

Negotiated Ongoing Connection Contract: EGs: [insert site]



NMI: [insert]

Work Request No. [insert]

Ergon Energy Corporation Limited
ABN 50 087 646 062

[insert embedded generator name]
ABN [insert]

WITHOUT PREJUDICE

**NOTE TO COUNTERPARTIES: THIS DOCUMENT MAY BE UNILATERALLY
VARIED BY ERGON ENERGY UP UNTIL THE DATE OF OFFER TO COMPLY
WITH THE CURRENT ERGON ENERGY TEMPLATE.**

Please note: This contract is for use only by EGs.

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1. PARTIES TO THIS CONTRACT

This *contract* is between:

- (a) Ergon Energy Corporation Limited ABN 50 087 646 062, of 420 Flinders St, Townsville QLD 4810 (*Ergon Energy* or *we, our* or *us*); and
- (b) [insert name of embedded generator] ABN [insert ABN], of [insert registered address] (the *Counterparty* or *you* or *your*).

[Drafting note: Additional clauses may be required if the *Counterparty* is other than a corporation (such as a joint venture, partnership or trust.)]

2. RECITALS

- (a) This *contract* sets out the arrangements between the parties in relation to the provision of the *services* by *us* to *you*.
- (b) If the commencement of this *contract* is triggered by a *new connection* or *connection alteration* under either of Chapters 5 or 5A of the *NER*, the parties will be party to a separate *Connection Establishment Contract* to establish or modify the connection (as relevant).

3. INTERPRETATION

3.1. Glossary

Italicised terms (other than references to *laws* and Latin phrases) are defined in the following order of priority:

- (a) in this clause;
- (b) in the *NERL* or the *NERR*; and
- (c) in the *NEL* or the *NER*.

Words used in the *Corporations Act 2001* (Cth) have the meaning defined in that Act. Relevant words used in clause 12 are defined in the *A New Tax System (Goods and Services Tax) Act 1999* (Cth). If a word is defined, other grammatical forms of that word have that meaning.

abnormal operating condition means a condition that results, or is likely to result, in any part of the *distribution system* or any relevant *network* operating in a sub-optimal manner, including, without limitation, transients, planned or unplanned outages, upgrades, system maintenance and any conditions related to or arising from a *force majeure event* (such as severe weather conditions, lightning storms or bush fires);

actual monthly maximum import demand is the actual maximum half-hourly rate for electricity imported from the *distribution system* at the *connection point* in a calendar month;

AEMO means the Australian Energy Market Operator Limited ABN 072 010 327 responsible under the *NER* for the operation of the *NEM*;

authorisation means any authorisation, licence, authority, permit, registration, consent, declaration, exemption, notarisation or waiver, and any renewal or variation of any of them issued, granted or approved by a *government agency* or third party (including pursuant to any native title or cultural heritage legislation);

authorised demand means the maximum average rate at which *we* permit *you* to take electricity from the *distribution system* at the *connection point* (where the rate is measured over a 30-minute period finishing on the hour or on the half-hour), which rate is initially set out in Item 1.2 of Schedule 1 and may be varied under clause 6.3. Note that this, together with the *authorised export limit*, comprises the “authorised demand” referred to in S5.6(c) of the *NER* and in *Ergon Energy’s approved pricing proposal*;

authorised export limit means the agreed maximum average rate at which *you* may export electricity from *your facility* into *our distribution system* at the *connection point* (where the rate is measured over a 30-minute period finishing on the hour or on the half-hour), which rate is initially set out in Item 1.1 of Schedule 1 and may be varied under clause 6.3. Note that this, together with the *authorised demand*,

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comprises the “authorised demand” referred to in S5.6(c) of the *NER* and in *Ergon Energy’s approved pricing proposal*;

business day means a day other than a Saturday, a Sunday or a day that is a public holiday in the place where the thing is to be done;

change of control means, for a corporation that is not (directly or indirectly) majority owned by the Queensland Government or one or more of the Ministers of that Government, a change of:

- (a) *control* of the composition of the board of directors of the corporation;
- (b) *control* of more than half the voting rights attaching to shares in the corporation; or
- (c) *control* of more than half the issued shares of the corporation (excluding any part that carries no right to participate beyond a specified amount in the distribution of either profit or capital),

other than:

- (d) a change where the ultimate controlling entity of the corporation remains the same; and
- (e) a change resulting from the transfer of shares listed on a recognised stock exchange;

charges means the *network charges*, payments for *communications services* and *fees*, as relevant;

communications service means the use of *our existing communications system* by *us* to transfer data received from *your remote monitoring equipment* at *our communications node* with *you* to *our communications node* with *Powerlink Queensland*;

confidential information means:

- (a) any information that is defined as confidential information under the *NER*;
- (b) any information that is provided by one party to another, where the disclosing party indicates, at the time of disclosure, that the information is confidential or commercially sensitive (including any information that is confidential or commercially sensitive to another entity, such as a *representative* of the disclosing party); and
- (c) any information pertaining to a party’s business which, from its nature, would reasonably be expected to be viewed by that party as confidential or commercially sensitive,

and includes any such information that is provided by one party to another before the date of this *contract*;

confidential technical information means *confidential information* of a technical nature;

connection alteration has the meaning given to that term in any *Connection Establishment Contract* (essentially, the modification of the *connection point* between *your facility* and *our distribution system*);

Connection Establishment Contract means a *connection contract* between the parties under either of Chapters 5 or 5A of the *NER* that provides for the provision of a *new connection* or *connection alteration*. This may be colloquially referred to as a “construction contract” as it involves design and construction works;

connection point is defined in Item 3(b) of Schedule 1.7;

contract means this document as executed and as amended or supplemented from time to time;

control means a power or control that is direct or indirect or is, or can be, exercised as a result of, by means of, in breach of, or by revocation of, trusts, relevant agreements and practices, or any of them, whether or not they are enforceable;

Counterparty means the entity set out in clause 1(b);

default means a *financial default*, a *non-financial default* or a *disconnection right*;

default interest period means, for an unpaid amount, a period of 20 *business days* beginning on the day on which the amount falls due, or on the last day of another *default interest period* for that amount;

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default rate means, for any day in a *default interest period*:

- (a) a rate of interest equal to 3% over the Commonwealth Bank Corporate Overdraft Reference Rate (monthly charging cycle) as published by the Commonwealth Bank of Australia;
- (b) if at any time the Commonwealth Bank Corporate Overdraft Reference Rate ceases to be published, then such other rate as the parties may agree is a reasonable substitute; and
- (c) if the parties do not agree on a rate under (b) above, a rate determined by a nominee of the President of the Institute of Arbitrators and Mediators Australia (Queensland Branch);

disconnection right means where we are entitled to *de-energise* or *disconnect* the *facility* from the *distribution system* at the *connection point* under the *energy laws* as a result of some non-compliance or similar either by *you* or in connection with the *facility*;

distribution system means the relevant *distribution system* (as that term is defined in the *NERL*) owned and operated by *us* to which the *facility* is, or will be, *connected*;

EG has the meaning given to the term Embedded Generator in *our approved pricing proposal*;

electrical equipment has the meaning given to that term in the *Electrical Safety Act 2002* (Qld);

embedded generating unit has the meaning given to that term in the *NER*;

emergency means an emergency due to the actual or imminent occurrence of an event that in any way endangers, or threatens to endanger, the safety or health of any person, or normal operation of the *distribution system* or any *transmission system*, or that destroys or damages, or threatens to destroy or damage, any property;

energy laws has the meaning given to that term in the *NERL* (and, for the avoidance of doubt, includes Queensland electrical safety legislation);

existing communications systems means *our* existing communications systems used to provide information about the status of *our distribution system* to *our* communications node with *Powerlink Queensland* for them to transfer to *AEMO's control centre*;

expert means the person appointed as an expert under clause 16(a);

facility means the relevant facility in respect of which *you* are an *EG* (being the facility stated in Item 1.1 of Schedule 1) to which *we* are, or will be, providing the *services*, which includes any, or any part of any, buildings, structures or *electrical equipment* on, in or at that facility;

fee means any fee payable by *you* to *us* under this *contract* or that *we* are entitled to charge, or recover from, *you* under the *energy laws*;

financial default means a failure by a party to pay an amount of money owing to a party, to lodge a *security* with a party, or that party suffering an *insolvency event*;

financial obligation means an obligation under this *contract* involving the payment of money or relating to the lodgement of a *security*;

force majeure event means any event, act, circumstance or omission, or combination of them, that is beyond the reasonable control of an affected party, and that is not the result of a failure to observe *good electricity industry practice* or any of negligence, bad faith, wilful misconduct, fraud, breach of *law* or failure to comply with any relevant *authorisation* or this *contract*;

generator commissioning plan means a written plan setting out the process to be followed by *you* and *us* for *you* to demonstrate that the *embedded generating units* that are (directly or indirectly) *connected* to the *distribution system* at the *connection point* are compliant with the *technical requirements* (including any *Generator Performance Standard*) and can operate without adversely affecting the stability, security and performance of the *distribution system* or the supply of electricity to *our* other customers;

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Generator Performance Standard means, in respect of any *embedded generating unit* that is (directly or indirectly) *connected* to the *distribution system* at the *connection point*:

- (a) if a *performance standard* has been registered for that *embedded generating unit* with AEMO in accordance with rule 4.14 of the *NER* – the registered *performance standard* current at the relevant time; and
- (b) if a *performance standard* is yet to be registered for that *embedded generating unit* with AEMO in accordance with rule 4.14 of the *NER*, then the relevant standards agreed upon by *you, us*, the owner/operator of the *embedded generating unit*, any other relevant *network service provider(s)* and AEMO (to the extent applicable) at the relevant time;

[GPS information agreed in stages:

- first registered after initial commissioning but before CP energisation;

- updated on energisation of CP;

- updated again on completion of generator commissioning process; and

- updated again two months later.

Refer AEMO's technical information requirements for generator connections. Table 2-1 and Model Guidelines]

good electricity industry practice means:

- (a) for *you*, the exercise of that degree of skill, diligence, prudence and foresight that could reasonably be expected from a significant proportion of operators of facilities similar to the *facility*, taking into account the size, duty, age, location and technological status of the *facility* and any other relevant factors; and
- (b) for *us*, the exercise of that degree of skill, diligence, prudence and foresight that could reasonably be expected from a significant proportion of operators of facilities similar to the *distribution system*, taking into account the size, duty, age, location and technological status of the *distribution system* and any other relevant factors;

government agency means: a government, government department or other similar body; a governmental, semi-governmental or judicial person; or a person (whether autonomous or not) who is charged with the administration of a *law*;

hot commissioning activities means “live” commissioning activities that involve the *embedded generating unit* operating in parallel with the *distribution system* where operations can affect the *distribution system*;

insolvency event means when any of the following occur in respect of a party:

- (a) it disposes of all or part of its assets, operations or business other than in the ordinary course of business;
- (b) it ceases to carry on business;
- (c) it ceases to be able to pay its debts as they become due;
- (d) any step is taken by a mortgagee to take possession, or dispose, of all or part of the party's assets, operations or business;
- (e) any step is taken to enter into any arrangement between the party and its creditors;
- (f) any step is taken to appoint a receiver, a receiver and manager, a trustee in bankruptcy, a provisional liquidator, a liquidator, an administrator or other like person to all or part of the party's assets, operations or business; or
- (g) where the party is a partnership, any step is taken to dissolve that partnership or a partner dies;

inverter means a device that uses semiconductor devices to transfer power between a direct current (DC) source or load and an alternating current (AC) source or load;

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law means any legally binding law, legislation, statute, act, rule, order or regulation that is enacted, issued or promulgated by the State of Queensland, the Commonwealth of Australia or any relevant local authority;

micro embedded generating system means a *generating system* (which, for the avoidance of doubt, includes relevant equipment such as an *inverter*) *connected* (or to be *connected*) within a *distribution system* and not having direct access to the *transmission network*, where that *generating system* is of a kind contemplated by AS 4777 (Grid connection of energy systems via inverters);

NEL means the National Electricity (Queensland) Law, as defined in the *Electricity - National Scheme (Queensland) Act 1997* (Qld);

NER means the National Electricity Rules under the *NEL*;

NERL means the National Energy Retail Law (Queensland), as defined in the *NERL (Qld) Act*;

NERL (Qld) Act means the *National Energy Retail Law (Queensland) Act 2014* (Qld);

NERR means the National Energy Retail Rules under the *NERL*;

network capacity means the actual *power transfer capability* of *our distribution system* to either deliver electricity to, or receive electricity from, the *facility* at the *connection point* from time to time, as determined either by us (or, failing such determination, *AEMO*);

network charges means the charges that *we* are entitled to charge for the *services* provided under this *contract*;

new connection has the meaning given to that term in any *Connection Establishment Contract* (essentially, the creation of a new *connection point* between *your facility* and *our distribution system*);

non-financial default means:

- (a) with respect to *us*, a failure to comply with a provision of this *contract* that has or could reasonably be expected to have a material adverse effect on *our* capacity to provide the *services*; and
- (b) with respect to *you*, either:
 - (i) a failure to comply with a provision of this *contract* that has, or could reasonably be expected to have, a material adverse effect on:
 - (A) the security, stability or performance of any part of the *distribution system*;
 - (B) the quality of electricity supplied to the *distribution system*, or vice versa, at the *connection point*; or
 - (C) the provision of the *services*; or
 - (ii) a failure to comply with clause 6.6,

but does not include a *financial default* or a *disconnection right*;

non-financial obligation means an obligation under this *contract* other than a *financial obligation*;

notified price has the meaning given to that term in the *Electricity Act 1994* (Qld);

OEM means original equipment manufacturer;

Powerlink Queensland means Queensland Electricity Transmission Corporation Limited ABN 82 078 849 233, being, as at the date of this *contract*, the relevant *transmission network service provider*;

pre-NERL negotiated connection contract has the meaning given to that term in the *NERL (Qld) Act*;

QECMM means the document entitled "Queensland Electricity Connection and Metering Manual: Service and Installation Rules" available on *our* website (www.ergon.com.au);

