planned;

(4) authorisations to provide opinions and interpretations of technical information; and

(5) authorisations to access *metering installations* within secure and restricted areas;

(c) have policies and procedures for making statements of opinions and interpretations, documented within the quality system;

(d) comply with:

(1) *AS* 3000 Wiring Rules;

(2) applicable Australian Communications and Media Authority (ACMA) communications and cabling requirements;

(3) C-Tick compliance requirements;

(4) jurisdictional legislation, including safety legislation and regulations; and

(5) any reasonable requirements of the *Local Network Service Provider* when working on or around *Local Network Service Provider*.

S7A.8.3.2 Use of contractors

Where a *Metering Provider* engages a sub-contractor to perform any of its obligations specified in the *Rules*, the *Metering Provider*:

(a) must have policies and procedures for assessing the sub-contractor's capability, competency and processes, procedures and systems, to ensure that they are compliant with the *Rules*;

(b) must ensure that auditable processes are in place to certify that all work performed by the sub-contractor complies with the *Rules*;

(c) remains liable for all acts and omissions of any sub-contractor; and

(d) must authorise the sub-contractor to provide any specific opinion or interpretation of technical information.

S7A.8.3.3 Insurance

The *Metering Provider* must:

(a) hold public liability insurance for an amount not less than $10,000,000 per occurrence;

(b) hold professional indemnity insurance for an amount of not less than $1,000,000 per occurrence; and

(c) provide the *Utilities Commission* with certified current copies of insurance policies on request.

Note

If a Metering Data Provider, Metering Provider and Metering Coordinator are the same legal entity, a single insurance policy for public liability insurance for an amount not less than $10,000,000 per occurrence and professional indemnity insurance for an amount of not less than $1,000,000 per occurrence that covers the operations of the Metering Data Provider, Metering Provider and Metering Coordinator roles will satisfy the insurance requirements under this schedule.

S7A.8.4 Device management and test equipment

S7A.8.4.1 Procurement

The *Metering Provider* must have processes and systems in place for the procurement of *meters*, *instrument transformers* and any

other devices that can be installed by the *Metering Provider* within a *metering installation*, and ensure that *metering installation* components are suitable for use in accordance with the *Rules*.

S7A.8.4.2 Storage, handling and transport

(a) The *Metering Provider* must have processes that are consistent with good industry practice, specifying the requirements for storage, handling (including packaging) and transport (including return to owner) of any equipment that is calibrated including *meters*, *instrument transformers* and test equipment. The processes must be designed to:

(1) minimise the risk of physical or environmental damage to the equipment; and

(2) identify conditions under which the physical condition of the equipment or accuracy is compromised as a result of storage, transport or handling.

(b) The *Metering Provider* must ensure that *meters*, *instrument transformers* and devices removed from the *metering installation* are returned to their owner within 10 *business days* following their removal, unless otherwise agreed with the owner.

S7A.8.4.3 Management of test equipment

The *Metering Provider* must:

(a) establish a register of test equipment used for testing *metering installations*, *meters* and *instrument transformers*;

(b) maintain records of test equipment, including records of calibration certificates, for at least 7 years from the issue date of the calibration certificate;

(c) ensure that all test equipment is calibrated by a *NATA* accredited testing laboratory holding ISO 9001 and 17025 accreditation for the calibration of test equipment, current at the time of calibration; and

(d) ensure that all tests are undertaken with test equipment where the calibration certificate is current and stated calibration due date has not passed.

S7A.8.4.4 Management of meter programming and authorised software

The *Metering Provider* must:

(a) establish a register of equipment and authorised software used for programming *meters*; and

(b) maintain records of equipment, authorised software and programs used for programming *meters*, including any changes to firmware or software within the *meter*, for at least 7 years from the most recent date of use.

S7A.8.5 Installation and commissioning requirements

S7A.8.5.1 General commissioning requirements

The *Metering Provider* must develop, maintain and operate processes and procedures for the installation and commissioning of *metering installations* for which they are accredited, which must include installation and verification requirements to ensure that:

(a) electrical wiring at the *metering installation* is:

(1) wired and terminated in compliance with *meter* and *instrument transformer* manufacturer requirements, relevant *Australian Standards* and jurisdictional requirements;

(2) terminated in a manner that ensures no electrical conductors are exposed, that the cable type and size, and number of cables terminated in any one termination are appropriate and that all terminations are tight;

(3) of an appropriate cable type, size and insulation that meets the requirements of *AS* 3000;

(4) connected with the correct polarity at each termination and connection; and

(5) connected with the correct phase sequence, where three phases are connected at the *metering installation*; in the case of a change to an existing *metering installation*, the existing phase sequence is maintained;

(b) the accuracy class of *metering installations* and any documentation from a certified body verifying the errors of *meters* and *instrument transformers* comply with the *Rules*;

(c) nameplate information reflects the design accuracy class of the *meters* and *instrument transformers*;

(d) the actual connected ratios of all *instrument transformers* at a *metering installation* and the calculation of the constant to be applied to the collection and processing of *metering data* by the *Metering Data Provider* are aligned;

(e) burdens applied to *instrument transformers* are within the rated burden specified on the name plate of the *instrument transformer*;

(f) *voltage* phase sequence relationships are correct unless the *Metering Provider* can verify to the satisfaction of *NTESMO* the accuracy of the *metering installation* when a non-standard phase sequence is applied;

(g) the combined current and *voltage* phase relationships at the *meter* terminals are correct;

(h) the *meter* programming parameters, display and error functions are all correct in accordance with manufacturer specifications, including the measurement of the forward rotation of *energy* applied to the *meter*, and that the correct pulse rates have been programmed into the *meter*;

(i) where the *metering installation* includes *instrument transformers*, register readings are validated by use of a *load* being placed on the load side of the *metering installation* and may include a timing check by comparing the readings on the *meter* display or pulse indicators against load and time;

(j) where the *metering installation* has *meter* alarms, occurrences of alarms identified on commissioning are investigated and resolved prior to leaving the site;

(k) where an aerial or antenna is installed as part of the *metering installation*, it is installed in accordance with the manufacturer's instructions and in a manner that maintains the integrity of the *meter* enclosure, including water and environmental seals; and

(l) the time setting of the *metering installation* is referenced in accordance with clause 7A.8.8.

S7A.8.5.2 Metering data validation requirements

The *Metering Provider* must develop, maintain and operate processes and procedures for the validation of *interval metering data* with the *Metering Data Provider* on the installation or alteration of that *metering installation*, which must include processes to ensure that:

(a) *metering* data is validated in accordance with schedule S7A.7;

(b) where validation has failed or cannot reasonably be undertaken, the *Metering Provider* informs the *Metering Data Provider* and the *Metering Coordinator* that the *metering installation* cannot be validated and undertake wiring checks which visibly verify correct connection and phase relationships of *voltage* and current circuits and also undertake one or more of the following alternative measurements and commissioning checks to enable the *Metering Coordinator* and *Metering Provider* to confirm that the *metering installation* complies with the *Rules*:

(1) utilisation of *meter energy* measurement to calculate *load*/ demand and that this value is reflective of expected magnitude;

(2) use of a dummy *load* or phantom *load* box to verify correct *energy* measurement at the *metering installation*; and

(3) compare *meter* measurement of *energy* or *load* with an alternative measurement of demand, current and other measurements of electrical energy;

(c) where the *Metering Provider* has undertaken in-situ testing to verify correct *energy* measurement at the *metering installation*, the *Metering Provider* informs the *Metering Data Provider* of the start and end times of the test to facilitate the *Metering Data Provider* substituting and validating *metering data*.

S7A.8.6 Metering installation maintenance

S7A.8.6.1 Test plans

(a) The *Metering Provider* must develop and maintain Asset Test Plans that provide confirmation of the *Metering Provider's* testing approach to ensure *metering installations* are maintained:

(1) in accordance with the testing and inspection requirements of the *Rules*;

(2) in accordance with approved Asset Management Strategies; or

(3) in any combination of the above.

(b) As a minimum, the *Metering Provider's* Asset Test Plans must include:

(1) the approach to testing and inspecting for each *metering installation*, or groups of *metering installations*;

(2) where appropriate, the approach to testing and inspecting various device types; and

(3) the details of the test equipment and test methodology to be employed in undertaking works considered in the test plan.

S7A.8.6.2 Management of metering installation malfunctions

(a) The *Metering Provider* must have processes and systems to support the *Metering Coordinator* in identifying and rectifying a *metering installation malfunction* in the timeframes specified in clause 7A.6.9.

(b) Where a Metering Provider identifies a metering installation malfunction, the Metering Provider must advise the Metering Data Provider and the Metering Coordinator within 1 business day of identification in accordance with paragraph 7A.6.9(d).

S7A.8.6.3 Telecommunications

(a) The *Metering Provider* must advise the *Metering Data Provider* and the *Metering Coordinator* if communications equipment is to be temporarily disconnected such that it may affect the *remote acquisition* of *metering data*.

(b) The *Metering Provider* must use reasonable endeavours to assist the *Metering Coordinator* and the *Metering Data Provider* with the manual collection of *metering data* from the *metering installation* where *remote acquisition* becomes unavailable.

S7A.8.6.4 Non-conforming test results or calibrations

The *Metering Provider* must have a process for the management of non-conforming test results or calibrations at a *metering installation*, and for devices removed from a *metering installation* for testing and evaluation, which must include:

(a) a process to perform the evaluation of the non-conformance;

(b) authority for management of the non-conformance;

(c) notification of the non-conformance to parties affected by the non-conformance, which must include the *Metering Coordinator*, *Metering Data Provider*, financially responsible participant, *Local Network Service Provider* and *NTESMO*; and

(d) initiation of corrective action.

S7A.8.7 Systems and administration

S7A.8.7.1 Register of metering installations

(a) The *Metering Provider* must establish and maintain a register of *metering installations* which must include:

(1) the identity and characteristics of *metering* equipment (*instrument transformers*, *metering installation* and *check metering installation*), including:

(i) serial numbers;

(ii) *metering installation* identification name;

(iii) *metering installation* types and models;

(iv) *instrument transformer ratios* (available and connected);

(v) current test and calibration programme details, test results and references to test certificates;

(vi) asset management plan and testing schedule;

(vii) calibration tables, where applied to achieve *metering installation accuracy*;

(viii) *Metering Provider*(s) and *Metering Data Provider*(s) details;

(ix) summation scheme values and multipliers; and

(x) data register coding details;

(2) for *metering installations* for *connection points* in a *market* operated or administered by *NTESMO* – any matters identified by *NTESMO* in a communication guideline issued in from time to time accordance with clause S7A.1.3.

