

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:

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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 Minister²); 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

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

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 Infigen Energy SAGT Pty Limited (ABN 77 635 710 360 / ACN 635 710 360) (the "Applicant").

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.

Infigen Energy SAGT Pty Limited (ABN 77 635 710 360 / ACN 635 710 360) is a proprietary company limited by shares and was incorporated on 22 August 2019. Its jurisdiction of registration is New South Wales.

Infigen Energy SAGT Pty Limited 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):

Telephone: (02) 8031 9900 Facsimile: (02) 9247 6086

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: Soruby Bharathy

Title: Connections Manager

Business Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

Postal Address (if different to Business Address): Same as Business Address.

Telephone: 0410 862 173 Facsimile: N/A.

E-mail: Soruby.bharathy@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: Soruby Bharathy

Title: Connections Manager

Business Address: Level 17, 56 Pitt Street, Sydney

State: NSW Post Code: 2000

Postal Address (if different to Business Address):

Telephone: 0410 862 173 Facsimile: N/A.

E-mail: Soruby.bharathy@infigenenergy.com

Email (cc): accounts_payable@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.

The Applicant is part of a group of companies that are ultimately wholly owned by Infigen Energy Limited ("IEL"). IEL is listed on the Australian Securities Exchange ("ASX") as part of a stapled group comprising IEL and Infigen Energy Trust ("IET"). The responsible entity of IET is Infigen Energy RE Limited ("IERL").

More specifically, the Applicant is a wholly owned subsidiary of Infigen Energy (SA) Power Holdings Pty Limited, which in turn is a wholly owned subsidiary of the ultimate parent company, Infigen Energy Limited ("**IEL**") (ABN 39 105 051 616).

The following attachments pertaining to the corporate structure and organisational structure of the Infigen Energy group are provided to the Commission in confidence:

- A1 Infigen Energy Group Corporate Structure this structure chart is for the entire Infigen Energy group, including the Applicant and its related bodies corporate. (CONFIDENTIAL)
- **A2 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, the Applicant and all other subsidiary entities within the Infigen Energy group. (CONFIDENTIAL)
- A4 Officers and Key Personnel of Applicant this document contains information in relation to the prior experience and qualifications of the directors and company secretary of the Applicant, together with details of the prior experience and qualifications of other key personnel who will be responsible for the key functions of the Applicant's business (CONFIDENTIAL)

Further information in relation to the directors of Infigen Energy Limited, as the ultimate parent company, and the Infigen Energy group's executive management team is available on the Infigen Energy website at: https://www.infigenenergy.com/about-us/ and on pages 36 to 39 of the FY19 Annual Report.

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.

The Applicant requests that its electricity generation licence application be considered as soon as possible and is seeking to have the licence issued by no later than 1 May 2020. The reasons for this are as follows:

- the Applicant has secured the right to enter into a long term (25 year) lease with the South Australian Government for four TM2500 GE gas turbines (the "Gas Turbines"), which are currently connected to the grid by SA Power Networks and registered as non-scheduled generators in the National Electricity Market ("NEM");
- these generators are currently operational, located at Lonsdale, South Australia and are part of the Emergency Power Stations for South Australia;
- the Applicant wishes to enter into the lease and to assume operational responsibility for these generators with effect from 1 May 2020; and
- the Applicant intends to register these generators as scheduled market generators in the NEM and to initially operate them at their existing location at Lonsdale.

The Applicant ultimately intends to relocate these generators to a permanent location at Bolivar, South Australia.

The Applicant would appreciate the Commission's assistance in this matter.

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.

As noted in Section 2.1 above, the Applicant has secured the right to enter into a long term (25 year) lease with the South Australian Government for the Gas Turbines. The Gas Turbines are:

- currently connected to the grid by SA Power Networks ("SAPN");
- registered as non-scheduled generators in the NEM; and
- currently operational, located at Lonsdale, South Australia and are part of the Emergency Power Stations (or Temporary Generator South) for South Australia.