Registered Customer has the meaning given to the term "*Customer*" in the *NER*;

remote monitoring equipment has the meaning given to that term in the *NER*;

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representative means the agents, contractors, sub-contractors, designers, employees, officers and other representatives of a party;

retailer means a person that is authorised to sell energy to customers;

RPEQ means an engineer registered with the Board of Professional Engineers under the *Professional Engineers Act 2002* (Qld) in the area of electrical engineering;

security means a security that meets the requirements of clause 10, and the *security start date*, *security amount* and *security end date* for each *security* are set out in Item 1.4 of Schedule 1;

security for removal means a *security* designed to cover the expected costs of *us* removing *stranded assets* in accordance with this *contract*, and any loss or damage that may be suffered by *us* in connection with such removal;

security interest means:

- (a) a mortgage, charge, pledge, lien, hypothecation, power of attorney or title retention arrangement, a right of set-off or right to withhold payment of a deposit or other money, a notice under section 255 of the *Income Tax Assessment Act 1936* (Cth), subdivision 260-A in schedule 1 of the *Taxation Administration Act 1953* (Cth) or any similar legislation;
- (b) any other interest or arrangement of any kind that secures the payment of money or the performance of an obligation or which gives a creditor priority over unsecured creditors in relation to any property; or
- (c) any agreement to create any of them or to allow any of them to exist;

services means the services set out in clause 6.1(a);

STNW1165 Standard means *our* "Standard for Connection of Embedded Generators in the Ergon Energy Distribution system", having *our* internal reference STNW1165, which is available on *our* website (www.ergon.com.au);

STNW1170 Standard means *our* "Connection Standard: Small Scale Parallel Inverter Energy Systems up to 30 kVA", having *our* internal reference STNW1170, which is available on *our* website (www.ergon.com.au);

STNW3365 Standard means *our* "Customer Standard: Standard for Embedded Generation (5MW and above)", having *our* internal reference STNW3365, which is available on *our* website (www.ergon.com.au);

STNW Standard means the applicable one of the *STNW1165 Standard*, *STNW1170 Standard* or *STNW3365 Standard*, having regard to the aggregate nameplate generation *connected* to the *distribution system* at the *connection point*;

stranded assets means any assets owned by *us*:

- (a) that were dedicated to providing the *services* to *you* prior to the expiry or earlier termination of this *contract*, and that that will not be used to provide *services* to *you* after such expiry or termination; and
- (b) which *we* do not want or need retained *in situ* after such expiry or termination;

technical requirements means the obligations set out in:

- (a) Schedules 5.1, 5.2 and 5.3 of the *NER* (as relevant to the extent that *you* operate a *network*, import electricity or export electricity, respectively);
- (b) Schedule 4 of this *contract*; and
- (c) any *Generator Performance Standard*,

as revised pursuant to the *Connection Establishment Contract*;

time of connection means:

- (a) if on commencement of this *contract*, the *connection point* is energised and operational and no *new connection* or *connection alteration* is required – the date of such commencement; and

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- (b) otherwise – when the *connection point* is tested and commissioned and becomes energised for operational purposes under the *Connection Establishment Contract*; and

Wiring Rules means the Australian/New Zealand Standard for Wiring Rules (AS/NZS 3000:2007).

3.2. Rules for interpreting this contract

Unless the context otherwise requires, the following interpretation rules apply to this *contract*:

- (a) headings are for convenience and do not affect interpretation;
- (b) a reference to:
 - (i) any *law* is to that legislation (including subordinate legislation) as amended or replaced;
 - (ii) an *Australian Standard* refers to:
 - (A) where the matter concerns design and construction parameters and the like, the *Australian Standard* that was current at the relevant date of such design and construction; and
 - (B) where the matter concerns an ongoing operational requirement, the *Australian Standard* that is current at the relevant time of such operation;
 - (iii) a clause, schedule or appendix is a reference to that part of this *contract*;
 - (iv) a document or agreement is to that document or agreement as amended, supplemented, replaced or novated, and includes references to any clause, schedule or appendix within that document or agreement;
 - (v) a party includes a permitted substitute or assignee of that party;
 - (vi) a person includes any type of entity or body of persons including any executor, administrator or successor in law of the person;
 - (vii) anything (including a right, obligation or concept) includes each part of it; and
 - (viii) a day is to a calendar day and a month is to a calendar month;
- (c) a singular word includes the plural, and vice versa;
- (d) examples are not exclusive;
- (e) a reference to 'A\$', '\$A', 'dollar' or '\$' is a reference to Australian currency; and
- (f) if a day on or by which a party must do something under this *contract* is not a *business day*, the person must do it on or by the next *business day*.

3.3. Multiple parties

If a party to this *contract* comprises more than one person, or a term refers to more than one person, obligations are joint and several, rights are held severally and all other references are to each person separately.

4. SCOPE AND OPERATION OF THIS CONTRACT

4.1. Application of this contract

This contract is a connection contract for the provision of ongoing *services*.

4.2. What is not covered by this contract

This *contract* does not cover:

- (a) the establishment of a *new connection* or a *connection alteration* (as this is done under a *Connection Establishment Contract*);
- (b) the sale of energy to the *facility* at the *connection point* (as this is a matter for *you* and/or *your retailer*); or
- (c) the purchase of any electricity exported from the *facility* into the *distribution system* at the *connection point*.

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5. TERM

5.1. When this *contract* starts and finishes

- (a) Unless otherwise specified in this *contract*, the rights and obligations under this *contract* commence on the day on which this *contract* and, if there is to be a *Connection Establishment Contract*, that *Connection Establishment Contract*, are fully executed.
- (b) Subject to any relevant *energy laws*, this *contract* will terminate at midnight on [insert], unless terminated earlier in accordance with this *contract*.
- (c) Rights and obligations accrued before the end of this *contract* continue despite the ending of this *contract*.

5.2. Special provisions where this *contract* involves the *connection* of new or modified *generating units* (other than a *micro embedded generating system*)

The parties acknowledge and agree that:

- (a) where new or modified *generating units* are to be (directly or indirectly) *connected* to the *distribution system* at the *connection point* (other than where the aggregate nameplate capacity of any *generating system(s)* located on *your* side of the *connection point* does not exceed 200 kVA), these *generating units* need to be tested and commissioned in accordance with this clause 5.2 to demonstrate:
 - (i) compliance with the *technical requirements* (including any *Generator Performance Standard*) (including the ability to startup and shutdown in a stable fashion); and
 - (ii) that the operation of the *generating units* do not adversely affect the levels of service or quality or security of *network service* to other *Network Users*,before those *generating units* commence regular operation;
- (b) the parties will agree upon a *generator commissioning plan* that sets out:
 - (i) relevant contact personnel;
 - (ii) a communications protocol to be followed during the commissioning process;
 - (iii) details of the *embedded generating units* that are being tested (including any aggregation of those units for testing purposes);
 - (iv) details of any milestone dates and any “hold points” that will be used for staged commissioning;
 - (v) details of the contents of “hold point” reports (if required) and commissioning reports;
 - (vi) details of measurement equipment and the relevant sampling frequency to be used;
 - (vii) each relevant technical parameter that is being tested; and
 - (viii) for each technical parameter:
 - (A) a description of the relevant compliance test and the methodology for performing that test (including any intermediate steps required within the testing process);
 - (B) the prerequisites and system requirements for performing that compliance test;
 - (C) measured quantities;
 - (D) post-test analysis; and
 - (E) success criteria;
- (c) *you* must, during the *detailed design* stage under the *Connection Establishment Contract* or earlier, provide *us* with:
 - (i) certification from the *OEM* of the *inverter* as to:
 - (A) the minimum short circuit ratio at which the *generating systems* can reliably operate;

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- (B) the minimum short circuit ratio at which the PSS®E model is valid for the *generating system*;
- (ii) PSS®E models for pre-test simulation studies (including automatic and manual startup and shutdown control modules) and a Model User Guide;
- (iii) if the *generating system* is an asynchronous system:
 - (A) *facility-* and *generating system-*specific electromagnetic transient-type simulation models (incorporating manufacturer's specific models where available) compatible with simulation software such as PSCAD/EMTDC to prove control system performance at low *distribution system* short circuit ratios; and
 - (B) measurement results (from an equivalent facility and plant performance from other installations, lab tests, hardware in loop etc.) confirming the validity of the PSCAD vs PSS®E models using a set of benchmarking tests of faults and contingency scenarios,

so that any relevant due diligence and modelling that we need to do to accurately undertake a stability and security assessment of the impact of the *generating system* on our *distribution system* can be completed well prior to commencing any *hot commissioning activities* set out in the *generator commissioning plan*;

- (d) where there is a *Generator Performance Standard*, the *generator commissioning plan* will incorporate a *Generator Performance Standard* compliance test program agreed between you, us, AEMO and any relevant *network service provider(s)*;
- (e) you will progress the activities set out in the *generator commissioning plan* at the times, and in the manner, agreed between the parties;
- (f) you must provide us (and, if relevant, AEMO and/or any relevant *network service provider(s)*) with a commissioning report that:
 - (i) outlines the commissioning tests undertaken at the *facility*;
 - (ii) compares the expected (modelled) performance with the actual test performance; and
 - (iii) outlines the conclusions of the tests with respect to compliance requirements;
- (g) if, during the commissioning process, we detect any:
 - (i) failure of the *embedded generating units* to comply with the *technical requirements*; or
 - (ii) adverse effect on the levels of service and quality of *supply* to our other existing customers that we consider (acting reasonably) is due to the commission of your *embedded generating units*,

we may:

- (iii) liaise with you to adjust any equipment on your side of the *connection point* to remove this non-compliance within what we consider to be a reasonable time (having regard to the impact of the non-compliance on the security, stability or performance of any part of the *distribution system* or on the levels of service and quality of *supply* to our other customers) – where the reasonable time may require immediate action; and
- (iv) if this non-compliance is not rectified within that specified time, we may either *disconnect* the *embedded generating units* (if we have the ability to do that without *disconnecting* the entirety of the *facility* at the *connection point*) or *disconnect* the *facility* at the *connection point*;
- (h) if we reasonably request you to take certain actions to facilitate any actions under clause 5.2(g), you must promptly comply with that request at your cost;
- (i) if clause 5.2(g)(iv) applies, you will need to liaise with us to revise the *generator commissioning plan* and carry out any additional modelling (both at your cost) to satisfy us that the issue will be resolved before any *hot commissioning activities* are recommenced; and

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- (j) where there are minor discrepancies between the actual test performance and the expected (modelled) performance, the parties (including, if relevant, AEMO and any other relevant *network service provider(s)*) may agree to update the *technical requirements* to reflect the actual test performance, provided that any changes to this *contract* are made in accordance with clause 20(a), and nothing in this clause 5.2(j) restricts *our* right to take action under clause 5.2(g).

6. CORE OBLIGATIONS REGARDING SERVICES

6.1. Provision and acceptance of services

- (a) This *contract* is a connection contract under which we undertake, from the *time of connection*, to provide the following *services* to *you* in accordance with, and subject to, this *contract*, relevant *laws* (including *energy laws*) and relevant *authorisations*:
- (i) the provision of *power transfer capability* across the *connection point* at a level up to, but not exceeding, any of the following:
- (A) for *active power* from the *facility* into the *distribution system* – the *authorised export limit*;
- (B) for *active power* from the *distribution system* into the *facility* – the *authorised demand*; and
- (C) for *active power* in any direction – the *network capacity* at that time,
- where each of these *services* is a *standard control service* as at the date of this *contract*.
- (b) *Our* obligations extend down to the *connection point* for the *facility*, and not beyond.
- (c) We also consent to *you* interconnecting the *embedded generating units* set out in Schedule 1.7 with *our distribution system*, provided that nothing in this *contract* overrides *your* obligation to obtain *our* prior written consent to the interconnection of any other *generating units* with *our distribution system* under clause 28 of the *Electricity Regulation 2006* (Qld).
- (d) *You* must, from the *time of connection*, and subject to this *contract*, relevant *laws* (including *energy laws*) and relevant *authorisations*:
- (i) **(acceptance of services)** accept the *services* and pay the *network charges* for these *services* in accordance with clause 9;
- (ii) **(connection restrictions)** only *connect* the *facility* and any *electrical equipment* to the *distribution system* at the *connection point*;
- (iii) **(export restrictions)** only export electricity from the *facility* to the *distribution system* at the *connection point* up to the lesser of the amounts set out in clauses 6.1(a)(i)(A) and 6.1(a)(i)(C); and
- (iv) **(import restrictions)** only import electricity from the *distribution system* at the *connection point* up to the lesser of the amounts set out in clauses 6.1(a)(i)(B) and 6.1(a)(i)(C).
- (e) *You* must provide *us* with [list any auxiliary services required eg AC supply] at no cost to *us*.
- (f) *You* must not mislead or deceive *us* in relation to any information provided to *us*.

6.2. Restrictions on transfer of electricity across connection point

- (a) The parties acknowledge and agree that:
- (i) we have rights to take certain actions under the *energy laws* in certain circumstances (including, without limitation, in respect of unsafe conditions and unreasonable interference), which may affect the provision of the *services*, and nothing in this *contract* restricts *our* entitlements to take such action (or any relevant notification obligations under those *laws*);
- (ii) other people may also have rights to take certain actions under the *energy laws*, such as testing of *metering installations* and associated *current transformers* and *voltage transformers*, which may affect the provision of the *services*;

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- (iii) the values for the *authorised export limit* and *authorised demand* have been determined at least partly by reference to *our* assessment of the *network capacity* of the *distribution system* in the relevant area as at the date of this *contract* (having regard to the configuration of the *distribution system*, the capacity of various elements of the *distribution system*, penetration levels of *embedded generators* and relevant *loading* conditions at that time (which vary on a daily, seasonal and yearly basis)), and changes to these factors will result in changes to the *network capacity* in various parts of the *distribution system* such that some changes may adversely affect *your* ability to import and export electricity at the *connection point*;
- (iv) we may also have granted other customers the right to transfer electricity at another *connection point*, which can limit the *network capacity* available to *you* under this *contract* from time to time;
- (v) the provision of the *services*:
 - (A) is, under clause 6.1, restricted by the *network capacity* that is available from time to time;
 - (B) is subject to compliance by both parties with relevant *laws* and *authorisations*; and
 - (C) may be constrained in certain circumstances, such as when:
 - (I) there is a relevant *force majeure event*;
 - (II) there is a relevant *network constraint*, *abnormal operating condition*, *credible contingency event* or *interruption* (as the *connection* is a single *connection* without complete redundancy);
 - (III) there are changes to the *network capacity*; and
 - (IV) provision of the *services* would not be in accordance with *good electricity industry practice* (such as where it would result in the technical parameters of the *distribution system* exceeding acceptable limits and/or otherwise compromise the security and stability of the *distribution system*),and we are not required to give *you* any priority to any *network capacity* during such circumstances.
- (b) *You* acknowledge and agree that *your* ability to dispatch any *embedded generating units* at the *facility* is subject to limitations in the *NER*, including those that might be applied by AEMO, such as concerning whether a *generating unit* is *constrained on* or *constrained off*, and to AEMO's *central dispatch* process.

