



# Application form for the issue of an Electricity Generation Licence

by the Essential Services Commission of SA under the  
Electricity Act 1996

August 2017

Enquiries concerning this application form should be addressed to:

Essential Services Commission  
GPO Box 2605  
Adelaide SA 5001

Telephone: (08) 8463 4444  
Freecall: 1800 633 592 (SA and mobiles only)  
E-mail: [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au)  
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## Table of contents

Licence requirements and conditions .....	1
Generation operations which require a licence .....	1
Mandatory licence conditions .....	1
Additional technical licence conditions .....	1
Annual licence fees .....	2
Use of this form and applicant's responsibilities .....	3
Application fees .....	3
How to lodge an application .....	3
Consultation and Confidentiality .....	3
Further information .....	4
Licence Application Form .....	1
1 The Applicant .....	1
1.1 Identity of Applicant .....	1
1.2 Legal Identity of Applicant .....	1
1.3 Address and Contact Details of Applicant .....	2
1.4 Contact Person on behalf of Applicant .....	2
1.5 Contact Person for Licence Fees .....	2
1.6 Diagram of Corporate or other Structure .....	3
2 The Licence .....	4
2.1 Date from which Licence is sought .....	4
2.2 Nature and scope of operations for which Licence is sought .....	5
3 Suitability of applicant to hold a licence .....	5
3.1 Standard of honesty and integrity shown by Applicant .....	5
3.2 Standard of honesty and integrity shown by Officers and major shareholders of Applicant ...	6
3.3 Names and addresses of the Officers of Applicant .....	6
3.4 Names and addresses of major shareholders of Applicant .....	8
3.5 Details of the group members .....	8
3.6 Additional information .....	8
3.7 Financial resources available to the Applicant .....	8
3.8 Additional Details of Structure of Applicant .....	9
3.9 Human resources available to the Applicant .....	10
3.10 Technical resources available to the Applicant .....	10
3.11 Quality of Electricity Produced/Connection Agreement .....	11
3.12 Risk Management .....	11
3.13 Development Act Approval .....	12
3.14 Registration with AEMO .....	12
3.15 Licences held by the Applicant in other Australian jurisdictions .....	12
3.16 Previous unsuccessful licence applications in other Australian jurisdictions .....	12
3.17 Licences held by Associates of the Applicant .....	13
3.18 Compliance Plans .....	13

3.19	Additional Information .....	14
4	Factors specified in the Essential Services Commission Act 2002 .....	15
5	Application fees .....	15
6	Declaration.....	16
	Attachment 1 .....	17
	2017 model licence conditions for new generators .....	17
	Interpretation of this schedule .....	17
	Disturbance ride through capability .....	17
	Voltage control capability .....	20
	System strength .....	20
	Active power control capability .....	20
	System restoration .....	22

## Licence requirements and conditions

It is essential that licence applicants read the Essential Services Commission's (**Commission**) Advisory Bulletin No 4 – "*Licensing Arrangements for the Electricity and Gas Supply Industries*" before they fill out this form. This Bulletin is available on the Commission website [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au) under electricity/licensing.

### Generation operations which require a licence

Section 15(2)(a) of the *Electricity Act 1996* (**Act**)<sup>1</sup> is explicit in that it requires a person that carries on the operation of the generation of electricity to hold a licence. This requirement applies to all generators with the exception of a generator that can rely on:

- (1) one of the statutory exemptions specified in the Electricity (General) Regulations 1997 (**Regulations**) outlined below;
- (2) an individual exemption issued by the Commission (with the approval of the Minister) pursuant to section 80(1) of the Act; or
- (3) an exemption made by Governor under a regulation pursuant to section 98(2)(e) of the Act.

Pursuant to Regulations 6(1) and (2), the following generators are exempt from the requirement to hold a generation licence:

- ▶ a generator whose generating plant has a rated nameplate output of 100kVA or less;
- ▶ a generator that does not supply electricity for reward to or by means of a transmission or distribution network;
- ▶ a generator that generates electricity for the sole consumption of that generator or a designated body (such bodies must be designated by the Minister<sup>2</sup>); or
- ▶ a generator that generates electricity for a person at a premises occupied or used by the person as a tenant or licensee (whether directly or indirectly) of the generator (or a designated body) where that person is not charged for the supply of electricity except by a licensed retailer/generator or as an unspecified part of rent or charges for the occupation or use of the premises.

It is important for generators (or proposed generators) to carefully consider whether they can rely on a statutory exemption from the requirement to be licensed. If the reliance on a statutory exemption is queried by the Commission, the onus to provide evidence that a particular exemption can be relied upon is on the relevant generator.

In addition, in the event that the operations of a generator change so that it can no longer rely on one of the three exemptions specified above, it will need to apply to the Commission for a generation licence immediately in order to continue those operations.

### Mandatory licence conditions

Sections 21(1) and 22 of the Act requires the Commission to place certain mandatory conditions in generation licences. The Commission strongly recommends that applicants review these mandatory conditions. Applicants must be familiar with the relevant conditions and confident that they can comply with the conditions.

### Additional technical licence conditions

Additional technical licence conditions apply to all new electricity generators seeking to connect to the South Australian power system. Applicants for a generation licence should familiarise

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<sup>1</sup> Available at <https://www.legislation.sa.gov.au/LZ/C/A/ELECTRICITY%20ACT%201996.aspx>

<sup>2</sup> To date, the Minister for Energy and Resources has not designated any bodies for the purposes of Regulations 6(1).

themselves with the Commission's Inquiry into the licensing arrangements for generators in South Australia final report, available on the Commissions website.<sup>3</sup>

Model licence conditions reflecting the Inquiry findings and conclusions have been developed and are available in Appendix 1. The model conditions will be applicable to all new applications, having regard to advice from the Australian Energy Market Operator (**AEMO**) on the specific circumstances of individual applications received.

Depending on the specific characteristics of a given generation project, the model conditions may be varied to the degree necessary to ensure that South Australian consumers' long-term interests with respect to the price, quality and reliability of electricity services are protected.

### Annual licence fees

Holding a licence incurs annual licence fees. The licence fees determined by the Minister for Resources and Energy are administered by the Commission. At annual intervals, the Commission, on behalf of the Minister, will send to each licensee, depending on the category within the sector, an invoice for the licence fee. Licence fees are to be paid on receipt of an invoice via one of the payment options set out in the invoice.

The initial licence will not be issued until the first annual licence fee (or approved licence fee instalment) has been paid.

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<sup>3</sup> Refer: <http://www.escosa.sa.gov.au/projects-and-publications/projects/inquiries/inquiry-into-licensing-arrangements-under-the-electricity-act-1996-for-inverter-connected-generators/inquiry-into-licensing-arrangements-under-the-electricity-act-1996-for-inverter-connected-generators>

This form is to be completed by persons making application to the Commission for the issue of a licence to authorise electricity generation operations in the electricity supply industry in South Australia.

