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
Web: www.escosa.sa.gov.au

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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 under electricity/licensing.

Generation operations which require a licence

Section 15(2)(a) of the *Electricity Act 1996* (**Act**)[1] 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[2]); 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 apply to all new electricity generators seeking to connect to the South Australian power system. Applicants for a generation licence should familiarise themselves with the Commission's Inquiry into the licensing arrangements for generators in South Australia final report, available on the Commissions website.[3]

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[1] Available at https://www.legislation.sa.gov.au/LZ/C/A/ELECTRICITY%20ACT%201996.aspx
[2] To date, the Minister for Energy and Resources has not designated any bodies for the purposes of Regulations 6(1).
[3] 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

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.

How to apply for a generation licence

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.

Use of this form and applicant's responsibilities

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.

Application fees

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

How to lodge an 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

Consultation and Confidentiality

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 encourage 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

All attachments to this application are to be treated as confidential

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.

The applicant is Lake Bonney Wind Power Pty Ltd.

The applicant already holds an electricity generation licence granted under the *Electricity Act 1996* (SA) for the following generation assets:

1. Lake Bonney wind farm Stage 1 - 46 Vestas V66 1.75MW turbines with an aggregate installed nameplate capacity of approximately 80.5 MW.
2. Lake Bonney wind farm Stage 2 - 53 Vestas V90 3.0MW turbines and 1 Windflow 500kW turbine with an aggregate installed nameplate capacity of 159.5MW.
3. Lake Bonney wind farm Stage 3 - 13 Vestas V90 3.0MW turbines with an aggregate installed nameplate capacity of 39MW.

This application seeks a variation to Lake Bonney Wind Power Pty Ltd's existing electricity generation licence to include the following generation asset:

4. Lake Bonney Battery Energy Storage System – 192 Tesla Powerpack 2 and 104 Tesla Powerpack 2.5 batteries with an aggregate installed nameplate capacity of 25MW / 52MWh.

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.

Lake Bonney Wind Power Pty Ltd (ABN 48 104 654 837) is a proprietary company limited by shares. Its jurisdiction of registration is the Northern Territory.

Lake Bonney Wind Power Pty Ltd has its registered office at:

Level 17, 56 Pitt Street
Sydney, NSW 2000
AUSTRALIA

1.3 Address and Contact Details of Applicant

Business Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

Postal Address (if different to Business Address): N/A

Telephone: (02) 8031 9900 Facsimile: N/A

E-mail: company.secretary@infigenenergy.com

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: Julien Tissandier

Title: Senior Engineer

Business Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

Postal Address (if different to Business Address): N/A

Telephone: 0403 298 229 Facsimile: N/A

E-mail: Julien.tissandier@infigenenergy.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: Julien Tissandier

Title: Senior Engineer

Business Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

Postal Address (if different to Business Address): N/A

Telephone: 0403 298 229 Facsimile: N/A

E-mail: Julien.tissandier@infigenenergy.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.

Lake Bonney Wind Power Pty Ltd ("**LBWP**") is part of the Infigen Energy group and an indirect wholly owned subsidiary of Infigen Energy Limited ("**IEL**"). IEL is listed on the Australian Securities Exchange ("**ASX**") as part of a triple-stapled group comprising IEL, Infigen Energy Trust ("**IET**") and Infigen Energy (Bermuda) Limited ("**IEBL**"). The responsible entity of IET is Infigen Energy RE Limited ("**IERL**").

See also the information contained in the following attachments, provided to the Commission in confidence:

- **A1 - LBWP Corporate Structure** – this structure chart is confined to the entities in the LBWP ownership chain (and is therefore a subset of the information contained in attachment A2 below).
- **A2 - Infigen Energy Group Corporate Structure** – this structure chart is for the entire Infigen Energy group, including LBWP and all of its related bodies corporate.
- **A3 - Infigen Energy Organisational Chart** – this organisational chart shows the personnel responsible for the key functions of the Infigen Energy group. These personnel are available to service the needs of IEL, LBWP and all other subsidiary entities within the Infigen Energy group.

- **A4 - Infigen Board – Director Bios** – this document contains information in relation to the prior experience and qualifications of the directors of IEL, the ultimate parent company of LBWP. Information in relation to the directors and secretary of LBWP, as the applicant, is separately provided in attachment **A5 – LBWP Officers and KMP** - see paragraph 3.3 below.