(b) The register must be retained electronically for at least 13 months for each *metering installation* from when the details of the *metering installation* are first recorded in the register and may be archived after this period.

(c) The register must be retained for at least 7 years for each *metering installation* from when the details of the *metering installation* are first recorded in the register and any archiving retrieval mechanisms must facilitate analysis and management of information using the same processing rules applied to the electronic register.

(d) The *Metering Provider* must provide information from their register of *metering installations* to a party authorised to receive data in accordance with clause 7A.13.5 in a timeframe agreed with that party.

S7A.8.7.2 Disaster recovery

(a) The *Metering Provider* must establish and maintain a disaster recovery plan and business continuity processes that include:

(1) detailed documentation that is maintained up to date, showing revisions and the date of the last review;

(2) confirmation at least annually by the *Metering Provider's* management that the plan is current for the systems and processes in place; and

(3) confirmation that the plan has been subjected to an annual end-to-end test that facilitates both a ‘fail-over' from and ‘recovery' back to the production system.

(b) In the event of an IT system failure, the *Metering Provider* must ensure that systems are returned to normal operational service within 5 *business days* of the failure, as evidenced by:

(1) the software and the most recent back-up of data being restored to operational service within the 5 *business days*; and

(2) no outstanding processing or delivery of *NT NMI Data* to *NTESMO* and *Registered Participants*.

(c) The *Metering Provider* must at its earliest opportunity notify *NTESMO* of any failure where the *Metering Provider* has a requirement to implement its disaster recovery plan.

S7A.8.7.3 Audits undertaken by the Utilities Commission

The *Metering Provider* must undertake all services in a manner that is auditable by the *Utilities Commission* and must provide all

reasonable assistance to the *Utilities Commission* in discharging its obligations under the *Rules* and any relevant jurisdictional legislation in relation to *metering installations*.

Part C Metering Data Provider services

S7A.8.8 Introduction

S7A.8.8.1 Purpose

(a) The purpose of Part C of this schedule is to detail the obligations, technical requirements, measurement processes and performance requirements that are to be performed, administered and maintained by the *Metering Data Provider*.

(b) This Part details:

(1) the obligations of Metering Data Providers in the provision of metering data services;

(2) the obligations of *Metering Data Providers* to establish and maintain a metering *data services database*; and

(3) the obligations of *Metering Data Providers* in support of the *Metering Coordinator*.

S7A.8.8.2 Obligations

Metering data services

(a) Each Metering Data Provider must:

(1) provide *metering data services* in accordance with the *Rules* and relevant jurisdictional codes and policies;

(2) establish, maintain and operate a *metering data services database*;

(3) ensure that *metering data* is kept confidential and secure and only provided to persons entitled to have such access in accordance with the *Rules*;

(4) undertake the collection, processing and delivery of *metering data* and meter alarm occurrences; and

(5) co-operate in good faith with NTESMO, and all Registered Participants, Metering Providers and Metering Data Providers.

Insurance

(b) The *Metering Data Provider* must:

(1) hold public liability insurance for an amount not less than $10,000,000 per occurrence; and

(2) hold professional indemnity insurance for an amount of not less than $1,000,000 per occurrence.

Note

If a Metering Data Provider, Metering Provider and Metering Coordinator are the same legal entity, a single insurance policy for public liability insurance for an amount not less than $10,000,000 per occurrence and professional indemnity insurance for an amount of not less than $1,000,000 per occurrence that covers the operations of the Metering Data Provider, Metering Provider and Metering Coordinator roles will satisfy the insurance requirements under this schedule.

Use of sub-contactors

(c) Where a *Metering Data Provider* engages a sub-contractor to perform any of the *Metering Data Provider's* obligations specified in the *Rules*, the *Metering Data Provider*:

(1) must have policies and procedures for assessing the sub-contractor's capability, competency, processes, procedures and systems, to ensure that the sub-contractor complies with the *Rules*;

(2) must ensure that auditable processes are in place to certify that all work performed by the sub-contractor complies with the *Rules*;

(3) remains liable for all acts and omissions of its sub-contractor;

(4) must authorise the sub-contractor to provide any specific opinion or interpretation of technical information where a *Metering Data Provider* so engages a sub-contractor; and

(5) must provide the *Utilities Commission*, on request, with any information pertaining to the sub-contractor that the *Utilities Commission* reasonably considers necessary for the discharge of the *Metering Data Provider's* responsibilities under the *Rules*.

Specific obligations

(d) Each *Metering Data Provider* must:

(1) undertake validation, substitution and estimation of *metering data* in accordance with schedule S7A.7 Part C;

(2) provide *metering data services*;

(3) ensure registered details of the connection point are fully recorded in the *Metering Data Provider's metering data services database*;

(4) ensure *metering* details and parameters within the *metering data services database* are correct such that the *metering data* in the *metering data services database* is accurate;

(5) facilitate the timely commissioning and registration of the *metering installation*; and

(6) establish and maintain a metering register in its *metering data services database*.

Metering register

(e) Each *Metering Data Provider* must ensure that information in its metering register is:

(1) registered in co-operation with the *Metering Coordinator* and *Metering Provider*;

(2) provided on request to persons entitled to have access to that information in accordance with paragraph 7A.13.5(c);

(3) communicated to other *Metering Data Providers* having the right of access as a result of the transfer of a *connection point*;

(4) populated with the following:

(i) connection and metering point reference details, including:

(A) agreed locations and reference details (for example, drawing numbers);

(B) loss compensation calculation details;

(C) site identification names;

(D) details of financially responsible participants and *Local Network Service Providers* associated with the *connection point*;

(E) details of the *Metering Coordinator*;

(ii) the identity and characteristics of *metering* equipment (that is, *instrument transformers*, *metering installation* and *check metering installation*), including:

(A) serial numbers;

(B) *metering installation* identification name;

(C) *metering installation* types and models;

(D) *Metering Provider*(s) and *Metering Data Provider*(s) details;

(E) summation scheme values and multipliers; and

(F) data register coding details;

(iii) for types 1, 2, 3 and 4 *metering installations*, data communication details, if relevant, including:

(A) telephone number(s) for access to energy data;

(B) communication equipment type and serial numbers;

(C) communication protocol details or references;

(D) data conversion details;

(E) user identifications and access rights; and

(F) 'write' password (to be contained in a hidden or protected field);

(iv) data validation, substitution and estimation processes agreed between affected parties, including;

(A) algorithms;

(B) data comparison techniques;

(C) processing and alarms (for example, voltage source limits; phase angle limits);

(D) *check metering* compensation details; and

(E) alternate data sources; and

(5) for *metering installations* for *connection points* in a *market* operated or administered by *NTESMO*, includes any relevant matters identified by *NTESMO* in a communication guideline issued from time to time in accordance with clause S7A.1.3.

S7A.8.9 Service requirements

S7A.8.9.1 System requirements

Each *Metering Provider* must maintain and operate a *metering data services database* to facilitate the:

(a) *collection* of *metering data*;

(b) processing, calculation, validation, substitution and estimation of *metering data*;

(c) delivery of *metering data* and *metering register* data to *NTESMO*, *Registered Participants*, financially responsible participants and other Service Providers;

(d) assignment and version control of participant roles for *connection points*;

(e) commissioning of each metering installation into the *Metering Data Provider's metering data services database*;

(f) loading of *metering data* relating to meter churn; and

(g) storage and archiving of metering data and *validated metering data* from the *metering installation*.

S7A.8.9.2 Metering data services database

Each *Metering Data Provider* must maintain and operate a *metering data services database* that provides a full audit trail and version control capability. This functionality must be applied to:

(a) *metering data*;

(b) assigned data quality flags;

(c) substitution and estimation types;

(d) *meter* alarms;

(e) metering register information;

(f) the delivery of *metering data* to *Registered Participants*, financially responsible participants and *NTESMO*; and

(g) the mapping of all *metering* data streams (including logical *metering* data streams).

S7A.8.9.3 Exception reports

Each *Metering Data Provider* must maintain, operate and monitor a system that supports the detection of system or process errors. These exception reports must include, but not be limited to:

(a) missed reads and missing intervals of *metering data* within the *metering data services database*;

(b) long term substitutions and estimations;

(c) *metering data* errors and data overlaps;

(d) validation or metering register errors;

(e) failed batch processing, database errors and hardware failures;

(f) the capture of file syntax errors, failed and rejected *metering data* deliveries;

(g) status management of collection interfaces; and

(h) status management of *metering installation malfunctions*.

S7A.8.9.4 Collection process requirements

(a) Each *Metering Data Provider* must use reasonable endeavours to ensure actual *meter* readings and occurrences of *meter* alarms are collected for all *connection points*.

(b) Each *Metering Data Provider* must operate a process that:

(1) records and logs faults and problems associated with the reading function of *meters*, and this process must record and log, but is not limited to, any:

(i) access problems;

(ii) *metering installation* security problems;

(iii) *metering installation* faults;

(iv) read failures; and

(v) *metering installation* time synchronisation errors; and

(2) supports the *Metering Coordinator*, the *Metering Provider*, or both, in the rectification of any *metering installation malfunctions* or problems associated with the reading function of *meters*.

(c) On request by the financially responsible participant, a *Metering Data Provider* must use reasonable endeavours to carry out a special *meter* reading or final reading within 3 *business days* of the receipt of the request unless an alternative timeframe has been agreed.

S7A.8.9.5 Specific collection process requirements for remotely read metering installations

(a) Each *Metering Data Provider* must be capable of initiating a *remote acquisition* for *metering data* from type 1 to 3 *metering installations* where relevant *metering data* is missing, erroneous or has failed validation.

(b) Each *Metering Data Provider* must operate and maintain a process that:

(1) initiates an alternative method to collect *metering data* where *remote acquisition* becomes unavailable; and

(2) provides a log detailing successful reading events for each *metering installation*, or alternatively an exception report of failed *meter* readings.

