



**Contract for Rotating Machine
Embedded Generating System Connection
(less than 5MW)**

April 2018

WARNING

It is the responsibility of the user of this document to ensure that the current version is used. Ausgrid may amend this document at any time.

Document and Amendment History

Issue No.	Date	Approved By	Summary of Changes
1	February 2016	Chief Engineer	Initial Issue
2	1 December 2016	Manager - Network Risk and Planning	Updates to reflect Ausgrid lease transaction
3	14 December 2016	Manager - Network Risk and Planning	Minor typographical corrections
4	16 April 2018	Head of Asset Investment	Updated for new metering provisions

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All correspondence should be directed to:
Head of Asset Investment
Ausgrid
GPO Box 4009
SYDNEY NSW 2001

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THIS CONTRACT IS BETWEEN:

AUSGRID OPERATOR PARTNERSHIP (ABN 78 508 211 731), trading as **AUSGRID**, of 570 George Street, Sydney

AND

THE CONNECTION CUSTOMER stated in the *connection application*.

Background

- A. The *connection applicant* has applied to *Ausgrid* for a *connection alteration* to an existing *connection* or to form a *new connection* between the premises and *distribution network* in order to accommodate an *embedded generating system* at the *premises*.
- B. Until accepted by the *connection applicant*, this *connection contract* represents a negotiated *connection offer* because the *connection applicant* has elected to negotiate the terms and conditions on which the *connection service* is to be provided and/or *Ausgrid* has determined that *Ausgrid's* model standing offers for *basic connection services* and *standard connection services* do not apply to the *connection services* being sought by the *connection applicant*.

Operative provisions

1 Ausgrid's connection offer and connection contracts

1.1 Defined terms

All terms in italics are defined in the Dictionary at clause 18.2.

1.2 What constitutes this connection contract?

This *connection contract* is for the *premises* referred to in the *connection application*. It consists of:

- (a) the *Connection Offer Summary*;
- (b) clauses 1 to 18 inclusive of this document;
- (c) all appendices and annexures to this document;
- (d) the *connection application*; and
- (e) where you have signed and returned an acceptance form, the *connection offer*.

1.3 When does this contract apply?

- (a) This *connection contract* will be the only *connection contract* that applies where:
 - (1) the *premises* is already connected to *the distribution system*;
 - (2) no change will be made to the maximum *import capacity* of the existing *connection* as approved by *Ausgrid*; and
 - (3) the only *connection alteration* required to establish the *connection* for the *embedded generating systems* is to the *service mains* and does not include the *relocation* of any existing *distribution network* asset.

- (b) If *augmentation* works are required in order for the *embedded generating system* to be *connected* to the *distribution network*, the services provided by *Ausgrid* in relation to the *augmentation works* will be provided under a separate contract. *Electrification* of the *connection* is contingent on the completion of the *augmentation works* under the separate contract.
- (c) If *relocation works* are required in order for the *embedded generating system* to be *connected* to the *distribution network*, the *relocation works* will be provided under a separate contract.
- (d) If *relocation works* are required in order to establish the *connection*, before commencing the *relocation works* or any works under this *connection contract*, the *connection customer* must obtain the *Ausgrid's* express written consent to the applicable *relocation works*. The *connection customer* must ensure that their *electrical professional* will co-operate with the person(s) performing the *relocation works* to co-ordinate the *connection works* and *relocation works*.
- (e) If the *connection applicant* or another person has also lodged a *connection application* for a *new connection* of the *premises* in relation to the *import* of electricity and:
 - (1) *Ausgrid* has made a *connection offer* in relation to that *new connection*; and
 - (2) *Ausgrid's* offer has been accepted,
 a separate *connection contract* is formed in relation to that *new connection*. That contract and this *connection contract* are separate contracts with *Ausgrid* but will operate concurrently.
- (f) If the *connection applicant* or another person has lodged another *connection application* for a *connection alteration* in respect of the *premises* and:
 - (1) the *connection alteration* is to increase to the current *import capacity* of the existing *connection*;
 - (2) *Ausgrid* has made a *connection offer* of standard *connection services* in relation to that *connection alteration*; and
 - (3) *Ausgrid's* offer has been accepted,
 a separate *connection contract* is formed in relation to that *connection alteration*. That contract and this *connection contract* are separate contracts with *Ausgrid* but will operate concurrently.

1.4 Commencement date and term

- (a) The *connection contract* commences on the date that you accept *Ausgrid's* negotiated *connection offer*.
- (b) The term of the *connection contract* is 1 year unless extended by agreement between the parties.

1.5 The connection applicant and the connection customer

- (a) This contract is between *Ausgrid* and the *connection customer* (also referred to in this contract as "you" where convenient).
- (b) If you have authorised another person to make the *connection application* and accept the *connection offer* on your behalf, that person (referred to in this contract as the *connection applicant*) has made the application and accepted the *connection offer* as your agent.

1.6 Ausgrid's Deemed Standard Connection Contract

- (a) On the same date as this contract commences, another contract, known as *Ausgrid's* Deemed Standard Connection Contract, is also formed. It is a standard form contract containing the model terms and conditions for connection contracts set out in Schedule 2 of the National Energy Retail Rules.

- (b) Some terms of this contract are continuing obligations which means that the *retail customer* for the *premises* must comply with these terms and conditions after the *connection* has been *electrified*. The obligation to comply with these terms and conditions is contained in clause 3.3 of *Ausgrid's Deemed Standard Connection Contract* and are additional terms of that contract.
- (c) *Ausgrid's Deemed Standard Connection Contract* is available on our website.

2 The connection

2.1 Description of connection

- (a) This *connection contract* governs the *connection services* involved in connecting or *disconnecting* the *embedded generating system* to the *distribution system*.
- (b) The *connection* is as described in the *connection details*.
- (c) The *connection customer* must ensure the *connection* complies in all respects with the *connection details* and the minimum requirements for the *connection*.
- (d) The minimum requirements for the *connection* are:
 - (1) the generating unit must be of the type specified in *Ausgrid's Network Standard NS 194* and *Ausgrid's Network Standard 194B*;
 - (2) the total nameplate rating of the *embedded generating system(s)* at the *connection point* must not exceed 5MW;
 - (3) the combined maximum *export capacity* of the *embedded generating system at the connection point* must not exceed the requirements under clause 2.2
 - (4) the proposed *connection* must not compromise the safety, security and reliability of the *distribution network* at any time;
 - (5) any works to change the *distribution network* are the subject of a separate connection contract as per clause 1.3 and must be completed before the *connection* can be made and electrified.
- (e) If prior to the date of *connection* there is any change to the *connection* proposed in the *connection application* and as varied in the *connection offer* (if applicable) you may need to lodge a new *connection application*.
- (f) If this clause is breached or *Ausgrid*, acting reasonably, considers that it may be breached, *Ausgrid* may terminate the *connection contract* in accordance with clause 15 by notice in writing to the *connection applicant*.