The Commission can also consider joint applications from two or more persons who wish to hold a licence jointly. Persons making joint applications must ensure that each of the applicants completes a separate application form, together with a covering letter explaining that the application is for a licence to be jointly held.

Section 16(1)(a) of the Act provides that an application for the issue of a licence must be made to the Commission in a form approved by the Commission. This is the form approved by the Commission.

An application for a licence may be made by any legal person including, without limitation, individuals, partnerships, incorporated associations, unit and other forms of trusts and corporations. Entities that are not a legal person (for example, an unincorporated joint venture) cannot apply for a licence.

For the purpose of this application form, reference to the term “Officer” include the applicant’s directors and secretary, and other persons who make or participate in making decisions that affect a substantial part of the business of the applicant (e.g. Chief Executive Officer, Chief Financial Officer, General Manager etc.).

Applicants should list the information requested in the spaces provided in this form and enclose additional information when required. Applicants must take all reasonable steps to ensure the information provided in the application form is complete, true and correct and are required to make a declaration to that effect in the application form. Failure to disclose information or misrepresent any matter relevant to such information may result in a licence not being issued or in the suspension or cancellation of a licence at a later time.

Applicants are responsible for providing the Commission with current, accurate and relevant documentation. This will ensure that the application is processed promptly and without delay. All applications are assessed on a case-by-case basis. If insufficient information is provided with an application, the Commission will request additional information to be submitted before the application is considered further.

Applicants should also enclose the application fee (presently set by the Minister for Resources and Energy at \$1,000 per licence) with their application.

Applicants should send their completed application form in writing and electronically.

- ☐ In writing to: Essential Services Commission of SA  
GPO Box 2605  
Adelaide SA 5001
- ☐ Electronically to: [licensing@escosa.sa.gov.au](mailto:licensing@escosa.sa.gov.au)

The Commission will consult with relevant government, industry and consumer groups in the conduct of its licensing functions through a public consultation process. Consequently, applications and/or

supporting information will be made available on the Commission's website and in hard copy from the Commission's office for this purpose.

If applicants believe that they are providing confidential information when completing this form they should write "this information is confidential" after any such information. It is the applicant's responsibility to ensure this is clearly highlighted on the form. Applicants should also provide a 'non-confidential' version of the form capable of publication on the Commission's website.

The Commission will use information supplied in applications and in support of applications in accordance with the requirements of Part 5 of the Essential Services Commission Act 2002. Applicants claiming confidentiality are encouraged to familiarise themselves with Part 5. Applicants should note that the Commission may disclose confidential information in some circumstances.

### Further information

Applicants should note that the Commission may ask applicants who have submitted an application form to provide further information to the Commission, or to clarify the information that they have already provided if required.

Please note that, in the event that an application lacks sufficient detail and the Commission is required to request additional information from an applicant, delays in the assessment of the application may occur.

# Licence Application Form

## 1 The Applicant

Applicants must answer all questions in this section.

### 1.1 Identity of Applicant

State the full name of the applicant. The applicant is the person who will be undertaking the electricity generation operations that will be the subject of the licence. Joint applicants should each complete an application form, and submit their application forms at the same time, with a covering letter explaining that a joint application is being made.

**Name:** One Investment Management Pty Limited ACN 139 693 271 as trustee for Tailern Bend Solar Operating Trust.

### 1.2 Legal Identity of Applicant

Provide information about the applicant, (i.e. whether the applicant is a natural person, private limited company or partnership, etc). If the applicant is a body corporate, please also state the jurisdiction in which the applicant is registered, and the applicant's ABN/ACN.

One Investment Management Pty Limited ACN 139 693 271 (**Trustee**) is the trustee for Tailern Bend Solar Operating Trust (**SA Op Trust**). The Trustee is not owned by the Equis group and is an independent professional trustee acting solely in its capacity as Trustee of the Trust as the applicant for the licence. The registered address is:

Level 11  
20 Hunter Street  
Sydney  
NSW 2000

#### *Ownership*

In summary, the Tailern Bend Solar Farm structure is headed by two entities, One Funds Management Limited ACN 117 797 403 as trustee for Renewable Energy Australia Trust Passive Trust 1 (**Holding Trust**) and One Investment Administration Limited ACN 072 899 060 as trustee for Renewable Energy Australia Trust Active Trust 1 (**Operating Trust**).

Holding Trust owns all of the units in One Investment Management Pty Ltd ACN 139 693 271 as trustee for Renewable Energy Australia Trust Passive Sub-Trust 1, which in turn, owns all of the units in One Asset Management AR Pty Ltd ACN 167 355 035 as trustee for Tailern Bend Solar Asset Trust (**SA Trust**).

Operating Trust owns all of the units in One Asset Management AR Pty Ltd ACN 167 355 035 as trustee for Renewable Energy Australia Trust Active Sub-Trust 1, which in turn owns all of the units in One Investment Management Pty Ltd ACN 139 693 271 as trustee for Tailern Bend Solar Operating Trust (**SA Op Trust**).

SA Trust will own the plant which comprises the Tailern Bend Solar Farm and SA Op Trust has entered into all contracts required for the operation and maintenance of the Tailern Bend Solar Farm (**Project**).

For further clarification, please refer to the corporate structure diagram provided in Section 1.6.

#### *Operations*

SA Trust and SA Op Trust have appointed Equis Energy (Australia) Pty Ltd ABN 89 609 132 747 (**Operator**) as the asset manager under an Asset Management Agreement to manage the day to day operations of the Project, and with the primary responsibility for overseeing the engineering, procurement, construction, operation and maintenance services in relation to the Project. Amongst other things, the Operator will advise and ensure SA Op Trust will be compliant with the applicable laws including the Act and assist with registration with AEMO. Both SA Trust and SA Op Trust will own and operate the Project in accordance with the Operator's instructions and recommendations.

For the purposes of applying for the licence for the SA Op Trust, the experience, profile and suitability of the key personnel of the Operator and within Equis are described below.

### 1.3 Address and Contact Details of Applicant

Business Address: Level 11, 20 Hunter Street Sydney  
State: NSW Post Code: 2000  
Postal Address (if different to Business Address):  
PO Box R1471, Royal Exchange  
State: NSW Post Code:..... 1225  
Telephone: +61 2 8277 0000  
Facsimile: +61 2 8580 5700  
E-mail: [equis@oneinvestment.com.au](mailto:equis@oneinvestment.com.au)

### 1.4 Contact Person on behalf of Applicant

The full name, title and contact details of a person to whom the Commission can direct enquiries and correspondence about the application.