S7A.8.9.6 Specific collection process requirements for manually read metering installations

Each *Metering Data Provider* must:

(a) develop and maintain a *meter* reading schedule in accordance with Schedule 7A.7 Part B;

(b) maintain reading routes with particular attention to any specific access requirements and hazard information;

(c) use reasonable endeavours to ensure that *metering data* is collected at least once every 3 months;

(d) ensure that scheduled reading date lists and programmed reading equipment is provisioned, updated and maintained;

(e) use reasonable endeavours to ensure that metering data is collected within 2 *business days* prior to or 2 *business days* subsequent to a scheduled reading date; and

(f) ensure that all *metering data* collected and any fault reason codes associated with a reading failure are transferred to the *metering data services database* within 1 *business day* of the data being collected or attempted to be collected from the *metering installation*.

S7A.8.9.7 Metering data processing requirements

General

(a) Each *Metering Data Provider* must have a process to:

(1) confirm and utilise the roles for *connection points*;

(2) assign and store the date/time stamp of when the *metering data* was entered into the *Metering Data Provider's metering data services database*;

(3) ensure that all *metering data* is stored in the *metering data services database* with the correct:

(i) quality flag;

(ii) applicable substitution or estimation type code; and

(iii) applicable substitution or estimation reason code;

(4) check the *metering data services database* for missing *metering data* and overlaps;

(5) aggregate *interval metering data* for a *connection point* into a 30-minute interval net *metering* data stream prior to delivery to *NTESMO* or financially responsible participants in accordance with the *Rules*;

(6) load *metering data* in an alternative format provided by a *Metering Provider* where there is a communications error, failed reading or *metering installation malfunction* that prevents the normal collection of *metering data* from a *metering installation*; and

(7) whenever any substitutions or estimations are carried out, notify:

(i) *NTESMO* (in respect of a *metering installation* used for the purposes of *settlements*);

(ii) *Registered Participants* for the *connection point*; and

(iii) financially responsible participants (in respect of a *metering installation* used for the purposes of *billing transactions*).

Erroneous data

(b) Where the *Metering Coordinator* or *Metering Provider* informs a *Metering Data Provider* of a situation that may cause *metering data* to be erroneous, the *Metering Data Provider* must identify and substitute any erroneous *metering data*.

(c) Where any *Registered Participant* for the *connection point* disputes *metering data*, the *Metering Data Provider* must investigate, and, if necessary correct the *metering data* in accordance with Schedule 7A.7 Part C.

Meter alarms

(d) Where a *meter* alarm has occurred, the *Metering Data Provider* must process the occurrence of the *meter* alarm along with the *metering data* as part of the validation process in accordance with Schedule 7A.7 Part C.

S7A.8.9.8 Specific metering data processing requirements for type 1, 2, 3 and 4 metering installations

Each *Metering Data Provider* must be able to undertake simple cumulative or subtractive processes to manage complex metering configurations. Typically, the system must support:

(a) an A+B+C or A-B-C aggregation configuration;

(b) validation capability for standard partial or *check meter connection points* that incorporate a simple comparison of a single *metering* data stream to a single *check metering* data stream within an acceptable tolerance; and

(c) the calculation of the average of the 2 validated data sets for *metering installations* where the *check metering installation* duplicates the *metering installation* and accuracy level, and the average of the 2 validated data sets must be delivered to:

(1) *NTESMO* (in respect of a *metering installation* used for the purposes of *settlements*);

(2) *Registered Participants*; and

(3) financially responsible participants (in respect of a *metering installation* used for the purposes of *billing transactions*).

S7A.8.9.9 Specific metering data processing requirements for type 7 metering installations

Inventory tables, load tables and on/off tables

(a) Each *Metering Data Provider* must store inventory tables, load tables and on/off tables in the *metering data services database*

(b) Each *Metering Data Provider* must ensure:

(1) inventory tables are complete, correct and updated with any changes provided by the *Local Network Service Provider or Metering Coordinator*;

(2) on/off tables are complete and correct; and

(3) load tables are complete and correct.

(c) Each *Metering Data Provider* must ensure the inventory table, load table and on/off table are versioned for *metering data* calculations.

Processing of calculated metering data

(d) Each *Metering Data Provider* must ensure that all *calculated metering data* is validated and processed into *recording intervals*.

S7A.8.9.10 Specific metering data estimation requirements for manually read and type 7 metering installations

(a) Each *Metering Data Provider* must have a process for the creation of *estimated metering data* for type 4A, 5, 6 and 7 *metering installations*.

(b) To meet *metering data* delivery requirements, this process must either:

(1) create individual blocks of *estimated metering data* on a daily basis; or

(2) create a single block of *estimated metering data*:

(i) from the date of the last *meter* reading to a period beyond the next scheduled reading date for type 4A, 5 and 6 *metering installation*s; or

(ii) from the date of the last calculation to a period beyond the next scheduled calculation for type 7 *metering installations*.

S7A.8.9.11 Delivery performance requirements for metering data

Obligation to deliver information to NTESMO

(a) Where this clause S7A.8.9.11 imposes an obligation on a *Metering Data Provider* to deliver *metering data* or other information to *NTESMO*, that obligation only applies in respect of a *metering installation* that is used for the purposes of *settlements*.

Obligation to deliver information to financially responsible participants

(b) Where this clause S7A.8.9.11 (other than paragraph S7A.8.9.11(e)) imposes an obligation on a *Metering Data Provider* to deliver *metering data* or other information to financially responsible participants, that obligation only applies in respect of a *metering installation* that is used for the purposes of *billing transactions*.

Validated metering data to be delivered

(c) Each *Metering Data Provider* must ensure only validated *metering data* is delivered to *NTESMO*, *Registered Participants* and financially responsible participants.

Delivery timing requirements

(d) Subject to any agreement to the contrary as contemplated by clause S7A.8.13.1, each *Metering Data Provider* must:

(1) deliver to *NTESMO*, *Registered Participants* and financially responsible participants all actual *meter* readings that passed validation within 2 *business days* of the actual *meter* readings being received into the *metering data services database*;

(2) substitute, validate and deliver to *NTESMO*, *Registered Participants* and financially responsible participants the *substituted metering data* within 2 *business days* of the actual *meter* readings being received into the *metering data services database* and failing validation;

(3) substitute, validate and deliver to *NTESMO, Registered Participants* and financially responsible participants the *substituted metering data* within 2 *business days* of the receipt of any fault reason codes associated with a reading failure or failed interrogation event, into the *metering data services database*;

(4) validate and deliver to *NTESMO*, *Registered Participants* and financially responsible participants all *substituted metering data* within 2 *business days* of the *metering data* being substituted;

(5) ensure that all *metering data* is delivered to *NTESMO*, *Registered Participants* and financially responsible participants for the full period of any retrospectively created *metering* data streams within 2 *business days* of that *metering* data streams being created; and

(6) for type 4A, 5, 6 and 7 *metering installations*, validate and deliver to *NTESMO*, *Registered Participants* and financially responsible participants all *estimated metering data* within 2 *business days* of the *metering data* being estimated.

(e) Each *Metering Data Provider* must provide *metering data* to the relevant financially responsible participants within 2 *business days* of receiving a completed notification of a change of financially responsible participants, including *estimated metering data*, for a type 4A, 5, 6 or 7 *metering installation.*

Review of failed validations

(f) Each *Metering Data Provider* must ensure that all failed validations are reviewed promptly so as to:

(1) where the initial review of the failed validation identifies that the actual *meter* readings are valid, deliver the actual *meter* readings to *NTESMO*, *Registered Participants* and financially responsible participants within 2 *business days* of the *metering data* being received into the *metering data services database*; and

(2) where further information is required to validate the actual *meter* readings, and the receipt of such information identifies that the actual *meter* readings are valid, deliver the actual *meter* readings to *NTESMO*, *Registered Participants* and financially responsible participants within 2 *business days* of the *metering data* passing validation.

Operational delays

(g) The *Metering Data Provider* must notify *NTESMO* and affected *Registered Participants* immediately upon the identification of any operational delays impacting on normal *metering data* delivery.

S7A.8.10 Data management following the alteration of type of metering installation at a connection point

S7A.8.10.1 Meter churn scenarios

(a) Meter churn can result in a change to the configuration of *metering data* recorded by a *metering installation*. This change in *metering data* may result in an alteration to the Metering Data File Format file.

(b) Where a meter churn takes place, each *Metering Data Provider* must:

(1) comply with the Metering Data File Format requirements when constructing the Metering Data File Format file associated with the change in type of *metering installation*; and

(2) for a meter churn scenario described in an item of column 1 of the following table, comply with the requirements for the management of *metering data* described in the provision listed in column 2 of that item of the following table:

Column 1 Meter churn scenario	Column 2 Provision
A *metering installation* is changed from a type 6 *metering installation* to a new type 6 *metering installation* (Scenario 1)	Clause S7A.8.10.2
A *metering installation* is changed from a type 6 *metering installation* to a type 1, 2, 3, 4, 4A, or 5 *metering installation* (Scenario 2)	Clause S7A.8.10.3
A *metering installation* is changed from a type 1, 2, 3, 4, 4A, or 5 metering installation to a type 6 metering installation (Scenario 3)	Clause S7A.8.10.4
A *metering installation* is changed from a type 1, 2, 3, 4, 4A, or 5 *metering installation* to a new type 1, 2, 3, 4, 4A, or 5 *metering installation* (Scenario 4)	Clause S7A.8.10.5

S7A.8.10.2 Scenario 1

The *Metering Data Provider* must have a process to ensure that:

(a) the final accumulation *meter* reading(s) from the removed type 6 *metering installation* are applied at the end of the *day* prior to the meter churn;

(b) the start reading(s) for a new type 6 *metering installation* are applied at the start of the *day* of the meter churn; and

(c) *estimated metering data* is provided for any *metering* data streams made active as a result of the meter churn.

S7A.8.10.3 Scenario 2

(a) The *Metering Data Provider* must have a process to ensure that:

(1) the final accumulation *meter* reading(s) from the removed type 6 *metering installation* are applied at the end of the *day* prior to the meter churn;

(2) the *metering data* for the new type 1, 2, 3, 4, 4A, or 5 *metering installation* commences at the start of the *day* of the meter churn; and

(3) *estimated metering data* is provided for any *metering* data streams made active as a result of the meter churn for a new type 4A or type 5 *metering installation*.

(b) The *Metering Data Provider* must have a process to ensure that the *metering data* for the period of the meter churn *day* between the start of the *day* and the commissioning of the new *metering installation* is provided as zeroes with a quality flag of F.