2.2 Maximum capacity of connection

- (a) The maximum *export capacity* of the *connection* is as specified in the *connection details*.
- (b) The *reactive power* (import or export) *capacity* of the *embedded generating system* is specified in Appendix B.
- (c) The maximum *import capacity* of the *connection* is not governed by the terms and conditions of this *connection contract*. It will either be:
 - (1) specified in a separate offer if you have also applied for a *new connection* or a *connection alteration* in conjunction with the offer relating to this *connection contract*; or
 - (2) if you already have a *connection* to our *distribution system*, it would have been specified at the time your *connection* was established.

Common service connection

If the *connection customer* proposes to use, or already uses a *common service connection* they must, at the time the *connection application* is made, have no grounds for believing that the maximum *capacity* of the *common service connection* will be exceeded due to the *connection* of other *embedded generating systems* or other premises to the *distribution system* through the *common service connection*.

Connection through a common service connection

- (d) Where the *connection* is not a *common service connection* but is connected to the *distribution system* through the *common service connection*, the *connection applicant* acknowledges that it has taken into account the maximum *capacity* of the *common service connection* in making its *connection application*.
- (e) *Ausgrid* can provide details of the maximum *capacity* of the *common service connection* on request otherwise the details can be obtained from the person responsible for the *common service connection*.
- (f) The *connection customer* warrants that, at the time the *connection application* is made, it has no grounds for believing that the rating of the *electrical installation* between the *common service connection* and the *connection customer's premises* will be exceeded.
- (g) If your *premises* is *connected to the distribution system* via a *common service connection*, that *common service connection* will have a different maximum *capacity* and as a result, the *connection* may be capable of exporting more electricity than the maximum *export capacity* specified for the *connection*. In such case, any increase in *capacity* provided by the *common service connection* does not represent an increase in the maximum *export capacity* of the *connection* and *Ausgrid* is under no obligation to provide you with any *capacity* beyond the maximum *export capacity* provided for in the *connection offer*.
- (h) This clause 2.2 is an additional term of *Ausgrid's* Deemed Standard Connection Contract in accordance with clause 3.3 of that contract.

2.3 Subsequent connection of embedded generating systems

- (a) The *connection customer* must not:
 - (i) connect an additional *embedded generating system* at the *premises* without entering into a separate *connection contract*, or
 - (ii) replace the *embedded generating system* after *electrification* without *Ausgrid's* consent.
- (b) If clause 2.3(a) is breached or *Ausgrid*, acting reasonably, considers that it may be breached, *Ausgrid* may issue a notice of defect and terminate the *connection contract* in accordance with clause 15 by notice in writing to the *connection applicant*.
- (c) This clause 2.3 is an additional term of *Ausgrid's* Deemed Standard Connection Contract in accordance with clause 3.3 of that contract.

2.4 Connection point

The *connection point* forms part of the *connection details*.

2.5 Point of common coupling

The *point of common coupling* forms part of the *connection details*.

2.6 Premises connection assets to be installed by the ASP/2 or ASP/1

The *premises connection assets* to be installed by the ASP/1 or ASP2 (as appropriate) are new or altered *service mains* from the *point of common coupling* to the *connection point* (if required).

2.7 Cost of the premises connection assets

- (a) To avoid doubt, the *premises connection assets* relevant to this contract are new or altered *service mains*.
- (b) The *connection customer* must pay the amount charged to the *connection customer* by the ASP/1 or ASP2 for:
 - (1) the cost of new or altered *premises connection assets*; or
 - (2) the cost of any minor variation, as determined by *Ausgrid* acting reasonably, from the technical specifications provided in Appendix B.

3 Ausgrid's connection services

- (a) The *connection services* provided by *Ausgrid* in accordance with this contract do not include the physical work required to connect an *embedded generating system* to the *electrical installation* at the *premises* or to *connect* the *electrical installation* to the *distribution system*. Those works are delivered as *contestable services* by private contractors.
- (b) The *connection services* in relation to this contract are as follows:
 - (1) *ancillary services* relating to the assessment and administrative tasks associated with processing the *connection application* including recording the details of the *connection* in *Ausgrid's* databases and issuing a job number;
 - (2) conducting any inspection as permitted by *energy laws* including carrying out a site inspection (if necessary);
 - (3) analysing the effect of the proposed *connection* on the *distribution network*;
 - (4) approving the design of the *connection*, protection and control scheme for the *embedded generating system* and associated relay settings (see clause 10.8);
 - (5) witnessing the testing of protection and control equipment; and
 - (6) *ancillary services* relating to inspecting the *connection* between the *embedded generating system* and the *electrical installation* at the *premises* and other inspections permitted by the *energy laws*;
 - (7) *ancillary services* relating to re-inspecting the *connection* between the *embedded generating system* and the *electrical installation* at the *premises*;
 - (8) modifying the details of the *connection* in *Ausgrid's* databases;
 - (9) negotiate the *Operating Protocol Agreement* referred to in clause 10.9 (as required);
 - (10) review the customer's *Installation Safety Management Plan* for compliance with *Ausgrid's* standards and the *Service and Installation Rules*;
 - (11) receiving and processing (as necessary) the Certificate of Compliance for Electrical Work (in relation to the *electrical installation*) and Notification of Service Work (in relation to the installation or alteration of *service mains*); and
 - (12) receiving and processing other formwork from your *electrical professional* as required under the *energy laws*.
- (c) *Ausgrid* must carry out these services in accordance with the timeframes specified in clause 5.

- (d) If requested, *Ausgrid* will provide any relevant information about the *connection* to the *connection customer* or any existing or incoming *retail customer* at the *premises*.

4 Contestable services

The *contestable services* required to *connect* the *embedded generating system* is (if required) the installation or alteration of the *premises connection assets*.

In New South Wales, the installation or alteration of *premises connection assets* is a *contestable service* that must be performed by an *accredited service provider* who holds current *Ausgrid* authorisation.