The Gas Turbines have an installed nameplate capacity of 123.2MW (at 15 °C, the units are de-rated at higher temperatures) consisting of four identical gas turbine generating units, each rated at 30.8 MW. The Gas Turbines are rotating synchronous machines. The Gas Turbines are connected to the SAPN 66kV high voltage network at Lonsdale Zone Substation via a single feeder.

The site layout is provided as attachment **A5 Site Layout (CONFIDENTIAL)** and a single line diagram is provided as attachment **A6 Single Line Diagram**. (CONFIDENTIAL)

Each of the four generating units, including their control systems, are identical.

Each unit comprises of:

• Brush round rotor synchronous machine with a brushless rotating exciter;

- GE EX2100e single channel automatic voltage regulator (AVR) including Power System Stabiliser (PSS which is disabled), under and over excitation limiters and V/Hz limiter; and
- Aeroderivative GE gas turbine fitted with GE gas turbine controller.

At their current location on South Australian Water Corporation owned land at the end of the unnamed road that runs west from the corner of Chrysler Road and Christie Road, Lonsdale, South Australia, the Gas Turbines are currently supplied by diesel (gas supply is not available at this location).

As noted in Section 2.1 above, the Applicant ultimately intends to relocate the Gas Turbines to a permanent location at Bolivar, South Australia, where long term gas supply will be available.

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:

- the Applicant has not been found guilty of any criminal offence;
- the Applicant 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);
- the Applicant has not been the subject of disciplinary action; and
- the Applicant 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.

In addition, the Applicant notes that two related companies of the Applicant, namely, Lake Bonney Wind Power Pty Ltd and Walkaway Wind Power Pty Ltd hold electricity generation licences in South Australia and Western Australia respectively (see Section 3.17 below).

As a member of the Infigen Energy group, the Applicant must abide by the standards of corporate and individual behaviour that have been endorsed by the IEL Board. 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 attached as attachment A7 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.

All directors, officers, employees, contractors and consultants of the Applicant 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 and Officers of the Applicant

As noted in Section 1.6 above, the Applicant is a wholly owned subsidiary of Infigen Energy (SA) Power Holdings Pty Limited, which in turn is a wholly owned subsidiary of IEL as the ultimate parent company.

The Applicant is therefore part of the Infigen Energy group and, as such, the corporate governance policies (which can be found at: https://www.infigenenergy.com/about-us/corporate-governance/) apply to the Applicant.

Accordingly, all directors, employees, contractors and consultants of the entities in the Infigen Energy group (including the Applicant, Infigen Energy (SA) Power Holdings Pty Limited and IEL) are required to comply fully with both the spirit and letter the Code, as well as all applicable laws, obligations and policies.

In addition, so far as the Applicant is aware:

- no current director or officer of IEL, Infigen Energy (SA) Power Holdings Pty Limited or the Applicant or any person with significant managerial responsibility or influence on the Applicant has been charged with fraud, theft or any other criminal offence;
- none of IEL, Infigen Energy (SA) Power Holdings Pty Limited or the Applicant have 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);
- none of IEL, Infigen Energy (SA) Power Holdings Pty Limited or the Applicant have been the subject of disciplinary action;
- none of IEL, Infigen Energy (SA) Power Holdings Pty Limited or the Applicant have been the subject of any past or present administrative or legal actions in relation to an authorisation, authority, or licence in any industry.

None of the persons listed in Section 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 the Applicant.

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.

Officers and other Key Personnel of the Applicant

The directors of the Applicant are:

- 1. Ross Kenneth Rolfe
- 2. Sylvia Ann Wiggins
- 3. David Anthony Clark

The company secretary of the Applicant is David Elwyn Richardson.