S7A.8.10.4 Scenario 3

Where reversion from a type 1, 2, 3, 4, 4A, or 5 *metering installation* to a type 6 *metering installation* is permitted, the *Metering Data Provider* must have a process to ensure that:

(a) the final reading(s) from the removed type 1, 2, 3, 4, 4A, or 5 *metering installation* cease at the end of the *day* of the meter churn;

(b) the *metering data* for the period of the meter churn *day* between commissioning of the new *metering installation* and the end of the *day* of the meter churn is provided as zeroes with a quality flag of F; and

(c) the start reading(s) for the new type 6 *metering installation* are applied at the start of the *day* following the *day* of the meter churn.

S7A.8.10.5 Scenario 4

Each *Metering Data Provider* must have a process to ensure compliance with the following requirements:

(a) the final reading(s) from the removed type 1, 2, 3, 4, 4A, or 5 *metering installation* is collected up to the removal of the old *metering installation* on the *day* of the meter churn;

(b) the *metering data* for the new type 1, 2, 3, 4, 4A, or 5 *metering installation* commences at the start of the *day* of the meter churn;

(c) the *Metering Data Provider* related to the new *metering installation* must obtain *metering data* for the period of the meter churn *day* between the start of the meter churn *day* and the removal of the old *metering installation* from the *Metering Data Provider* related to the old *metering installation*;

(d) the *Metering Data Provider* related to the new *metering installation* must combine the *metering data* from the old *metering installation* and the new *metering installation* for the day of meter churn and deliver *metering data* for the whole *day* of meter churn;

(e) where meter churn results in a change to the recording of *metering data* from 15-minute to 30-minute intervals, the 15-minute intervals of *metering data* from the start of the meter churn *day* until the commissioning of the new *metering installation* are to be aggregated to form *interval metering data*;

(f) where meter churn results in a change to the recording of *metering data* from 30-minute to 15-minute intervals:

(1) the 15-minute intervals of *metering data* from the commissioning of the new *metering installation* to the end of the meter churn *day* are to be aggregated to form 30-minute *interval metering data*; or

(2) the 30-minute intervals of *metering data* for the start of the meter churn *day* may be disaggregated to form 15-minute interval *metering data*, where agreed with the *Metering Coordinator*;

(g) *estimated metering data* is provided for any *metering* data streams made active as a result of the meter churn for a new type 4A or type 5 *metering installation*;

(h) where meter churn results in a *metering* data stream being made active, the *Metering Data Provider* related to the new *metering installation* must provide *metering data* from the start of the *day* to the commissioning of the new *metering installation* by providing zeroes with a quality flag of F;

(i) where meter churn results in a *metering* data stream being made inactive, the *Metering Data Provider* must provide *metering data* from the commissioning of the new *metering* installation to the end of the *day* by providing zeroes with a quality flag of F; and

(j) the *Metering Data Provider* must create final *substituted metering data* for the period between the existing *metering installation* being removed and the commissioning of the new *metering installation*.

S7A.8.11 System architecture and administration

S7A.8.11.1 Metering data archival and recovery

Each *Metering Data Provider* must have retrieval mechanisms (both electronic and archived) that allow the *metering data* retained in its *metering data services database* under clause 7A.8.3 to be accessed**,** recovered, re-evaluated and delivered in agreed timeframes to *NTESMO*, *Registered* Participants or financially responsible participants.

S7A.8.11.2 Data backup

All *metering data* and metering register information must be backed-up, at a minimum, on a daily basis and held in a secure environment.

S7A.8.11.3 Disaster recovery

Requirement for disaster recovery plan

(a) Each *Metering Data Provider* must ensure that a disaster recovery plan is established and in place to ensure that in the event of a system failure, its IT systems can be returned to normal operational service within 2 *business days*.

(b) The *Metering Data Provider* must ensure that the disaster recovery plan is:

(1) up to date with all documentation showing revisions; and

(2) witnessed and dated at least annually by the *Metering Data Provider* as being current for the systems and processes in place.

Fall-over system approach

(c) Where a *Metering Data Provider* adopts a disaster recovery plan that has a complete ‘fail-over' system approach, the disaster recovery plan must be subjected to a test annually that facilitates a full ‘fail-over' to the recovery system.

Segmented system approach

(d) Where the *Metering Data Provider* adopts a disaster recovery plan that has a segmented system approach, the disaster recovery plan must:

(1) detail the interfaces and relationships between system segments;

(2) be established for each individual system segment;

(3) be tested annually with evidence retained to show disaster recovery for each individual system segment; and

(4) have, for each individual system segment, a procedure that clearly details the process to establish a return to full operation.

Testing

(e) Expected evidence to support disaster recovery plan testing should include, but not be limited to:

(1) a test plan of the fail-over;

(2) results of the fail-over including timing;

(3) system logs indicating fail-over and recovery; and

(4) logs or notations evidencing resumption of *Metering Data Provider* operations.

Actions following system failure

(f) If a system failure occur**s**, the *Metering Data Provider* must ensure that within 2 *business days*:

(1) its *metering data services database* is restored to operational service; and

(2) all processing and delivery backlogs of *metering data* to *NTESMO* and *Registered Participants* is completed.

Notice to NTESMO of activation of disaster recovery plan

(g) The *Metering Data Provider* must, at its earliest opportunity, notify *NTESMO* of any failure where the *Metering Data Provider* has a requirement to activate its disaster recovery plan.

S7A.8.11.4 System administration and data management

Metering data services database

(a) The *metering data services database* must be operated and administered by a *Metering Data Provider* to facilitate:

(1) controlled access to systems and data using unique identification and passwords for each user;

(2) the restriction of access to the underlying database tables to nominated system administrators;

(3) the restriction of *Registered Participant* access to *metering data* and *NT NMI data* in accordance with paragraph 7A.13.5(c);

(4) a minimum of 95% system availability (that is, hardware and systems downtime do not exceed a maximum of 438 hours per annum).

Metering register

(b) Each *Metering Data Provider* must maintain full audit trails and version control of metering register information, *metering data* for at least 7 years so that any data output produced by the system can be re-produced from source data.

S7A.8.12 Quality control

S7A.8.12.1 Audits

(a) Audits may be undertaken at any time by the *Utilities Commission* in accordance with the *Rules* and may be carried out following a request from a *Registered Participant*.

(b) Where an audit of a *metering installation* is conducted by the *Utilities Commission* under clause 7A.7.4, and *metering data* must be obtained from the *Metering Data Provider* in support of this audit, the *Metering Data Provider* must provide the *metering data* within 2 *business days* of the *Utilities Commission's* request.

(c) Each *Metering Data Provider* must assist the *Utilities Commission* with reasonable requests for the provisioning of *metering data* and relevant information relating to *connection points* that are part of the audit process of *Metering Coordinators*, *Metering Providers* and *Metering Data Providers*.

S7A.8.12.2 Corrective action

(a) Each *Metering Data Provider* must take corrective action on any reported instances of non-compliance identified by *NTESMO* or through a *Metering Data Provider* audit process.

(b) Where a *Metering Data Provider* becomes aware that incorrect *metering data* has been delivered to *NTESMO* and *Registered Participants*, the *Metering Data Provider* must provide corrected *metering data* to all affected parties within 1 *business day* as required by paragraph 7A.8.3(d).

(c) *NTESMO* may request corrective action where errors or omissions are found within the *settlements* process and such requests are to be actioned as a priority by the *Metering Data Provider*.

(d) Where the *Metering Data Provider* cannot deliver the corrected *metering data* in the timeframe specified above, the *Metering Data Provider* must advise *NTESMO* and agree on an alternative delivery time.

S7A.8.13.1 Administration

Provision of data

(a) A *Registered Participant* may request a *Metering Data Provider* to:

(1) provide *metering data* in an alternative format, method or timeframe;

(2) provide any other *metering data services*; or

(3) any combination of the above.

No data to be provided

(b) A *Registered Participant* may request a *Metering Data Provider* to not provide or deliver any *metering data* to the *Registered Participant* as required under this Part.

System changes not required

(c) There is no requirement for a *Metering Data Provider* to implement system changes and processes to facilitate bilateral agreements.

Bilateral agreement not to impact metering data delivery to NTESMO

(d) Any acceptance by a *Metering Data Provider* to deliver *metering data* to a *Registered Participant* in accordance with any agreement contemplated by this clause S7A.8.13.1 or acceptance to not provide any *metering data* in accordance with such an agreement must not impact on *metering data* delivery to *NTESMO* or any other *Registered Participant* for the *connection point(s)* concerned.

Bilateral agreement to be auditable

(e) Any bilateral agreement established between a *Registered Participant* and a *Metering Data Provider* must be in writing and made available to the *Utilities Commission* on request for audit purposes.

S7A.8.13.2 Quality systems

Each *Metering Data Provider* must operate and retain a quality system that is at least equal to a quality accreditation to the ISO9001 or ISO9002 standards.

88 Clause 8.1.3 modified

After clause 8.1.3, heading

insert

Note

Clause 8.1.3(b)(5) and (7) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

89 Chapter 8, Part B modified

After Chapter 8, Part B, heading

insert

Note:

This Part has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

90 Clause 8.6.1 modified

After clause 8.6.1, heading

insert

Note

Clause 8.6.1(d) and (e) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

91 Clause 8.6.2 modified

After clause 8.6.2, heading

insert

Note

Clause 8.6.2(l) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

92 Clause 8.6.5 replaced

Clause 8.6.5

repeal, insert

8.6.5 Indemnity to AER and AEMC

Each *Registered Participant* must indemnify the *AER* and the *AEMC* against any claim, action, damage, loss, liability, expense or outgoing which the *AER* or the *AEMC* pays, suffers, incurs or is liable for in respect of any breach by that *Registered Participant* or any officer, agent or employee of that *Registered Participant* of this rule 8.6.