Full Name: Miro Tischljar

Title: Executive General Manager Project Execution

Business Address: Suite 3 – Level 12, 200 Mary Street Brisbane

State: QLD Post Code: 4000

Postal Address (if different to Business Address):

.....  
State: ..... Post Code: .....

Telephone: 0401 907 475 Facsimile: .....

E-mail: [miro.tischljar@equisenergy.com](mailto:miro.tischljar@equisenergy.com)

### 1.5 Contact Person for Licence Fees

The full name and/or title of the person to whom the Commission can direct enquiries and correspondence about licence fees.

Full Name: Miro Tischljar

Title: Executive General Manager Project Execution

Business Address: Suite 3 – Level 12, 200 Mary Street Brisbane

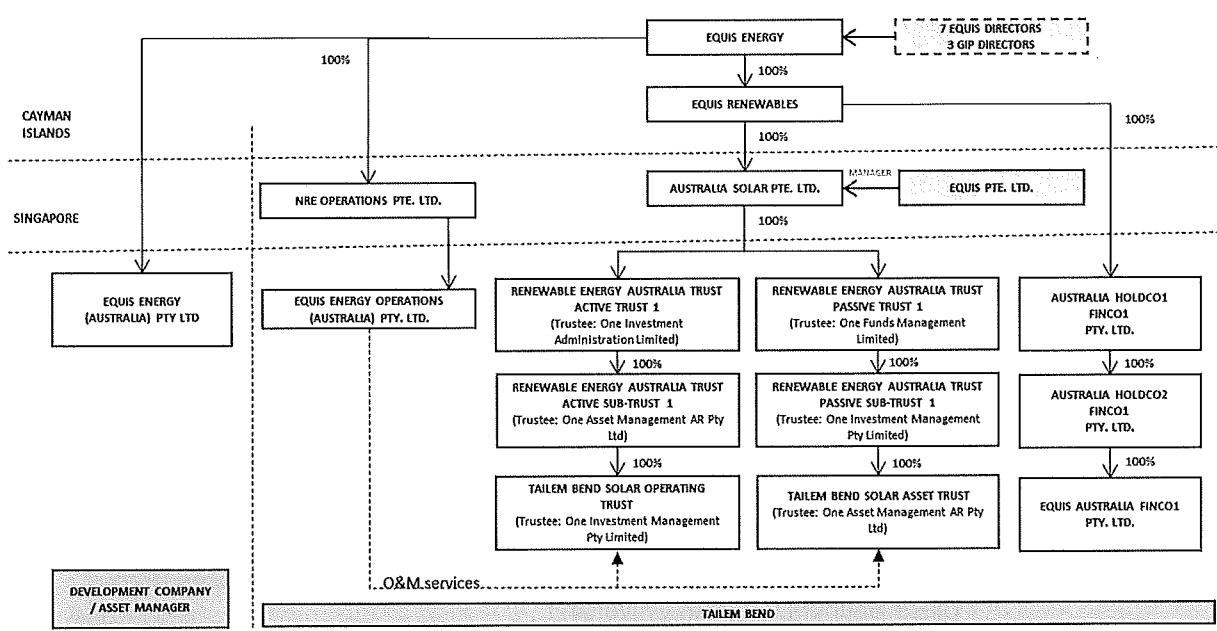
State: QLD Post Code: 4000

Postal Address (if different to Business Address):

State: ..... Post Code: .....  
 Telephone: 0401 907 475 Facsimile: .....  
 E-mail: [miro.tischljar@equisenergy.com](mailto:miro.tischljar@equisenergy.com)

## 1.6 Diagram of Corporate or other Structure

Please attach with this application form details of the corporate or other structure, including details of any related companies within the meaning of the Corporations Act 2001; and a diagram of the organisational chart, including composition of the board, management and other key personnel responsible for the key functions of the business.



The organisational structure in relation to the Project may be summarised as follows:

- Equis Energy (**Equis Energy**) is the owner of Equis Renewables, which ultimately owns the Project.
- Equis Energy is the direct owner of the Operator and indirect owner of Equis Energy Operations (Australia) Pty Ltd ACN 619 539 829 (**Equis O&M**), one of the entities engaged to provide operational and maintenance services post construction of the Project.
- The Equis' board of directors is responsible for management oversight and ensuring Equis' strategy in each country is implemented consistently.
- Singapore is the head office and responsible for managing risk and investment strategy.
- Management has centralized the monitoring, reporting and data analysis associated with each operating asset. The monitoring office is located in Bangalore, India. Each country also operates monitoring stations with respect to the Assets located in that relevant country.
- The trustees of the trusts (including the SA Trust and SA Op Trust) in the above structure diagram are not owned by Equis and are engaged as independent professional trustees.

The key Equis personnel profiles (including key personnel of the Operator):

Tony Gibson	16+ years of experience in private equity
Partner Group General	Former Head of Private Funds for SJ Berwin in Hong Kong (later merged with King & Wood Mallesons), Senior equity partner for King &

Counsel	Wood Mallesons in Hong Kong LLB (Hons), University of Birmingham
Anil Nangia Country Manager	20+ years of power development experience  Experienced in all aspects of renewable project development from conception to operations and has led the development of a number of utility scale wind, solar and bioenergy projects in Australia.  Formerly Ratchaburi Australia, Transfield Services, Origin Energy, Ergon Energy and Queensland Gas  Bachelor of Electrical Engineering (Melbourne University). MBA (University of Queensland)
Miro Tischljar EGM Project Execution and Operation	25+ years of experience in renewable & thermal power generation and oil & gas industry globally covering project development, project execution and operation.  Formerly Head of Project Execution at Siemens Ltd  Master in Mechanical Engineering (Technical University Slovak), Master of Business Administration (Queensland University of Technology Australia)
Joe Hallenstein General Manager	13+ years of power sector experience  Specialist in renewable energy development and construction including managing project design and engineering  Formerly Ratchaburi Australia, Transfield Services, REpower, Acciona Energy and Helimax Energy  Bachelor of Science, Bachelor of Engineering/Computer Systems (First Class Honours, Monash University)

## 2 The Licence

Applicants must answer all questions in this section.

### 2.1 Date from which Licence is sought

Applicants should usually allow the Commission a minimum of 12 weeks to consider an application, as a public consultation period of at least four weeks forms part of the Commission's consideration of licence applications. If the applicant seeks to have the licence issued by a certain date, provide this date. Please note that the Commission does not undertake to issue the licence by this date.

The Operator seeks to have the licence issued to One Investment Management Pty Limited as trustee for Tailern Bend Solar Operating Trust as soon as possible and in any event no later than 1/11/2018 in order to finalise registration with AEMO and be ready for energisation by 1/12/2018.

## 2.2 Nature and scope of operations for which Licence is sought

Applicants for a generation licence must state the location of the generation plant, the expected name plate capacity of the generation plant, the type of generation and fuel used and some details about how the generator is to be connected to the network. Applicants for a wind generation licence must attach a map showing the location of the wind turbines.

