



Application for Individual Retail Exemption

Quantum Power Pty. Ltd.

30 July 2015

Release Statement

This document is copyright. Except for the purposes permitted under the Copyright Act, no part of the publication may be reproduced in any form or by any means without permission of Quantum Power Limited.




Quantum Power Limited
ABN 63 115 910 659
T +61 7 3177 1040
Unit 14 / 2 Link Drive, Yatala QLD 4207
E info@quantumpower.com.au
www.quantumpower.com.au

Document Revision

Rev	Date	Details	Prepared by	Reviewed by	Approved by
1	30/07/2015	First Issue	Friederike Graser	Greg Wong	Richard Brimblecombe

Document Approval

Prepared, Reviewed and Approval Details

Prepared by: Friederike Graser	Date 28/07/2015	Signature: 
Reviewed by: Greg Wong	Date: 29/07/2015	Signature: 
Approved by: Richard Brimblecombe	Date: 30/07/2015	Signature: 

Contents

Company Background	5
General Information	5
Company Information	5
6. Reason for seeking individual exemption	5
7. The address of the site	5
8. Primary Activity of Quantum Power	6
9. Form of energy	6
10. Off grid energy supply	6
11. Date of commencement of operations	6
12. Mailing address for premises	6
13. Details of experience in selling energy	6
14. Previous retail authorisations	6
15. Continuity of supply	6
Particulars relating to the nature and scope of the proposed operations	7
1. Will the customers be our tenants?	7
2 Provision of other services	7
3 Number of dwellings	7
4 On selling of energy	7
5 Bulk purchase of energy	7
6 Estimated aggregate annual amount of energy sold	7
7 Customers contained to a controlled site?	7
8 Metering of premises	7
9 Type of meters to be used	8
10 Accuracy and standards of metering	8
11 Meter reading frequency	8
12 Determining Energy Charges if not Separately Metered	8
13 Billing	8
14 Dispute Resolutions	8
15 Rebates and Concessions	8

16	Energy Efficiency & Renewable options	9
17	Further information	9
17.1	Retail and Installation Partners	9
17.2	System Ownership	9

Company Background

Quantum Power Pty. Ltd. is a company focused on the engineering procurement and construction as well as production and sale of electricity from biogas under Power Purchase Agreements contracts.

General Information

Company Information

1. **Legal Name:** Quantum Power Pty. Ltd.
2. **Trading name:** as above
3. **ACN:** 604 634 737
4. **Address of Registered Office:** Unit 14 ,
2 Link Drive , Yatala QLD 4207
Postal Address As above
Business office: Unit 14 ,
2 Link Drive , Yatala QLD 4207
5. **Nominated Contact:** Richard Brimblecombe
Director
07 31771040
richard@quantumpower.com.au

6. Reason for seeking individual exemption

Quantum Power is seeking to become a supplier of PPA solutions to commercial and industrial customers in the agribusiness and municipal waste sectors within Australia, offering companies the opportunity to access green power generated on site using their organic by-products at cheaper rates and no upfront costs.

As such we believe that we do not meet the criteria outlined as deemed or registrable exemption category, we therefore wish to hereby apply for an individual exemption.

The PPA solution supplied will be primarily anaerobic digestion and biogas power based, but may also include solar photovoltaic, battery systems and other distributed generation systems that meet the customers needs.

7. The address of the site

Quantum Power will be installing anaerobic digestion and biogas power systems at multiple locations.

Our aim is to provide anaerobic digestion at any suitable location across Australia.

Consistent with the current Retail Exemption regulatory framework, Quantum Power will be servicing the NSW, ACT, Tasmanian and South Australia markets. Quantum Power will also look at offering PPA's in Victoria, Queensland once these states adopt NECFF. In the interim Quantum Power will ensure it has appropriate approvals and exemptions in those two states. As such we are requesting an exemption to allow the PPA to be established at multiple sites.

8. Primary Activity of Quantum Power

Quantum Power is a market leader of turnkey anaerobic digestion and power systems within Australia. Recently Quantum Power has made the decision to also move into Build Own Operate Maintain (BOOM) projects that provide customers with the benefits of anaerobic digestion systems and biogas fuelled power stations without the need for upfront capital.

Quantum Power already has a market presence being a member of several industry organisations such as Australian Pork Limited and Australian Egg Corporation. PPA's will be offered to customers as suited to their requirements, and will form part of Quantum Power's general anaerobic digestion solutions.

9. Form of energy

The energy supplied will be biogas (mixture of methane and carbon dioxide) and electricity generated solely from biogas produced by the anaerobic digestions systems located at the premises of the individual business.

In most instances the business will retain its primary grid connection with an authorised electricity retailer. Quantum Power may be requested to supply solutions to off grid brownfield sites or greenfield projects that do not plan on establishing grid connections.

10. Off grid energy supply

Quantum Power will provide solutions to companies that are already located off-grid or may be looking to establish off-grid facilities. In these instances the biogas generation forms part of an integrated on site power production network. The management of onsite integration as well as any back-up generation is the responsibility of the customer.

11. Date of commencement of operations

Commencement of energy sales remains subject to approval of this exemption request. Due to the long lead time and construction of these projects Quantum Power already has some projects in the pipeline where PPA will be offered once this exemption has been approved.

12. Mailing address for premises

Quantum Power is seeking an exemption for multiple sites; as such this is not applicable.

13. Details of experience in selling energy

Quantum currently supplies power to AJ Bush a meat rendering plant in Beaudesert QLD. Quantum is in the process of applying for a Special Approval from the Department of Energy and water Supply for the site.

14. Previous retail authorisations

Quantum Power holds no current or prior retail exemptions or licences.