Further information in relation to the Infigen board and the Infigen Energy group's management team is available on the Infigen Energy website at: https://www.infigenenergy.com/about-us/

2 The Licence

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.

LBWP seeks to have its existing electricity generation licence varied as soon as possible and in any event by no later than 15 January 2019 in order to be able to finalise the registration process and be ready to energise by 10 February 2019

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.

This application is in relation to a battery energy storage system ("**BESS**") under construction at LBWP's existing Lake Bonney Wind Farm located on the Woakwine Range, about 2 km from the eastern shore of Lake Bonney, near Millicent in South Australia.

The BESS will be located in the vicinity of the Lake Bonney Wind Farm site office, ancillary service buildings and ElectraNet's Mayurra substation. Please refer to **Annexure 1** for further details.

The BESS will have an installed nameplate capacity of 25MW with a storage capability of 52MWh. Lithium-ion batteries will be used to store electricity to be discharged back into the grid.

The BESS will be connected via the Mayurra substation to the 132kV Mayurra-Snuggery transmission line. The BESS' connection point will be on the load side of Electranet's 33kV load disconnector at the Mayurra substation BESS exit.

LBWP is requesting that the generation licence conditions for the constructed BESS be included in LBWP's existing electricity generation licence via a variation of the current terms of that licence.

3 Suitability of applicant to hold a licence

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 of 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.

The applicant advises that:

- LBWP has not been found guilty of any criminal offence;
- LBWP has not 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);
- LBWP has not been the subject of disciplinary action;
- LBWP has not been the subject of any past or present administrative or legal actions in relation to an authorisation, authority, or licence in any industry; and
- LBWP has held an electricity generation licence since 22 July 2002 which was last varied by ESCOSA on 23 December 2009 to include the 39MW Lake Bonney wind farm Stage 3.

As a member of the Infigen Energy group, LBWP must abide by the standards of corporate and individual behaviour that have been endorsed by the Infigen Boards. A full list of the Infigen Energy group's corporate governance policies can be found at: https://www.infigenenergy.com/about-us/corporate-governance/

These governance policies include a Code of Conduct (the "**Code**"), a copy of which is provided to the Commission in confidence and attached as **A10 Code of Conduct**. As noted in the Code, Infigen is committed to being a good corporate citizen that models high standards of corporate and individual behaviour. The Code aims to help achieve that goal by guiding LBWP's actions to align with Infigen's stated values in the delivery of LBWP's stakeholder commitments.

All directors, officers, employees, contractors and consultants of LBWP are required to comply fully with both the spirit and letter of the Code, as well as all applicable laws, obligations and policies.

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.

Major Shareholders of the Applicant

As disclosed in the materials provided at paragraph 1.6 above, LBWP is an indirect wholly owned subsidiary of IEL. The direct shareholders in LBWP are Lake Bonney Holdings Pty Limited (75%) and NPP Projects I, LLC (25%). All of these entities are part of the Infigen Energy corporate group and, as such, the corporate governance policies located at: https://www.infigenenergy.com/about-us/corporate-governance/ apply to each of these entities.

This means, amongst other things, that the Code of Conduct which forms part of the Infigen Energy group's corporate governance framework applies to each of IEL, Lake Bonney Holdings Pty Limited and NPP Projects I, LLC. Accordingly, all directors, employees, contractors and consultants of these entities are required to comply fully with both the spirit and the letter of that Code, as well as all applicable laws, obligations and policies.

In addition, so far as the applicant is aware, none of IEL, Lake Bonney Holdings Pty Limited nor NPP Projects I, LLC have:

- been found guilty of any criminal offence;
- 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);
- have been the subject of disciplinary action; or
- been the subject of any past or present administrative or legal actions in relation to an authorisation, authority, or licence in any industry.

Officers and other Key Management Staff of the Applicant

None of the persons listed in paragraph 3.3 below have displayed any prior misconduct, experienced refusal or suspension from licensing or professional membership, been disqualified from managing a corporation under the *Corporations Act 2001* (Cth), or have an actual or potential conflict of interest likely to affect their ability to carry out their role or the key functions of LBWP.

For information in relation to the competence of officers and other key management staff of the Applicant, please refer to attachment **A5 - LBWP Officers and KMP** provided to the Commission in confidence**.**

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.

This information is provided in attachment **A6. Lake Bonney Wind Power Officers' Details**, provided to the Commission in confidence.