The Project is located 2 km south-east of Tailem Bend and 90 km south-east of Adelaide. The site is formerly described as 261 Lime Kiln Road, Certificate of Title Volume 5195 Folio 427. The Project will include the construction of a new 33kV/132kV substation within the site facility which will be connected to the adjacent Tailem Bend Substation via a 132kV transmission line. Site location maps and layout of the Project facility are included in Appendix A.

The Project has a nameplate rating of 108MWac but with a maximum grid capacity of 95MWac which will consist of:

- 1) 54 x 2MW Schneider Inverters – Datasheet attached as Appendix B (Confidential)
- 2) IXL mounting systems – Datasheet attached as Appendix B (Confidential)
- 3) Jinko solar panels – Datasheets attached as Appendix B (Confidential)

## 3 Suitability of applicant to hold a licence

Applicants must answer all questions in this section.

### 3.1 Standard of honesty and integrity shown by Applicant

In deciding whether the applicant is a suitable person to hold a licence, the Commission may:

- ▶ consider the applicant's previous commercial and other dealings, and
- ▶ the standard of honesty and integrity shown in those dealings.

Please provide information that will assist the Commission in its consideration of this matter. If the applicant:

- ▶ has been found guilty of any criminal offence,
- ▶ has been successfully prosecuted under any Territory, State or Commonwealth legislation (such as the Australian Securities and Investments Commission Act 2001 or the Competition and Consumer Act 2010) or
- ▶ has been the subject of disciplinary action,
- ▶ has been the subject of any past or present administrative or legal actions in relation to an authorisation, authority, or licence in any industry,

details of such matters must be disclosed. Failure to disclose such information or misrepresent any matter relevant to such information may result in the cancellation of a licence.

The Commission may use the service of an external expert to assist with the assessment of the applicant's standard of honesty and integrity.

Given the structure described above, the Applicant considers it appropriate to provide the information and details of the Operator and its employees. Equis, the Operator and its employees conduct themselves at all times to the highest level of integrity, professionalism and ethical standards. All facets of operations are expected to conform with governing acts and legislation with employees expected to undertake any activity in a lawful manner.

There are no accounts of the Applicant breaching any statutory obligations, committing any criminal or civil offence. Equis and its relevant entities have not been prosecuted under any applicable legislation in its operating jurisdiction.

There are no prior offences against the applicant, and as such there has not been any disciplinary action taken against the applicant entity. Equis and its relevant entities are not part of any administration or legal actions in relation to any unauthorised, authorised or licence in any industry.

### 3.2 Standard of honesty and integrity shown by Officers and major shareholders of Applicant

Applicants should address responses to this question in the same manner as 3.1 above except here it relates to officers and major shareholders of the applicant.

Please also supply details of any policies and procedures addressing the probity and competence of officers and other key management staff.

#### *Officers of Equis*

As per section 3.1, Equis' Officers conduct themselves to the utmost level of probity. The officers listed in section 3.3 have not partaken in any former misconduct or experienced refusal or suspension from licencing or professional membership.

Equis' Code of Conduct is committed to avoiding or appropriately identifying and managing any conflict of interest between the personal interests of Equis personnel and their responsibility to serve the interests of Equis. There are no potential conflicts of interest which may result in any Officer being unable to fulfil their role.

Under the Corporations Act 2001, none of Equis' Directors have been disqualified from managing corporations.

Equis' Code of Conduct is attached as Appendix C (Confidential).

#### *Officers of Applicant*

The Applicant is part of the One Investment Group (**OIG**). OIG, the Applicant and its staff conduct themselves at all times to the highest level of integrity, professionalism and ethical standards. All facets of OIG's operations are closely monitored and are expected to conform with applicable laws. OIG including the Applicant is governed by a comprehensive compliance and reporting framework required for an independent professional trustee business. The Applicant is also governed by many policies and procedures including its own conflicts of interest policy. All employees are expected to undertake any activity in a lawful and professional manner.

Given the Applicant will be the holder of the licence being applied for, the Applicant considers it appropriate to provide a copy of the attached Enforceable Undertakings (**EUs**) with the Australian Securities and Investments Commission (**ASIC**) and executed by the two directors of the Applicant, Frank Tearle and Justin Epstein. The EUs arose in connection with an application for an Australian Financial Services Licence and contained in two files attached as Appendix D (Confidential).

The EUs will have no impact on the Applicant's directors day to day management, business or their role as directors of the trustee. The EUs will have no impact on the Project.

### 3.3 Names and addresses of the Officers of Applicant

State the names and addresses of the officers of the applicant. "Officers" of the applicant include the applicant's directors and secretary, and other persons who make or participate in making decisions that affect a substantial part of the business of the applicant.

Full Name: Frank Tearle

Date of Birth: 28 September 1967

Office Held: Executive Director

Address: Level 11, 20 Hunter Street, Sydney

State: NSW

Post Code: 2000

Full Name: Justin Epstein

Date of Birth: 6 June 1980 Office Held: Executive Director

Address: Level 11, 20 Hunter Street, Sydney

State: NSW

Post Code: 2000

(attach additional pages if necessary)

### 3.4 Names and addresses of major shareholders of Applicant

State the full names and addresses of the major shareholders of the applicant

Name: Australia Solar Pte. Ltd

Date of Birth (if applicable): N/A Office Held (if applicable): N/A

Address: 1 George Street #14-04 One George Street Singapore

State: Singapore

Post Code: 049145

### 3.5 Details of the group members

This is information about entities controlled by the applicant, or by the ultimate parent entity of the applicant (if applicable).

Given the structure described above, it is appropriate to consider the entities within Equis and not the Applicant. Section 1.6 outlines the entities which are part of Equis.

### 3.6 Additional information

Please answer the following questions.

- ▶ Is the applicant a resident of, or does it have permanent establishment in, Australia? Where the answer to this question is no, please provide further detail.

Yes

- ▶ Is the applicant under external administration (as defined in the Corporations Act 2001) or under a similar form of administration under any laws applicable to it in any jurisdiction? Where the answer to this question is yes, please provide further detail.

No – The Applicant is not under external administration

- ▶ Is the applicant immune from suit in respect of the obligations under the Electricity Act 1996? Where the answer to this question is yes, please provide further detail.

No – the Applicant is not immune from suit in respect of the obligations under the Electricity Act 1996.

- ▶ Is the applicant capable of being sued in its own name in a court of Australia? Where the answer to this question is no, please provide further detail.

Yes

(attach additional pages if necessary)

### 3.7 Financial resources available to the Applicant

Provide information about the financial resources available to the applicant. If the applicant is a company, please also enclose:

- ▶ copies of all audited profit and loss statements and balance sheets for the last three financial years (including all notes), and

- ▶ director's declaration that the financial statements comply with accounting standards, give a true and fair view, have been made in accordance with the Corporations Act and that there are reasonable grounds to believe the company/entity will be able to pay its debts as and when they fall due; and
- ▶ the director's report and the audit opinion.