5 Time frames for Ausgrid's connection services

5.1 Connection services

- (a) Subject to paragraphs (b) and (c), *Ausgrid* will perform the *connection services* referred to in clauses 3(b)(1) – (7) prior to *electrification*.
- (b) *Ausgrid* will not issue a Permission to Connect (PTC) until the *connection applicant* fulfils its obligations under clause 10.6.
- (c) *Ausgrid* may carry out a re-inspection of the *connection* in the case of defective work (as referred to in clause 3(b)(7)) following *electrification*.
- (d) *Ausgrid* will approve the *installation design* of the *embedded generating system* within 24 *business days* of a complete and compliant design and control scheme being submitted to *Ausgrid*. The relevant design will need to conform to *Ausgrid's* Network Standard 194 and be completed by an *electrical professional*. If not approved, *Ausgrid* will advise the *connection customer* of any defects within the same timeframe and approve or advise of any defect of any resubmitted scheme within 14 *business days*, except that if in the reasonable opinion of *Ausgrid* a resubmitted scheme is substantially different from the previous submission then a 24 *business day* timeframe will apply instead of 14 *business days*.
- (e) *Ausgrid* will only schedule witness testing of protection and control equipment:
- (i) if the design of the *connection* has been approved by *Ausgrid*;
 - (ii) during business hours on a date agreeable to the parties, where the request is made 20 *business days* prior to the nominated date; and
 - (iii) if the test plan has been provided no later than 10 *business days* before the scheduled date of the witness testing.
- (f) Out of hours witness testing will only be scheduled by negotiation and may incur additional charges.
- (g) The timing of *Ausgrid's connection services* referred to in clauses 3(b)(11) - (12) is determined by:
- (1) the timing of the work performed by your relevant *electrical professional*; and
 - (2) the timing of any *augmentation* works required in order for the *embedded generating system* to be *connected*.
- (h) *Ausgrid* will perform the *connection services* referred to in clauses 3(b)(11) - (12) as soon as practicable after the relevant works are completed.

5.2 Timing of electrification

- (a) A *connection* under this contract is *electrified* by an ASP/1 or ASP/2.. To avoid doubt, *new connections* and *connection alterations* to increase the maximum *import capacity* of the existing *connection* are *connected* in accordance with a separate connection contract.
- (b) *Electrification* occurs after all of the applicable requirements under this *connection contract* have been satisfied, including:
 - (1) an *electricity professional* has installed the *embedded generating system*;
 - (2) the ASP/1 or ASP/2 has completed any necessary *contestable services*;
 - (3) where necessary, your *retailer* or the *metering coordinator* you have directly appointed, has arranged for the installation of a *metering installation* in accordance with the *energy laws*; and
 - (4) inspections of the *embedded generating system* have been carried out by Ausgrid to ensure compliance with relevant *energy laws* and any defects that were identified by Ausgrid have been rectified and a final inspection has been carried out by Ausgrid.
- (c) The *connection customer* must ensure that any defect found in the *premises connection assets* or other electrical equipment must be rectified and re-inspected. Major defects may require the defective portion of the *premises* to be *disconnected* but minor defects generally do not.
- (d) The *connection customer* must ensure that Ausgrid is notified when the rectification work has been completed and is ready for reinspection.
- (e) Ausgrid will use reasonable endeavours to schedule a re- inspection as soon as possible and at a mutually convenient time. Your appropriate *electrical professional* will need to be present for reinspection associated with the *embedded generating system*.

6 Ausgrid's connection fees and charges

6.1 Ausgrid's connection charges

Ausgrid's charges for *connection services* provided under this contract (known as connection charges) comprise of:

- (1) fees for *alternative control services* referred to in clause 6.2 and 6.4 below; and
- (2) the *site inspection fee* referred to in clause 6.3 below.

Ausgrid's current *connection charges* for its *connection services* (other than *network charges*) are set out in the Fee Schedule at Appendix A and are consistent with Ausgrid's *connection policy*. A copy of the Ausgrid's *connection policy* is available on its website at:

<https://www.ausgrid.com.au/~-/media/Files/Connections/ConnectionCharges.pdf>

6.2 Alternative control services

Ancillary services are classified as *alternative control services* by the regulator. All *ancillary services* provided under this contract (provided for under clause 3) are payable as *connection charges*.

6.3 Site inspection fee

- (a) If Ausgrid reasonably needs to make a site inspection in order to determine the nature of the *connection service* you are seeking, it is entitled to charge a *site inspection fee* to cover its reasonable expenses.
- (b) Ausgrid's *site inspection fee* is specified in the Fee Schedule at Appendix A.
- (c) Ausgrid will invoice the *connection customer* for the *site inspection fee* and the *connection customer* must pay the fee (which is recoverable as a debt) regardless of whether the *connection* is made.

- (d) The *site inspection fee* (if any) payable under this contract is set out in the *connection offer*.
- (e) You may ascertain whether a *site inspection fee* will be payable and an estimate of what *Ausgrid's* possible charge may be by making an enquiry to *Ausgrid* before lodging the *connection application*.

6.4 Specific fees for connection services

If specified in Appendix A, *Ausgrid* will charge you a reasonable fee to cover the expenses it directly and reasonably incurs as part of the negotiation process in assessing your *connection application* and making a *connection offer* (a negotiation fee). Further details on this fee are set out in Appendix A.

6.5 Billing arrangements

- (a) *Connection charges* are generally billed as *network charges* through the *customer's retailer*, except for:
 - (1) *ancillary service fees*;
 - (2) the *site inspection fee* referred to in clause 6.3 above; and
 - (3) the fees referred to in clause 6.4.
- (b) *Ancillary service fees* are charged at rates set by the *regulator* for each financial year. The *connection customer* is responsible for paying *ancillary service fees* but *Ausgrid* bills them to your *electrical professionals* for the sake of convenience.
- (c) Your obligation to pay *ancillary service fees* may be discharged by your *electrical professional* on your behalf (depending on the terms of the applicable contract for *contestable* services) but if your *electrical professional* fails to pay these fees, *Ausgrid* will bill them to you.
- (d) If *Ausgrid* invoices you for *connection charges*, you are obliged to pay in accordance with the payment terms set out in the invoice.

7 Owners' consent required for installation of embedded generating units

7.1 Owners' consent required

- (a) *Ausgrid* has provided this *connection offer* and entered into this *connection contract* on the basis that where the *connection customer* is required to obtain the consent of the owner or owners of the *premises* intended for the installation of the *embedded generating system*, such consent has been obtained in a form which is reasonably satisfactory to *Ausgrid*.
- (b) The *connection customer* acknowledges that if it requires the *premises* owners' consent but has not obtained that consent, the owner or owners may require the *connection customer* to remove and/or *disconnect* the *embedded generating system*. The removal of the units and any related equipment will be at the *connection customer's* cost.

7.2 Ausgrid may request evidence of owners' consent

Ausgrid may request the *connection customer* to provide *Ausgrid* with written evidence of the owner or owners' consent within a specified period of time which must be no less than 10 *business days*. If *Ausgrid* makes such a request, the *connection customer* must provide that written evidence to *Ausgrid* within the specified time.

7.3 Ausgrid may terminate if owners' consent is not obtained

- (a) If the *connection customer* cannot verify to *Ausgrid's* reasonable satisfaction that the owner or owners' consent to the installation of the *embedded generating system* has been obtained, *Ausgrid* may with 10 *business days'* notice terminate this *connection contract*.
- (b) This clause 7 is an additional term of *Ausgrid's* Deemed Standard Connection Contract in accordance with clause 3.3 of that contract.