3.4 Names and addresses of major shareholders of Applicant

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

Name:

Infigen Energy Limited, the ultimate parent company.

Lake Bonney Holdings Pty Limited

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

Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

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).

Please refer to the following attachments, provided to the Commission in confidence, which are also referred to at paragraph 1.6 above:

- **A1 - LBWP Corporate Structure** – this structure chart is confined to the entities in the LBWP ownership chain.
- **A2 - Infigen Energy Group Corporate Structure** – this structure chart is for the entire Infigen Energy group, and hence includes IEL as the ultimate parent company of LBWP and all entities controlled by IEL (other than dormant legacy entities owned by IEL that conduct no business or operations).

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.

- 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.

- 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.

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.

The audited financial statements of LBWP for the last three financial years are attached in the following attachments provided to the Commission in confidence:

- **A7-1 - LBWP FY18 Financial Report**
- **A7-2 - LBWP FY17 Financial Report**
- **A7-3 - LBWP FY16 Financial Report**

Each of these reports include a director's declaration, the director's report and the audit opinion referred to above.

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 audited financial statements for the last three financial years for the Infigen Energy group, of which IEL is determined to be the parent under applicable accounting standards, are attached in the following attachments:

- **A8-1 - FY18 Annual Report**
- **A8-2 - FY17 Financial Report**
- **A8-3 - FY16 Financial Report**

Each of these reports include a director's declaration, the director's report and the audit opinion.

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.

Strategic Direction and Objectives

As noted above, LBWP is an indirect wholly owned subsidiary of IEL and IEL is listed on the Australian Securities Exchange (ASX). Recent commentary on the strategic direction and objectives of the Infigen Energy group is contained in Section 1 of the Operating and Financial Review contained within the Directors' Report on pages 11 and 12 of the Infigen Energy 2018 Annual Report attached as attachment **A8-1 - FY18 Annual Report** under the heading "Strategy and Growth".

As a wholly owned subsidiary of an ASX listed company, LBWP does not produce a LBWP specific business plan containing content confined to LBWP's own strategic direction and objectives, independent from the rest of the Infigen Energy group. That said:

- as the owner of 278.5MW of installed wind energy generation capacity at Lake Bonney 1, 2 and 3 wind farms, LBWP's primary corporate objective is to operate that plant safely, efficiently and cost effectively; and

- the market, commercial and strategic drivers behind LBWP's current application in relation to the battery energy storage system (BESS) are summarised in the response provided at paragraph 4 below.

Capital and Liquidity

Attachment **A7-1 - LBWP FY18 Financial Report** contains information in relation to LBWP's financial position, including a statement of financial position (i.e., balance sheet). The Applicant provides the following information and analysis in relation to its capital and liquidity position:

- during the financial year ended 30 June 2018, LBWP had revenue and other income of $104,356,808 and made a net profit of $42,074,249 (2017: $95,416,268 and $14,859,066 respectively);
- as disclosed in the balance sheet, of LBWP's $387,378,878 in total liabilities, $345,036,170 (or approximately 89% of those liabilities) is a loan from a related party (in the Infigen Energy group);
- as disclosed in Note 9 to the LBWP FY18 Financial Report, this related party loan has a term of 10 years and is non-interest bearing;
- LBWP has no 'external' debt – i.e., it has not borrowed any money from banks, financial institutions or other non-related party lenders;
- although LBWP currently has negative net equity of $47,131,060, LBWP's liquidity position is strong as it is both profitable and generates strong cashflows from operations;
- due to these strong operating results, LBWP's negative net equity position is expected to unwind and become positive in the short term.

The Applicant also notes that LBWP is not a party to, and hence has no exposure under, any deed of cross guarantee with other members of the Infigen Energy group.

Network Service Provider - Credit Support Arrangements

LBWP is in the process of negotiating a Transmission Connection Agreement ("**TCA**") with ElectraNet Pty Limited ("**ElectraNet**") in relation to the BESS. A current draft of that TCA is provided to the Commission in confidence and attached as attachment **A11 - Draft TCA**. Whilst ElectraNet has yet to provide LBWP with details of the quantum of the credit support undertaking (i.e., bank guarantee) that LBWP will be required to provide to ElectraNet, the Applicant notes that:

- based on prior experience, LBWP will be providing a bank guarantee for security under the Transmission Connection Agreement;
- LBWP has access to available lines of credit under the Infigen Energy group's corporate facility;
- as disclosed in Note D3 to the Infigen Energy 2018 Annual Report attached as attachment **A8-1 - FY18 Annual Report**, that corporate facility includes a $60,000,000 bank guarantee/letter of credit facility; and
- as at 30 June 2018, of that $60,000,000 bank guarantee/letter of credit facility, only $4,536,000 of bank guarantees and letters of credit had been issued, leaving ample capacity under that facility to meet any ElectraNet bank guarantee requirements in connection with the Transmission Connection Agreement for the BESS.