For further details in relation to the directors and company secretary of the Applicant, see attachment A3 Officers of the Applicant Details. (CONFIDENTIAL)

For information in relation to the competence of officers and other key management staff of the Applicant, see attachment A4 Officers and Key Personnel of Applicant. (CONFIDENTIAL)

3.4 Names and addresses of major shareholders of Applicant

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

Infigen Energy Limited, the ultimate parent company

Infigen Energy (SA) Power Holdings Pty Limited

Address: Level 17, 56 Pitt Street, Sydney NSW 2000

As noted in Section 1.6 above, Infigen Energy Limited is listed on the Australian Securities Exchange as part of a stapled group comprising Infigen Energy Limited and Infigen Energy Trust.

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 attachment A1 Infigen Energy Group Corporate Structure. (CONFIDENTIAL)

This structure chart is for the entire Infigen Energy group, and hence includes IEL as the ultimate parent company of the Applicant and all entities controlled by IEL (other than dormant legacy entities owned by IEL that conduct no business or operations). As can be seen from this structure chart, there are no entities controlled by the Applicant.

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 Applicant was incorporated on 22 August 2019. As the first financial year of the Applicant ends on 30 June 2020, no audited profit and loss statements and balance sheets of the Applicant are currently available.

The Applicant has received and will receive related party funding from other members of the Infigen Energy group. This funding may take the form of capital contributions or intercompany loans.

The audited financial statements for the last three financial years for the Infigen Energy consolidated group are attached in the following attachments:

- A8-1 FY19 Annual Report
- A8-2 FY18 Annual Report
- A8-3 FY17 Annual Financial Report

Each of these reports include a director's declaration, 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.

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

- A8-1 FY19 Annual Report
- A8-2 FY18 Annual Report
- A8-3 FY17 Annual 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, the Applicant 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 16 and 17 of the Infigen Energy 2019 Annual Report attached as attachment **A8-1 FY19 Annual Report** under the heading "Strategy and Growth".

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

- the primary corporate objective of all companies within the Infigen Energy group is to operate their plant safely, efficiently and cost effectively;
- after initially operating the Gas Turbines at their existing site at Lonsdale, South Australia, the Applicant intends to relocate the Gas Turbines to a new site at Bolivar, South Australia and operate the plant more flexibly (using gas fuel) in a manner that would complement and support the Infigen Energy group's semi scheduled renewable energy portfolio in South Australia (currently comprised of the three Lake Bonney wind farms with a total installed nameplate capacity of 278 MW) and provide increased utilisation of the Gas Turbines; and
- the Gas Turbines will add physical firming capacity to the Infigen Energy group's portfolio such that, when taken together with the group's Lake Bonney wind farms and the group's 25MW/52MWh battery energy storage system (also at Lake Bonney), the Gas Turbines will enable the Infigen Energy group to enter into further firm electricity supply contracts with commercial and industrial (C&I) customers and other customers in South Australia, thereby improving competition in the South Australian market.

Capital and Liquidity

As a wholly owned subsidiary of IEL, the Applicant will receive related party funding from other members of the Infigen Energy group. This funding may take the form of capital contributions or intercompany loans.

Information in relation to the financial position of the Infigen Energy group is contained within the Financial Report in the FY19 Annual Report provided as attachment **A8-1 FY19 Annual Report**. In particular:

- as disclosed in Note D2 to the financial statements, as at 30 June 2019 the Infigen Energy consolidated group had unrestricted cash and cash equivalents of ~\$95.6 million on the balance sheet;
- as disclosed in Note D3 to the financial statements, the Infigen Energy group has a corporate facility which contains the following lines of credit to support the group's liquidity needs:
 - o a \$20 million working capital facility which was undrawn as at 30 June 2019; and
 - a \$60 million facility available for providing bank guarantees and letters of credit, and/or to fund cash collateral posting requirements of up to \$20 million as at 30 June 2019,
 \$26.7m of bank guarantees and letters of credit had been issued under that facility; and
- as disclosed in Note G3 to the financial statements, the Infigen Energy group generated ~\$144.3 million of cash flow from operating activities in financial year ending 30 June 2019.

The group is well funded for the size of business it operates.