93 Clauses 8.6.6 and 8.6.7 modified

After clauses 8.6.6 and 8.6.7, headings

insert

Note

This clause has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

94 Clause 8.7.1 modified

(1) Clause 8.7.1(b)(1)

omit

and *AEMO*

(2) Clause 8.7.1(c)(3)

omit

, all *Registered Participants* and *AEMO*

insert

and all *Registered Participants*

95 Clause 8.7.2 modified

(1) Clause 8.7.2, heading

omit, insert

8.7.2 Reporting requirements and monitoring standards for Registered Participants

Note

Clause 8.7.2(a)(2) and (4) and (b)(2) has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

(2) Clause 8.7.2(a)(5)

omit

or *AEMO*

(3) Clause 8.7.2(b)(1)

omit

, *AEMO*

(4) Clause 8.7.2(b)(1)

omit

, (4)

(5) Clause 8.7.2(c)

omit

AEMO and

(6) Clause 8.7.2(e)

omit (all references)

and *AEMO*

(7) Clause 8.7.2(f)

omit

all words from "neither" to "be)"

insert

a *Registered Participant* must not recklessly or knowingly provide, or permit any other person to provide on behalf of that *Registered Participant*

(8) Clause 8.7.2(g)

omit

or *AEMO*

(9) Clause 8.7.2(g) and (h)

omit

and/or *AEMO* (as the case may be)

(10) Clause 8.7.2(g)

omit

and (to the extent relevant) *AEMO*

96 Clause 8.7.6 modified

After clause 8.7.6, heading

insert

Note

Clause 8.7.6 has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

97 Chapter 8, Parts E and G modified

After Chapter 8, Parts E and G, headings

insert

Note

This Part has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

98 Chapter 8, Parts H modified

After Chapter 8, Part H, heading

insert

Note:

This Part has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

98A Rule 8.14 modified

After rule 8.14, heading

insert

Note

Paragraph (b)(4) of this rule has no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016).

99 Chapter 10 modified

(1) Chapter 10, definitions ***accumulated energy data***, ***accumulated metering data***, ***application to connect***, ***business day***, ***calculated metering data***, ***check meter***, ***check metering data***, ***check metering installation***, ***connection point***, ***control centre***, ***Customer***, ***customer authorised representative***, ***day***, ***Distribution Network Service Provider***, ***distribution system***, ***estimated metering data***, ***facilities***, ***financially responsible***, ***Generator***, ***interval energy data***, ***interval metering data***, ***Metering Coordinator***, ***Metering Data Provider***, ***metering data services***, ***metering data services database***, ***metering installation malfunction***, ***Metering Provider***, ***National Electricity Law***, ***national grid***, ***Network Service Provider***, ***NMI***, ***nominal voltage***, ***nominated pass through event considerations***, ***positive change event, power system***, ***regulatory control period***, ***remote acquisition***, ***Rules***, ***substituted metering data***, ***telecommunications network***, ***time***, ***transmission network***, ***Transmission Network Service Provider***, ***transmission or distribution system*** and ***unmetered connection point***

omit

(2) Chapter 10

insert (in alphabetical order)

1st regulatory control period

In relation to a *Network Service Provider* in this jurisdiction, means the first period during which the provider will be or is subject to a control mechanism imposed by a distribution determination, being the period from 1 July 2019 to 30 June 2024.

2009-14 NT regulatory control period

The regulatory control period that commenced on 1 July 2009 under the *NT Network Access Code*.

2014-19 NT regulatory control period

The regulatory control period that commenced on 1 July 2014 under the *NT Network Access Code*.

2014 NT Ministerial Direction

The direction issued by the shareholding Minister of Power and Water Corporation ABN 15 947 352 360 to the board of the Corporation under section 8(4)(a) of the Government Owned Corporations Act (NT), dated 19 June 2014.

2014 NT Network Price Determination

The "2014 Network Price Determination" made by the *Utilities Commission* under the *Utilities Commission Act* (NT), *Electricity Reform Act* (NT) and Chapter 6 of the *NT Network Access Code* that:

(a) applies, or applied, from 1 July 2014 to 30 June 2019; and

(b) because of section 57 of the *Electricity Networks (Third Party Access) Act* (NT), is, or was, a network pricing determination made under section 6A(1) of that Act,

as amended, varied or substituted from time to time.

accumulated energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *recording interval*. *Accumulated energy data* is held in the *metering installation*. The measurement is carried out at a *metering point*.

accumulated metering data

The *accumulated energy data*, once collected from a *metering installation*, is *accumulated metering data*. *Accumulated metering data* is held in a *metering data services database*.

application to connect

An application made by a *Connection Applicant* in accordance with Chapter 5, Part B for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*.

Australian Central Standard Time (ACST)

The time that is set at 9 hours and 30 minutes in advance of *Co-ordinated Universal Time*.

business day

A day that is not:

(a) a Saturday or Sunday; or

(b) a public holiday as defined in section 17 of the *Interpretation Act* (NT) (other than a public holiday that is part of a day) in the City of Darwin.

calculated metering data

The recording interval data corresponding to the calculation of consumed energy for a type 7 *metering installation* in accordance with schedule 7A.7. *Calculated metering data* is held in the *metering data services database.*

check meter

An additional meter used as a source of *check metering data* for type 1 and type 2 *metering installations* as specified in schedule 7A.4.

check metering data

The *energy data*, once collected from a *check metering installation*, is *check metering data*. *Check metering data* is held in a *metering data services database*.

check metering installation

A *metering installation* that includes a *check meter* which is used as the source of *check metering data* for data validation.

connection point

The agreed point of *supply* established between *Network Service Provider*(s) and another *Registered Participant*, *Non-Registered Customer* or *franchise customer*.

control centre

The *facilities* used by *NTESMO* for managing *power system security* and administering a *market*.

Customer

A person who:

(a) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the selling of electricity; but

(b) does not hold a licence authorising the ownership or operation of an electricity network under that Part.

customer authorised representative

A person authorised by a *retail customer* to request and receive information under Chapter 7A on the *retail customer's* behalf.

day

Unless otherwise specified, the 24 hour period beginning and ending at midnight *Australian Central Standard Time*.

Distribution Network Service Provider

A person who:

(a) engages in the activity of owning, controlling, or operating a *distribution system*; and

(b) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the ownership or operation of an electricity network.

distribution system

Means:

(a) a *distribution network*, together with the *connection assets* associated with the *distribution network*, which is connected to another *transmission or distribution system* within the other *participating jurisdictions*; or

(b) a *distribution network* that forms part or all of a local electricity system, together with the *connection assets* associated with the *distribution network*; or

(c) a stand-alone distribution system in a *regulated SAPS*.

Connection assets on their own do not constitute a *distribution system*.

estimated metering data

The estimated values of *accumulated metering data*, *interval metering data* or *calculated metering data* that have been prepared in accordance with schedule 7A.7. *Estimated metering data* is held in a *metering data services* database.

facilities

A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, typically:

(a) a *power station*, *generating system* or *integrated resource system*;

(b) a *substation* or *power station switchyard*;

(c) a *control centre* (being an *NTESMO control centre*, or a *distribution* or *transmission network control centre*);

(d) facilities providing an *exit service*.

financially responsible

In relation to a *connection point*, a term which is used to describe the person authorised to have any of the following:

1. the *load connected* at that *connection point*;

2. the *generating unit connected* at that *connection point*;

3. a *bidirectional unit* connected at that *connection point*.

Note:

The obligations on Customers (including retailers) and Generators in relation to the authorisation of, respectively, load or generating units connected at a connection point will be considered as part of the phased implementation of the Rules in this jurisdiction.

Generator

A person who:

(a) engages in the activity of owning, controlling or operating a *generating system* that is *connected* to, or who otherwise *supplies* electricity to, a *transmission or distribution system*; and

(b) is a *Registered Participant* who, under Part 3 of the *Electricity Reform Act* 2000 (NT), holds a licence authorising the generation of electricity.

For the purposes of Chapter 5, the term includes a person who:

(a) is required or intends to hold a licence authorising the *generation* of electricity;

(b) is covered by an exemption from the requirement to hold a licence for the *generation* of electricity;

(c) is a non-registered embedded generator (as defined in clause 5A.A.1) who has made an election under clause 5A.A.2(c); or

(d) is a non-registered embedded generator (as defined in clause 5A.A.1) above the relevant materiality threshold (as defined in Chapter 5).

interval energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared and recorded by the *metering installation* in intervals which correspond to a *recording interval* or are submultiples of a *recording interval*. *Interval energy data* is held in the *metering installation*.

interval meter

A meter that records interval energy data.

interval metering data

The *interval energy data*, once collected from a *metering installation*, is *interval metering data*. *Interval metering data* is held in a *metering data services database*.

Metering Coordinator

A person appointed to the role of *Metering Coordinator* in this jurisdiction.

Metering Data Provider

A person appointed to be a *Metering Data Provider* for a *connection point*.

metering data services

The services that involve the collection, processing, storage and delivery of *metering data* and the management of relevant *NT NMI data* in accordance with the *Rules*.

metering data services database

The database established and maintained by the *Metering Data Provider* that holds *metering data* and *NT NMI data* relating to each *metering installation* for which the *Metering Coordinator* has appointed the *Metering Data Provider* to provide *metering data services*.

metering installation malfunction

The full or partial failure of the *metering installation* in which the *metering installation*:

(a) does not meet the requirements of schedule 7A.4;

(b) does not record, or incorrectly records, *energy data*; or

(c) does not allow, or provide for, collection of *energy data*.

Metering Provider

A person appointed to be a *Metering Provider* for a *connection point*.

national grid

The sum of:

(a) all *connected transmission systems* and *distribution systems* within the other *participating jurisdictions*; and

(b) the *transmission systems* and *distribution systems* and *regulated SAPS* in this jurisdiction.

NEL

The National Electricity (NT) Law.

Network Service Provider

A *Distribution Network Service Provider* or *Transmission Network Service Provider*.

NMI

A National Metering Identifier issued by the relevant *Network Service Provider*.

nominal voltage

The design *voltage* level, nominated for a particular location on the *power system*, such that power lines and circuits that are electrically connected other than through transformers have the same *nominal voltage* regardless of operating *voltage*.

nominated pass through event considerations

The *nominated pass through event considerations* are:

(a) whether the event proposed is an event covered by a category of *pass through event* specified in clause 6.6.1(a1)(1AA) to (4) (in the case of a distribution determination) or clause 6A.7.3(a1)(1) to (4) (in the case of a *transmission determination*);

(b) whether the nature or type of event can be clearly identified at the time the determination is made for the service provider;

(c) whether a prudent service provider could reasonably prevent an event of that nature or type from occurring or substantially mitigate the cost impact of such an event;

(d) whether the relevant service provider could insure against the event, having regard to:

(1) the availability (including the extent of availability in terms of liability limits) of insurance against the event on reasonable commercial terms; or

(2) whether the event can be self-insured on the basis that:

(i) it is possible to calculate the self-insurance premium; and

(ii) the potential cost to the relevant service provider would not have a significant impact on the service provider's ability to provide *network services*; and

(e) any other matter the *AER* considers relevant and which the *AER* has notified *Network Service Providers* is a nominated pass through event consideration.