8 The premises connection assets

8.1 Responsibility for installing premises connection assets

You are responsible for engaging an *ASP/2* and/or an *ASP1* holding current *Ausgrid* authorisation to install the *premises connection assets*.

8.2 Cross-property service mains

- (a) This clause 8.2 is a pre-condition to *electrification* of the *connection*.
- (b) If there is no frontage from the *premises* to a public road or public reserve and in order to *connect* the *premises* to *the distribution system* it is necessary to erect *service mains* on *other land*, *Ausgrid* will not permit the *connection* unless:
 - (1) *Ausgrid* has given explicit consent in writing to the location of the *service mains*; and
 - (2) the registered proprietor of the *other land* has signed and delivered to *Ausgrid* a deed of agreement to grant an easement in favour of *the Network Owner* for the *service mains*, in accordance with *Ausgrid's* standard form of agreement available on our website.
- (c) As soon as is reasonably practicable after the *service mains* are installed on the *other land*, you must obtain from the owner of the *other land* a transfer granting an easement in favour of *the Network Owner* in registrable form for the easement referred to in clause 8.2(b)(2) and deliver it to *Ausgrid*, together with a survey of the easement prepared by a registered surveyor and suitable for lodgement at *LPI* together with the transfer granting easement.
- (d) If *electrification* occurs before the requirements of this clause have been satisfied, *the Network Owner* will not accept ownership of the *service mains*.
- (e) You acknowledge and agree that if the *connection* is *electrified* before the requirements of this clause have been satisfied, *Ausgrid* may:
 - (1) terminate the contract in accordance with clause 15; and
 - (2) *disconnect* the *premises*.
- (f) You also acknowledge that if clause 8.2(b)(2) has not been satisfied, the owner of the *other land* may require you to remove the *service mains*.

8.3 Consumers mains on other land

- (a) This clause 8.3 is a pre-condition to *electrification* of the *connection*.
- (b) If there is no frontage from the *premises* to a public road or public reserve and in order to *connect* the *premises* to *the distribution system* it is necessary to erect *consumer's mains* on *other land*, *Ausgrid* will not permit the *connection* until:
 - (1) an easement over the *other land* in favour of the *premises*; and
 - (2) if the *consumers mains* are owned jointly by more than one person, a positive covenant made under the provisions of section 88B of the Conveyancing Act 1919 (NSW) over the *other land* in favour of that easement have been registered by *LPI*.

- (c) If *electrification* occurs before the requirements of this clause have been satisfied, *the Network Owner* will not accept ownership of the *premises connection assets* at the *connection point*.
- (d) You acknowledge and agree that if the *connection is electrified* before the requirements of this clause have been satisfied, *Ausgrid* may terminate the contract.
- (e) You also acknowledge that if clause 8.3(b) has not been satisfied, the owner of the *other land* may require you to remove the *consumer's mains*.

8.4 Acquisition of premises connection assets on connection

- (a) Subject to clause 8.2 or 8.3 (as applicable) ownership of the *premises connection assets* installed by your *ASP1* or *ASP/2* is transferred to *the Network Owner* when those assets are *electrified*.
- (b) You must do everything reasonably practicable to ensure that *the Network Owner* will acquire those assets without challenge to its rights of ownership and you will do all things reasonably open to you and necessary to ensure the *Network Owner's* ownership is not open to challenge.
- (c) In the event of any challenge to *the Network Owner's* ownership of the *premises connection assets*, you will, at no cost to *Ausgrid*, do everything *Ausgrid* reasonably requests to assist *the Network Owner* in asserting its title to the assets, including obtaining the assistance of your *ASP1* or *ASP/2*.
- (d) Where *the Network Owner* already owns and controls the relevant *premises connection assets*, *Ausgrid* must authorise the *connection customer* to access and use those assets as reasonably required by the *connection customer* in relation to the *connection services* and on request.

9 Metering

9.1 Metering must be installed at the premises

The *connection customer* must ensure that before the *connection* is *electrified*, a *metering installation* or *metering installations* (as required) to measure electricity flow at the *premises* have been installed in accordance with the *energy laws*.

10 Safety and technical requirements

10.1 Precondition to electrification

All the requirements contained in this clause 10 are *preconditions to electrification*.

10.2 Satisfactory evidence of compliance

- (a) To enable *Ausgrid* to analyse the effect of the *connection* on the *distribution network*, the *connection customer* must provide the following information about the *embedded generating system* and the *electrical installation*:
 - (1) all technical information requested by *Ausgrid* as soon as practicable after the information is requested; and
 - (2) operation diagrams in the form of a single diagram, suitable for inspection purposes, showing the electrical circuits of the existing and proposed main *electrical installations*.
- (b) The single line diagram provided under clause 10.2(a)(2) will form Appendix D.
- (c) The *connection customer* must advise *Ausgrid* as soon as possible after becoming aware of any material changes to the information provided under clause 10.2(a)(1).

- (d) The information provided under clause 10.2(a)(1) and any changes to that information provided in accordance with 10.2(c) will form Appendix B to this contract.

10.3 The electrical installation at the premises

The *connection customer* must ensure that the *electrical wiring work* carried out to connect the *embedded generating systems* and the *electrical installation* is performed by an appropriate *electrical professional* and that the *embedded generating system* and the *electrical installation* comply with the technical and safety requirements stipulated in this clause 10.

10.4 The metering installation at the premises

The *connection customer* must ensure that metering arrangements, including the type, provision and installation of the *metering installation*, comply with the *Service and Installation Rules*, the *rules* and all other relevant *energy laws*.

10.5 Compliance with rules and standards

- (a) The *connection customer* must ensure that the *embedded generating system*, the *electrical installation* and the *premises connection assets* comply with (as relevant):
- (1) the requirements of the *installation rules*;
 - (2) relevant *Ausgrid* Network Standards, including but not limited to *Ausgrid Network Standard NS194* and *Ausgrid's Network Standard NS194B*;
 - (3) the *rules*, the market operations rules and any applicable metrology procedures made under the *rules* or the market operations rules;
 - (4) any requirements or standards specified by *Ausgrid* from time to time to ensure compliance with the *rules*;
 - (5) the technical requirements, specifications and standards as varied from time to time by *Ausgrid* to ensure consistency with the *rules* and the ongoing safety, security and reliability of the *distribution network*;
 - (6) relevant Australian Standards (including AS3000: Electrical Installations);
 - (7) *Ausgrid's* Network and Electrical Standards and Policies and *Ausgrid's* Electrical Safety Rules;
 - (8) any reasonable requirement imposed by *Ausgrid* before or after the *embedded generating system is electrified* if *Ausgrid* becomes aware of any defect or other matter or thing that in its reasonable opinion may:
 - (i) cause the *embedded generating system* or the *electrical installation* to be unsafe;
 - (ii) cause the *embedded generating system* or the *electrical installation* or the *premises connection assets* not to comply with the conditions of this contract; or
 - (iii) cause damage or interference to the *distribution system* or another customer's *electrical installation* or equipment.
 - (9) if applicable, the limits and standards stipulated in the *Power Quality Emissions Report* annexed to this contract.
- (b) Where *Ausgrid* imposes a requirement under clause 10.5(a)(4) or (a)(5), *Ausgrid* will provide the *connection customer* with 10 *business days'* notice of the new requirement or variation to an existing requirement.