If the applicant is a subsidiary company, please also provide:

- ▶ copies of all audited profit and loss statements and balance sheets of the applicant's parent company for up to the last three financial years.

The applicant should also submit copies of:

- ▶ its business plans including at least strategic direction and objectives, identified opportunities in the market place and forecast results; and
- ▶ evidence of capital and liquidity support in place, including any bank or cross guarantees, to support the business and evidence of negotiations with the network service provider concerning credit support arrangements.

The Applicant, One Investment Management Pty Limited is a trustee for the Tailm Bend Solar Operating Trust. The Operator is a wholly owned subsidiary of Equis Energy. Given the structure described above, it is appropriate to provide details and information about the Operator and Equis instead of the Applicant. Equity funding for all Equis projects, including this grid connected solar project, is provided by Equis and its investors. Equis investors are investment grade global financial institutions and pension funds. Equis has raised and managed over US\$2.7 billion of equity since December 2011. This makes Equis the largest independent infrastructure fund manager in Asia and largest Asian renewable energy IPP.

Equis invests only in renewable energy generation Assets. Equis does not invest in equipment suppliers, construction contractors or local developers. The investment strategy of Equis has been to target Assets which provide economic and decision-making control subject to any legal restrictions. Equis seeks to utilise management's local positioning and expertise to originate and develop Assets, thereby avoiding the payment of developer premiums and the risk associated with substandard development work and Asset sale process.

Equis is conservatively levered across the group. Acquisition or term debt is not utilised to lever investments. At the project level, Equis borrows on a non-recourse basis to the Equis funds. The cross collateralisation of projects with respect to project level debt is also avoided.

Financial information is provided as an attachment to the application. Equis' financial information for the last three years is contained in two files attached as Appendix E (Confidential).

FY2014, 2015.pdf

FY2016.pdf

### 3.8 Additional Details of Structure of Applicant

If the applicant is part of a group of related companies, and/or party to a partnership, joint venture or alliance agreement with another company, please provide:

- ▶ contractual arrangements (e.g. alliance contracts, associate contracts, establishment contracts) that define relationships within the group – including shared resources, guarantees, revenue flows, obligations and or responsibilities.

Not applicable

### 3.9 Human resources available to the Applicant

Provide information about the human resources available to the applicant. This includes:

- ▶ the experience and qualifications of those employees outlined in the organisational chart (see point 1.6); and
- ▶ if the applicant will employ contractor/s to assist with the licensed operations, the name of that contractor/s, details about the experience of the contractor/s in such operations and details of the processes in place to ensure the contractor/s complies with the regulatory obligations imposed by the licence.

The Applicant has appointed the Operator to manage and operate the Project on terms set out in an Asset Management Agreement. A copy of the Asset Management Agreement is attached as Appendix F (Confidential).

Given the structure described above, it is appropriate to provide details and information about the Operator and Equis instead of the Applicant. The Operator can draw on a team of experienced professionals with expertise in generation design, construction and operation. The Operator however will still need to draw on contractors for specific aspects of project design, construction and operation.

Equis operates from 15 Asian offices, employing 272 professionals. Management is comprised of:

- 100 high voltage, electrical, civil and mechanical engineers.
- 35 investment and development professionals.
- 137 legal and compliance, accounting and finance, operations and general administration professionals.

Equis employs local land, development, grid assessment, construction management and operations and monitoring experts. In addition, Equis draws upon the knowledge and experience of consultants and contractors.

UGL is the primary contractor for the Engineering, Procurement and Construction (EPC) contract. UGL's capabilities extend across a broad range of services and whole-of-life solutions for diverse industries, utilising world leading, sustainable and innovative technologies. UGL partners with some of the world's largest blue-chip companies and government agencies, private enterprise and public institutions. For more details please refer to <http://www.ugllimited.com/>.

Equis has contracted UGL and a related company to be the O&M managers who will be responsible for directly monitoring and ensuring ongoing compliance with all operational regulations.

### 3.10 Technical resources available to the Applicant

Applicants for a generation licence are asked to provide details about the availability of technical resources to be used in carrying out the operations for which a licence is sought. The information should include details about the technically qualified staff available to the applicant and (if relevant) details of experience gained in similar operations.

Where applicants are relying on a third party to provide staff and resources to meet the technical requirements of the generation licence, please provide:

- ▶ a list of all functions and activities being proposed to outsource;
- ▶ details of any formal agreement/s to provide services, including confirmation that the third party possess relevant technical competencies to conduct the proposed activities;
- ▶ a summary of the third party's technical capacity to meet relevant obligations, including relevant accreditations; and

- a summary of the third party's experience and knowledge in the relevant area.

As per our response to 3.9, Equis operates from 15 Asian offices, employing 272 professionals including 100 engineers and 35 local development professionals. In each country Equis employs local land, development, grid assessment, construction management and operations and monitoring experts. Notwithstanding the appointment of an owners' engineer, Equis typically appoints a full-time project manager with local construction expertise who has worked for EPC contractors. Equis' regional solar specialists provide technical support such as reviewing and optimising designs.

UGL is the primary contractor for the Engineering, Procurement and Construction (EPC) contract. UGL is a leading provider of project delivery with core capabilities in engineering, design, supply, project management, commissioning and O&M. Furthermore, UGL offers vast levels of experience within Renewable and Power Infrastructure, Transmission Systems Utilities, AEMO connection considerations for solar projects utilising inverter generation and recent experience on high performance and capacity battery storage systems. UGL is a leading provider of high value-add life cycle asset management and maintenance services to support critical social and economic infrastructure. UGL provides government agencies and corporations with the technical engineering capability to deliver essential services through the operation, maintenance and renewal of complex assets. UGL provides clients with a whole-of-life approach to asset delivery and management ensuring an asset's performance is optimised and enhanced over its entire life cycle.

Over the past five years UGL has invested over 25,000 man-hours in renewable energy design. UGL has completed construction of solar plant in Darwin, two solar plants in Canberra (fixed and tracking), a hybrid project at Coober Pedy and a Battery Spinning Reserve in the Pilbara. UGL are currently either engaged, preferred EPM/O&M or shortlisted EPC/O&M contractor on:

- Utility scale high capacity battery storage solution
- Large Scale Utility Solar PV Plants (10-100MW)
- Medium Scale Utility Solar PV Plants (>1MW – behind the meter applications)
- Renewable Hybrid Projects

The Operator has outsourced the Owners Engineer (OE) role for construction of the Project to the Adelaide office of the engineering consulting firm Jacobs. Jacobs will deploy 2-3 FTE roles to the project to assist the Operator to monitor and manage the civil, electrical and environmental functions of the Project.