6.3. Changes to *your facility* including requesting changes to *authorised demand* and *authorised export limit*

- (a) If the aggregate *nameplate rating* of *your embedded generating units* (as commissioned) is less than the *authorised export limit* specified in Item 1.1 of Schedule 1, we may, by notice to *you*, reduce the *authorised export limit* under this *contract* to be equivalent to that *nameplate rating*.
- (b) The activities referred to in clause 6.3(c) either require consent under the *energy laws* or may noticeably adversely affect the quality, reliability, safety or *metering* of the *connection* or the supply of electricity to the *facility* or any other person, and *you* must, before doing any of those activities:
 - (i) notify *us* of this and, if required, submit the information set out in S5.3.1 of the *NER* to *us*; and
 - (ii) if *our* consent is required under the *energy laws* in order to carry out such activities, seek to obtain *our* consent to do this, which such consent may be on conditions (without limitation, this may include an obligation to submit an application for an alteration to the *connection* under either of Chapters 5 or 5A (as relevant) of the *NER*, in which case the relevant connection contract must be in force before the *connection alteration* is made).
- (c) The activities are:

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- (i) (directly or indirectly) *connecting* any new or additional electrical equipment (including any *generating units*) to the *distribution system* at the *connection point*;
 - (ii) changing any relevant technical characteristics of any electrical equipment that is (directly or indirectly) connected to the *distribution system* at the *connection point* (including, without limitation, changing any wiring of plant or electrical equipment (including *metering equipment*)); or
 - (iii) changing the operation of *connected* plant or electrical equipment, including making any permanent material change to the expected energy load, pattern of usage or generation profile at the *facility*.
- (d) Without limiting clause 6.3(a), *you* may also request a change in the *authorised demand* or the *authorised export limit* once every 12 months, in accordance with the *NER*.

6.4. Your obligations regarding compliance of equipment

You must ensure that any *electrical equipment* (including, without limitation, earthing grid and earthing connections) that is (directly or indirectly) *connected* to the *distribution system* at the *connection point* is designed, constructed, operated and maintained to comply with:

- (a) this *contract*, *good electricity industry practice*, relevant *laws* (including *energy laws*), *authorisations*, *Australian Standards* (such as the *Wiring Rules* and AS 4777, etc.) and, where , there is no applicable *Australian Standard*, relevant *International Standards* and *British Standards* that are accepted in the Australian industry (such as IEC 60255), the *QECMM* and Schedules 5.1, 5.2 and 5.3 (as relevant) of the *NER*; and
- (b) an appropriate maintenance strategy developed by *you* (having consideration to the recommendations of the supplier of the *electrical equipment*),

including to ensure that this *electrical equipment*:

- (c) operates satisfactorily for the full range of variation of system parameters and characteristics and at the distortions and disturbances specified in this *contract* (including, without limitation, the *technical requirements*);
- (d) is capable of safe and satisfactory operation whilst *connected* to the *distribution system*;
- (e) where the *electrical equipment* comprises a *generating unit*.
 - (i) is capable of safe and satisfactory operation in parallel with the *distribution system*; and
 - (ii) the operation of that *generating unit* does not contribute to the throughput of electricity through a *distribution system* element exceeding the rated capacity of that element;
- (f) does not adversely impact on the levels of service and quality of *supply* to our other existing customers; and
- (g) that all engineering work in respect of this *electrical equipment* is done by, or under the supervision of, an *RPEQ*.

6.5. Mismatches between authorised limits and actual amounts

- (a) If the *actual monthly maximum import demand* exceeds the *authorised demand*.
 - (i) in a month, *we* will, instead of using the *authorised demand* when calculating the *network charges* (where relevant), use the relevant values for the *actual monthly maximum import demand*; and
 - (ii) by a material amount, *you* must, if *we* request, provide *us* with an explanation of these excesses and the likelihood that they will continue, and *we* may require *you* to make a request under clause 6.3(d).
- (b) This clause does not limit *your* obligation under clauses 6.1(d)(iii) and 6.1(d)(iv).

6.6. Illegal use of energy or interference

You must not, and must take reasonable steps to ensure others do not:

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- (a) illegally use energy supplied to the *facility*;
- (b) interfere or allow interference with any of *our* equipment at the *facility*, except as may be permitted by law;
- (c) use the energy supplied to the *facility* or any energy equipment in a manner that unreasonably interferes with the *connection* or supply of energy to another customer or causes damage or interference to any third party;
- (d) use *services* provided by *us* in a way that is not permitted by law or this *contract*; or
- (e) tamper with, or permit tampering with, any of *our* equipment.

6.7. Remote monitoring equipment

[Drafting note: Use this part if no remote monitoring equipment is expected to be installed.]

- (a) The parties acknowledge and agree that, as at the date of this *contract*, there is no obligation on *you* to install *remote monitoring equipment* as contemplated in s5.2.6.1 of the *NER*, and hence no obligation on *us* to provide communications systems for the transfer of data from any such *remote monitoring equipment* as contemplated in s5.2.6.2(e) of the *NER*.
- (b) If *you* become aware that any such requirement may be imposed, *you* must promptly advise *us* of this and agree to amend this *contract* in a manner acceptable to *us* (acting reasonably) so that this *contract* sets out the extent of *our* obligations to provide such communications systems, limitations on liability in respect of the operation of such communications systems and payment for the provision of these *communications services* to *you*.

[Drafting note: Use this part if remote monitoring equipment is expected to be installed.]

- (c) The parties acknowledge and agree that:
 - (i) *you* are required to install *remote monitoring equipment* as contemplated in s5.2.6.1 of the *NER*;
 - (ii) *we* will provide the *communications services*;
 - (iii) *Powerlink Queensland* transfers data about *our distribution system* from *our* communications node with them to *AEMO's control centre*, and it is expected that they will treat the data from *your remote monitoring equipment* in the same way;
 - (iv) *we* undertake to operate and maintain *our* communications systems in accordance with the *energy laws* and any relevant standards issued by *AEMO* for the purpose of providing information about the status of *our distribution system* (which does not include a redundant system), and nothing in this *contract* obliges *us* enhance or augment those communications systems to provide the *communications services*;
 - (v) *we* accept no liability for any shortcomings between the *communications services* provided and the requirements of any relevant standards published by *AEMO* for the purpose of providing data from *remote monitoring equipment* to *AEMO*;
 - (vi) , and, for the avoidance of doubt, clause 9 applies to the provision of these *communications services*; and
 - (vii) *you* will pay *us* for the *communications services* in accordance with clause 9 and Item 1.7 of Schedule 1.

[Drafting note: Use the below where an automated communications link will be installed.]

- (d) Notwithstanding the above, *you* must:
 - (i) install an automated communications link between the *facility* and *our* communications node at the [insert] Substation in order to receive certain instructions from *our* SCADA system, as contemplated in clause 6.12(d); and
 - (ii) allow *us* access to the [insert] kV circuit breaker located on *your* side of the *connection point* for the purposes referred to in Item 4.18(b)(iv) of Schedule 4.

6.8. Operating protocol

- (a) The parties may develop and implement a written operating protocol to govern regular operational procedures relating to the *connection point* to ensure compliance with *laws* and *authorisations*, personal safety and satisfactory operation of the *distribution system* and any *electrical equipment* that is (directly or indirectly) *connected* to the *distribution system* at the *connection point*, provided that a party may depart from the operating protocol where required to meet its obligations under the *energy laws*.
- (b) The operating protocol is intended to be a standalone, dynamic document that supports this *contract* and provides more detail on the day-to-day operations of each party and the requisite liaison between each party.
- (c) The parties acknowledge that operational practices may evolve over time, thus requiring amendments to the operating protocol. Any changes to the operating protocol must be in writing and approved by senior technical personnel of each party.
- (d) The operating protocol should cover at least the following matters:
 - (i) all information about the management of outages (both planned and unplanned outages for repair and maintenance of each party's facilities), including:
 - (A) agreement on annual plans for outages and maintenance for the following 12 months (taking into account the commercial objectives of each party);
 - (B) minimum notification periods for the commencement of planned outages and an obligation to notify the other party of planned outages as soon as reasonably practicable;
 - (ii) all information about switching procedures relevant to each party's facilities;
 - (iii) target times for *us* to respond to various categories of faults on *our distribution system*;
 - (iv) agreed methods for maximising *power transfer* at the *connection point* during periods of *network constraint*, *abnormal operating condition*, *credible contingency event*, *interruption*, etc.;
 - (v) methods of communication and notification (e.g. by email, telephone, facsimile, etc.);
 - (vi) conditions of land access; and
 - (vii) coordination requirements.
- (e) Each party must comply with an operating protocol at its own cost.
- (f) The parties' contact details for liaison under the operating protocol are the 24-hour contact details set out in Item 1.6 of Schedule 1.

6.9. Inspection, testing, commissioning, *disconnection* and reconnection

- (a) To the extent feasible, the provisions of:
 - (i) rule 5.7 of the *NER* apply in relation to the inspection and testing of; and
 - (ii) rule 5.8 of the *NER* apply in relation to the commissioning of,
any *electrical equipment* that is to be (directly or indirectly) *connected* to the *distribution system* at the *connection point* at any time after the *time of connection*, and *we* shall be entitled to witness such inspections and testing.
- (b) To the extent feasible, the provisions of rule 5.9 of the *NER* apply in relation to the *disconnection* and reconnection of the *connection point*.

6.10. Reliability

- (a) *You* acknowledge and agree that there is inherent variability in the reliability of the *distribution system* to which *you* are, or will be, *connected*, and *we* are required to meet certain reliability targets under the *energy laws*, such as in Schedule 5.1 of the *NER*.

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- (b) In order to comply with those reliability targets, we use reasonable endeavours to carry out the following tasks:
 - (i) ensuring that the *distribution system* is in a normal operating configuration;
 - (ii) regularly maintaining the lines and substations to *good electricity industry practice* and in consultation with the facility operators; and
 - (iii) minimising the restrictions on *facility* operation when the *distribution system* is not in a normal operating configuration.

6.11. Outages

Each party is entitled to undertake planned or unplanned outages, repairs and maintenance of its facilities, provided that it complies with any relevant provisions ((including, without limitation, notice requirements) in this *contract*, any operating protocol under clause 6.8(a), and relevant *energy laws*.

6.12. Requests to maintain system stability

The parties acknowledge and agree that:

- (a) rule 5.2.1(b) of the *NER* requires *us* to ensure that this *contract* requires the provision and maintenance of relevant facilities consistent with *good electricity industry practice* and the operation of each party's equipment in a manner to assist in preventing or controlling instability within the *power system*, the maintenance of, or restoration to, a *satisfactory operating state* of the *power system*, and to prevent uncontrolled separation of the *power system* into isolated *regions* or partly combined *regions*, *intra-regional transmission* break-up, or *cascading outages*, following any *power system* incident;
- (b) in addition, *we* are subject to a number of obligations under the *energy laws* which require *us* to ensure effective and efficient operation of the *distribution system*, including with respect to reliability of that *distribution system* and its components;
- (c) much of this is achieved either by the obligation on *us* to comply with the *NER* and by the obligation on *you* to comply with the *technical requirements* and other relevant provisions of this *contract*;
- (d) in addition to the above, *we* reserve *our* right to request *you* to operate the *electrical equipment* connected to the *distribution system* at the *connection point* in a certain manner from time to time (including varying the amount of electricity taken) where *we* consider that this is reasonably necessary to assist in managing, or preventing, any of the circumstances referred to above, provided that any such requests are (subject to any relevant *laws* (including *energy laws*)) for the minimum reasonable requirement and minimum reasonable duration in the circumstances; and
- (e) *you* must use reasonable endeavours to comply with *our* request (including compliance with Item 4.18(b)(iii) of Schedule 4 where applicable), and *you* acknowledge that any failure to comply with such a request will constitute a *non-financial default* that may result in cessation or suspension of the *services*.

6.13. Other Users

We may provide services to any other person using any part of the *distribution system*, including those parts used to provide the *services* to *you*, and will consult with *you* if required in accordance with the *NER*.

6.14. Metering

- (a) The parties acknowledge and agree that the *energy laws* require the transfer of electrical *energy* across the *connection point* to be measured in a certain manner, and this process may involve one or more of the *financially responsible Market Participant*, a *responsible person*, *Metering Coordinator*, *Local Network Service Provider*, *Metering Provider* and *Metering Data Provider* (and relevant agreements between those entities).
- (b) Where *we* provide *metering* services in respect of *your connection point* (such as where *we* are the *Metering Provider* or the *Metering Data Provider*), *we* may recover charges for such

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metering services accordance with the abovementioned *energy laws* and agreements, and nothing in this *contract* restricts *us* from doing so.

- (c) *You* must ensure that the *financially responsible Market Participant* for the *connection point* advises *us* of the identity of the *Metering Coordinator* and/or *responsible person* for the *connection point* and keeps *us* promptly informed of any changes in these entities.