10.6 Fitness for safe operation

The *connection customer* must ensure that the *embedded generating systems*, *electrical installation* and the *premises connection assets* must be fit for purpose in the following ways:

- (a) safe operation in accordance with the Electricity (Consumer Safety) Act 2004 (NSW) and the Electricity (Consumer Safety) Regulation 2006 (NSW);
- (b) the electrical *installation* and the *premises connection assets* are installed and maintained in accordance with *good industry practice*;
- (c) comply with customers' responsibilities identified in *Ausgrid's* Customer Installation Safety Plan and Bush Fire Risk Management Plan, both of which are published in accordance with the Electricity Supply (Safety and Network Management) Regulation 2008 (NSW);
- (d) satisfy the requirement that all live parts remain properly insulated and protected against inadvertent contact with any person; and
- (e) neither the *embedded generating system* nor any part of the *electrical installation* or *premises connection assets* can be used in a manner that exceeds the operating limits imposed by the design or the *installation rules*.

10.7 Connection customer must accommodate and protect equipment

The *connection customer* must accommodate on the *premises* any *premises connection asset* that needs to be located there and protect such equipment from harm.

10.8 Certification of installation design prior to commencing installation of embedded generating unit(s)

- (a) You must obtain *Ausgrid's* certification for the *installation design*.
- (b) The *installation design* must comply with the rules and standards specified in this clause 10.
- (c) *Ausgrid* will not approve the *electrification* of the *connection* unless the *connection customer* has obtained *Ausgrid's* approval in accordance with paragraph (a) and the *connection* is established in accordance with the *installation design*.

10.9 Operating protocol agreement (OPA) and installation safety management plan (ISMP)

- (a) As soon as practicable after the commencement of this contract, the *connection customer*, in consultation with *Ausgrid*, must prepare a protocol that:
 - (1) ensures the safe, reliable and compliant operation and maintenance capability of the *distribution system* and the *embedded generating system* and the *electrical installation connected to the distribution system* in accordance with this *connection contract*;
 - (2) establish guidelines for co-ordination between *Ausgrid* and the *connection customer* to provide safe, and timely maintenance (including monitoring and testing) of the *distribution system* and the *embedded generating system* and *electrical installation*;
 - (3) *Ausgrid* has approved the protocol under clause 10.9(b),and once prepared and approved in accordance with the requirements of this clause 10.9, the protocol will be known as the *Operating Protocol Agreement* or *OPA* and will be attached as Appendix C to this contract.
- (b) The *Operating Protocol Agreement* must include:

- (1) a requirement that work on or near the *connection point* must be performed in accordance with *Ausgrid's* Electrical Safety Rules (particularly clause 12.3.4 of *Ausgrid's* Electrical Safety Rules - Isolation of privately owned parallel generation plants - embedded generation);
 - (2) a requirement that work on the *connection customer's embedded generating system* and *electrical installation* must be performed in accordance with the *connection customer's* Electrical Safety Rules;
 - (3) details of personnel responsible for the development, operation & maintenance of the *embedded generating system* and *electrical installation*;
 - (4) any power transfer arrangements; and
 - (5) such other matters that *Ausgrid* may require to be included in the *Operating Protocol Agreement* from time to time in relation to the safe, reliable and compliant operation and maintenance of the *distribution system*, the *embedded generating system* and the *electrical installation*.
- (c) It is a *precondition to electrification* that:
- (1) an *Operating Protocol Agreement* has been prepared and agreed to by *Ausgrid*; and
 - (2) for all HV customers, the *connection customer* has an *Installation Safety Management Plan* in place that is compliant with *Ausgrid's* standards and the *Service and Installation Rules*.
- (d) The *connection customer* and *Ausgrid* must comply with the *Operating Protocol Agreement*.

10.10 Responsible person and others

The connection customer must ensure that any person (including the responsible person under the Electricity (Consumer Safety) Act 2004 (NSW)) who works on or near the embedded generating unit and electrical installation complies with all relevant safety requirements under this contract including the requirements under the Operating Protocol Agreement, *Ausgrid's* Electrical Safety Rules and specific safety rules established by the connection customer under clause 10.5.

10.11 Ongoing obligations

This clause 10 is an additional term of *Ausgrid's* deemed standard connection contract in accordance with clause 3.3 of that contract.

11 Changes to the connection

A *connection customer* must notify *Ausgrid*:

- (1) prior to any alteration or upgrade being made to an *embedded generating system* that is *connected* at the *premises*;
- (2) prior to connecting an additional *generating unit* at the *premises* after initial *electrification* of the *connection* under this contract, even if the *connection* of the additional *generating unit* formed part of the initial *connection application*; or
- (3) prior to disconnecting any *embedded generating system* from the *electrical installation* at the *premises*.

This clause 11 is an additional term of *Ausgrid's* Deemed Standard Connection Contract in accordance with clause 3.3 of that contract.

Ausgrid may use the *network device* in any manner permitted under the *energy laws*.

Where *Ausgrid* installs a *network device* pursuant to this clause 14, it will do so at its own cost.

15 Termination

15.1 Right to terminate

- (a) *Ausgrid* may terminate this *connection contract* prior to the expiry of the term of the contract (as specified in clause 1.4) if:
 - (1) in *Ausgrid's* reasonable opinion, the *connection customer* does not comply with the requirements under this contract in relation to the *connection*;
 - (2) the services being sought (or being received) by the *connection customer* are not consistent with this *connection contract* and in particular, the *connection* requirements contained in clause 2.1;
 - (3) *Ausgrid* and the *connection customer* enter into another *connection contract* for the same *connection services* or for *connection services* relating to the *export* of electricity;
 - (4) the *connection customer* has not established the *connection* the subject of the *connection application* within 12 months of the date the contract commences; and
 - (5) a clause of this contract entitles *Ausgrid* to terminate the contract.
- (b) If the *connection customer* or establishes and maintains a *connection* which is in breach of this contract, *Ausgrid* may *disconnect* the *premises*.
- (c) The *connection customer* may terminate this contract by giving *Ausgrid* 10 *business days'* written notice.
- (d) This clause 15 is an additional term of *Ausgrid's* deemed standard connection contract in accordance with clause 3.3 of that contract.

15.2 Effect of termination

Termination of this contract does not affect the accrued rights or liabilities of either party under this contract.