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.

From a contractual arrangements perspective, the only material contractual arrangements between LBWP and other members of the Infigen Energy group are:

- those disclosed in Note 9 to the LBWP FY18 Financial Report (see attachment A7-1);
- the sale by LBWP from time to time of large-scale generation certificates (LGCs), which are created as a result of the operations of the Lake Bonney 1, 2 and 3 wind farms, to certain other Infigen Energy group members who then on-sell them to third party customers.

Importantly, LBWP is not a party to any deed of cross guarantee with other members of the Infigen Energy group nor has it provided any guarantee in respect of the borrowings of other Infigen Energy group members. From a revenue flow perspective, LBWP generates cashflows from operations and uses those cashflows to repay its related party loan (being the related party funding that LBWP received to fund construction of its Lake Bonney 1, 2 and 3 wind farms).

In addition, since 30 June 2018 a further loan of approximately $28,000,000 will be made available to LBWP from a related party to assist fund the construction of the BESS. Once the BESS is built and operational, the cashflows from the BESS will be available to service and reduce this loan over time.

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 organisational chart, provided to the Commission in confidence, which is attached as attachment **A3 - Infigen Energy Organisational Chart** covers group wide human resources. The Applicant does not propose to provide the experience and qualifications of each and every employee and does not believe that this is intended. For information in relation to the prior experience and qualifications of directors, officers and other key management personnel of the Applicant, please refer to attachment **A5 - LBWP Officers and KMP.**

Infigen Energy is a consolidated business that owns and operates multiple energy generation assets. The Applicant notes that the individuals referred to in attachment **A3** are a shared resource across LBWP and other Infigen Energy group entities. Part of the corporate and overhead costs associated with employing these personnel are recharged to LBWP and form part of LBWP's annual operating expenses.

These shared human resources provide all required day-to-day services. In relation to the BESS, these shared human resources will provide management oversight of the operation and maintenance of the BESS, with the personnel that work in Infigen Energy's operational control centre (**OCC**) providing operational support for the interactions of the BESS with the National Energy Market (NEM).

Upon completion of construction and installation of the BESS, day-to-day oversight of the physical condition of the BESS will primarily be the responsibility of Infigen's Lake Bonney wind farm site manager. In addition, support services for the BESS will be provided by the contractor referred to in attachment **A9-2 – Contracted Support Services**, provided to the Commission in confidence.

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.

Please refer to attachment **A9-1- Technical Resources**, provided to the Commission in confidence.

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.

LBWP is in the process of negotiating a Transmission Connection Agreement with ElectraNet, as well as the Generator Performance Standards (**GPS**). Infigen currently has a Master Preliminary Works Agreement in place with Electranet to ensure progress.

Infigen has carried out all necessary modelling and studies to confirm that the BESS facility will comply with the Generator Performance Standards as well as the ESCOSA technical guidelines.

A copy of the draft Transmission Connection Agreement is provided to the Commission in confidence and attached as **A11. Draft TCA**. The final Transmission Connection Agreement will be provided when available.

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.

As part of the Infigen Energy group, LBWP has a Risk Management Policy, consistent with leading risk management standards including International Standard ISO 31000 (based on AS/NZS 4360:2004), which clearly define responsibilities for managing risk under Infigen's Enterprise Risk Management (ERM) framework. The ERM framework aims to facilitate the achievement of business objectives by ensuring appropriate responses to all potential risks.

Please refer to attachment **A12 - Risk Management Policy** for the risk management policy of the Infigen Energy group, provided to the Commission in confidence.

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.

Please refer to attachment **A13 - Development Approval**, provided to the Commission in confidence. In summary, Development Approval for the BESS was obtained on 29/30 August 2018, subject to conditional Building Rules Consent.

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.