7. LAND ACCESS

- (a) This clause applies except where there is a relevant *emergency*. Where there is an *emergency*, *we* will use *our* reasonable endeavours to comply with this clause to the extent reasonably practicable in the situation.
- (b) *We* may access the *facility*, and may install equipment on the *facility* (in an agreed location), in accordance with this clause to comply with *our* obligations or exercise *our* rights under this *contract* or any *laws*.
- (c) *We* must use reasonable endeavours to provide *your* 24-hour contact set out in Item 1.6 of Schedule 1 at least 7 days' notice of *our* intention to exercise *our* rights under this clause, together with a brief description of the purpose of access and nature of any works to be done.
- (d) *You* must provide *our representatives* with all assistance and safe access that is reasonably required by *us* so that *we* can complete the necessary tasks.
- (e) Any access under this clause must be in accordance with all relevant *laws* and *authorisations*, any operating protocol under clause 6.8, and any other access requirements that *you* advise to *us*, provided that:
 - (i) *we* consider that *your* requirements are reasonable in the circumstances, and give appropriate consideration to the type of work proposed to be done by *us*;
 - (ii) *your* requirements do not impose drug and alcohol testing obligations on *our representatives* that are more onerous than those required internally by *us* (and, for this purpose, *we* must give *you* copies of *our* Drug and Alcohol Policy Business Rules (Reference ES001001R100 Ver 5); and
 - (iii) where *your* requirements impose obligations on *us* that exceed the obligations imposed on *our representatives* under *our* internal policies and procedures (including, without limitation, in respect of site and general inductions), *you* must reimburse *us* for the costs of *our* compliance with such rules and guidelines (to the extent of the excess obligation), including, without limitation, any associated costs of travel, accommodation and equipment procurement.
- (f) *You*:
 - (i) acknowledge that *we* cannot require *our* personnel to undergo any drug or alcohol testing that is more invasive than that set out in *our* Drug and Alcohol Policy Business Rules (Reference ES001001R100 Ver 5.) (which *we* will provide *you* with a copy of on request); and
 - (ii) agree that, should the operation of clause 7(e) result in any of *our* employees being asked to undertake drug or alcohol testing under this clause 6.14(c) that is more invasive than that set out in the above Business Rules, then that employee has the right to refuse such testing, and, should the employee refuse such testing, *you* may (at *your* election) either:
 - (A) immediately escort that employee from the *facility* and notify *us* of this fact; or
 - (B) agree to a temporary waiver of that testing for that employee for that particular access instance.
- (g) If clause 7(f)(ii)(A) applies, then *we* must use *our* reasonable endeavours to make appropriate alternative arrangements at *your* cost, taking into consideration the particular circumstances of, and need for, the access, together with the availability of replacement personnel.

- (h) When working on the *facility*, *our representatives* must minimise disruption to *you* and *your representatives*.
- (i) Provided *our representatives* comply with the relevant access requirements, *you* must give those *representatives* access (free of charge) to [potable water, toilet facilities, emergency telephone facilities], provided that *we* are liable for any loss of or damage to those facilities that *our representatives* cause.
- (j) *You* must promptly inform *us* if *you* become aware that there is, or will be, a change materially affecting access to any of *our* assets at the *facility*.

8. OWNERSHIP OF EQUIPMENT

- (a) Any plant or equipment installed by a party under this *contract* or a separate agreement relating to the construction of *connection assets* or the provision of *services* (subject to any contrary intention in such an agreement) remains the property of the party.
- (b) *You* have no rights in, or title to, any of *our* plant or equipment.
- (c) Without limiting clause 8(d), any assets referred to in clause 8(a) may be decommissioned and removed by the party upon expiry or earlier termination of this *contract* where the assets are no longer required to provide *services*.
- (d) Where expiry or earlier termination of this *contract* will result in *stranded assets*, *you* request, at the relevant time, that *we* remove these *stranded assets* and carry out all necessary or desirable ancillary works, including making good the *distribution system* in light of removal of such *stranded assets* and the disposal or recovery for re-use (at *our* election) of the *stranded assets*.
- (e) *We* must comply with a request under clause 8(d) as soon as reasonably practicable after the expiry or earlier termination of this *contract*, and may claim the costs incurred in complying with such a request as *fees* in accordance with *energy laws*.

9. CHARGES AND BILLING

9.1. Determination of charges

- (a) The services contemplated by this *contract* for which *we* may recover *charges* include:
 - (i) the *services*;
 - (ii) the *communications services*;
 - (iii) the establishment and operation of this *contract* in compliance with legislative and regulatory requirements (including services provided by third parties, consideration of the impacts of this *contract*, such as on the *distribution system* or any relevant *network*, and the provision of equipment that any relevant regulator requires *us* to install in respect of the *connection*); and
 - (iv) the operation, maintenance, repair, replacement or removal of any primary equipment that is stated to be owned by *us* under Item 3(c)(i)(A) of Schedule 3.
- (b) For services outside those identified in clause 9.1(a) (such as carrying out any technical assessments or studies or providing metering services):
 - (i) *we* must give *you* an estimate of the applicable costs for *us* to carry out those activities; and
 - (ii) if *you* accept that estimate and require *us* to carry out the activities, the parties must enter into a separate agreement in respect of those additional services.

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- (c) Where any *service* provided to *you* under or in connection with this *contract* is subject to economic regulation, *we* may recover from *you* relevant *charges* for that *service* up to the maximum entitlement under the *energy laws*.
- (d) Where any *service* provided to *you* under or in connection with this *contract* is not subject to economic regulation, *we* may determine the relevant *charges* on a commercial basis and agree on these with *you*.
- (e) *Our* best estimate, as at the date of this *contract*, of the *network charges* to apply as and from the *time of connection* of the *facility* to the *distribution system* is set out in Item 1.5 of Schedule 1.
- (f) For the avoidance of doubt, if *we* remove any assets under clause 8(e), this is taken to be an activity requested by *you* under clause 9.1(b) and:
 - (i) *we* must give *you* an estimate of the *fees* for that activity; and
 - (ii) if *you* accept the estimate and require *us* to carry out the activities, use *our* reasonable endeavours to comply at *your* cost.

9.2. Invoicing

- (a) *We* must use reasonable endeavours to prepare the tax invoices for the *services* and any other services provided in connection with this *contract* as soon as practicable after the end of a month or otherwise in accordance with the *energy laws*.
- (b) *You* must pay any tax invoices *you* receive in the manner, and by the date, stated in that invoice. *Our* tax invoices provide for payment to be made within 30 days of the date of the tax invoice.
- (c) For the avoidance of doubt, *you* must pay for all services provided up to the date of termination of this *contract*.
- (d) If requested, a party must provide the other party with relevant supporting material, data and information.

10. SECURITIES

- (a) If a *security* is listed for an amount greater than \$0.00 in Item 1.4 of Schedule 1, then *you* must provide that *security* in the form of an irrevocable and unconditional cash deposit, bank guarantee, surety bond or other form of security acceptable to *us* (acting reasonably), which is payable on demand and which is given by a financial institution or insurer acceptable to *us* and which is on terms acceptable to *us* on or before the relevant *security start date*.
- (b) A *security* provided under this clause must secure the performance of *your* obligations to pay amounts to *us* under this *contract* on demand and without reference to *you*.
- (c) *You* must ensure that any *security* is maintained in full force and effect from the relevant *security start date* to the relevant *security end date*.
- (d) *We* may draw on a *security for removal* for any costs, losses or damage in connection with the removal of assets under this *contract*.
- (e) *We* may (provided *we* first give *you* a tax invoice for the amount owing and *you* do not pay this amount by the date stated in that tax invoice (which must be at least 30 days from the date that the tax invoice is issued)) draw on any other *security* for any amounts owing by *you*, any damages awarded by a court in connection with this *contract*, or for any costs incurred or losses suffered by *us* as a consequence of *your* failure to comply with this *contract*.
- (f) If *we* draw on a *security* for less than the full *security amount*, and this requires *us* to relinquish the *security*, *you* must provide a replacement *security* to secure the full remaining *security amount*.
- (g) *We* must return a *security* (or the amount remaining after drawdown) to *you* within 10 *business days* of the *security end date* for that *security*, except where *we* have a claim on the *security* (in which case *we* must return the *security* after all claims are finalised).

- (h) We may request a new or substitute *security* at any time for any amount, if we reasonably consider that there is a material change in the relevant risk profile, and you must comply with any such request within 10 *business days* of the request.
- (i) This clause does not limit any other rights we may have against you.

11. DEFAULT INTEREST

- (a) Subject to clause 11(c) and any contrary *energy laws*, interest on an unpaid amount accrues each day in a *default interest period* at the *default rate* for that *default interest period*, and is capitalised (if not paid) on the last day of that *default interest period*.
- (b) Subject to clause 11(c) and any contrary *energy laws*, if a liability of a party becomes merged in a judgment or order, the party, as an independent obligation, must pay interest on the amount of that liability, from and including the date of the judgement or order until it is paid in full, at the higher of the *default rate* and the rate under the judgement or order.
- (c) Clauses 11(a) and 11(b) do not operate to impose interest where the unpaid amount constitutes a refund of monies paid.
- (d) Interest under this clause accrues daily and is calculated on a *pro rata* basis.

12. GST

- (a) Amounts specified in, or payable under, this *contract* may be stated to be exclusive or inclusive of GST. Clause 12(d) applies unless an amount payable under this *contract* is stated to include GST.
- (b) If a party is a GST group member, relevant references to GST and input tax credits include references to GST and input tax credits for the representative member of the GST group.
- (c) All amounts in this *contract* are GST exclusive unless otherwise indicated.
- (d) If a GST exclusive amount payable under this *contract* is consideration for a taxable supply, then the party required to pay the amount must, subject to the supplier issuing a tax invoice, pay both the GST exclusive amount and, at the same time, an additional amount equal to the GST payable on the supply.
- (e) Where non-monetary consideration is provided, the parties must share information as required to determine the appropriate amount of GST.
- (f) Where a supplier incurs a cost or expense for which it may be reimbursed by, indemnified against, claim against or set-off against another party under this *contract*, the amount to be paid or credited is the cost or expense (reduced by any relevant input tax credit) plus the amount attributable to GST (as referred to in clause 12(d)).
- (g) If an adjustment event occurs, the supplier must issue a valid adjustment note and the parties must then make appropriate payments to reflect the required adjustment of GST.

13. FORCE MAJEURE EVENTS

13.1. Effect of force majeure event

- (a) To the extent that a *force majeure event* adversely affects the performance of a *non-financial obligation*, then the relevant rights and obligations are suspended to the extent of that adverse effect, provided that this will not extend the term of this *contract*.
- (b) Clause 13.1(a) does not affect rights or obligations that accrued prior to suspension.
- (c) The period of suspension will exclude any delay attributable to a failure by the party affected to comply with clause 13.2.

13.2. Obligation to overcome or minimise effect of force majeure event

A party that claims a *force majeure event* must use its best endeavours to remove, overcome or minimise the effects of that event as soon as practicable, and must resume performance of any suspended obligation as soon as reasonably possible after the end of a *force majeure event*.

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13.3. Settlement of industrial disputes

Nothing in this clause requires a party to settle an industrial dispute that constitutes a *force majeure event* in any manner other than the manner preferred by that party.

14. TERMINATION, DEFAULT AND DISCONNECTION

14.1. Early termination

- (a) You may terminate this *contract* at any time on 3 months' notice.
- (b) This *contract* will terminate with immediate effect if, at any time, none of the following apply:
 - (i) you own (in whole or in part) the *facility*;
 - (ii) you operate the *facility*; or
 - (iii) you occupy the *facility*.
- (c) If a *Connection Establishment Contract* is terminated, other than expiring as a result of satisfaction of clauses 5.2(a)(i) and 5.2(a)(ii) of that contract, this *contract* will also terminate with immediate effect.

14.2. Default procedure

- (a) A non-defaulting party may (without prejudice to its rights at *law*) give a defaulting party a written notice specifying a *default* that has occurred and, if the *default* is capable of remedy, a period within which the defaulting party must remedy the *default*.
- (b) Nothing in this clause 14.2 limits the operation of clause 18.6.
- (c) Subject to clause 14.2(d), the defaulting party has the period stated in the above notice to remedy the *default* (provided that such period must be reasonable in the circumstances and taking into account the nature of the *default*, and cannot be less than 10 *business days* in respect of a *financial default*).
- (d) The defaulting party must diligently pursue a reasonable course of action to remedy the default, and must use *good electricity industry practice* in doing so, otherwise the non-defaulting party may send a notice to the defaulting party ending the relevant cure period.
- (e) If a *default* is not cured within the relevant cure period (or, for clause 14.2(e)(i) the great of the relevant cure period and 10 *business days*), the non-defaulting party may do any one or more of the following (without prejudice to its rights at *law* and in equity):
 - (i) terminate this *contract*;
 - (ii) sue, or take debt recovery action against, the defaulting party for any outstanding amount owing under this *contract*, or, where the *default* constitutes a failure by you to comply with clause 6.6, for an amount representing our best estimate of the amount of energy obtained wrongfully or illegally;
 - (iii) where the *default* constitutes a failure by you to comply with clause 6.6, we may undertake (or agree that you undertake) any necessary rectification work at your cost;
 - (iv) exercise all other remedies available to it; and
 - (v) if we are the non-defaulting party, de-energise and *disconnect* the *facility* at the *connection point*.
- (f) Nothing in this clause restricts us taking action under Item 4.18(b)(iv) of Schedule 4.

14.3. Consequences of early termination

- (a) Our rights under clauses 14.2(e) and 14.3(a) are without prejudice to any other rights or powers in respect of a *default*, or to *disconnect* the *facility* or any *generating units* at the *facility*, that we may have at *law*, in equity, under this *contract*, under the *Connection Establishment Contract* or any other relevant contractual arrangement.

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- (b) Nothing in this *contract* affects any of *our* rights under the *energy laws* to *disconnect you*, or any relevant notification obligations under those *energy laws*.