16 Miscellaneous

16.1 Electrical professionals

The connection customer must take reasonable steps to ensure that any *electrical professional* who is not party to the *connection contract* complies with *Ausgrid's* requirements relating to the *electrical installation* and the *premises connection assets* and any other equipment required to be installed at the premises under this contract, including any *metering installation*.

16.2 Amendment

- (a) The contract may be amended by agreement in writing signed by both parties.
- (b) If there is a change to the regulatory requirements which apply to the *connection services* provided under this *connection contract*, *Ausgrid* may propose amendments to the contract for consideration and negotiation with the *connection customer*.

16.3 Oral explanation

No oral explanation provided by one party to the other or to any person whom a party represents will:

- (a) affect the meaning or interpretation of this connection contract; or
- (b) constitute any collateral agreement, warranty or understanding between the parties or with any other person.

16.4 Rules prevail

To the extent of any inconsistency between the terms of this contract and the requirements of the *energy laws*, the *energy laws* prevail, subject to clause 18.1.

17 Interpretation and governing law

17.1 Interpretation

Headings are for convenience only and do not affect interpretation.

Unless stated to the contrary:

- (a) words used in the singular include the plural and vice versa;
- (b) any gender includes the other genders;
- (c) one part of speech in a defined term imports all parts of speech;
- (d) a reference to a person includes a natural person, a firm, unincorporated association, corporation, government or statutory body or authority and the person's legal personal representatives, successors and assigns;
- (e) a reference to legislation, a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (f) a reference to a right includes a benefit, remedy, discretion, authority or power;
- (g) "clause" refers to a clause in this contract;
- (h) "contract" refers to this contract;
- (i) "we" and "our" refer to *Ausgrid*;
- (j) "you" refers to the *connection customer*; and
- (k) "including" always implies an inclusion without limitation.

17.2 Governing Law and Jurisdiction

This contract is governed by the law in force in New South Wales. The parties submit to the exclusive jurisdiction of the courts of New South Wales and any courts which may hear appeals from those courts in respect of any proceedings in connection with the contract.

18 Dictionary

18.1 Statutory definitions apply

- (a) Terms used in the *connection offer* and the *connection contract* have the meanings they bear in the *energy laws* as amended from time to time, with the exception of the defined term *energy laws*, which has the extended meaning given in clause 18.2
- (b) For ease of reference, *Ausgrid* offers the definitions set out in clause 19.2. Where our definitions differ from those in the *energy laws*, the definitions in the *energy laws* prevail in the event of a conflict of meaning, except as provided in sub-clause 18.1(a).

18.2 Definitions

Subject to clause 18.1 the following words have the following meanings:

accreditation scheme means the *Scheme for the Accreditation of Service Providers to Undertake Contestable Services* made in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) administered by the NSW Department of Industry, Resources and Energy.

accredited service provider means a person accredited under the *accreditation scheme* to provide *contestable* services.

Active energy means a measure of electrical energy flow, being the time integral of the product of voltage and the in-phase component of current flow across a connection point, expressed in watthour (Wh).

Active power means the rate at which *active energy* is transferred.

AEMO means the Australian Energy Market Operator.

alternative control services means customer specific or customer requested services for which the full cost of the service is attributed to that particular customer and means those services classified by the *regulator* as alternative control services.

ancillary services means services determined by the *regulator* to be ancillary services and in the context of this contract are provided by *Ausgrid* to an *accredited service provider* retained by or on behalf of a *connection customer*. The charges for *ancillary services* are *ancillary service fees*.

ancillary service fees means the fee based on rates that the *regulator* permits *Ausgrid* to charge for *ancillary services* and for the purpose of this contract, the fees payable under clause 6.

ASP/1 means a person accredited as a level 1 *accredited service provider* in accordance with the *accreditation scheme* to construct *distribution network* assets.

ASP/2 means, depending on the context,

- (a) a person accredited as a level 2 *accredited service provider* in accordance with the *accreditation scheme* to construct *premises connection assets*; or
- (b) the person so accredited retained by the *connection customer* or any agent of the *connection customer* to construct the *premises connection assets*.

augmentation of a *distribution system* means work to enlarge that system or to increase its *capacity* to distribute electricity.

Ausgrid means the Ausgrid Operator Partnership (ABN 78 508 211 731), trading as Ausgrid, a partnership carried on under that name by:

- (a) Blue Op Partner Pty Ltd (ACN 615 217 500) as trustee for the Blue Op Partner Trust;
- (b) ERIC Alpha Operator Corporation 1 Pty Ltd (ACN 612 975 096) as trustee for ERIC Alpha Operator Trust 1;
- (c) ERIC Alpha Operator Corporation 2 Pty Ltd (ACN 612 975 121) as trustee for ERIC Alpha Operator Trust 2;

- (d) ERIC Alpha Operator Corporation 3 Pty Ltd (ACN 612 975 185) as trustee for ERIC Alpha Operator Trust 3; and
 - (e) ERIC Alpha Operator Corporation 4 Pty Ltd (ACN 612 975 210) as trustee for ERIC Alpha Operator Trust 4;
- being the operator of the *distribution system*.

Ausgrid's Network Standard NS194 means Ausgrid's Network Standard NS194 Protection Requirements of Embedded Generators >30kW as published on *Ausgrid's* website from time to time.

Ausgrid's Network Standard NS194B means Ausgrid's Network Standard NS194B Guidelines for Rotating Machines Connected to the Ausgrid Network as published on *Ausgrid's* website from time to time.

authorisation means the consent *Ausgrid* gives to an *accredited service provider* to work on or near its *distribution system*.

basic connection means a *connection* between the *premises* of a *connection customer* and *the distribution system* that involves minimal or no *augmentation of the distribution network* and for which *Ausgrid* has a model standing offer for providing a *basic connection service*.

basic connection service means a service related to a *basic connection* or proposed *basic connection*.

business day means any week day other than any public holiday in New South Wales and 27, 28, 29, 30 and 31 December.

capacity means the measure of the electricity (usually expressed in amperes) that can be received from or *exported* into the *distribution system*.

commencement date is determined in accordance with clause 1.4.

common service connection means a connection to *the distribution system* through which other premises of retail customers located at the same location connect to *the distribution system*.

connection means a physical link between a *distribution system* and a *connection customer's premises* to allow the flow of electricity and means, in this contract, the *connection* described in the *connection offer*. To avoid doubt, *connection* does not include *relocation works* and *connection works* do not include *relocation works*. **connect** and **connected** have a corresponding meaning.

connection alteration means an alteration to an existing *connection*, including an addition, upgrade, *extension*, expansion, *augmentation* or any other kind of alteration.

connection applicant means the person who lodged the *connection application*, who is either a *retail customer* or a *real estate developer*, or a person making a *connection application* on behalf of a *retail customer* or *real estate developer*.