LBWP will be applying for registration with AEMO as a scheduled market generator and a scheduled market customer in respect of the BESS facility.

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.

LBWP has never held an electricity or gas licence in another Australian jurisdiction.

There are no licences previously held by LBWP that have been suspended or cancelled.

As noted in paragraph 1.1 above, LBWP currently holds an electricity generation licence granted under the *Electricity Act 1996* (SA) for Lake Bonney wind farm Stage 1, Stage 2 and Stage 3.

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.

LBWP has not applied for an electricity or gas licence in another Australian jurisdiction.

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.

Walkaway Wind Power Pty Ltd (ABN 43 110 397 709), a subsidiary of LBWP's ultimate parent company IEL, holds an electricity generation licence issued by the Economic Regulation Authority of Western Australia (Licence number EGL2).

Infigen Energy Holdings Pty Ltd (ABN 86 111 909 794), a subsidiary of LBWP's ultimate parent company IEL, holds an electricity retailer authorisation issued by the Australian Energy Regulator (identification number E13049).

Infigen Energy Holdings Pty Ltd (ABN 86 111 909 794), a subsidiary of LBWP's ultimate parent company IEL, holds an electricity retail licence issued by the Essential Services Commission of Victoria.

Infigen Energy Markets Pty Limited (ABN 47 128 696 097), a subsidiary of LBWP's ultimate parent company IEL, holds an electricity retailer authorisation issued by the Australian Energy Regulator (identification number TE12019).

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 applicable regulatory obligations imposed by the relevant licence.

LBWP currently holds an electricity generation licence granted under the *Electricity Act 1996* (SA), and complies with all applicable regulatory obligations imposed by the licence. This includes the submission of Annual Compliance Reports as part of the licence conditions.

The same responsibilities and methodologies for compliance monitoring by LBWP will be expanded to include the BESS and audits will be undertaken to ensure the compliance obligations are continuously met.

A copy of the latest Compliance Report submitted by LBWP is provided to the Commission in confidence and attached as **A14. LBWP 2017-2018 Annual Compliance Report**.

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.

$10,000,000 in Commonwealth and State grant funding has been made available to support construction of the BESS. More specifically:

- $5,000,000 of funding has been made available under a grant deed with the South Australian Renewable Technology Fund; and
- $5,000,000 of funding has been made available under a funding agreement with the Australian Renewable Energy Agency (ARENA).

Further details of ARENA's support can be found on the ARENA website at: https://arena.gov.au/projects/lake-bonney-battery-energy-storage-system/

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 variation of LBWP's existing licence to include the operation of the BESS will serve the long-term interests of consumers with respect to the price, quality and reliability of electricity supply by:

- providing further competition in both the generation and ancillary services markets;
- providing readily available energy that can be dispatched faster and more accurately than traditional electricity generators; and
- offering new grid stabilising services, such as fast frequency response.

The operation of the BESS will also allow for, but is not limited to:

- introduction of a new provider of frequency control ancillary services (FCAS) in a market previously dominated by traditional thermal generators, increasing competition and reducing prices;
- increased capacity of dispatchable energy, to increase reliability during periods of high demand and lower costs to consumers through additional supply;
- a further proof of concept into the use of battery systems in a utility-scale network; and
- the ability of the Infigen Energy group to pursue further commercial and industrial (C&I) customer electricity supply contracts with a lowered supply risk and therefore a lower cost due to a firmer availability of supply from the battery system.

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)[4], 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.[5]

Statutory Declaration

I ....DAVID RICHARDSON....

of....13 LINCOLN CRESCENT, BONNET BAY NSW 2226....

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 ....26 OCTOBER 2018....

Signature ....

(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 26TH day of OCTOBER 2018

Before me:.... SOLICITOR (NSW)

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

[4] or equivalent legislation in other Australian jurisdictions.

[5] 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. [6]

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.[7]

(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).[8]

(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)

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

[7] The settling time requirement does not apply to synchronous generators.

[8] 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.[9]

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 ±10 percent of nominal voltage experienced at the respective LV terminals within 30 minutes from the commencement of the first variation.[10]

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.[11]

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 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)

[9] 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.

[10] 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.

[11] Unless otherwise specified by the Commission at the time the licence is issued.