### 3.11 Quality of Electricity Produced/Connection Agreement

The Commission may not issue a generation licence unless it is satisfied that the generating plant (or proposed generating plant) will generate electricity of the appropriate quality for the relevant transmission or distribution network. The Commission will be satisfied that the electricity is of an appropriate quality if the applicant has entered into a connection agreement which meets the Commission's technical requirements with the licensed operator of the relevant transmission or distribution network. Applicants are therefore required to submit a copy of such a connection agreement.

One Investment Management Pty Limited as trustee for the Taillem Bend Solar Operating Trust entered into a Transmission Connection Agreement with ElectraNet on 17 November 2017. A copy of the Transmission Connection Agreement is contained in Appendix G (Confidential). The agreement includes provision that the plant and equipment will meet the licensing requirements.

### 3.12 Risk Management

Provide confirmation and reasonable evidence that the applicant's management has identified the risks associated with electricity operations and has established, utilises and relies upon risk management systems and processes which are adequate, accurate and

current to address those risks. A copy of the applicant's risk management strategy should be submitted.

Equis is led by a Board of Directors, who are responsible for overseeing the implementation of Equis' investment strategy. Equis ensures that there is one Board member permanently located in each country of operation. The Board is responsible for managing risk and ensuring adherence to the investment strategy, with the country's appointed Director responsible for ensuring the Board is kept abreast of developments.

Equis (including the Operator) actively monitors risk as part of the organisational framework, with all staff required to report any actual, potential or likely breach of law or the compliance system. All matters are reported to the Head of Compliance who raises each matter at regular Risk & Compliance Committee meetings.

Equis (including the Operator) incorporates an 8-step risk management approach to protect its business from unacceptable risks. Equis (including the Operator) ensures that all projects developed are managed and completed in compliance with Equis' Environmental Health and Safety Management System and our Safe Work Practices Handbooks. These documents provide a systematic and structurally similar approach to work health and safety issues across the many jurisdictions in which we operate. A copy of Equis' risk management policy is included in Appendix H (Confidential).

Furthermore, for the construction and operation of our projects, Equis relies upon the certified WHS Management system of its principal contractor on site.

### 3.13 Development Act Approval

Please advise if the applicant has or is applying for approval under the Development Act 1993 (SA). If so, provide details, including the date on which approval was or will be granted.

The Operator has received Development Approval for the Project and associated infrastructure. Development Number: 571/V001/17, Dated 3 January 2017.

### 3.14 Registration with AEMO

Please advise if the applicant will apply to register with AEMO. If so, provide details. Applicants for a wind generation licence should note that registration as a semi-scheduled market participant is required for all new generators and all expansions to existing wind generation plant.

The Operator will on behalf of the Applicant be completing registration with AEMO as a market generator (semi-scheduled market participant) in agreeance with the requirements of the National Electricity Rules.

### 3.15 Licences held by the Applicant in other Australian jurisdictions.

If the applicant holds, or has previously held, electricity and/or gas licences in other Australian jurisdictions please provide details. If a licence previously held has been suspended or cancelled, please provide details.

No.

Although not the current licence holder of any assets within Australia, Equis is an electricity licence holder throughout Asia, responsible for the development of 71 assets comprising 6,373 MW. Equis exclusively owns and manages 33 assets comprising 2,549MW.

### 3.16 Previous unsuccessful licence applications in other Australian jurisdictions

Please state whether the applicant has applied for an electricity or gas licence in another Australian jurisdiction and not been issued with a licence, and provide details if relevant.

Not Applicable – No prior applications.

### 3.17 Licences held by Associates of the Applicant

If an associate of the applicant (within the meaning of the Corporations Act) holds an electricity or gas licence in South Australia or in other Australian jurisdictions, please provide details.

Not Applicable – No associates within Australia.

### 3.18 Compliance Plans

Applicants are required to submit a copy of their Compliance Plan which demonstrates how the compliance systems the applicant has (or will have) in place will ensure compliance with all of the applicable regulatory obligations imposed by the relevant licence.

The Operator will prepare a Compliance Plan on behalf of the applicant and will ensure operations of the Project are strictly monitored and comply with all regulatory obligations imposed by the generation licence.

A compliance framework is being established, which will document responsibilities and obligations required to meet all compliance requirements delegated to appropriate personnel. The Operator is working with the O&M managers to ensure all facets of compliance are addressed.

### 3.19 Additional Information

The Commission encourages applicants to provide any additional information they consider would be of assistance in supporting the application. Please provide below.

Headquartered in Singapore, Equis is Asia Pacific's largest independent renewable energy developer and investor. Equis is focused on building, owning and operating renewable energy generation assets and currently owns over 1 GW of operating renewable energy assets with a further 500 MW of assets under construction. Equis has a pipeline of over 3.2 GW of development projects expected to be constructed in the coming years. Equis has a track record of completing 100% of Assets which have commenced construction.

The Operator confirms that it understands and will ensure the Applicant complies with the requirements of the licensing principles which have been released by ESCOSA in August 2017. Further information related to the principles will be assessed as part of all regulatory applications.

## 4 Factors specified in the Essential Services Commission Act 2002

In considering a licence application, the Commission must have as its primary objective protection of the long term interests of consumers with respect to the price, quality and reliability of electricity supply, and must also have regard to the need to:

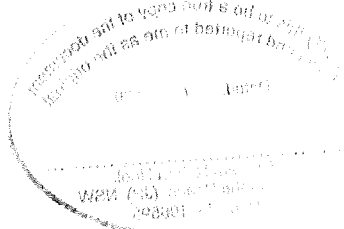
- (a) promote competitive and fair market conduct;
- (b) prevent misuse of monopoly or market power;
- (c) facilitate entry into relevant markets;
- (d) promote economic efficiency;
- (e) ensure consumers benefit from competition and efficiency;
- (f) facilitate maintenance of the financial viability of regulated industries and the incentive for long term investment;
- (g) promote consistency in regulation with other jurisdictions.

If the applicant believes that information about their application would assist the Commission in its consideration of these factors, the applicant should provide such information below.

The Operator understands its responsibility in ensuring fair and competitive market conduct, price, quality and reliability of electricity and will ensure that the Applicant will conduct the Project in the same manner.

## 5 Application fees

Applicants for a licence must pay to the Commission an application fee fixed by the Minister for Energy from time to time. This fee is presently set at \$1,000 per licence. Please enclose this fee with the application. An application cannot be considered until this fee has been received and cannot be refunded.



## 6 Declaration

All information in this application for the issue of a licence to authorise electricity generation operations in the electricity supply industry in South Australia must be verified by a Statutory Declaration of the applicant, in accordance with the provisions of the *Oaths Act 1936* (SA)<sup>4</sup>, stating that the information contained in the application is true and correct to the best of the applicant's knowledge, information and belief.