connection application means an application for a *new connection* or *connection alteration* and in the context of this contract means the completed *connection application* referred to in the *connection offer* and includes all documents forming attached to, or provided with, the application.

connection charge means a charge imposed by a *distribution network service provider* such as *Ausgrid* for a *connection service*. *Ausgrid's* only *connection charges* are those described in clause 6.

connection contract means a contract formed by the making and acceptance of a *connection offer*. To avoid doubt, except where *Ausgrid's Deemed Standard Connection Contract* is expressly referred to in this document, *connection contract* refers to a contract under Chapter 5A of the *rules*.

connection customer means the *retail customer* or *real estate developer* (as the case may be) whose details are set out in the *connection application*.

connection details are the proposed embedded generation details and the connection details set out in the *connection application*, as modified by *Ausgrid* in the *connection offer*.

connection link means a fixture that forms the physical junction through which electricity is transmitted across a break in electrical conductors. The *connection link* forms part of the *electrical installation* provided and maintained by the *connection customer*.

connection offer means this offer by *Ausgrid* to enter into a *connection contract* on the terms of this contract and the *connection application*.

connection offer summary means the explanation of the connection offer set out at the beginning of this document and forming part of this contract.

connection point means the junction of the distribution system with the electrical installation at the premises. For the purposes of this contract, the connection point specified in clause 2.4.

connection policy means a document approved as a *connection policy* by the *regulator* under Chapter 6, Part E of the *rules*, setting out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges. *Ausgrid's connection policy* is available on our website:

http://www.ausgrid.com.au/~media/Files/Connections/Connection_Policy_Connection_Charges.pdf

connection services means the services provided by *Ausgrid* under this contract as specified in clause 3. For the avoidance of doubt, *connection services* do not include *contestable services* or services involving the provision, installation or maintenance of a *metering installation*.

consumer's mains are mains leading from the *connection point* to the main switchboard on the *premises*. They are part of the *electrical installation* and are owned by the *premises* owner.

contestable refers to services that may be provided by more than one supplier as a contestable service or on a competitive basis and in New South Wales must be provided in accordance with the *accreditation scheme*.

contestable service means the work done at or near the *premises* (at the *connection customer's* cost) by an *ASP/2* to establish the *connection*.

disconnect includes (without limitation) discontinuing the supply of electricity to a *customer's premises* by any means including operating a switch, removing meters or dismantling equipment between the *premises* and the *distribution system*.

distribution network means the apparatus, equipment, plant and buildings used to convey and control the conveyance of electricity to customer's *premises* (excluding *premises connection assets*), and for the purpose of this contract means the *distribution network* that is owned by the *Network Owner*, leased to the *Network Lessee*, and operated and maintained by *Ausgrid* under a sub-lease.

distribution network service provider means an owner, controller or operator of a *distribution network*, and in this contract means *Ausgrid* as the person who is registered under the *rules* as the distribution network service provider.

distribution system means the apparatus, equipment, plant and buildings used to convey and control the conveyance of electricity to customer's *premises* and includes any *premises connection assets*, and for the purpose of this contract means the distribution system that is owned by the *Network Owner*, leased to the *Network Lessee*, and operated and maintained by *Ausgrid* under a sub-lease.

electrical installation has the meaning it is given in the Electricity (Consumer Safety) Act 2004 (NSW) and means the electrical wiring and associated equipment that are used to convey and control the conveyance of electricity within *premises* to which electricity is supplied from a *distribution system*, but does not include the *premises connection assets* or *metering installation* or anything connected to and extending or situated beyond an electrical outlet socket.

electrical professional means a licensed electrical contractor, an *accredited service provider* or other appropriately qualified person.

electrical wiring work means the physical work of installing, repairing, altering, removing or adding to an *electrical installation* or the supervising of that work.

electrify means the application of electrical current to the *premises connection assets* and the *electrical installation* and **electrification** has a corresponding meaning.

embedded generator means a person that owns, controls or operates an *embedded generating system*.

embedded generating system means one or more *generating unit(s)* that are *rotating machine generators* connected or intended to be connected to the *distribution system* with a total generating capacity no greater than 5MW. The *embedded generation system* includes all protection, control and communication systems necessary to comply with the *installation design*.

energy laws includes (as amended from time to time) the National Energy Retail Law, the National Electricity Law, the *rules*, any rules, regulations and instruments made under the National Energy Retail Law or the National Electricity Law, the Electricity Supply Act 1995 (NSW) and Electricity (Consumer Safety) Act 2004 (NSW), all rules, regulations, instruments and plans made under or to comply with those Acts, *Ausgrid's* Network Standards, *Ausgrid's* Electrical Safety Rules, the Service and Installation Rules of New South Wales and the AS/NZ 3000 Wiring Rules.

EWON means the *Energy and Water Industry Ombudsman*.

export means, in relation to electricity, the electricity generated by the *embedded generating system* and delivered to *the distribution system* from the *premises*.

export capacity means the measure of maximum *active power* that can be delivered from the electrical installation to the *distribution system* through the *connection point*.

extension is an augmentation that requires the provision of a power line (including a service main) outside the present boundaries of the distribution network operated and maintained by Ausgrid.

generating unit has the meaning as defined in the *rules*.

good industry practice means the standard adopted by a reasonable and prudent person in the circumstances (and may include good electricity industry practice as defined in the *rules*, if applicable in the particular circumstances).

import means, in relation to electricity, the delivery of electricity from *the distribution system* to the premises.

import capacity means the measure of the electricity (expressed in amperes) that can be received from the *distribution network* by an *electrical installation* through the *connection point*.

Installation design means the design produced by an *electrical professional* and certified by Ausgrid that contains all relevant protection schemes, relay settings, control and communication schemes that are installed or are intended to be installed on the *premises* in relation with the *connection*, including those schemes relevant to the generation, or potential generation of electricity.

installation rules means the Service and Installation Rules of New South Wales as amended from time to time.

Installation Safety Management Plan (ISMP) A document prepared by the High Voltage Customer to address the full range of risks likely to be associated with the operation and maintenance of the private *electrical installation*.

instrument means a transfer granting easement or a section 88B instrument, whichever is approved by *Ausgrid*.

inverter means a device that uses semiconductor devices to transfer power between dc source or load and an ac source or load.

LPI means Land and Property Information.

metering coordinator means a person who is registered by *AEMO* as a metering coordinator under Chapter 2 of the *rules*.

metering installation means the assembly of components that are controlled for the purpose of metrology and which are located at or near the point of physical connection of the device measuring the current in the power conductor where the energy data is made available for collection.