15. COMPLIANCE WITH LAWS

- (a) Each party must comply with its relevant obligations under relevant *laws* (including *energy laws*) and *authorisations*, including, without limitation, any *laws* relevant to *life support equipment*.
- (b) The parties acknowledge that the *NER* contains certain provisions that are relevant to the operation of this *contract*, and that need to be incorporated into this *contract* to enable *us* to properly comply with *our* obligations as a *Network Service Provider*.
- (c) *You* must, to the extent feasible, comply with relevant obligations placed on *Registered Customers* and *Generators* under Chapters 2, 4, 5, 7 and 8 of the *NER* (as varied by Chapters 8A, 9 and 11 of the *NER* and incorporating the relevant definitions in Chapter 10 of the *NER* and having regard to the purposes of those Chapters) as if *you* were a *Registered Customer* (but, except in relation to rule 4.3.5 of the *NER*, not a *Market Customer*) and a *Generator* (as relevant).

16. LIABILITY

- (a) Except to the extent that the liability is caused by *our* negligence, bad faith, wilful misconduct, fraud, breach of *law* or failure to comply with any relevant *authorisation* or this *contract*, *we* are not liable to *you* in connection with the exercise of any right or obligation in accordance with this *contract*.
- (b) To the extent that a guarantee under Part 3-2 of the Australian Consumer Law in the *Competition and Consumer Act 2010* (Cth) applies to the provision of *services* or *communications services*, *our* liability for breach of such a guarantee is (at *our* election) limited to the replacement of the *services* or *communications services* (as relevant), or the supply of equivalent *services* or *communications services* (as relevant), or the payment of the cost of either of these.
- (c) To the extent permitted by law, *we* give no condition, warranty or undertaking, and *we* make no representation to *you*, about:
 - (i) the condition or suitability of energy, its quality, fitness for purpose or safety, other than those set out in this *contract*; or
 - (ii) the condition or quality of the *communications services*.
- (d) Notwithstanding any other provision of this *contract*, neither party is liable to the other under, or in connection with, this *contract* or under contract, tort (including negligence) breach of statute or other cause of action at law or in equity for any of the following:
 - (i) any cost, expense, loss or damage of an indirect or consequential nature or that otherwise is not a direct and immediate consequence of the breach;
 - (ii) loss of profits, loss of contract, loss of opportunity, loss of goodwill, loss of business reputation, loss of revenue, loss of use of property or loss of production;
 - (iii) increased costs of working or labour costs; and
 - (iv) costs of capital or costs of business interruption,suffered by the other party, however arising, due to any causes including the default or sole or concurrent negligence of a party, and whether or not foreseeable.
- (e) If a party makes a claim against the other party under this *contract* and the first party has contributed to the loss that it has suffered, that party's entitlement to damages is proportionately reduced.
- (f) The parties do not intend to vary or exclude the operation of sections 97 and 97A of the *Electricity Act 1994* (Qld), section 316 of the *NERL* or section 120 of the *NEL*, which exclude *our* liability for *your* loss or damage as a result of the total or partial failure to supply energy to *your facility* in certain circumstances.

17. DISPUTE RESOLUTION

- (a) If clause 8.2 of the *NER* applies to the dispute, the parties must, to the extent practicable, follow that dispute resolution process.
- (b) For all other disputes, the parties must first endeavour to resolve the dispute at the project manager level and, if this is not successful within 5 *business days*, the parties must refer the dispute to the senior *representatives* of the parties for resolution. These senior *representatives* must use their best endeavours to, within 10 *business days* of the date of referral of the dispute, either:
 - (i) resolve the dispute; or
 - (ii) agree on a process for resolving the dispute.
- (c) If a dispute is not resolved by the senior *representatives* under clause 17(b) within the 10 *business day* period, the parties may agree to refer the dispute to an *expert* and may appoint the *expert* by agreement.
- (d) If the parties cannot agree on the *expert*, the parties must appoint an *expert* nominated by:
 - (i) for financial matters, the President of the Resolution Institute (Queensland branch);
 - (ii) for technical engineering matters, the President of Engineers Australia; and
 - (iii) for legal matters, the President of the Queensland Law Society,or, if the relevant institution above declines to nominate an *expert*, an *expert* nominated by an institution agreed between the parties as the most appropriate institution in the circumstances.
- (e) Expert determination will be conducted in the place notified by *us* to *you*.
- (f) The parties must direct the *expert* to make his or her determination quickly, and must take all reasonable steps to bring about a quick determination.
- (g) The *expert* must:
 - (i) have reasonable qualifications and commercial and practical experience in the area of the dispute;
 - (ii) have no interest or duty that conflicts or may conflict with his or her function as *expert*; and
 - (iii) not be an employee, or former employee, of any of the parties, or any related body corporate of the parties.
- (h) In the absence of a manifest error, the *expert's* decision will be valid and binding on the parties where the amount for a single event is less than \$250,000.
- (i) Where a dispute concerns an amount of money payable, then, within five *business days* of the settlement of the dispute, any amount agreed or determined to be paid or refunded must be paid or refunded by the relevant party.
- (j) The costs of the *expert* and any advisers to the *expert* will be borne equally by the parties unless the *expert* makes a determination to the contrary.

18. CONFIDENTIALITY, PRIVACY AND ACCESS TO INFORMATION

18.1. General obligations

- (a) Subject to clause 18.1(b), each party must keep all *confidential information* confidential and must ensure that any *confidential information* received by it is only used, disclosed or reproduced:
 - (i) in order to implement this *contract*;
 - (ii) in order to comply with relevant obligations under this *contract* and the *laws*; or
 - (iii) where permitted under the remainder of this clause 18,

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where “disclose” includes making the information available, giving access to it, and divulging or communicating it (and it includes disclosure whether by or on behalf of that party).

- (b) For the avoidance of doubt, nothing in this *contract* prohibits a party from disclosing its own *confidential information*.
- (c) The provisions of this clause 18 are in addition to the obligations of a party receiving *confidential information* at law, in equity, or pursuant to any statute, trade or professional obligation, custom or use.

18.2. Compliance with confidentiality provisions of the *NER*

Where rule 8.6 of the *NER* applies, the parties must comply with those confidentiality provisions.

18.3. Entitlements to disclose

- (a) A party may only use, disclose or reproduce *confidential information* received from the other party:
 - (i) to any *representative* of that party who needs that information in order to either:
 - (A) facilitate that party’s compliance with this *contract*, or
 - (B) where that information is *confidential technical information*, carry out modelling or other assessments of that information to confirm the integration of any *electrical equipment* downstream of the *connection point* with the *distribution system*,
provided that, where that *representative* is not an employee or officer of that party, that party will inform the *representative* of the confidential nature of the information and the requirement that it not be disclosed to any other person or used for any other purpose;
 - (ii) to a *bona fide* intending assignee (or person seeking to take control) of the party upon them providing a confidentiality undertaking similar to this clause;
 - (iii) to contractors for their performance of their duties upon them providing a confidentiality undertaking similar to this clause;
 - (iv) to its professional consultants, auditors and advisers to obtain professional advice;
 - (v) to any bank or financial institution from whom the party is seeking to obtain finance upon them providing an confidentiality undertaking similar to this clause;
 - (vi) as the party reasonably believes is required to comply with obligations, or exercise rights, under any *laws* and *authorisations*;
 - (vii) where the *confidential information* has become publicly available other than as a result of an unauthorised disclosure;
 - (viii) where the receiving party can establish, by written record, is already known to it without confidentiality restrictions before that information was received from the disclosing party;
 - (ix) where the receiving party can establish, by written record, that it has acquired or come to know that information independently of the disclosing party and its *representatives* other than by unlawful means;
 - (x) for *us*, whilst *we* are (directly or indirectly) majority owned by the Queensland Government or one or more Ministers of that Government, to, or as required by that Government or Ministers or their advisers;
 - (xi) as required by any *law* or any recognised stock exchange; or
 - (xii) with the prior written consent of the disclosing party (which may include reasonable conditions).
- (b) If a party intends to disclose *confidential information* under clause 18.3(a)(xi), that party must, to the extent that it is legally able to do so, give reasonable notice of the intended disclosure to the other party (including details of the *confidential information* to be disclosed and the third party to whom it is to be disclosed).

- (c) Any party receiving *confidential information* is responsible for any use, disclosure or reproduction by its *representatives* as if such disclosure, reproduction or use were made by that party, and that party must take such steps as may be necessary to prevent any disclosure, reproduction or use that would be contrary to this *contract*.

18.4. No licence

Nothing in this *contract* assigns or gives to a party any licence or other rights relating to the *confidential information* of the other party.

18.5. Public announcements

Where a party proposes to make a public announcement about matters related to this *contract*, the party agrees to use reasonable endeavours to consult with the other party prior to making the public disclosure.

18.6. Restraint of breach

Either party may institute proceedings to restrain, or obtain immediate equitable relief in respect of, any breach or threatened breach of this clause 18 or any other unauthorised use or disclosure of any *confidential information*.

18.7. Return of information

- (a) A party that receives *confidential information* must, immediately upon request by the disclosing party, deliver up to that party (or, at that party's option, destroy every record under the receiving party's control) all of the disclosing party's *confidential information*.
- (b) Despite clause 18.7(a), the receiving party may retain records of *confidential information* to the extent it is contained in board papers or required by professional advisers for professional indemnity purposes.

18.8. Compliance with privacy laws

We will comply with all relevant privacy legislation in relation to *your* personal information. A summary of *our* privacy policy and contact details for *our* privacy officer are available on *our* website (www.ergon.com.au).

18.9. Provision of consumption or charge information

- (a) If *you* request information about *your* energy consumption or charges for the *services*, we must provide these (but may charge a reasonable fee for information requested more than once in any 12-month period).

19. NOTICES AND TAX INVOICES

- (a) Notices (however described) and tax invoices (where relevant) under this *contract* must be sent in writing (which may include by electronic means), unless this *contract* or the *energy laws* say otherwise.
- (b) A notice or tax invoice sent under this *contract* is taken to have been received by the recipient:
- (i) on the date it is handed to the party or successfully faxed to the party (which occurs when the sender receives a transmission report to that effect);
 - (ii) where *you* are the recipient – left at *your facility*;
 - (iii) where *we* are the recipient – left at one of *our* offices (which excludes depots);
 - (iv) on the date three *business days* after it is posted; or
 - (v) on the date of transmission (unless the sender receives notice that delivery did not occur or has been delayed) if sent electronically and the use of electronic communication has been agreed between the parties,

unless such day is not a *business day*, in which case it is taken to have been received on the next following *business day*.

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- (c) Each party must give the other party the name and contact details of a person or people who can be contacted 24 hours a day, every day of the year, and must promptly inform the other if there is any change to those contact details.

20. AMENDMENT

- (a) Except where otherwise expressly provided in this *contract*, this *contract* can only be amended, supplemented, replaced or novated by another document signed by the parties.
- (b) The parties must regularly review the *technical requirements* to ensure that they are correct and consistent with the *laws* and reflect the relevant operating arrangements.
- (c) If any relevant technical information about the electrical installations *connected* (directly or indirectly) to the *distribution system* at the *connection point* is to change (including, without limitation, as set out in Schedule 4, the *Generator Performance Standard* and any *Generating System Design Data Sheet* or *Generating System Setting Data Sheet*), then each party must promptly advise the other party of this change, upon which the parties must review this change and modify this *contract* as required to reflect the changed technical information, prior to implementing that change.
- (d) The parties acknowledge and agree that:
- (i) the *technical requirements* have been determined in accordance with the *NER* (particularly Schedules 5.2 and 5.3); and
 - (ii) the *authorised demand* and *authorised export limit* have been determined, as at the *commencement date* and having regard to the configuration of the *distribution system*, penetration levels of *embedded generators* and *loading conditions* at that time;
 - (iii) we are required to ensure compliance of its *distribution system* with the *system standards* and network performance requirements set out in Schedules 5.1a and 5.1 of the *NER*, and, in respect of some technical parameters, *our* ability to comply with these requirements is dependent upon the behaviour of relevant *Network Users* or *Generators*;
 - (iv) the provisions of the *NER* may change over time; and
 - (v) changes to the configuration of the *distribution system*, penetration levels of *embedded generators* and relevant *loading conditions* over time may mean that:
 - (A) the *technical requirements* set out in this *contract* do not achieve the outcome intended by the parties and the *NER* (for example, where the *technical requirement* is determined on a shared basis with other *Network Users* and there is a change in the number/usage of relevant *Network Users*); or
 - (B) there is some impediment to the *facility* exporting up to the *authorised export limit*, or taking up to the *authorised demand* (for example in the situations referred to in clauses 6.2(a)(v) and 6.12(d)).
- (e) Should either party reasonably consider that:
- (i) the *technical requirements* are (or are becoming) obsolete or inappropriate, having regard to clause 20(d), and that it would be beneficial to modify the *technical requirements*; or
 - (ii) the impediment to the operation of the *facility* needs to be addressed,
- then:
- (iii) that party may notify the other party of this, together with relevant details;
 - (iv) the parties must, within three months of that notification, meet and agree on a program to assess the issue, propose possible solutions, assess the viability and cost-effectiveness of these solutions, and agree upon a solution that is consistent with *good electricity industry practice* and the intent of the *NER* so that *we* are not at risk of being non-compliant with its obligations under the *NER*;
 - (v) the parties must comply with that program; and

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- (vi) if the parties do not agree upon a solution within 12 months of the initial notification, the parties must refer the matter to an *expert* for resolution.