The Applicant also notes that:

- it is not a party to, and hence has no exposure under, any deed of cross guarantee with other members of the Infigen Energy group; and
- the Applicant has not provided any guarantee in respect of the borrowings of other Infigen Energy group members.

Network Service Provider - Credit Support Arrangements

As noted in Section 3.11 below, the Applicant is currently in the process of negotiating an Ongoing Connection & Supply Contract with SA Power Networks (ABN 13 332 330 749) ("SAPN") for

connection of the Gas Turbines at their current location at Lonsdale, South Australia. Whilst SAPN has provided a pro-forma agreement which is currently under negotiation, the draft provided by SAPN does not yet contain details of the amount of the credit support (which may be a bank guarantee or a cash deposit) that will need to be provided to SAPN by the Applicant.

That said, given the head room available under the \$60 million facility mentioned above and the unrestricted cash on the Infigen Energy group's balance sheet, the Applicant is very well placed to satisfy any customary credit support requirements that SAPN may require under the Ongoing Connection & Supply Contract.

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.

At present, there are no contractual arrangements between the Applicant and any other member of the Infigen Energy group. As at the date of this application:

- the Applicant has received intercompany loan funding of ~\$1.03 million to fund its activities;
- IEL, as the ultimate parent company of the Applicant, has approved a capital expenditure budget of \$55 million for the Applicant to cover the costs associated with taking over responsibility for operating the Gas Turbines at their existing location at Lonsdale and the future relocation of the Gas Turbines to their proposed location at Bolivar in due course.

Details in relation to the human resources made available to the Applicant by the Infigen Energy group are set out in Section 3.9 below.

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, which is attached as attachment **A2 Infigen Energy Organisational Chart** covers group wide human resources. (CONFIDENTIAL)

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 officers and other key management personnel of the Applicant, please refer to attachment A4 Officers and Key Personnel of Applicant. (CONFIDENTIAL)

The Applicant is happy to provide further information on request from the Commission.

Infigen Energy is a consolidated business that owns and operates multiple energy generation assets. The Applicant notes that the individuals referred to in attachment **A4**, and most of the individuals referred to in attachment **A2**, are a shared resource across the Applicant and other Infigen Energy group entities.

These shared human resources provide all required day-to-day services for the Applicant (other than Gas Turbine and balance of plant maintenance activities). These shared human resources will provide management oversight of the operation and maintenance activities of the Applicant, with the

personnel that work in Infigen Energy's operational control centre providing operational support for the interactions of the Applicant with the National Electricity Market (NEM).

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 **A4 Officers and Key Personnel of Applicant**, for details of the prior experience and qualifications of officers and other key management personnel of the Applicant. **(CONFIDENTIAL)**

In addition, the Applicant intends to procure operation and maintenance (O&M) services for the Gas Turbines from a suitably qualified third party services provider. For details of the Applicant's plans in relation to outsourcing certain O&M services to a third party service provider in connection with the operation of the Gas Turbines at their existing location at Lonsdale, South Australia, please refer to attachment **A9 Gas Turbine Maintenance Initiatives**. (CONFIDENTIAL)

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.

In December 2019, the Applicant submitted a connection application to SAPN in relation to the Gas Turbines at Lonsdale and paid the relevant fees in relation to that application. The connection application (including the models) are currently under review by SAPN, ElectraNet and AEMO.

The Applicant is in the process of negotiating an Ongoing Connection & Supply Contract with SAPN including the Generator Performance Standards (**GPS**) for the Gas Turbines. Review of the models and assessment of the GPS by SAPN, ElectraNet and AEMO together with compliance by the Applicant with the final accepted GPS (which will be embodied in the Ongoing Connection & Supply Contract) ensures that the electricity generated by the Gas Turbines is of appropriate quality. The engineering studies undertaken by the network service providers (SAPN and ElectraNet) will be provided to the Commission along with the proposed Ongoing Connection & Supply Contract in the form of an Engineering Report.