National Metering Identifier or NMI means the National Metering Identifier issued at (or in relation to) a metering installation and registered with *AEMO* in accordance with the *energy laws*.

network charges means the charges that *Ausgrid* is entitled to charge a customer under the *rules* and which are billed directly to the *retailer*.

network device means the apparatus or equipment located at or adjacent to a *metering installation* at the *connection point* which enables *Ausgrid* to monitor, operate or control its *distribution network* for the purpose of providing network services, any may include switching devices, measurement equipment and control equipment.

Network Lessee means Ausgrid Asset Partnership (ABN 48 622 604 040), a partnership carried on under that name by:

- (a) Blue Asset Partner Pty Ltd (ACN 615 217 493) as trustee for the Blue Asset Partner Trust;
- (b) ERIC Alpha Operator Corporation 1 Pty Ltd (ACN 612 975 096) as trustee for ERIC Alpha Asset Trust 1;
- (c) ERIC Alpha Operator Corporation 2 Pty Ltd (ACN 612 975 121) as trustee for ERIC Alpha Asset Trust 2;
- (d) ERIC Alpha Operator Corporation 3 Pty Ltd (ACN 612 975 185) as trustee for ERIC Alpha Asset Trust 3; and
- (e) ERIC Alpha Operator Corporation 4 Pty Ltd (ACN 612 975 210) as trustee for ERIC Alpha Asset Trust 4;

and its successors and assigns, which leases the assets which form part of the *distribution system* from the *Network Owner* and which are in turn operated and maintained by *Ausgrid* under a sub-lease arrangement.

Network Owner means Alpha Distribution Ministerial Holding Corporation and its successors and assigns, that owns the assets which form part of the *distribution system* which are leased to the *Network Lessee* and are in turn operated and maintained by *Ausgrid* under a sub-lease arrangement.

new connection means a *connection* established or to be established, in accordance with applicable *energy laws*, where there is no existing *connection*.

Operating Protocol Agreement or OPA has the meaning given in clause 10.9.

other land means private land other than the *premises*.

point of common coupling means the point at which *service mains* are connected to the *distribution network* and for the purposes of this contract is the point specified in the *connection application* and if applicable, as amended by *Ausgrid* in the *connection offer*.

point of supply means the *connection point*.

precondition to electrification means a condition of this contract that the *connection customer* must meet before *Ausgrid* will approve the *electrification* of the *connection*.

premises includes any building or part of a building, any structure or part of a structure, any land (whether built on or not) and any river, lake or other waters and for the purposes of this document, means the *premises* referred to in the *connection application*.

premises connection assets means the components of the *distribution system* through which *Ausgrid* provides electricity to individual *premises*. The components of the *electrical installation* at the *premises* are not *premises connection assets*.

reactive power means the time-integral of the product of the voltage at the connection point and that component of the current that is flowing across the connection point that is out of phase with the voltage (as measured in Volt Amp Reactive).

real estate developer means a person engaged in the commercial development of land and for the purposes of this contract means the *real estate developer* (if any) named in the *connection application*.

regulator means the Australian Energy Regulator established by section 44AE of the Competition and Consumer Act 2010 (Cth).

relocation means moving existing assets in the *distribution system* from one place to another (including undergrounding existing overhead assets) and includes installing new items in place of existing ones; and **relocation works** bears an equivalent meaning.

retail contract means a contract between a *retail customer* and a *retailer* for the sale of electricity to the *premises*.

retail customer means a person who purchases electricity from a *retailer* and includes a non-registered *embedded generator* and a micro embedded generator.

retailer means a person who is the holder of a retailer authorisation issued under the National Energy Retail Law in respect of the sale of electricity.

rotating machine refers to the broad category of generators that convert mechanical energy to electrical energy via electromagnetic induction. Electromagnetic induction works by forcibly moving a loop of wire (a rotor) around a stationary bar (a stator) that provides an electric field, either through a permanent magnet or an electromagnet.

rules means the National Electricity Rules established (and as amended from time to time) under the National Electricity Law.

service mains means overhead conductors or underground cables used to connect the *distribution network* and the *connection point* at the *premises*. *Service mains* may be of high voltage or low voltage construction and are installed by an ASP/1 or ASP/2 (*as appropriate*) at the *connection customer's* cost but after *electrification* they are owned by the *Network Owner* but leased to the *Network Lessee* and operated and maintained by *Ausgrid* under a sub-lease arrangement.

shared consumers mains are *consumers mains* owned jointly by more than one customer.

site establishment fee is described in Appendix A.

site inspection fee is the fee allowable under rule 5A.D.4 and further described in clause 6.3.

small customer means a residential customer or a business customer who consumes electricity below the upper consumption threshold (currently 100MWh per annum).

standard connection service means *connection services* provided by *Ausgrid* which facilitate and supplement the construction and installation of *premises connection assets*, *extensions* and other *distribution system assets* by *accredited service providers*.

Appendix A – Fee schedule – connection charges



FEE SCHEDULE – CONNECTION CHARGES

The fees below are consistent with *Ausgrid's connection policy*.

1. SITE INSPECTION FEE:

[to be inserted by Ausgrid]

2. AUSGRID ANCILIARY SERVICE FEES:

(a) Site establishment \$[to be inserted by Ausgrid] per NOSW (or CCEW) form

Ausgrid charges a *site establishment fee* for checking and updating network load data.

Ausgrid will bill this fee to the *ASP/2* when they submit their Notification of Service Work (NOSW) form or if an *ASP/2* is not involved with the work, to the installing electrical contractor when they submit their CCEW form.

(b) Inspection of service work

A Grade ASP \$ [to be inserted by Ausgrid] per NOSW form

B Grade ASP \$ [to be inserted by Ausgrid] per NOSW form

C Grade ASP \$ [to be inserted by Ausgrid] per NOSW form

Ausgrid will bill this fee to the *ASP/2* when they submit their Notification of Service Work (NOSW) form.

(c) Re-inspection \$[to be inserted by Ausgrid] per re-inspection

Where an inspection determines that electrical work is defective, *Ausgrid* re-inspects the work after it has been rectified.

Ausgrid will bill this fee to the *ASP/2* who performed the *contestable services* or to the licensed electrical contractor who installed the *electrical installation* (whichever is applicable), prior to carrying out the re-inspection.

(d) Inspections outside normal Ausgrid business hours \$[to be inserted by Ausgrid] per hour

Ausgrid's normal business hours are 7.30am to 4.00pm Monday to Friday (excluding public holidays).

Inspections of electrical work or defective work carried out outside these hours at the request of a *connection customer* will be charged to the person liable for the fee, after *Ausgrid* carries out the inspection.

3. OTHER CONNECTION SERVICE FEES:

Negotiation Fee: [Ausgrid to insert amount]

This fee covers expenses directly and reasonably incurred by *Ausgrid* in assessing your *connection application* and making this *connection offer*, in accordance with Rule 5A.C.4

Hourly rates are :

Appendix B – Technical requirements

Appendix C – Operating Protocol Agreement

APPENDIX D – Single Line Diagram