NT equivalent services

Regulated network access services (as defined in clause 3 of the *NT Network Access Code*) that are designated as direct control services in Table 3.1 of Part A of the *2014 NT Network Price Determination*.

NT Network Access Code

The Network Access Code as defined in section 2A(1) of the *Electricity Networks (Third Party Access) Act* (NT).

NT NMI data

The following data in respect of a *connection point*:

(a) the *NMI* of the *connection point* and the street address of the relevant *connection point* to which that *NMI* is referable;

(b) the *NMI* checksum for the *connection point*;

(c) the identity of the relevant *Network Service Provider*;

(d) the relevant *distribution loss factor* applicable to the connection point;

(e) the Network Tariff (identified by a code) applicable in respect of the *connection point*;

(f) the read cycle date, or date of next scheduled read or date in a relevant code representing the read cycle date or date of next scheduled read, for that *connection point*,

and, to avoid doubt, does not include any *metering data* or other details of an end-user's consumption at that *connection point*.

positive change event

For a *Distribution Network Service Provider*, a *pass through event* which entails the *Distribution Network Service Provider* incurring *materially* higher costs in providing *direct control services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* higher costs in providing *prescribed transmission services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

power system

The electricity power system of the *national grid* including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, operated as an integrated arrangement or arrangements.

recording interval

A 30 minute period ending on the hour (*Australian Central Standard Time*) or on the half-hour and, if identified by a time, means the 30 minute period ending at that time.

regulatory control period

In respect of a *Network Service Provider*, a period of not less than 5 *regulatory years* for which the provider is subject to a control mechanism imposed by a distribution determination.

remote acquisition

The acquisition of *interval metering data* from a *telecommunications network* connected to a *metering installation* that:

(a) does not, at any time, require the presence of a person at, or near, the interval *metering installation* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading); and

(b) includes but is not limited to methods that transmit data via:

(1) fixed-line telephone (‘direct dial-up');

(2) satellite;

(3) the internet;

(4) wireless or radio, including mobile telephone networks;

(5) power line carrier; or

(6) any other equivalent technology.

Rules

The National Electricity Rules as defined in section 2(1) of the *National Electricity Law*.

substituted metering data

The substituted values of *accumulated metering data*, *interval metering data* or *calculated metering data* prepared in accordance with schedule 7A.7. *Substituted metering data* is held in a *metering data services database*.

telecommunications network

A telecommunications network that provides access for public use.

time

Australian Central Standard Time.

transmission network

Any of the following:

(a) a *network* in this jurisdiction operating at nominal *voltages* of 66kV and above;

(b) a *network* or part of a *network* prescribed by local instrument to be a *transmission network* or part of a *transmission network*,

but does not include a *network* or part of a *network* prescribed by local instrument not to be a *transmission network* or part of a *transmission network.*

For a *participating jurisdiction* other than the State of Victoria, an *identified shared user asset* owned, controlled or operated by a *Primary Transmission Network Service Provider* (including a *third party IUSA* that is the subject of a *network operating agreement*) forms part of that *Primary Transmission Network Service Provider's transmission network*.

Note:

The National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016 are a local instrument.

Transmission Network Service Provider

A person who:

(a) engages in the activity of owning, controlling or operating a *transmission system*; and

(b) under Part 3 of the *Electricity Reform Act* (NT), holds a licence authorising the ownership or operation of an electricity network.

transmission or distribution system

A transmission system or a distribution system.

unmetered connection point

A *connection point* at which a *meter* is not necessary under schedule 7A.1.

Utilities Commission

The Utilities Commission of the Northern Territory established by section 5 of the *Utilities Commission Act* (NT).

(3) Chapter 10, definition ***applicable regulatory instruments***, at the end

insert

(6A) Northern Territory:

(a) the *Electricity Reform Act* (NT);

(b) all instruments made and licences granted under the *Electricity Reform Act* (NT);

(c) the *Utilities Commission Act* (NT); and

(d) all instruments made under the *Utilities Commission Act* (NT).

(4) Chapter 10, definition ***franchise customer***, at the end

insert

Note:

There are no franchise customers in this jurisdiction.

99A Chapter 10 modified (further definitions substituted and inserted)

(1) Chapter 10, definitions ***access standard***, ***connection alteration***, ***connection contract***, ***Dedicated Connection Asset Service Provider***, ***dispatch***, ***distribution network user access***, ***embedded network***, ***funded augmentation***, ***generating system***, ***Incoming Retailer***, ***Local Network Service Provider***, ***market***, ***market load***, ***metering register***, ***normal voltage***, ***performance standard***, ***plant***, ***power system security***, ***profile***, ***retail customer***, ***satisfactory operating state***, ***secure operating state***, ***settlements***, ***settlements ready data***, ***system standard*** and ***transmission consultation procedures***

omit

(2) Chapter 10

insert

access standard

A particular technical requirement as recorded in a *connection agreement*.

billing transaction

The activity of producing bills and credit notes in *markets* that are not operated or administered by *NTESMO*.

connection alteration

Has (in the context of Chapters 5A and 7A) the meaning given in clause 5A.A.1.

connection contract

Has (in the context of Chapters 5A and 7A) the meaning given in clause 5A.A.1.

Dedicated Connection Asset Service Provider

A *Transmission Network Service Provider* to the extent that it owns or operates a *dedicated connection asset* in accordance with a licence under the *Electricity Reform Act 2000* (NT).

dispatch

The act of initiating or enabling all or part of the response to an instruction issued to a *Generator* to *synchronise*, supply *ancillary services*, or supply *energy*.

distribution network user access

The *power transfer capability* of the *distribution network* in respect of:

(a) *generating units* or a group of *generating units*; and

(b) *network elements*; and

(c) *bidirectional units* or a group of *bidirectional units*,

at a *connection point* which has been negotiated in accordance with rules 5.3, 5.3A and 5.3AA.

Note:

For the avoidance of doubt, distribution network user access extends to the transmission network for the purposes of Chapter 6.

electricity retail supply code

The *Electricity Retail Supply Code* made by the Utilities Commission under section 24 of the *Utilities Commission Act 2000* (NT) (as published by the Utilities Commission from time to time).

embedded network

A *distribution system* that is *connected* to a *distribution system controlled* or operated by the *Local Network Service Provider* (other than a *distribution system* that is owned, controlled or operated by the *Local Network Service Provider*).

energy ombudsman

The person holder or occupying the office of Ombudsman for the Northern Territory established by section 9 of the *Ombudsman Act 2009* (NT).

funded augmentation

A *transmission network augmentation* for which the *Transmission Network Service Provider* is not entitled to receive a charge pursuant to Chapter 6, other than an *identified user shared asset* or a *designated network asset*.

generating system

(a) Subject to paragraph (b), for the purposes of the *Rules*, a system comprising one or more *generating units*.

(b) For the purposes of Chapter 5, a system comprising one or more *generating units* and includes auxiliary or *reactive plant* that is located on the *Generator's* side of the *connection point* and is necessary for the *generating system* to meet its *performance obligations*.

Incoming Retailer

A *retailer* that:

(a) that has a contract with a customer at a *connection point*; and

(b) has initiated the customer transfer process in accordance with the *electricity retail supply code*,

but which is not yet designated the *financially responsible* participant for that *connection point*.

Local Network Service Provider

Power and Water Corporation ABN 15 947 352 360.

market

Means:

(a) except for the purposes of Chapter 7A:

(i) a market or exchange operated or administered by *NTESMO*, whether being a market for *energy* or any other market or exchange; or

(ii) a market or exchange for *energy* that is not operated or administered by *NTESMO*; and

(b) for the purposes of Chapter 7A, a market or exchange for *energy*.

market load

A *load* for an *NMI* classified by the relevant *retailer* or, with the consent of the *financially responsible* person for that *load*, by some other person, as a *market load*. There can be more than one *market load* at any one *connection point.*

metering register

A register of information associated with a *metering installation* as required by schedule 7A.1.

new meter deployment

The replacement of an existing electricity meter of one or more *small customers* which is arranged by a *retailer*, other than where the replacement is:

(a) at the request of the relevant *small customer* or to enable the provision of a product or service the customer has agreed to acquire from the *retailer* or any other person;

(b) a maintenance replacement; or

(c) required as a result of a *metering installation malfunction*.

normal voltage

In respect of a *connection point*, its *nominal voltage* or such other *voltage* up to 10% higher or lower than *normal voltage*, as approved by *NTESMO*, for that *connection point*, at the request of the *Network Service Provider* who provides *connection* to the *power system.*

NTESMO (being the ***Northern Territory Electricity System and Market Operator***)

As the case requires:

(a) the entity that undertakes the performance of the functions set out in the *Rules* that relate to monitoring or controlling the operation of the *power system* in respect of one or more of the local electricity systems; or

(b) the entity that undertakes the performance of the functions set out in the *Rules* that relate to operating or administering a *market* in respect of one or more of the local electricity systems.

performance standard

A standard of performance that:

(a) is established as a result of it being taken to be an applicable performance standard in accordance with *jurisdictional electricity legislation*; and

(b) forms part of the terms and conditions of a *connection agreement*.

plant

In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical *energy.*

power system security

The safe scheduling, operation and control of the *power system* on a continuous basis in accordance with the principles set out in *jurisdictional electricity legislation.*

Note:

The principles that will be set out in jurisdictional electricity legislation in the above definition will correspond to principles set out in clause 4.2.6 in the Rules applying in other participating jurisdictions.

profile

Metering data or costs for a longer period than a *recording interval* allocated into *recording intervals*.

retail customer

Has the same meaning as in the *National Electricity Law.*

Note:

In the context of Chapter 5A, the above definition has been supplemented by a definition specifically applicable to that Chapter. See clause 5A.A.1.

satisfactory operating state

In relation to the *power system*, has the meaning given in *jurisdictional electricity legislation*.

Note:

The meaning given in jurisdictional electricity legislation in the above definition will correspond to the meaning given in clause 4.2.2 in the Rules applying in other participating jurisdictions.

secure operating state

In relation to the *power system*, has the meaning given in *jurisdictional electricity legislation*.