A copy of the final Ongoing Connection & Supply Contract will also be provided to the Commission when executed.

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 a member of the Infigen Energy group, the Applicant is subject to the group's Risk Management Policy, a copy of which is attached as attachment **A10-1 Risk Management Policy**. (CONFIDENTIAL) This Risk Management Policy has been developed in accordance with leading industry risk management standards, including International Standard ISO 31000 (based on AS/NZS 4360:2004).

In addition, the Applicant has developed an advanced draft of a Service, Reliability, Maintenance and Technical Management Plan (**SRMTMP**) for the Gas Turbines at Lonsdale, a copy of which is attached as attachment **A10-2 SA Gas Turbine SRMTMP** – **Lonsdale DRAFT**. (**CONFIDENTIAL**) The SRMTMP will be submitted to the South Australian Office of the Technical Regulator (OTR) for review and approval once all reference documents referred to in Appendix A thereto are available.

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.

In December 2019, the Applicant submitted a development application to the South Australian Government Department of Planning, Transport and Infrastructure (Application ID 4858) to operate the Gas Turbines at the existing Lonsdale site. This application is currently being considered and the Applicant anticipates that approval will be obtained prior to 1 May 2020.

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 Applicant will apply for registration of the Gas Turbines with AEMO as a scheduled market generator in respect of the existing facility at Lonsdale.

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.

The Applicant has never held an electricity or gas licence in another Australian jurisdiction. Further, there are no licences previously held by the Applicant that have been suspended or cancelled.

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.

The Applicant 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 the Applicant'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 the Applicant'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 the Applicant'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 the Applicant's ultimate parent company IEL, holds an electricity retailer authorisation issued by the Australian Energy Regulator (identification number TE12019).

Lake Bonney Wind Power Pty Ltd (ABN 48 104 654 837), a subsidiary of the Applicant's ultimate parent company IEL, holds an electricity generation licence issued by ESCOSA for the Lake Bonney Wind Farms (Stages 1-3) and the Lake Bonney Battery Energy Storage System.

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.

A draft Compliance Plan (attachment A11 Compliance Plan - DRAFT) (CONFIDENTIAL) based on the general compliance and monitoring systems used by the Infigen Energy group is attached. The draft Compliance Plan will be amended to include any additional licence conditions applicable to the Applicant in accordance with the recommendations made by AEMO and as approved by ESCOSA.

The broad methodologies for compliance monitoring in place for the Infigen Energy group's existing operating facilities will be expanded to include the Applicant and audits will be undertaken to ensure the compliance obligations are met.

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.

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 Applicant believes that the approval of this application will serve the long-term interests of South Australian consumers with respect to the price, quality and reliability of electricity supply by:

- providing further competition in both the generation and ancillary services markets;
- making available dispatchable energy, to increase reliability during periods of high demand and increasing supply which should result in lower costs to consumers;
- strengthening the ability of the Infigen Energy group to pursue further commercial and industrial (C&I) customer electricity supply contracts in South Australia with a lowered supply risk and therefore a lower cost to customers due to a firmer availability of electricity supply from the Gas Turbines; and
- relocation of the Gas Turbines from their existing Lonsdale site where they are currently supplied by diesel (gas supply is not available at this location) to Bolivar where long term gas supply will be available, will lead to higher utilisation of the turbines.

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

Statutory 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

or equivalent legislation in other Australian jurisdictions.

Declared at: SYDNEY this 30 TH day of JANUARY 20 20

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

	Current	Current	Minimum amount of	Speed of contribution	
Reactive current response	injection gain (%)	absorption gain (%)	contribution as percentage of rated current	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)

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

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

The settling time requirement does not apply to synchronous generators.

This requirement does not apply to synchronous generators.

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.

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)

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

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.

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

- (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! R eference 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

- 12.1. 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.

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.

- (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 \pm 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 minutes¹³ 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.

The exact duration will be specified by the Commission at the time the licence is issued.



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