Where the applicant is a body corporate, evidence of the relevant authority of the declarant to sign on behalf of the body corporate must also be provided to the Commission.<sup>5</sup>

### Statutory Declaration

I Frank Tearle of One Investment Management Pty Limited as trustee for the Taillem Bend Solar Operating Trust do solemnly and sincerely declare that the information contained in this Application for the issue of a licence to authorise electricity generation operations in the electricity supply industry in South Australia is true and correct to the best of my knowledge information and belief.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1936*.

Date 4<sup>th</sup> April 2018

Signature ..... 

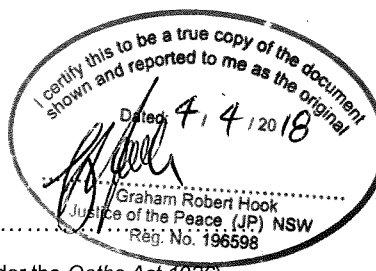
Frank John Tearle  
Executive Director

(Where the applicant is a body corporate, the declaration must be made by a person authorised by body corporate to sign on its behalf)

Declared at: Sydney this 4<sup>th</sup> day of April 2018.

Before me: .....

(Signature of Justice of the Peace or other person authorised under the *Oaths Act 1936*)



<sup>4</sup> or equivalent legislation in other Australian jurisdictions.

<sup>5</sup> The Commission will accept a copy of a Board minute (or circulating resolution) giving approval for the declarant to sign on behalf of the applicant as evidence of the relevant authority.

# Attachment 1

## 2017 model licence conditions for new generators

### Interpretation of this schedule

#### 1. Interpretation

- 1.1. Terms used in this schedule and also in the National Electricity Rules (NER) have the same meaning in this schedule as they have in those rules (unless otherwise specified or unless the context otherwise requires).

- 1.2. For the purposes of this schedule, the term:

**Commission** - means the Essential Services Commission, established under the Essential Services Commission Act 2002.

**continuous uninterrupted operation** means that, for voltage disturbances within the continuous operating range (that is, connection point voltage fluctuating within 90 percent and 110 percent of normal voltage), active power must be maintained (unless there has been a change in the intermittent power source) and reactive power must be managed to meet voltage control requirements.

### Disturbance ride through capability

#### 2. Disturbance ride through capability – general requirements

- 2.1. The non-synchronous generating system must meet the following requirements:
- (a) The low voltage ride-through activation threshold (LVRT), as measured at the low voltage (LV) terminals of the generating units and dynamic reactive support plant (as applicable), must not be less than 85 percent of nominal voltage.
  - (b) The generating system must maintain continuous uninterrupted operation for voltage disturbances as specified in clauses 3, 7 and 8.
  - (c) Where LVRT and high voltage ride-through (HVRT) requirements in the NER are specified in respect of the generating system's connection point, the withstand capability of individual generating units is to be determined at the LV side of the generating unit's transformer. All individual generating units must remain connected for connection point voltages within the LVRT/HVRT withstand requirements, irrespective of the generating system's transformer tap position.

#### 3. Disturbance ride-through (reactive current injection)

- 3.1. The generating system must supply additional capacitive reactive current (reactive current injection) of up to 4 percent of the maximum continuous current of the generating system (in the absence of a disturbance) for each 1 percent reduction of connection point voltage below 90 percent of normal voltage, as shown in Table 1. This requirement applies at the LV terminals of the generating units and dynamic reactive support plant (as applicable) for power system disturbances resulting in a voltage reduction of up to 100 percent of normal voltage at the connection point.
- 3.2. The generating system must supply additional inductive reactive current (reactive current absorption) of up to 6 percent of the maximum continuous current of the generating system (in the absence of a disturbance) for each 1 percent increase in connection point voltage

above 110 percent of the normal voltage, as shown in Table 1. This requirement applies at the LV terminals of the generating units and dynamic reactive support plant (as applicable).

- 3.3. The reactive current injection must be maintained until the connection point voltage returns to within the range of 90 percent to 110 percent of normal voltage.

Table 1: Reactive current injection requirements

Reactive current response	Current injection gain (%)	Current absorption gain (%)	Minimum amount of contribution as percentage of rated current	Speed of contribution	
				Rise time (millisecond)	Settling time (millisecond)
Synchronous	4	6	250	30	N/A
Non-synchronous	4	6	100	30	60

- 3.4. The amount of reactive current injection required may be calculated using phase-to-phase, phase-to-ground, or sequence components of voltage. For the last method, the ratio of negative-sequence to positive-sequence current injection must be X.<sup>6</sup>
- 3.5. The generating system must comply with the following response characteristics for reactive current injection:
- (a) A rise time no greater than 30 milliseconds and a settling time no greater than 60 milliseconds applies to reactive current injection requirements.<sup>7</sup>
  - (b) The reactive current injection requirements described above apply for all pre-disturbance reactive power control modes (voltage control, power factor control and reactive power control).<sup>8</sup>
  - (c) The reactive current response must be adequately damped as defined in the NER.
  - (d) Upon occurrence of a fault, reactive power consumption must not exceed 5 percent of maximum continuous rated current of the generating system and must be limited to the rise time duration set out in Table 1.
  - (e) The post-fault reactive power contribution of the generating system must be sufficient to ensure that the connection point voltage is within the following ranges for continuous uninterrupted operation:
    - (i) voltages over 110 percent for the durations permitted under NER clause S5.1a.4;
    - (ii) 90 percent to 110 percent of normal voltage continuously;
    - (iii) 80 percent to 90 percent of normal voltage for a period of at least 10 seconds; and
    - (iv) 70 percent to 80 percent of normal voltage for a period of at least 2 seconds.

#### 4. Disturbance ride through (active power injection requirements)

<sup>6</sup> The exact ratio of negative-sequence to positive-sequence current injection will be specified by the Commission at the time the licence is issued.

<sup>7</sup> The settling time requirement does not apply to synchronous generators.

<sup>8</sup> This requirement does not apply to synchronous generators.

- 4.1. The generating system must be capable of restoring active power to at least 95 percent of the level existing just prior to a fault within X milliseconds after disconnection of the faulted element.<sup>9</sup>
- 4.2. Upon occurrence of a fault, a generating system's transient active power consumption must not exceed one power frequency cycle and must not exceed 5 percent of the maximum continuous rated current of the generating system.