8.1. The generating system must be capable of continuous uninterrupted operation for any combination of the following rates of change of frequency:

(a) ±4 Hz/s for 250 milliseconds

(b) ±3 Hz/s for 1 second, until such time as power system frequency breaches the extreme frequency excursion tolerance limits. [12]

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

[12] 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[13] 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.[14]

[13] The exact duration will be specified by the Commission at the time the licence is issued.
[14] The exact duration will be specified by the Commission at the time the licence is issued.

Annexure 1

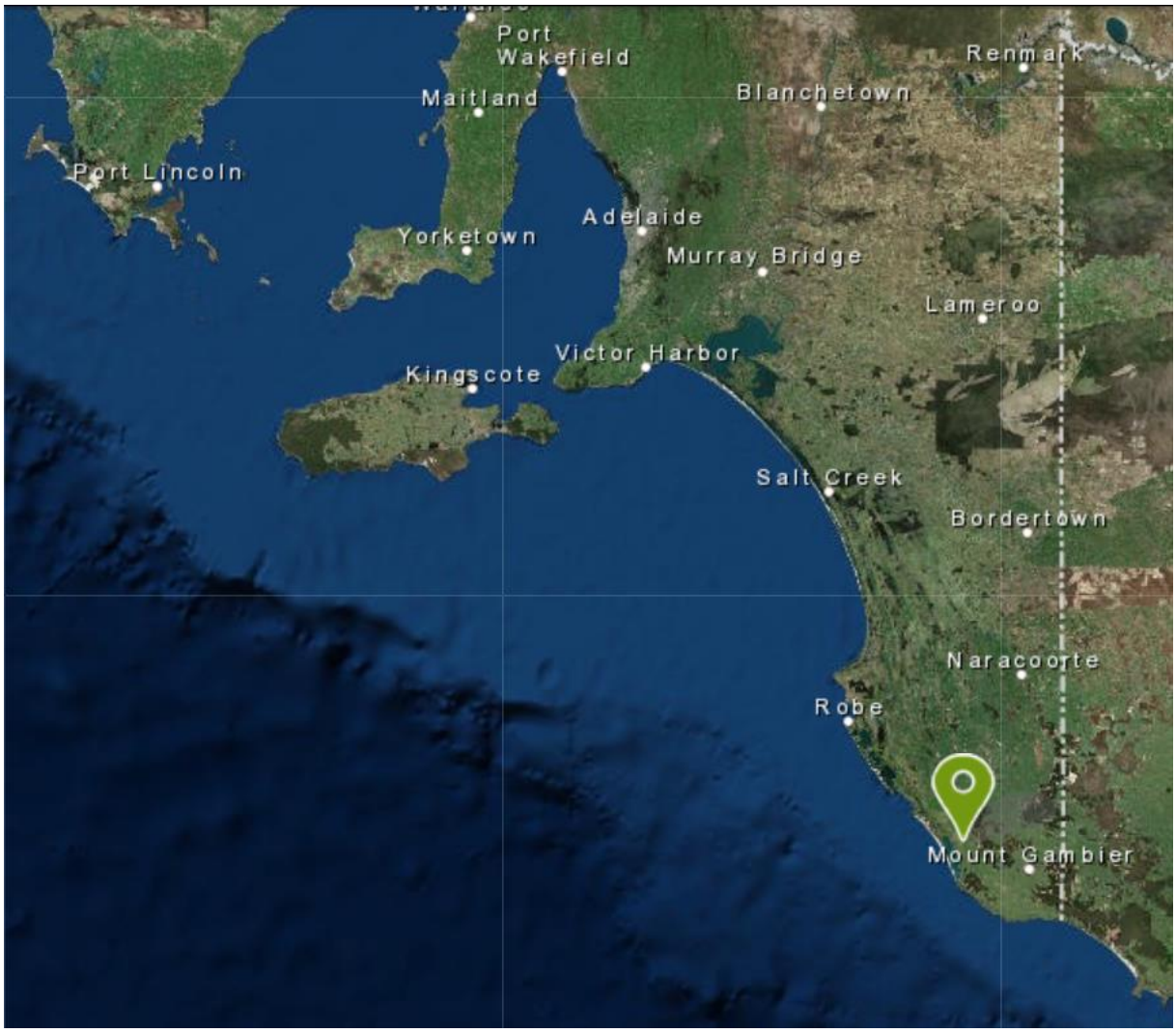

Figure 1 - Lake Bonney Wind Farm Location (Source: Location SA Map Viewer)

Figure 2 - Lake Bonney BESS Location

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