Note:

The meaning given in jurisdictional electricity legislation in the above definition will correspond to the meaning given in clause 4.2.4 in the Rules applying in other participating jurisdictions.

settlements

The activity of producing bills and credit notes in *markets* operated or administered by *NTESMO.*

settlement ready data

The *metering data* that has undergone a validation and substitution process by *NTESMO* for the purposes of settlements and is held in the *metering database*.

system standard

A standard for the performance of the *power system* as set out in *jurisdictional electricity legislation* that:

(a) is necessary for the safe and reliable operation of the power system;

(b) is necessary for the safe and reliable operation of the facilities of *Registered Participants*; and

(c) is consistent with good electricity industry practice.

transmission consultation procedures

The procedures set out in Part H of Chapter 6A (as applying in the other *participating jurisdictions*) that must be followed by:

(a) the *AER* in making, developing or amending guidelines, models or schemes or in reviewing methodologies; or

(b) the *AEMC* in developing or amending guidelines.

102 Chapter 10 modified (expires on 1 July 2029)

Chapter 10

insert (in alphabetical order)

2nd regulatory control period

In relation to a *Network Service Provider* in this jurisdiction, means the second period during which the provider will be or is subject to a control mechanism imposed by a distribution determination, being the period from 1 July 2024 to 30 June 2029.

Note:

This definition expires on 1 July 2029.

103 Chapter 10 modified (expires when NERL is applied)

Chapter 10, definition ***energy laws***

omit, insert

energy laws

Means:

(a) the national electricity legislation as defined in the *National Electricity Law*;

(b) these *Rules* and instruments made under these *Rules*;

(c) the national gas legislation as defined in the National Gas (NT) Law;

(d) the National Gas Rules as defined in the National Gas (NT) Law and instruments made under those Rules; and

(e) any other Northern Territory legislation that regulates energy.

Note:

The modifications to this definition expire when the National Energy Retail Law is applied as a law of this jurisdiction.

104 Chapter 11 modified

After Chapter 11, heading

insert

Note:

Parts A to ZZI, ZZK, ZZL, ZZN (except for clause 11.86.8), ZZO to ZZT, ZZV and ZZX have no effect in this jurisdiction (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of those Parts may be revisited as part of the phased implementation of the Rules in this jurisdiction.

105 Clause 11.93.1 modified

Clause 11.93.1, definition ***subsequent regulatory control period***

omit, insert

subsequent regulatory control period of:

(a) Power and Water Corporation – means the *1st regulatory control period*; or

(b) another affected DNSP or affected TNSP – means the *regulatory control period* for that affected DNSP or affected TNSP that immediately follows the current regulatory control period.

106 Chapter 11A inserted

After Chapter 11

insert

11A. NT Savings and Transitional Rules

Part A Savings and transitional rules for Chapter 5

11A.1 Chapter 5 provisions

(1) In this Rule:

regulatory investment test means a regulatory investment test under Part D of Chapter 5.

(2) A *Primary Transmission Network Service Provider* is not required to publish or provide information under clause 5.2A.5(a) until 1 July 2020.

(3) A *Distribution Network Service Provider* is not required to have and publish its first information pack under clause 5.3A.3(a)(3) until 1 July 2020.

(4) A *Distribution Network Service Provider* is not required to include in its first *Distribution Annual Planning Report* published under clause 5.13.2 the information specified in clause S5.8(a)(5) if information on energy and demand forecasts was not required to be reported by the *Distribution Network Service Provider* under *jurisdictional electricity legislation* applicable at the time the previous report was prepared.

(5) The requirement to undertake a regulatory investment test does not apply in relation to:

(a) a project that was assessed by the AER for the purposes of its distribution determination for Power and Water Corporation (ABN 15 947 352 360) for the period of 5 years commencing on 1 July 2019; or

(b) a project where an assessment equivalent to a regulatory investment test has been commenced by Power and Water Corporation before 1 July 2019.

(6) A *Transmission Network Service Provider* is not required to comply with clause 5.18A.3(f) until 1 July 2024 in relation to the content of an impact assessment under that clause.

Part B Savings and transitional rules for Chapter 5A

Note

Part B of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations).

11A.2 Model standing offers

11A.2.1 Definitions

In this Rule:

NT distributor means Power and Water Corporation ABN 15 947 352 360.

relevant provisions means Chapter 5A and Chapter 6, Part DA.

transition date means the date on which the transition period ends.

transition period means the period from the commencement of the *1st regulatory control period* (being 1 July 2019) to 30 June 2020.

11A.2.2 Extended meaning of some terms

During the transition period:

(a) a *basic connection service* includes not only a *connection service* for which a *model standing offer* has been approved by the *AER* (see paragraph (c) of the definition in clause 5A.A.1) but also one for which the *AER's* approval of a *model standing offer* is not required;

(b) a *standard connection service* includes not only a *connection service* for which a *model standing offer* has been approved by the *AER* (see the definition in clause 5A.A.1) but also one for which the *AER's* approval of a *model standing offer* is not required; and

(c) a *model standing offer* includes a document prepared and *published* by the NT distributor, without the *AER's* approval, as a *model standing offer* to have effect during the transition period (but not beyond the end of that period).

11A.2.3 Transitional operation of relevant provisions

(a) During the transition period, the relevant provisions operate subject to the exclusions, qualifications and modifications prescribed by this Rule.

(b) However, the relevant provisions operate without the exclusions, qualifications and modifications prescribed by this Rule insofar as they relate to:

(1) a period beyond the transition period; or

(2) a person (such as a new entrant to the industry) that is not the NT distributor.

Example

If the NT distributor submits a regulatory proposal for the regulatory control period that follows the transition period, the distributor is bound by the relevant provisions (without exclusion, qualification or modification) in relation to the regulatory proposal even though the proposal is submitted during the transition period.

(c) A transaction commenced by or with the NT distributor during the transition period may be continued and completed after the transition period without regard to *changes* to the rules governing the transaction that take effect at the end of the transition period.

11A.2.4 Exclusions, qualifications and modifications

During the transition period, the relevant provisions apply to, and in relation to, the NT distributor subject to the following exclusions, qualifications and modifications:

Model standing offers (basic connection services)

(a) A document, prepared by the NT distributor and *published* on the NT distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *basic connection services* during the transition period if it complies with the requirements of clause 5A.B.2(b) as to its terms and conditions.

(b) If, during the transition period, the *AER* approves a *model standing offer* for the same *basic connection services*, the approved *model standing offer* supersedes the former *model standing offer* under this clause.

(c) The NT distributor's obligation to have a *model standing offer* to provide *basic connection services* (clause 5A.B.1) operates during the transition period but the *AER's* approval of the *model standing offer* is not required until the transition date.

(d) The NT distributor's obligation to submit for the *AER's* approval a proposed *model standing offer* to provide *basic connection services* (clause 5A.B.2(a)) does not arise until 31 December 2019.

Model standing offer (standard connection services)

(e) A document, prepared by the NT distributor and *published* on the NT distributor's website, will (although not approved by the *AER*) be regarded as a *model standing offer* to provide *standard connection services* during the transition period if it complies with the requirements of clause 5A.B.4(c) as to its terms and conditions.

(f) If, during the transition period, the *AER* approves a *model standing offer* for the same *standard connection services*, and the approved *model standing offer* is to take effect before the end of the transition period, the approved *model standing offer* supersedes the former *model standing offer*.

(g) The NT distributor may submit for the *AER's* approval a *model standing offer* to provide *standard connection services* (clause 5A.B.4) during the transition period but the *AER's* approval of the *standing offer* is not required until the transition date.

Amendment of standing offers

(h) During the transition period, the NT distributor may amend a standing offer to provide *basic connection services* or *standard connection services* during the transition period by *publishing* the amendments and the amended text on its website. (This paragraph applies during the transition period to the exclusion of clause 5A.B.6.)

11A.2.5 References

A reference to any of the relevant provisions in a legislative or other instrument will be construed, during the transition period, as a reference to the provision as modified by this Rule.

Part C Savings and transitional rules for Chapter 7A

Note

Part C of this Chapter has no effect in this jurisdiction until 1 July 2019 (see regulation 5A of the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations). The application of Part C will be revisited as part of the phased implementation of the Rules in this jurisdiction.

11A.3 Existing metering installations

(a) This rule applies in relation to a *metering installation* installed at a *connection point* on a *transmission network* or *distribution network* in this jurisdiction that is in service immediately before 1 July 2019.

(b) The following requirements must be complied with in relation to the *metering installation*:

(1) the requirements imposed on a metering installation at a connection point on a distribution network or transmission network in this jurisdiction by, under or for the purposes of a law of this jurisdiction that is in force immediately before 1 July 2019 (the **NT requirements**); and

(2) the requirements imposed in respect of the metering installation by the Rules.

(c) The requirements imposed in respect of the *metering installation* by the following provisions are taken to be complied with:

(1) clause 7A.6.2(a);

(2) clause 7A.6.3(a);

(3) clause 7A.6.4, other than paragraph (b);

(4) clause 7A.6.5;

(5) schedule 7A.1, other than clause S7A.1.3;

(6) clause S7A.3.2.2;

(7) schedule 7A.5.

(d) For the purposes of the operation of Chapter 7A in respect of the *metering installation*, a reference in:

(1) clause 7A.7.2 to "the technical requirements";

(2) clause 7A.7.3 to "requirements of the *Rules*";

(3) clause 7A.7.4 to "schedule 7A.1" or "relevant accuracy requirement";

(4) clause 7A.8.7 to "schedule 7A.1";

(5) clause S7A.3.2.2(c) to "requirements of the *Rules*"; and

(6) Chapter 10, definition ***metering installation malfunction***, to "the requirements of schedule 7A.1",

must be regarded as a reference to "the NT requirements".

(e) If the *metering installation* is replaced on or after 1 July 2019, paragraphs (b) to (d) no longer apply in respect of the *metering installation*.

11A.4 Testing metering installations

The time periods for testing of *metering installations* under Table S7A.6.1.2 do not apply to *metering installations* that are at least 10 years old on 1 July 2019 until 1 July 2022.