21. ASSIGNMENT

- (a) Subject to clause 21(c), a party cannot assign or novate all or part of this *contract* unless:
 - (i) if there is a *Connection Establishment Contract*, that contract is similarly assigned or novated; and
 - (ii) the other party's prior written consent is obtained (provided that such consent cannot be unreasonably withheld if the assignee/novatee is technically and financially able to comply with the assignor/novator's obligations under this *contract* and any *Connection Establishment Contract* and the assignment/novation will not adversely affect the rights or obligations of the consenting party under those contracts).
- (b) A *change of control* of a party is deemed to be an assignment/novation of the party's rights under this *contract* to which the assignment/novation provisions of this clause applies (except for clause 21(d)).
- (c) Whilst we are (directly or indirectly) majority owned by the Queensland Government or one or more Ministers of that Government, we may assign or novate all or part of this *contract* by *law* or to an entity who is acquiring most or all of the relevant part of *our* business unit and is technically and financially able to comply with *our* obligations under this *contract*.
- (d) If a party consents to an assignment/novation, the assignor/novator must, prior to assigning/novating, cause the assignee/novatee to enter into a deed in favour of the consenting party under which the assignee/novatee covenants to comply with the obligations of the assignor/novator under this *contract* and any *Connection Establishment Contract* from the time of such assignment/novation.

22. GENERAL

- (a) The law in force in Queensland governs this *contract*, and the parties submit to the exclusive jurisdiction of the courts exercising jurisdiction in Queensland and any courts that may hear appeals therefrom.
- (b) Subject to clause 22(c), each party must pay its own expenses incurred in connection with the negotiation, preparation, execution and registration of this *contract*, transactions contemplated by this *contract* and any amendment to, or any consent, approval, waiver, release or discharge of or under, this *contract*.
- (c) Any stamp duty, duties or other taxes of a similar nature (including fines, penalties and interest) in connection with this *contract* or any transaction or instrument contemplated by this *contract*, must be paid by *you*.
- (d) This *contract*, together with any *Connection Establishment Contract* between the parties, contains the entire agreement between the parties about its subject matter and replaces any previous understanding, agreement, representation or warranty relating to that subject matter.
- (e) For any inconsistencies between this *contract* and other material, the priority of operation is as set out below:
 - (i) obligations under the *laws* prevail over inconsistent obligations in this *contract*;
 - (ii) for an inconsistency with a *Generator Performance Standard*, the relevant *Generator Performance Standard* prevails for the relevant *generating units*;
 - (iii) for an inconsistency with a *Connection Establishment Contract*, the more stringent obligation prevails (that is, the obligation that will give the most optimal *network* outcome); and
 - (iv) for an inconsistency with any other document or agreement between the parties, this *contract* prevails,

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and a failure to comply with the subsidiary document on the basis that it is inconsistent with a prevailing document will not be taken to be a breach of that subsidiary document.

- (f) Each party must do anything (including execute any document), and must ensure that its employees and agents do anything (including execute any document), that the other party may reasonably require to give full effect to this *contract*.
- (g) A right may only be waived in writing and signed by the party giving the waiver, and no other conduct of a party (including a failure to exercise, or delay in exercising, the right) operates as a waiver of the right or otherwise prevents the exercise of the right.
- (h) A waiver of a right on one or more occasions does not operate as a waiver of that right if it arises again, and the exercise of a right does not prevent any further exercise of that right or of any other right.
- (i) *You* must ensure that all information provided to *us* under this *contract* is in a format acceptable to *us*, acting reasonably, and *we* must give *you* details of such acceptable formats on request.
- (j) Any right that a person may have under this *contract* is in addition to, and does not replace or limit, any other right that the person may have.
- (k) Any provision of this *contract* that is unenforceable or partly unenforceable is to be severed to the extent necessary and possible to make this *contract* enforceable, unless this would materially change the intended effect of this *contract*.
- (l) Each indemnity in this *contract* survives the expiry or termination of this *contract*, and a party may recover a payment under an indemnity in this *contract* before it makes the payment in respect of which the indemnity is given.
- (m) Each obligation in relation to *confidential information* survives the expiry or termination of this *contract*. Any other term of this *contract* that, by its nature, is intended to survive the expiry or termination of this *contract*, does survive the expiry or termination of this *contract*.
- (n) Termination or expiry of all or part of this *contract* does not affect any rights that arose before the termination or expiry (including, without limitation, the right to be paid in accordance with clause 9 for services rendered before termination or expiry), or that otherwise relate to any breach or non-observance of this *contract* occurring before termination or expiry, or that relate to this clause and any provisions concerning GST, compliance with *laws*, liability, indemnity, dispute resolution and confidentiality.
- (o) This *contract* may be executed in counterparts, and all executed counterparts constitute one document.
- (p) Each person executing this *contract* under a power of attorney declares that he or she is not aware of any fact or circumstance that might affect his or her authority to do so under that power of attorney.

Negotiated Ongoing Connection Contract: embedded generators (EGs)



1. SCHEDULE 1 – REFERENCE SCHEDULE

1.1. *Authorised export limit*

The *authorised export limit* (for exporting electricity from *your facility* into the *distribution system* at the *connection point*) is [insert] MVA, provided that the instantaneous *power transfer* across the *connection point* must not exceed [insert] MVA.

1.2. *Authorised demand*

The *authorised demand* (for taking electricity from the *distribution system* at the *connection point*) is [insert] MVA, provided that the instantaneous *power transfer* across the *connection point* must not exceed [insert] MVA.

1.3. *Facility*

The *facility* connected to the *distribution system* is located at [insert address/lot number of land].

1.4. *Securities*

Security	Security Start Date	Security Amount	Security End Date
<i>Security for damage</i> to cover any loss or damage that may be suffered by <i>us</i> as a result of <i>your</i> assets impeding the effective performance of, or damaging, the <i>distribution system</i> .	10 <i>business days</i> after the date of this <i>contract</i> .	[insert] (GST inclusive)	6 months after the end of this <i>contract</i> .
<i>Security for removal</i> to cover the expected costs of <i>us</i> removing assets in accordance with this <i>contract</i> , and any loss or damage that may be suffered by <i>us</i> in connection with such removal.	10 <i>business days</i> after the date of this <i>contract</i> .	[insert] (GST inclusive)	12 months after the end of this <i>contract</i> .

1.5. *Estimated network charges and any fees*

[To be inserted.]

Note: the “authorised demand” referred to in the above table refers to both the *authorised demand* and the *authorised export limit* defined in this *contract*, where *authorised demand* refers to the load side of the “authorised demand” and *authorised export limit* refers to the electricity export side of the “authorised demand”.

Full details of how *network charges* are calculated are included in our Information Guide for Standard Control Services pricing, a copy of which is available at <https://www.ergon.com.au/networktariffs>.

You should note that any changes in regulatory arrangements, and/or in *our* charging methodology, may result in changes to network tariff rates and structures. These changes will be advised to *our* customers as required under the regulatory requirements applicable at that time.

Please note that if *you* are entitled to access, and are in fact accessing, *notified prices*, then the *energy laws*, as at the date of this *contract*, provide that the payment of the *notified prices* to *your retailer* satisfies *your* obligation to pay *network charges*.

1.6. *Address details:*

Ergon Energy – address details	
Address:	PO Box 1090, Townsville QLD 4810
Fax:	07 4728 9640
Email:	adminconnectionmanagers@ergon.com.au
Attention:	Portfolio Manager Major Customers

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Ergon Energy – 24 hour contact details	
Name	[insert]
Phone:	[insert]
Email:	[insert]
Outage Coordinators:	[insert]
	Network General Enquiries: 13 74 66 (7.00am - 6.30pm Monday to Friday) Faults Only: 13 22 96 (24 hours a day, 7 days a week)
Counterparty – address details	
Address:	[insert]
Fax:	[insert]
Email:	[insert]
Attention:	[insert]
Counterparty – 24 hour contact details	
Name:	[insert]
Phone:	[insert]
Mobile:	[insert]
Email:	[insert]
Fax:	[insert]

1.7. Payment for *communications services*

We will bill the following charges on a monthly basis (with such charges to increase over the term of this *contract* as specified below) for provision of the *communications service*:

Communications Link	Annual Charge to be billed monthly based on a \$ per day basis
Provision of data to <i>Powerlink Queensland</i> via <i>Ergon Energy's</i> communication network.	<p>[\$insert] per day (GST exclusive), commencing on the <i>time of connection</i>.</p> <p>This amount will increase annually (on the anniversary of the relevant <i>time of connection</i>) by the percentage increase in CPI during that year, calculated by comparing the quarterly CPI figure published in the March quarter before the current anniversary and the CPI figure for the same quarter one year earlier.</p>
Operation and maintenance of the SCADA service through the <i>Ergon Energy</i> system.	<p>[\$insert] per data point per day (GST exclusive), commencing on the <i>time of connection</i>.</p> <p>This amount will increase annually (on the anniversary of the relevant start date) by the percentage increase in CPI during that year, calculated by comparing the quarterly CPI figure published in the March quarter before the current anniversary and the CPI figure for the same quarter one year earlier.</p>

We are not responsible for the provision of data past *our* communications node with *Powerlink Queensland*. We will invoice the establishment fee referenced below once the number of data points are finalised, and the annual charge referenced below will be billed monthly.

Communications Link	Estimated Charges
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Negotiated Ongoing Connection Contract: embedded generators (EGs)



Provision of data from <i>Powerlink Queensland</i> to AEMO.	Establishment - \$[insert] per data point (GST exclusive)
	Annual Charge - \$[insert] per data point (\$[insert] per data point per day) (GST exclusive)
Please note: a component of the <i>communications services</i> will be delivered using <i>Powerlink Queensland</i> , and <i>Powerlink Queensland's</i> charges will be passed through to you. Above is an estimate of the applicable <i>Powerlink Queensland</i> amounts as at the date of this <i>contract</i> , and we have been advised that these amounts will increase annually (on the anniversary of the relevant start date) by the percentage increase in CPI during that year, calculated by comparing the quarterly CPI figure published in the March quarter before the current anniversary and the CPI figure for the same quarter one year earlier.	

2. SCHEDULE 2 – EMBEDDED GENERATING UNIT DETAILS

The *embedded generating units* that are permitted to be *connected* to our *distribution system* at the *connection point* under this *contract* are set out below:

[insert number of generators, fuel type, nameplate capacity, brand and any other identifying information such as unit number registered with AEMO. Technical specifications etc can be included here.]

3. SCHEDULE 3 – CONNECTION POINT DETAILS

- (a) NMI: [insert]
- (b) *Connection point*: At the [insert exact location of point], as shown in the schematic diagram below.

[insert diagram]

The *network coupling point* is located at [insert where appropriate].

- (c) Metering arrangements:
- (i) The relevant *metering installations* for the *connection point* comprise, generally:
- (A) primary equipment such as *instrument transformers* and relevant cabling, which such primary equipment is, as at the date of this *contract*, owned by [insert entity] and which is used for [insert purpose (metering/network etc.)]; and
- (B) the *meters*, the ownership of which will be determined under the agreements referred to in clause 6.14 and which, as at the date of this *contract*, are owned by [insert entity].
- (ii) The *metering installations* are located [describe with reference to the *connection point*].

4. SCHEDULE 4 – TECHNICAL REQUIREMENTS

4.1. General

The parties acknowledge and agree that:

- (a) notwithstanding anything else in this Schedule and the *Generator Performance Standard*, this Schedule and the *Generator Performance Standard* apply only in respect of any period of energisation for testing and commissioning that is prior to the *time of connection*, and from the *time of connection*;
- (b) *our* principal concern, from a technical perspective, is to ensure that the overall operation of *your facility* (including the relevant load and *generating systems*) meets certain technical requirements at the *connection point* so that the technical parameters experienced on *our distribution system* remain within the obligations set out in Schedules 5.1 and 5.1a of the *NER*;
- (c) the technical parameters experienced on *our distribution system* may vary due to:
 - (i) the operation of *our distribution system*; and
 - (ii) the operation of facilities that are (directly or indirectly) *connected to our distribution system* by *our* customers;
- (d) under the *NER*, *our* ability to limit the level to which *your facility* contributes to the technical parameters experienced on *our distribution system* is principally limited to requiring *you* to comply with the relevant *technical requirements*, which are determined as at the date of this contract; and
- (e) *your* responsibility is to ensure such overall compliance at the *connection point*, including the costs of any changes to *your facility* required to ensure that *your facility* does not contribute to the technical parameters experienced on *our distribution system* in a manner that makes *us* unable to comply with the obligations set out in Schedules 5.1 and 5.1a of the *NER*.

4.2. Application to intact operating conditions

The *technical requirements* are specified for intact *distribution system* operating conditions and are assessed at the *connection point*.

4.3. Requirement to submit to compliance tests

- (a) *We* may undertake, or may reasonably require *you* to undertake, at *your* cost, a program of tests to ensure compliance with the *technical requirements*.
- (b) If any such tests demonstrate:
 - (i) that anything on *your* side of the *connection point* has caused or contributed to a failure to comply with any *technical requirements*, *you* must take remedial action at *your* cost to rectify the failure; and
 - (ii) otherwise, then *we* must reimburse *you* for the reasonable expenses incurred by *you* as a direct result of conducting the tests.

4.4. Registered Generator Performance Standard

Each party must keep a copy of the *Generator Performance Standard* and any ancillary documents (such as the *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*) with this contract.

4.5. Interpretation of provisions of the NER

Where relevant provisions of the *NER* refer to terms such as “electrical *plant* in its *facility*” or “new equipment”, these references are to be taken to refer to any electrical plant that is, or is to be, (directly or indirectly) *connected to the distribution system* at the *connection point*, including any *generating units*.

4.6. Unreasonable interference

The parties acknowledge and agree that *we* have certain legislative rights where a *customer of ours* causes unreasonable interference with the *distribution system* or the *supply* of electricity to *our* other *customers*. For the purposes of those rights, the parties agree that the following are events of unreasonable interference:

- (a) failure to comply with the *technical requirements*;
- (b) failure of any *generating units* to *disconnect* from the *distribution system* upon loss of synchronism; and
- (c) unreasonable absorption of, or interference with, *our* audio *frequency* signals used for *load control* or operations.