15. Continuity of supply

Biogas energy provided by Quantum Power will typically not be the sole supply of electricity to a customer. Customers will retain their grid connection (if already connected) provided by the customer's electricity retailer of choice. Should supply from the biogas generator be in any way compromised, the full electricity needs of the business would be fulfilled by the grid connection.

For offgrid power solutions the supply of biogas power will form part of a complete solution incorporating secondary and backup supply.

Particulars relating to the nature and scope of the proposed operations

1. Will the customers be our tenants?

No.

2 Provision of other services

Quantum Power will be providing the sale of energy and the ongoing maintenance and servicing of the power and anaerobic digestion systems.

3 Number of dwellings

Quantum Power is seeking permission for a retail exemption to offer PPA's at multiple sites. As such this is not applicable.

4 On selling of energy

No, Quantum Power will only be selling the electricity generated from the biogas generator installed on site at each customer's facilities.

5 Bulk purchase of energy

As per question 4, Quantum Power will not be purchasing any electricity from the market place.

6 Estimated aggregate annual amount of energy sold

To date Quantum Power has no customer agreements. Our key target market is customers from medium to large enterprises. The amount of power generated will depend on the quantity and type of organic material being digested to produce the biogas. As guidance for estimated aggregate annual amount of energy sold, should Quantum Power sign 10 customers each with a 1000 kW system that would equate to an annual energy sale of 30 million kWh pa or 3 million kWh pa per customer.

Quantum Power main target market is PPA's for customers with systems from 1MW to 5MW. We expect that most systems will fall in this bracket.

Biogas is a niche and emerging market. The agribusiness industry is a competitive market and any cost savings on power and energy are greatly sought after. Tariff rates will be determined by a number of factors including system size, customer load, agreement duration and existing tariffs.

There are benefits to agribusinesses beyond purely cheaper power, i.e. best practice waste treatment. Nonetheless, Quantum Power will aim to provide greater than 20% savings through the Biogas PPA, relative to a customer's existing tariff, which generally will result in a tariff below \$0.20/kWh.

7 Customers contained to a controlled site?

Quantum Power is seeking exemption to allow PPA's for multiple sites. None of the sites will be owned, controlled or operated by Quantum Power.

8 Metering of premises

Each customer's premises will be fitted with a meter for both grid power and biogas power.

If there is an integrated distributed energy solution implemented at the customer's premises, incorporating solar photovoltaic and battery storage etc, the various components will be separately metered also.

9 Type of meters to be used

Quantum Power will use meters which are compliant with National Electricity Law and National Electricity Market rules.

10 Accuracy and standards of metering

The meters will comply with Australian Standards and with the National Measurement Act 1960 (Cth).

The Meter Class Accuracy will be Class 0.2.

11 Meter reading frequency

The meters used will be capable of remote monitoring and reading, Quantum Power will collate meter data daily or weekly depending on customer sites with meter readings for billing purposes to occur Monthly.

12 Determining Energy Charges if not Separately Metered

As Quantum Power is metering separately this is not applicable.

13 Billing

It is Quantum Power intention to manage billing internally. Customers will be billed monthly or quarterly (depending on preference) for the energy produced by the system. Any feed in tariffs that the customer may receive for excess energy fed into the grid will be the customers earnings as per any agreement they have with their authorised electricity retailer.

In general, any LGC's will be owned by Quantum Power as per the PPA contracts, with Carbon Credits earned under the Emissions Reduction Fund also being owned by Quantum Power.

Invoices will be issued electronically via email and/or hard copy via Australia Post as per the customer's request. Quantum Power may elect to use the services of a third party billing provider should these services be required.

14 Dispute Resolutions

Customers may make a query or complaint to Quantum Power via email, phone or in person at our office.

Quantum Power will acknowledge the query or complaint within 5 working days and should it be required Quantum Power will request the customer provide a written notice setting out the material particulars of the dispute and the position which the customer considers to be correct.

Representatives of both parties will then meet in person or by telephone within 10 business days of the date of receipt of the notice and each use reasonable endeavours to resolve the complaint or dispute.

If the dispute is not resolved within 20 business days of the notice then either party may refer the complaint or dispute to a mediator or such other person or entity having the jurisdiction and power to resolve the dispute.

We will keep a record of all complaints and the time taken to conclusion.

15 Rebates and Concessions

Quantum Power will not offer any rebates or concessions

16 Energy Efficiency & Renewable options

Quantum Power will be offering PPA's for biogas generation and may offer complimentary products such as solar photovoltaic, battery systems and other distributed generation systems that meet the customers needs.

Quantum Power may offer services for the management of customers' power consumption and offer solutions on how to best maximise the benefits of biogas power consumption.

17 Further information

17.1 Retail and Installation Partners

Quantum Power will be responsible for the design and installation of the anaerobic digestion and power generation systems. Depending on the size and location of the projects, Quantum Power may initiate the services of local contractors for parts of the project.

17.2 System Ownership

During the term of the agreement Quantum Power will own the biogas system, including the responsibility of ongoing maintenance and operations.

Due to the nature of the biogas system Quantum Power will in nearly all instances only be engaging with business owners.

Where customer's preference is to own the system at the end of the PPA agreement, customer may negotiate for the PPA contract to have a buyout provision in which the site owner may at any time during or at end of the agreement elect to purchase the system. The buyout schedule will be based on factors including but not limited to the depreciated value of the system and the remaining value of the contract. The buyout schedule which will be pre determined and form part of the PPA contract. Where a customer's preference is not to own a system at the end of the PPA agreement, Quantum Power will retain ownership of the system at the end of the agreement.