11A.5 Metering data services database and related requirements

(1) The *Metering Data Provider* for this jurisdiction on 1 July 2019 is not, on or after that date, required to comply with all the requirements under rule 7A.8 relating to establishing and maintaining a *metering data services database* but the following requirements will apply:

(a) the *Metering Data Provider* must ensure that all of those requirements under rule 7A.8 are complied with by 31 March 2025 (with the period between 1 July 2019 and 31 March 2025 being referred to as the ***transitional period***), including by acquiring, gaining or upgrading computing capabilities, equipment and other assets and materials, and establishing or enhancing processes and systems, to ensure compliance;

(b) during the transitional period, the *Metering Data Provider* must, insofar as is reasonably practicable, use its existing resources and capabilities (and any upgraded, enhanced, additional or new resources and capabilities as they become reasonably available) to comply with those requirements under rule 7A.8, especially in relation to the validation, substitution and estimation of *metering data* in its *metering data services database*; and

(c) without limiting paragraph (b), the *Metering Data Provider* must use its best endeavours to:

(i) maximise the quality of *metering data*; and

(ii) maximise transparency in processes for verifying, validating, calculating and estimating *metering data*.

(2) During the transitional period:

(a) the requirements imposed by clause S7A.7.13.5(c)(4) and (5) will not apply in relation to the *Metering Data Provider*;

(b) the *Metering Data Provider* is only required to include information, data and matters on its metering register in accordance with the requirements of clause S7A.8.8.2(e)(4) to the extent that it is reasonably able to do so; and

(c) the reference in clause S7A.8.8.2(e)(5) to a communication guideline, in its application to the *Metering Data Provider*, will be taken to be a reference to the interim communication guideline prepared by *NTESMO* under rule 11A.6.

(3) In addition, during the transitional period:

(a) the *Metering Provider* is only required to include information, data and matters on a register of *metering installations* in accordance with the requirements of clause S7A.8.7.1(a)(1) to the extent that it is reasonably able to do so; and

(b) the reference in clause S7A.8.7.1(a)(2) to a communication guideline, in its application to the *Metering Provider*, will be taken to be a reference to the interim communication guideline prepared by *NTESMO* under rule 11A.6.

(4) For the transitional period, if information about a *metering installation* is included in the *metering register*, then the *metering installation* is to be taken, for the purposes of Chapter 7A, to be registered with *NTESMO*.

11A.6 Communication guideline

NTESMO is not required to have a comprehensive communication guideline in place under clause S7A.1.3 until the *Metering Data Provider* is in a position to comply with its obligations under rule 7A.8 relating to establishing and maintaining a *metering data services database*, after taking into account the operation of rule 11A.5, but the following requirements will apply:

(a) *NTESMO* must have an interim communication guideline in place by 1 January 2020;

(b) the interim communication guideline must comply with the requirements of clause S7A.1.3(c), (d) and (e) insofar as is reasonably practicable and after taking into account the *Metering Data Provider's* resources and capabilities during the period applying under clause 11A.5(1)(a);

(c) *NTESMO* must maintain the interim communication guideline until the M*etering Data Provider* is in a position to comply the obligations under rule 7A.8, and may review and vary the interim communication guideline from time to time; and

(d) *NTESMO* must revise or replace the interim communication guideline so that a comprehensive communication guideline is in place when the M*etering Data Provider* is in a position to comply with its obligations under rule 7A.8.

11A.7 Timeframes for meters to be installed

(1) In this rule:

commencement date means 1 July 2019.

maintenance replacement means the replacement of a *retail customer's* existing *meter* arranged by a *retailer* that is based on the results of sample testing of a *meter* population carried out in accordance with Chapter 7A:

(a) which indicates that it is necessary or appropriate, in accordance with good electricity industry practice, for the *meter* to be replaced to ensure compliance with Chapter 7A; and

(b) details of which have been provided to the *retailer* under Chapter 7A, together with the results of the sample testing that support the need for the replacement.

new meter deployment means the replacement of an existing *meter* of one or more *retail customers* which is arranged by a *retailer* other than where the replacement is:

(a) at the request of the relevant *retail customer* or to enable the provision of a product or service the *retail customer* has agreed to acquire from the *retailer* or any other person;

(b) a maintenance replacement; or

(c) as a result of a *metering installation malfunction*.

(2) This rule applies where, before the commencement date, a *retailer* has an outstanding request for a *meter* to be installed, including in relation to a *new connection*, at a *retail customer's* premises and that request does not relate to a new meter deployment or a *metering installation malfunction* (an ***existing metering installation request***).

(3) On and from the commencement date, Chapter 7A will apply to an existing metering installation request as if:

(a) the timeframe for the *meter* to be installed for the purposes of clause 7A.6.10(a)(2) ends at the later of:

(i) 6 *business days* from the date the *retailer* is informed that the *connection service* (as defined in clause 5A.A.1) is complete; and

(ii) 6 *business days* from the commencement date;

(b) for the purposes of clause 7A.6.11(a)(2), the *retailer* received the request from the *retail customer* on the commencement date; and

(c) for the purposes of clause 7A.6.12(a)(1)(ii) and (d), the *retailer* received the request from the *retail customer* on the commencement date.

Schedule 3 Further modifications to operation of National Electricity Rules commencing on 1 December 2017

regulation 9

1 Rules modified

This Schedule modifies the operation of the National Electricity Rules with effect on and from 1 December 2017.

2 Clause 8.6.1A replaced

Clause 8.6.1A

repeal, insert

8.6.1A Application

For the purposes of this Part only, "*Registered Participant*" is deemed to include not just *Registered Participants* but also *Metering Providers* and *Metering Data Providers*.

3 Chapter 10 modified

Chapter 10, definition ***retail customer***

omit, insert

retail customer

Has the same meaning as in the *National Electricity Law*.

Otherwise, a person to whom electricity is sold by a *retailer*, and supplied in respect of *connection points*, for the premises of the person, and includes a person (or a person who is of a class of persons) prescribed by these *Rules* for the purposes of this definition.

Note:

In the context of Chapter 5A, the above definition has been supplemented by a definition specifically applicable to that Chapter. See clause 5A.A.1.

Schedule 4 Further modifications to operation of National Electricity Rules commencing on 1 July 2019

regulation 9A

1 Rules modified

This Schedule modifies the operation of the National Electricity Rules with effect on and from 1 July 2019.

2 Chapter 10 modified

Chapter 10, definition ***Registered Participant***

omit, insert

Registered Participant

Each of the following:

(a) a Registered participant as defined in the *National Electricity Law*;

(b) for the purposes of the *Rules*, other than Chapter 5, Part A – a *Metering Coordinator*;

(c) as set out in clause 8.6.1A, for the purposes of Chapter 8, Part C – a *Metering Provider* or *Metering Data Provider*.

ENDNOTES

1 KEY

Key to abbreviations

amd = amended
app = appendix
bl = by-law
ch = Chapter
cl = clause
div = Division
exp = expires/expired
f = forms
Gaz* = *Gazette
hdg = heading
ins = inserted
lt = long title
nc = not commenced
od = order
om = omitted
pt = Part
r = regulation/rule
rem = remainder
renum = renumbered
rep = repealed
s = section
sch = Schedule
sdiv = Subdivision
SL = Subordinate Legislation
sub = substituted

2 LIST OF LEGISLATION

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016* (SL No. 17, 2016)**

Notified	27 April 2016
Commenced	r 9 and sch 3: 1 December 2016; rem:1 July 2016 (r 2)

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Amendment Regulations 2017* (SL No. 17, 2017)**

Notified	29 June 2017
Commenced	1 July 2017 (r 2)

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Amendment Regulations 2018* (SL No. 26, 2018)**

Notified	19 December 2018
Commenced	19 December 2018

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Amendment Regulations 2019* (SL No. 15, 2019)**

Notified	1 July 2019
Commenced	1 July 2019 (r 2)

***Statute Law Revision Act 2020* (Act No. 26, 2020)**

Assent	19 November 2020
Commenced	20 November 2020 (s 2)

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Amendment Regulations 2021*(SL No. 21, 2021)**

Notified	22 December 2021
Commenced	22 December 2021

***National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Amendment Regulations 2024* (SL No. 12, 2024)**

Date made	27 June 2024
Commenced	28 June 2024 (r 2)

***Electricity Legislation Amendment Regulations 2024* (SL No. 13, 2024)**

Date made	27 June 2024
Commenced	1 July 2024 (r 2, s 2(2) *Electricity Legislation Amendment Act 2024* (Act No. 26, 2023) and *Gaz* S54, 26 June 2024)

***National Electricity (Northern Territory) (National Uniform Legislation) Legislation Act 2026* (Act No. 29, 2026)**

Assent date	6 November 2026
Commenced	7 November 2026 (s 2)

3 GENERAL AMENDMENTS

General amendments of a formal nature (which are not referred to in the table of amendments to this reprint) are made by the *Interpretation Legislation Amendment Act 2018* (Act No. 22, 2018) to: r 1.

4 LIST OF AMENDMENTS

r 2A	ins No. 17, 2017, r 4
r 4	amd No. 17, 2017, r 5
r 5A	ins No. 17, 2017, r 6 amd No. 15, 2019, r 4; Act No. 29, 2026, s 11
r 6	amd No. 17, 2017, r 7
r 6A	ins No. 17, 2017, r 8 exp No. 17, 2016, r 11(2) as sub by No. 17, 2017, r 12
r 7	exp No. 17, 2016, r 11(2) as sub by No. 17, 2017, r 12
r 9	sub No. 17, 2017, r 9
r 9A	ins No. 17, 2017, r 9
r 10	amd No. 13, 2024, r 14
pt 4 hdg	amd No. 17, 2017, r 10
r 10A	ins No. 17, 2017, r 11 exp No. 17, 2016, r 11(2) as sub by No. 17, 2017, r 12
r 11	sub No. 17, 2017, r 12
sch 1	amd No. 17, 2017, r 13; No. 15, 2019, r 5; No. 17, 2016, r 11(2) as sub by No. 17, 2017, r 12
sch 2	amd No. 17, 2016, r 11(6); No. 17, 2017, r 14; No. 26, 2018, r 4; No. 17, 2016, r 11(1) as sub by No. 17, 2017, r 12; No. 15, 2019, rr 6 to 22; Act No. 26, 2020, s 3; No. 21, 2021, r 4; No. 17, 2016, r 11(2) as sub by No. 17, 2017, r 12; No. 12, 2024, r 4; Act No. 29, 2026, s 12
sch 3	sub No. 17, 2017, r 15
sch 4	ins No. 17, 2017, r 15