4.7. Generating units

You must ensure that:

- (a) any *generating units* that are (directly or indirectly) *connected* to the *distribution system* at the *connection point* comply with the relevant *STNW Standard*;
- (b) the presence of those *generating units* is clearly indicated on the main switchboard and that suitable *disconnection* instructions are located either on the main switchboard or the *embedded generating units* themselves;

where those *generating units* use solar photovoltaic technology, they:

- (i) have voltage and frequency protection configured in accordance with the values stated in AS 4777 and (if relevant) any agreement between the parties (provided that in the event of any inconsistency, the most stringent requirement applies);
- (ii) have a VMax setting set to 255 V;
- (iii) are able to operate in the power factor range from 0.93 lagging to 0.93 leading; and
- (iv) are installed to result in a balanced 3-phase output; and
- (c) where those *generating units* are not authorised by *us* to export electricity at the *connection point*, the *generating units* do not export any electricity to the *distribution system* (other than as necessarily required for the purpose of operating the *generating unit* in parallel with the *distribution system*).

4.8. Operational data forecasts

If *we* request this, *you* must, by 30 April of each year, give *us* a forecast for maximum demand, annual energy consumption, maximum electricity export levels and annual energy production at the *connection point* for the three financial years commencing on 1 July of that year.

4.9. Design compliance with Australian Standards

You must ensure that anything that is (directly or indirectly) *connected* to *our distribution system* at the *connection point* and which may affect the operation of *our distribution system* is designed to comply with relevant *Australian Standards* as at the time of first installation.

4.10. Designing for operational resilience

You must ensure that any *electrical equipment* that is (directly or indirectly) *connected* to the *distribution system* at the *connection point* is designed to withstand, without damage, the range of operating conditions that may arise, in a manner consistent with S5.1a of the *NER*.

4.11. Design requirements in relation to fault currents

[Drafting note: Delete the below if there is a *Generator Performance Standard*.]

You must ensure that any of the circuit breakers/switchgear on *your* side of the *connection point* that isolate *your facility* from *our distribution system* have ratings sufficient to be capable of breaking, without damage or restrike, the fault currents that may be experienced on the relevant portion of the *distribution system* from time to time over the term of this *contract*.

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The highest expected combined fault currents (that is, the *distribution system* contribution plus the contribution of the *generating units* downstream of the *connection point*) that are experienced as at the date of this *contract* are:

- (a) 3 phase = [insert] kA; and
- (b) 1 phase = [insert] kA,

The highest expected *distribution system* contribution to fault currents (that is, assuming that there are no *generating units* downstream of the *connection point*) that are experienced as at the date of this *contract* are (as at the date of this *contract*):

- (c) 3 phase = [insert] kA; and
- (d) 1 phase = [insert] kA,

However, *you* should be aware that these will change over time, including as a result of any reconfigurations to the *distribution system*, penetration levels of *embedded generators* and *loading* conditions at the time.

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not raise fault levels beyond the capacity of *our distribution system*, including compliance with S5.2.8 of the *NER*, including the *automatic access standard* set out therein.

[Drafting note: Delete the below if there is no *Generator Performance Standard*.]

You must ensure that any of the circuit breakers/switchgear on *your* side of the *connection point* that isolate *your facility* from *our distribution system* have ratings sufficient to be capable of breaking, without damage or restrike, the fault currents that may be experienced on the relevant portion of the *distribution system* from time to time over the term of this *contract*.

The highest expected combined fault currents (that is, the *distribution system* contribution plus the contribution of the *generating units* downstream of the *connection point*) that are experienced as at the date of this *contract* are set out in the “Fault Current” section of the *Generator Performance Standard*.

However, *you* should be aware that these will change over time, including as a result of any reconfigurations to the *distribution system*, penetration levels of *embedded generators* and *loading* conditions at the time.

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not raise fault levels beyond the capacity of *our distribution system*, including compliance with the “Fault Current” section of the *Generator Performance Standard*.

4.12. Designing to withstand power frequency voltages

You must ensure compliance with S5.3.2(c) of the *NER*. The nominated power *frequency voltages* are the most stringent of those set out in Table 1a of AS62271-1 (High-voltage switchgear and controlgear – Common Specification).

4.13. Designing for insulation coordination and lightning protection

You must ensure that the insulation levels and lightning protection of anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* is coordinated with the insulation levels of the *distribution system*, being those in accordance with AS2067 Substations and High Voltage Installations Exceeding 1 kV AC.

4.14. Low *distribution system* short circuit ratio

- (a) The *distribution system* in the vicinity of the *connection point* has a relatively low short circuit ratio, being [insert].
- (b) *You* acknowledge and agree that:
 - (i) this low short circuit ratio means that the power quality parameters in the *distribution system* (such as *voltage* stability, *frequency*, harmonic current distortion and *voltage* flicker) are considerably more sensitive to fluctuations in the level of export from *your facility* into the *distribution system* than would be the case if there was a higher short circuit ratio; and

- (ii) *you* will take appropriate consideration of this sensitivity in designing, constructing, operating and maintaining the *facility*, including carrying out modelling using the PSCAD models referred to in clause 5.2(c)(iii)(A) to determine what additional mitigation may need to be implemented to ensure controller stability (for example, limiting the active current injection ramp rate).

4.15. Designing for safety

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* complies with any relevant safety-related *Australian Standards* and safety-related *laws* (including the *Electrical Safety Act 2002* (Qld) and the *Electrical Safety Regulation 2013* (Qld)).

4.16. Designing to minimise impact on audio frequency signals

You must ensure that the operation of any *electrical equipment* that is (directly or indirectly) *connected to the distribution system* at the *connection point* (including any *shunt capacitors*) does not adversely affect *our* 217 Hz audio *frequency signals* used for *load control* or operations.

4.17. Earthing design

You must ensure that:

- (a) anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* is earthed as referred to in S5.2.3(b)(2) and S5.3.9(d) of the *NER*;
- (b) the earth grids on *your* side of the *connection point* are independent of *our distribution system*;
- (c) *you* obtain *our* prior written consent to any new *connection to our* earth grid;
- (d) *you* obtain *our* design approval and prior agreement for all earth connections applied to the *distribution system neutral* within the *facility*;
- (e) where an HV circuit forms part of the circuit for the *connection point*, that HV circuit is capable of being earthed by a suitable fault current rated device, as set out in this Item; and
- (f) where the design of the HV electrical apparatus does not allow testing with a voltage detector on all phases to prove the circuit is de-energised before earthing, the earthing device has suitably rated fault make earthing capability, including, where the HV electrical apparatus involves:
 - (i) metal-clad switchgear that is not withdrawable, an earthing device with either:
 - (A) a circuit to bus isolator plus a fault make earthing device; or
 - (B) a circuit isolator with “test to prove de-energised” facilities for applying an earthing device; and
 - (ii) switchgear that is withdrawable, an earthing device equipped with a fault make earth switch and cable proving dead test ability.

4.18. Designing for remote monitoring and communications interfaces (including SCADA)

- (a) *You* must ensure compliance with S5.3.9(b) of the *NER*. *You* must also, if required by *us* in order to meet *our* obligations under the *energy laws*, make available to *us* at *your* own cost, via an agreed communications channel at *your* control or switch room or other location within the *facility*, information concerning the following on *your* side of the *connection point*:
 - (i) open/close status of the highest voltage circuit breaker forming part of the transformer protection;
 - (ii) volts at the highest voltage bus;
 - (iii) amps on *your* side of the transformer;
 - (iv) MW export/import from *your* side of the *connection point* as a whole;
 - (v) MVA_r absorption/injection from *your* side of the *connection point* as a whole; and
 - (vi) any other relevant technical parameters as requested by *us* to comply with the *energy laws* or *good electricity industry practice*.

- (b) You acknowledge and agree that:
- (i) our SCADA system will monitor the available *network capacity* in areas of our *distribution system*;
 - (ii) we may issue you with a request through the communications link referred to in clause 6.7(d) as contemplated in clause 6.12(d) to reduce the transfer of electricity from your *facility* to our *distribution system* at the *connection point* in order to ensure that the throughput of electricity through a *distribution system* element does not exceed the rated capacity of that element; and
 - (iii) you must comply with a request made under Item 4.18(b)(ii) within 60 seconds of receiving that request;
 - (iv) if you do not comply with Item 4.18(b)(iii), we will, where we consider this reasonably necessary to maintain the security and stability of the *distribution system*, open the 66 kV circuit breaker located on your side of the *connection point* to isolate your *facility* from the *distribution system*; and
 - (v) if we open the circuit breaker under Item 4.18(b)(iv), you must not close this circuit breaker without our consent (which will not be unreasonably withheld).

4.19. Design of *synchronisation facilities*

[Drafting note: Only for non-inverter-based systems and systems that can operate off-grid (e.g. if have batteries for islanded operation systems).]

You must ensure that any *embedded generating units* that are (directly or indirectly) *connected* to our *distribution system* at the *connection point* are equipped with appropriate auto-synchronising facilities along with a synchronising switching device.

4.20. Design of lockable switch to prevent export during outages

You must provide a lockable manual switch at a location suitable to both parties, where the switch operates to prevent any *generating units* that are (directly or indirectly) *connected* to our *distribution system* at the *connection point* from exporting electricity into our *distribution system* in relevant circumstances during outages of the *distribution system* (such as, without limitation, where we are carrying out live line works).

4.21. Operational power factor and reactive power capability

[Drafting note: Delete the below if there is a *Generator Performance Standard*.]

- (a) You must ensure that anything that is (directly or indirectly) *connected* to our *distribution system* at the *connection point* is operated to comply with the following:
- (i) when the *facility* is taking electricity from the *distribution system* at the *connection point* such that the *load* is equal to or greater than 30% of the *authorised demand* for importing electricity, the *power factor* must be consistent with the *automatic access standard* set out in Table S5.3.1 of the *NER*, which is, as at the date of this *contract*, [0.95 lagging to unity]; and
 - (ii) when the *facility* is taking electricity from the *distribution system* at the *connection point* such that the *load* is less than 30% of the *authorised demand* for importing electricity, the production of *reactive power* must be within the range [insert] to [insert] MVARs lagging.
- (b) As the *power factor* measured at the *connection point* is affected by the presence of *embedded generating units*, the calculation of *power factor* for the purpose of assessing compliance will negate the effect of the embedded generation. The following formula will be used to calculate *power factor* from the available *metering data*:

$$\text{Power Factor} = \frac{\text{native load}}{\sqrt{(\text{native load})^2 + \text{CP_kVar}^2}}$$

where:

native load = CP_kW + Gen_kW

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CP_kW = NMI [insert NMI number and register] – NMI [insert NMI number and register];

CP_kVar = NMI [insert NMI number and register]; and

Gen_kW = NMI [insert NMI number and register].

[Drafting note: Delete the below if there is a *Generator Performance Standard*.]

You must ensure that:

- (c) anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* is operated to comply with the “Reactive Power Capability” section of the *Generator Performance Standard*; and
- (d) the design and operation of the control systems of *your generating system* are coordinated with *our* existing voltage control systems and the voltage control systems of other *Network Users*, in order to avoid or manage interactions that would adversely impact on *us* and *our* other customers, as contemplated in S5.2.5.13(i) of the *NER*.

4.22. Resilience to *voltage* fluctuations

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* is capable of withstanding, without damage, the following *voltage* impulse levels.

Network Voltage (kV)	Lightning Impulse Withstand Voltage (kV)
11	95
22	150
33	200
66	325
132	650
220	1,050

4.23. Operational contribution to *voltage* fluctuation

[Drafting note: Delete the below if there is a *Generator Performance Standard*.]

You must ensure that the variation over time of power generated or load taken at the *connection point* does not result in a contribution to the magnitude and rate of occurrence of voltage disturbance above:

- (a) where *you* are the only customer at the relevant substation – 80% of the Threshold of Perceptibility set out in Figure 1 of AS 2279, Part 4; and
- (b) where there are multiple customers at the relevant substation – [insert]% of the Threshold of Perceptibility set out in Figure 1 of AS 2279, Part 4.

[Drafting note: Delete the below if there is no *Generator Performance Standard*.]

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not contribute harmonic *voltage* distortion at the *connection point* greater than the emission limits set out in the “Quality of Electricity Generated” section of the *Generator Performance Standard*.

4.24. Operational contribution to harmonics and *voltage* notching

[Drafting note: Delete the below if there is a *Generator Performance Standard*.]

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not contribute harmonic *voltage* distortion at the *connection point* greater than the following emission limits (which are calculated in accordance with AS/NZS 61000.3.6.2001 and guidelines published by Standards Australia).

Harmonic Number	Emission Limit at Connection Point (amps)	Harmonic Number	Emission Limit at Connection Point (amps)

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Harmonic Number	Emission Limit at Connection Point (amps)	Harmonic Number	Emission Limit at Connection Point (amps)
2	[insert]	22	[insert]
3	[insert]	23	[insert]
4	[insert]	24	[insert]
5	[insert]	25	[insert]
6	[insert]	26	[insert]
7	[insert]	27	[insert]
8	[insert]	28	[insert]
9	[insert]	29	[insert]
10	[insert]	30	[insert]
11	[insert]	31	[insert]
12	[insert]	32	[insert]
13	[insert]	33	[insert]
14	[insert]	34	[insert]
15	[insert]	35	[insert]
16	[insert]	36	[insert]
17	[insert]	37	[insert]
18	[insert]	38	[insert]
19	[insert]	39	[insert]
20	[insert]	40	[insert]
21	[insert]	THD_I (see note 3)	[insert]%

Notes:

- the above emission limits are based on a Stage 2B allocation from AS61000.3.6;
- the point of common coupling (being broadly equivalent to the *network coupling point*) was determined to be at [insert location];
- In determining the total harmonic current distortion (THD_I) relative to the fundamental frequency current component, the following equation was used:

$$THD_I = \frac{\sqrt{\sum_{h=2}^{40} I_h^2}}{I_1}$$

where I_1 is the fundamental frequency current component.

[Drafting note: Delete the below paragraph if there is no *Generator Performance Standard*.]

You must ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not contribute harmonic *voltage* distortion at the *connection point* greater than the emission limits set out in the “Quality of Electricity Generated” section of the *Generator Performance Standard*.

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4.25. Balancing of load currents and contribution to voltage unbalance

You must ensure compliance with S5.3.6 of the *NER*, including the *automatic access standard* set out therein.

[Drafting note: Delete the below paragraph if there is a *Generator Performance Standard*.]