## 5. Multiple low voltage disturbance ride-through

- 5.1. The generating system, including, but not limited to, each of its generating units and dynamic reactive power support plant, must be capable of withstanding both of the following within a five minute interval:
  - (a) Any combination of voltage disturbances causing the voltage at the respective low voltage (LV) terminals of the equipment to drop below 85 percent of the nominal voltage for a total duration of 1,500 milliseconds regardless of disturbance type, duration, and residual voltage at the generating unit's terminals. The total number of voltage disturbances for which successful ride-through is required is limited to 15. Each fault can be a solid fault resulting in 100 percent voltage drop at the connection point with duration not exceeding the longest time expected to be taken for the breaker fail protection system to clear the fault, as set out in Table S5.1a.2 of the NER.
  - (b) A single worst-case long-duration shallow voltage disturbance, causing the voltage at the connection point to drop to 70- 80 percent of the normal voltage for a total duration of 2,000 milliseconds.
- 5.2. Subject to compliance with the requirements in clause 5.1, the generating system, including, but not limited to, each of its generating units and dynamic reactive power support plant, is not required to withstand any additional voltage variation exceeding  $\pm 10$  percent of nominal voltage experienced at the respective LV terminals within 30 minutes from the commencement of the first variation.<sup>10</sup>

## 6. Disturbance ride-through (high voltage disturbance ride-through)

- 6.1. The generating system must have a level of over-voltage withstand capability consistent with the levels shown in Table 2.<sup>11</sup>
- 6.2. The generating system must maintain continuous uninterrupted operation for temporary over voltage durations as specified in Table 2.

Table 2: Required over voltage withstand capability

Temporary overvoltage (% of normal voltage)	110–115	>115–120	>120–125	>125–130	>130–140
Duration(s)	1,200	20	2	0.2	0.02

## 7. Disturbance ride-through (partial load rejection)

- 7.1. The non-synchronous generating system must be capable of continuous uninterrupted operation during and following a power system load reduction of 30 percent from its

<sup>9</sup> The exact active power recovery time will be specified by the Commission at the time the licence is issued and will be between 100 and 500 milliseconds.

<sup>10</sup> For synchronous generators, consideration will be given to the physical limitations of the plant. This may require a variation to this condition, to be determined by Commission at the time of issuing of the licence.

<sup>11</sup> Unless otherwise specified by the Commission at the time the licence is issued.

pre-disturbance level or equivalent impact from separation of part of the power system in less than 10 seconds, provided that the loading level remains above minimum load.

#### **8. Disturbance ride-through (frequency disturbance ride-through)**

- 8.1. The generating system must be capable of continuous uninterrupted operation for any combination of the following rates of change of frequency:
- (a)  $\pm 4$  Hz/s for 250 milliseconds
  - (b)  $\pm 3$  Hz/s for 1 second, until such time as power system frequency breaches the extreme frequency excursion tolerance limits.<sup>12</sup>

#### **9. Disturbance ride-through (voltage phase angle shift)**

- 9.1. The generating system must not include any vector shift or similar relay/protective function acting upon voltage phase angle which might operate for phase angle changes less than 20 degrees.

### Voltage control capability

#### **10. Voltage control capability**

- 10.1. The generating system must be capable of being controlled by a fast-acting, continuously variable, voltage control system which must be able to receive a local and remote voltage set point.
- 10.2. The generating system must be capable of operating at either a set reactive power level or a set power factor, which must be able to be set locally or remotely at any time.
- 10.3. The voltage, power factor and reactive power control mode of the generating system must be capable of:
- (a) being overridden by the disturbance ride through requirements specified in clauses **Error! Reference source not found.** to 9 (inclusive) during power system voltage disturbances, and
  - (b) automatically reverting to power factor or reactive power mode when the disturbance has ceased.

### System strength

#### **11. System strength**

- 11.1. Individual components of plant within a generating system, which includes but is not limited to generating units and dynamic reactive power plant, must be capable of operating down to the following levels at the high voltage terminals in relation to each component:
- (a) minimum short circuit ratio of 1.5, and
  - (b) minimum positive sequence X/R ratio of 2.

### Active power control capability

#### **12. Active power control capability**

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<sup>12</sup> For synchronous generators, consideration will be given to the physical limitations of the plant. This may require a variation to this condition, to be determined by the Commission at the time of issuing of the licence.

- 12.1. The generating system must be capable of automatically providing a proportional increase or decrease in active power output, in response to falling and rising power system frequency respectively.
- 12.2. To comply with clause 12.1:
- (a) An active power response to changing power system frequency must be provided with no delay, beyond that required for stable operation, or inherent in the plant controls, once frequency leaves the deadband.
  - (b) The steady state droop setting of the active power response must be adjustable in the range 2 percent to 10 percent.
  - (c) The frequency deadband for the active power response must be adjustable in the range from 0 to +/- 1.0 Hz.
- 12.3. The generating system must be capable of sustaining a response to abnormal frequency conditions for at least 10 minutes, subject only to energy resource availability for intermittent generating systems.
- 12.4. The generating system must be capable of applying different deadband and droop settings in response to rising and falling frequency and for different levels of frequency change.

### **13. Active power control capability (AGC capability)**

- 13.1. The generating system must have active power control capabilities that allow it to participate in existing national electricity market arrangements requiring automatic generation control (**AGC**).
- 13.2. At a minimum, the AGC must have the capability to:
- (a) receive and respond to a remotely determined active power control setpoint, updated at a rate of every four seconds, transmitted to the generating system, and
  - (b) provide the following information to AEMO, upon a request from AEMO under NER clauses S5.2.6.1 or 3.8.2:
    - (i) actual active power output;
    - (ii) maximum raise limit;
    - (iii) minimum lower limit;
    - (iv) maximum raise ramp rate; and
    - (v) maximum lower ramp rate.

### **14. Active power control capability (rate of change of active power)**

- 14.1. The generating system must be capable of limiting the rate of change of active power, both upwards and downwards. A generating system is not required to comply with a limit on the rate of reduction of active power where the reduction in active power is caused by energy resource availability for intermittent generating systems.
- 14.2. The generating system must be capable of implementing different active power rate limits for operation in the normal operating frequency band and for contingency events.
- 14.3. The generating system must be capable of setting a ramp rate limit with accuracy of within 10 percent.

### **15. Active power control capability**

- 15.1. The generating system must have the capability to provide real-time information about its active power control settings to AEMO, including mode of operation, deadband and droop parameters and any other active power control setting that may change during real-time operation.

## System restoration

### 16. System restoration

- 16.1. Where sufficient minimum fault level is available from online synchronous machines, the generating system must have the following capability in the event of a black system:
- (a) the generating system must be capable of operation with auxiliary loads only for X minutes<sup>13</sup> while system load is being restored, and
  - (b) the generating system, including, but not limited to, each of its generating units and dynamic reactive power support plant (as applicable) must have the capability to provide steady-state and dynamic reactive power when operating with auxiliary loads only for X minutes while system load is being restored.<sup>14</sup>

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<sup>13</sup> The exact duration will be specified by the Commission at the time the licence is issued.

<sup>14</sup> The exact duration will be specified by the Commission at the time the licence is issued.



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