You must also ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not result in the current in any phase at the *connection point* exceeding [insert]%, or dropping below [insert]%, of the average of the currents in the three phases.

[Drafting note: Delete the below paragraph if there is no *Generator Performance Standard*.]

You must also ensure that anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* does not result in voltage unbalance exceeding that specified in the “Quality of Electricity Generated” section of the *Generator Performance Standard*.

4.26. Partial load rejection

[Drafting note: Delete the below paragraph if there is a *Generator Performance Standard*.]

You must ensure that any *generating systems* that are (directly or indirectly) *connected to our distribution system* at the *connection point* comply with S5.2.5.7 of the *NER*, including the *automatic access standard* set out therein.

[Drafting note: Delete the below paragraph if there is no *Generator Performance Standard*.]

You must ensure that any *generating systems* that are (directly or indirectly) *connected to our distribution system* at the *connection point* comply with the “Partial Load Rejection” section of the *Generator Performance Standard*.

4.27. Load shedding facilities

Where the expected peak demand (for import) at any time at the *connection point* is 10 MW or above, you must provide automatic *interruptible load* in accordance with S5.3.10 and rule 4.3.5 of the *NER* as if you were a *Market Customer* having expected peak demands at the *connection point* in excess of 10 MW, provided that you must comply with the relevant parameters for automatic settings advised by us, and must not change those settings without our prior written consent.

4.28. Quality of electricity generated and continuous uninterrupted operation

You must ensure that:

[Drafting note: Delete (a) below if there is a *Generator Performance Standard*.]

- (a) any *generating systems* that are (directly or indirectly) *connected to our distribution system* at the *connection point* comply with the *minimum access standard* set out in S5.2.5.6 of the *NER*; and

[Drafting note: Delete (b) below if there is no *Generator Performance Standard*.]

- (b) any *generating systems* that are (directly or indirectly) *connected to our distribution system* at the *connection point* comply with the Quality of Electricity Generated and Continuous Uninterrupted Operation” section of the *Generator Performance Standard*; and
- (c) anything that is (directly or indirectly) *connected to our distribution system* at the *connection point* complies with the requirements of S5.3.9(c) of the *NER*.

4.29. Generating unit responses

[Drafting note: Delete (a) below if there is a *Generator Performance Standard*.]

- (a) You must ensure that any *generating systems* that are (directly or indirectly) *connected to our distribution system* at the *connection point* comply with:
 - (i) S5.2.5.3 of the *NER* in relation to *frequency disturbances*;
 - (ii) S5.2.5.4 of the *NER* in relation to *voltage disturbances*; and
 - (iii) S5.2.5.5 of the *NER* in relation to disturbances following contingency events; and

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- (iv) S5.2.5.11 of the *NER* in relation to frequency control, including the *automatic access standards* set out therein.

[Drafting note: Delete (b) below if there is no *Generator Performance Standard*.]

- (b) You must ensure that any *generating systems* that are (directly or indirectly) *connected* to our *distribution system* at the *connection point* comply with the following sections of the *Generator Performance Standard*:
- (i) the “Generating Unit Response to Frequency Disturbance” section;
 - (ii) the “Generating System Response to Voltage Disturbances” section; and
 - (iii) the “Generating System Response to Disturbances following Contingency Events” section; and
 - (iv) the “Frequency Control” section.
- (c) Without limiting the above, those *generating systems* must be able to maintain:
- (i) stable loading without responding to minor changes in *frequency* (for example, through the use of a real power governor); and

[Drafting note: Delete (ii) below if there is a *Generator Performance Standard*.]

- (ii) stable VAr loading (consistent with the limits set out in Item 4.21(a)) without responding to minor changes in voltage (for example, through the use of a generator field controller).

[Drafting note: Delete (iii) below if there is no *Generator Performance Standard*.]

- (iii) stable VAr loading (consistent with the limits set out in the *Generator Performance Standard*) without responding to minor changes in voltage (for example, through the use of a generator field controller).

4.30. *Generating system impact on inter-regional or intra-regional power transfer capability*

[Drafting note: Delete the below paragraphs if there is a *Generator Performance Standard*.]

You must ensure compliance with S5.2.5.12 of the *NER*, including the *automatic access standard* set out therein, provided that when you are considering the impacts of any *generating systems* located downstream of the *connection points* on the *inter-regional* and *intra-regional power transfer capability*, you must have regard to all relevant factors that contribute to that capability, including, without limitation:

- (a) the rated capacity of the components of the *distribution system* and the *power system*;
- (b) the need to ensure that those *generating systems* do not operate at a frequency that will adversely impact on the ability of the *interconnected national electricity system* to set the frequency of the *power system* (and thereby maintain frequency and *power system* stability as required by the *NER*); and
- (c) the need to minimise stability impacts as a result of changes in fault currents being experienced in the *interconnected national electricity system*,

as factors such as these will impact upon the ability of other existing or potential users of the *distribution network* to utilise that *power transfer capability*.

[Drafting note: Delete the below paragraphs if there is no *Generator Performance Standard*.]

You must ensure compliance with the “Impact on Network Capability” section of the *Generator Performance Standard*, provided that when you are considering the impacts of any *generating systems* located downstream of the *connection points* on the *inter-regional* and *intra-regional power transfer capability*, you must have regard to all relevant factors that contribute to that capability, including, without limitation:

- (d) the rated capacity of the components of the *distribution system* and the *power system*;

- (e) the need to ensure that those *generating systems* do not operate at a frequency that will adversely impact on the ability of the *interconnected national electricity system* to set the frequency of the *power system* (and thereby maintain frequency and *power system* stability as required by the *NER*); and
- (f) the need to minimise stability impacts as a result of changes in fault currents being experienced in the *interconnected national electricity system*,

as factors such as these will impact upon the ability of other existing or potential users of the *distribution network* to utilise that *power transfer capability*.

4.31. Operation during and after outages of the *distribution system*

You must:

- (a) wait for at least five minutes (or other applicable timeframe set out in the relevant *Australian Standard*) following restoration of supply after an outage of the *distribution system* before attempting to synchronise with, and *connect* to, the *distribution system*, unless otherwise stated in an operating protocol under clause 6.8; and
- (b) ensure that an automatic interlock or timer is installed to enable compliance with this Item.

4.32. Live Line Protocol

- (a) Where live line work is being undertaken, *good electricity industry practice* precludes multiple sources of supply on that section of the *network*.
- (b) Where possible, we will shift network supply so as to supply you via feeders without live line work occurring. Where this is not possible, and live line work is warranted, you will be required to either:
 - (i) isolate any electrical installations *connected* (directly or indirectly) to the *distribution system* at the *connection point* from the *distribution system*; or
 - (ii) shut down any *generating units connected* (directly or indirectly) to the *distribution system* at the *connection point*,to allow this work to proceed.
- (c) Where live line work is to be undertaken, we will contact you and request you to take action as contemplated in either Item 4.32(b)(i) or 4.32(b)(ii) of this Schedule.
- (d) You must:
 - (i) comply with a request under Item 4.32(c) of this Schedule, including, without limitation, using an approved lock/tag system to prevent inadvertent reconnection; and
 - (ii) notify us when this has occurred.
- (e) When the live line work is finished, we must notify you and allow you to remove the lock/tag precautions and resume normal operations.

4.33. High Voltage Isolation and Access (HVIA) protocol

- (a) HVIA procedures are used on all work requiring direct contact with, or work in the vicinity of, high voltage equipment. This process requires adequate breaks (and, where possible, a visible break) between the area under access and energising sources such as *generating units*.
- (b) Where possible, we will shift network supply so as to supply you feeders without HVIA controlled work occurring. Where this is not possible, and HVIA work is warranted, you will need to be *disconnected* from the *distribution system* to allow the work to proceed.
- (c) Where HVIA work is to be undertaken, we will contact you and either request, or co-ordinate, (as appropriate) isolation of the *generating units* and relevant electrical installations *connected* (directly or indirectly) to the *distribution system* at the *connection point*.

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- (d) *You must:*
 - (i) comply with *our* requirements under Item 4.33(c) of this Schedule, including, without limitation, using an approved lock/tag system to prevent inadvertent reconnection; and
 - (ii) notify *us* when this has occurred.
- (e) When the HVIA work is finished, *we* must notify *you* and allow *you* to remove the lock/tag precautions and resume normal operations.

4.34. Lock and tag procedures

- (a) *You* must provide a lockable manual switch at a location suitable to both parties, where the switch operates to prevent any *generating units connected* (directly or indirectly) to *our distribution system* at the *connection point* from exporting electricity into *our distribution system* in relevant circumstances during outages of the *distribution system* (such as, without limitation, where *we* are carrying out live line works).
- (b) Either party may lock this manual switch.
- (c) A party locking this manual switch must use its own procedures and protocols to apply and remove the lock.
- (d) If requested to do so by *us*, *you* must apply the lock, and not remove it until requested to do so by *us*.

4.35. Automatic circuit reclose operation

- (a) The auto reclose function [may/will] be enabled and a suitable protection scheme will be required[, as described in the *Generator Performance Standard*].
- (b) *You* acknowledge that automatic or manual reclosing of distribution system switchgear after interruption of supply as a result of a distribution system fault will be attempted without determining if any *load* or generation is *connected* at the *connection point*. It is *your* responsibility to provide the necessary interlocks and/or line checks and/or lockouts to prevent the re-energising of the *distribution system* from damaging any of the *facility* or *electrical equipment* thereon.

4.36. Protection of *your electrical equipment*

You must:

- (a) implement appropriate measures, (including designing, installing, testing and maintaining protection and control facilities in accordance with this *contract* (including the *technical requirements*), the relevant provisions of the *NER* and *good electricity industry practice* and complying with switching procedures developed jointly with *us*) to:
 - (i) safeguard any *electrical equipment* that is (directly or indirectly) *connected* to the *distribution system* at the *connection point* against material disruptions to the quality of electricity, including, without limitation, loss of synchronism, power surges, excursions in voltage outside usual parameters, load reductions or voltage changes due to lightning, switching or earth faults, or single phasing, or any other similar changes, or due to the operation of any protective or auto-reclosing device in the *distribution system* (and, without limitation, ensure that these protection facilities can detect earth faults on the *distribution system*; and
 - (ii) safely and effectively automatically *disconnect* any faulty electrical equipment from the *distribution system*;
- (b) without limiting Item 4.36(a) above, ensure compliance with S5.2.2 of the *NER*, the *automatic access standards* in S5.3.3 of the *NER*, and S5.3.4 of the *NER* (provided that *your* protection facilities and settings are to cover all *electrical equipment* that is (directly or indirectly) *connected* to the *distribution system* at the *connection point*, and references to faulty circuit or faulted element are to include any such (directly or indirectly) *connected* circuits or elements); and

[Drafting note: Delete (c) below if there is a *Generator Performance Standard*.]

- (c) ensure compliance with S5.2.5.9 and S5.2.5.10 of the *NER*, including the *automatic access standards* therein;

[Drafting note: Delete (d) below if there is no *Generator Performance Standard*.]

- (d) ensure compliance with the “Protection Systems that Impact on Power System Security” and “Protection to Trip Plant for Unstable Operation” sections of the *Generator Performance Standard*;
- (e) ensure that all of the settings for protection and control facilities on *your* side of the *connection point* are coordinated with *our protection systems* and *control systems* (and, where applicable, the protection and control facilities of other users of the *distribution system*), and approved by *us*, and must not change a setting requested by *us* without *our* prior written consent;
- (f) not make any changes to the protection and control facilities relating to the *connection point* without *our* prior written consent (such consent not to be unreasonably withheld);
- (g) if any changes are made to protection and control facilities on *your* side of the *connection point* that involve more than changes to relay settings, ensure that all of the relevant protection and control facilities are tested to demonstrate compliance with this *contract* and the *NER*.

4.37. Protection of generating systems from power system disturbances

[Drafting note: Delete the following two paragraphs if there is a *Generator Performance Standard*.]

You must ensure compliance with S5.2.5.8 of the *NER*, including the *minimum access standard* set out therein.

In accordance with S5.2.5.8(c) of the *NER*, *you* must not (unless otherwise agreed between the parties) permit the creation of an island external to the *connection point* that is supplied from *you* during any outage on the *distribution system*.

[Drafting note: Delete the following paragraph if there is no *Generator Performance Standard*.]

You must ensure compliance with the “Protection of Generating Units from Power System Disturbances” section of the *Generator Performance Standard*.

4.38. Protection and control systems testing

- (a) The parties must cooperate to ensure that equipment comprising protection and control facilities relevant to a *connection point* is monitored and tested to demonstrate the reliable and compliant operation of that equipment and that it complies with the terms of this *contract*, *good electricity industry practice*, relevant *Australian Standards* and relevant *energy laws*.
- (b) The testing referred to in Item 4.38(a) above must occur both prior to installation and at the following intervals from the *commencement date*:
 - (i) systems containing only protection relays or modules which are supervised must be tested at intervals not exceeding 48 months; and
 - (ii) systems containing any protection relays or modules which are not supervised must be tested at intervals not exceeding 36 months,and any such testing must include circuit breaker tripping (unless such tripping would result in unacceptable interruption or disruption to *your* operations).
- (c) *You* must maintain records of the tests referred to above for a period of seven years (and provide *us* with copies of such test records upon request); and
- (d) *You* must provide *us* with prior notice of the tests referred to above and allow *us* to witness any such tests.

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EXECUTED as an agreement. Each person who executes this *contract* as either attorney or agent for a party warrants that he or she has authority to do so, and will produce written evidence of that authority to any party who requests it.

SIGNED for and on behalf of **Ergon Energy Corporation Limited (ABN 50 087 646 062)** by its attorney under power of attorney dated 28 October 2014 in the presence of:

Signature of attorney

Signature of witness

Alan Newman, Manager Major Customers

Name and title of attorney

Name of witness

Date:

EXECUTED by **[name of Counterparty]** (ABN **[insert]**) in accordance with s 127(1) of the *Corporations Act 2001* (Cth).

Signature of director

Signature of director/secretary

Name

Name

Date: