# **Balfour Beatty**Investments

#### Balfour Beatty Investments

Level 27, Ernst & Young Centre 680 George Street Sydney NSW 2000 Australia

05 November 2013

Manager, Licensing Essential Services Commission, Level 2, 35 Spring St, Melbourne Victoria 3000

Initially by email:

licensing@esc.vic.gov.au

Attention: Energy Regulation and Legislation Unit

Dear Sir/Madam,

#### Harvest Power Biomass Project: Generation Licence Application

Please find attached the application for a Licence to "Generate Electricity for Supply" for the Harvest Power Biomass Project. Balfour Beatty Investments Limited (BB Investments) is developing a project (the Project) which involves the design, construction, financing and operation of a 35MW (31.5MW net) biomass power plant (the Power Plant) in Carwarp, Victoria.

The Project is to be owned by Harvest Power Pty Limited, which will be the Licence Applicant (the Applicant). The Applicant has been incorporated by BB Investments and is a wholly owned indirect subsidiary of Balfour Beatty plc.

The Project is currently in the development stage with a preferred EPC contractor and Operator already appointed and the key commercial terms agreed. The site has been chosen and the development approval applications have been submitted by Parsons Brinckerhoff on behalf of BB Investments. Strong support has been shown for the Project by both the State and Federal Governments.







### Investments

Yours faithfully,

Robert Drake

Country Lead

Direct: 02 9272 5255

Mobile: 0416 278 562

Email: rob.drake@balfourbeatty.com

For and on behalf of

**BALFOUR BEATTY INVESTMENTS LIMITED** 









**Application for Licence to Generate for Supply** 

HARVEST POWER BIOMASS PROJECT

### Investments

#### Introduction

Balfour Beatty Investments Limited (BB Investments), as sponsor, is developing a project which involves the design, construction, financing and operation of a 35 MW (31.5 MW net) biomass power project (the Project), near Carwarp, Victoria. Once in operation this Power Plant will increase competition in the National Electricity Market, help in meeting the growing electricity demand in Victoria, and provide Renewable Energy Certificates towards the Australian Renewable Energy Target.

It is expected that the Project will be ready for commercial operation in Q2/3 2016.

The Project is to be owned by Harvest Power Pty Limited, which will be the Licence applicant (the Applicant). The Applicant will be incorporated by BB Investments and will be a wholly owned indirect subsidiary of Balfour Beatty plc. The Applicant is applying to the Essential Services Commission for a Licence to Generate Electricity for Supply in accordance with Section 18 of the Electricity Industry Act 2000 (Vic)

#### 1.0 Information on the Applicant and nature of the application

#### 1.1 Nature of the application

Type of Licence Generate Electricity for Supply

Scope of operations To include generation and transmission of electricity from

the Power Plant to the connection point

Date Sought Mid December 2013 – as soon as possible

Name of Applicant Harvest Power Pty Limited

ACN 165 383 559

Office Level 27 Ernst & Young Centre

680 George Street

Sydney, NSW 2000, Australia

Incorporation Details Registered in Victoria, 18 October 2013. Please find attached

as Appendix 5 a copy of the Applicant's Certificate of

Registration

Ultimate Holding Co Balfour Beatty plc

Contact Person Robert Drake

### Investments

Country Lead

T: 02 9272 5255 M: 0416 278 562

E: rob.drake@balfourbeatty.com

#### 1.2 Information on the Corporate Structure

Harvest Power Pty Limited: The Applicant, a special purpose vehicle to undertake the Project, will be a wholly owned indirect subsidiary of Balfour Beatty plc. BB Investments, as sponsor, is a business entity that is a wholly owned indirect subsidiary of Balfour Beatty plc. At this stage Balfour Beatty plc and its wholly owned indirect subsidiaries (collectively Balfour Beatty) is currently the sole shareholder in the special purpose vehicle as such there is no need for a shareholders' agreement. Should an equity partner wish to invest in the Project around the time of financial close then a shareholders' agreement will be finalised and executed. This will be provided to the Essential Services Commission upon request. For a diagram of the corporate structure please refer to Section 5.0 Commercial-in-confidence information.

**Additional details:** Not applicable, the Applicant is not part of a partnership trust or joint venture. As such there is no need for a partnership agreement or trust deed. The Applicant is a wholly owned indirect subsidiary of a public company, and as such there is no need to provide "details of the names and addresses of shareholders, unit holders, beneficiaries or others having an interest in the entity".

**Balfour Beatty plc, Ultimate Holding Co:** Balfour Beatty plc is the UK's largest construction and infrastructure development group, with half its business operations outside the UK. It is a FTSE-250 listed company, with revenue in the financial year ended Dec 2012 at £10.9 billion. Balfour Beatty plc's portfolio of businesses operates in professional services, construction services, support services and infrastructure investments. It employs around 50,000 staff globally, principally involved in the power, rail, road, airport and utility systems, buildings and complex structures markets.

**Balfour Beatty Investments, Sponsor:** BB Investments is the infrastructure investment division of Balfour Beatty plc. It is a sponsor of, and investor in, green-field infrastructure projects. With over 300 direct employees, it is committed to building a quality portfolio of essential infrastructure assets, having invested or committed equity in 70 UK and overseas infrastructure investments. BB Investments was established in the mid-1990s and since then it has become a market leading investor in essential infrastructure assets. It has a broad

### Investments

range of infrastructure investment skills, from project development through to financing, project execution and long-term asset management and operations.

It is one of the largest private sector investors in the UK in healthcare, education, roads and infrastructure. The total value of projects that it has invested in is approximately £13 billion. Through the development of its infrastructure asset portfolio, BB Investments has been involved in the construction and subsequent operation of a number of energy centres of various scales, including the 1 GW Barking Power Station.

Australia is a key growth market for BB Investments where, in addition to Project Harvest, it is developing and/or bidding for a number of green-field infrastructure projects.

### 1.3 Information on the Applicant

**Overview:** To date the Project has been developed by BB Investments. Accordingly, in the period to financial close, BB Investments controls the plans and arrangements relating to the Project's development. The Applicant is the special purpose entity which has been setup by BB Investments, as a wholly owned indirect subsidiary of Balfour Beatty plc, to construct, finance and operate the Project.

In order to leverage BB Investment's experience and capabilities in long-term asset/concession management and operations, there will be a secondment agreement between the Applicant and BB Investments. Under this agreement, as is the norm for BB Investments' projects in the UK, BB Investments will provide the Applicant with support services such as the transition management, tax & accounting and IT functions. BB Investments will also offer its strong experience in managing the commercial and insurance functions.

Parsons Brinckerhoff Australia Pty Limited (PB) is to be the EPC Contractor. Sinclair Knight Merz (SKM), as Owners Engineer, will assist in managing the Applicant's interests during the construction period. UGL Operations and Maintenance Pty Limited (UGL) is to be the O&M Contractor and will be responsible for the maintenance and operation of the Power Plant. After or just prior to the Power Plant being commissioned, the Applicant will employ a General Manager and this person will be responsible for the business and administrative processes applicable to the Applicant's day-to-day business, including its generating activities. The General Manager will have requisite experience and be adept to AEMO, Powercor and other electricity body's rules and requirements.

### Investments

**Organisational structure:** For diagrams of the organisational structure please refer to Section 5.0 Commercial-in-confidence information. The Directors of the Applicant are Rob Drake and Stewart Orrell. The directors of the Applicant may change should another equity investor be brought into the Project. Resumes and experience of key staff for the Project are shown in Section 5.0 Commercial-in-confidence information.

**Prosecutions:** the Applicant has not been found guilty of any criminal offence, been successfully prosecuted, the subject of disciplinary action or subject of administrative or legal actions. As such there are no details of any prosecutions or regulatory complaint commenced against the applicant.

Prosecutions against associates: As is quite normal with a company of the size of Balfour Beatty plc, having a wide variety of activities and interests, it is inevitable that there are a number of contractual claims and litigation or arbitrations actions involving group companies current at any time. Full details of material matters are reported to the auditors of Balfour Beatty plc. The latest audited report is the 2012 Annual Report which relates to the period ending 31 December 2012. As a result of that report (which the auditors are free to verify with external lawyers) the auditors considered it was not appropriate to qualify or otherwise note any actions or claims in the accounts of Balfour Beatty. Therefore, for the purposes of this question, there are no material matters proceeding by or against Balfour Beatty which would have any impact on the Applicant's ability to perform in accordance with any licence which may be awarded by you.

**Current licences:** the Applicant has no current licences. BB Investments, on behalf of the Applicant, whilst it was being incorporated, has registered (and been granted status) as an Intending Participant in the NEM with AEMO in August 2013. Please find attached Appendix 6 – Intending Participant Licence Grant, this information is to be treated as commercial-inconfidence information. The Applicant's full registration with AEMO, as a generator, will occur prior to commercial operations in Q2/3 2016.

**Unsuccessful applications:** The Applicant has not made any such applications under the Electricity Industry Act 2000, therefore has not had any unsuccessful applications in this or any other jurisdictions.

**Electricity Generation, supply and/or distribution licences held by associates:** Balfour Beatty's associates do not hold any electricity generation, supply and/or distribution licences in Australia.

### Investments

However in the UK:

- 1) Barking Power Limited holds a generation licence; and
- 2) Balfour Beatty Investments is a member in consortiums who are preferred bidders for three offshore transmission assets. At financial close of these assets, Balfour Beatty associates will own shares in companies which hold transmission licences.

#### 1.4 Experience in the Electricity Industry

Balfour Beatty has experience in developing and owning power stations, which includes:

- Barking Power Station, UK: A 1,000MW combined-cycle gas turbine power plant located in Essex, UK. In December 2011 Balfour Beatty transferred its 25.5% interest in the project to the Balfour Beatty Pension Fund.
- Powerlink Consortium, UK: A 30-year PFI contract for the management and O&M of the electrical power network for London Underground (77MW emergency power nominal capacity). Balfour Beatty has ceased its 10% holding equity interest as of August 2013.
- **Energy-from-waste projects, UK**: BB Investments, together with partners, is actively working on a number of investment and development projects and opportunities across the UK for energy-from-waste plants using waste wood as feedstock. The pipeline of projects is envisaged to amount to c.70MW of capacity.
- Gloucestershire Waste, UK: An Urbaser, Balfour Beatty joint venture reached financial close in February 2013, for a 28 year DBFO contract with a (25 year operations period) for an 18MW nominal capacity energy from waste facility. Balfour Beatty holds 49.5% equity interest in the project.
- Fort Bliss / White Sands Military Housing Project, USA: 13.2MW nominal capacity Solar PVs, leased from a third party. Balfour Beatty holds a 10% equity interest in the project.
- **Birmingham Hospital, UK:** 11MW nominal capacity standby generators. Balfour Beatty holds a 40% equity interest in the project.
- **Edinburgh Royal Infirmary, UK:** 6.6MW nominal capacity standby generators. Balfour Beatty holds a 50% equity interest in the project.

### Investments

- UK Offshore Transmission Owner (OFTO) Licences: BB Investments, together with other infrastructure investors/consortium members, is the preferred bidder on three OFTO projects: Thanet (300MW), Greater Gabbard (504MW) and Gwynt y Môr (576MW). The projects involve the acquisition and ownership of high voltage (HV) transmission assets connecting offshore wind farms to the onshore electricity transmission system. Each OFTO will be awarded a 20 year transmission licence, under which it will be responsible for operating and maintaining the offshore transmission assets.

#### 1.5 Other Project Stakeholders

#### Parsons Brinckerhoff – EPC Contractor, Development Approvals and Grid Connection

Parsons Brinckerhoff (a subsidiary of Balfour Beatty plc) is an internationally recognised leader in the delivery of EPC power projects having completed over 45 EPC power projects over the last 15 years. It has engineered more than 75,000MW of power at over 200 sites around the globe in the past 30 years alone, including peaking power plants, brownfield sites, combined-cycle gas turbine and cost efficient ways to approach the project start-up, execution and commissioning phases. Parsons Brinckerhoff has also developed robust inhouse systems for EPC management and project controls which ensures that we continually deliver successful projects. Parsons Brinckerhoff's comprehensive suite of capabilities encompass all services required to identify, initiate, plan, engineer, procure and construct a power generation and transmission project anywhere in Australia.

Parsons Brinckerhoff is a leading provider of major project planning and approvals, working with major contractors during project delivery to keep planning approvals issues off the project critical path. Parsons Brinckerhoff's ability to work with regulators and across the technical spectrum of major infrastructure projects has assisted in the delivery of many projects ahead of project schedules.

#### **UGL Operations and Maintenance Pty Limited – O&M Contractor**

UGL Operations and Maintenance Pty Limited is a wholly owned subsidiary of UGL Limited. UGL Limited is a leading provider of high value-add life cycle asset management and maintenance services for major power generation, transmission line and substation capital works. UGL Operations and Maintenance has a proven record of successful and sustainable project delivery across a diverse spectrum of operational projects. UGL Operations & Maintenance's core business is the development of cost effective, operational systems that

### Investments

deliver on time on budget operational solutions. UGL Limited has recent experience in the delivery of bioenergy power generation projects, with key personnel having extensive involvement in the construction of a recent sugar bioenergy co-gen project.

The Applicant, through the O&M Agreement and the key performance standards, will rely on UGL as the O&M Contractor to provide the necessary expertise to undertake the operational aspects of the Licence and to comply with the NER. For further detail on UGL's organizational capability please find attached Appendix 1. Please refer to Section 5.0 Commercial-in-confidence information, for the O&M Specification and the draft O&M Agreement.

#### SKM Australia Ltd – Technical Adviser and Owner's Engineer

Sinclair Knight Merz (SKM) is Australia's leading technical adviser in bioenergy power projects. SKM has a track record of successfully working on bioenergy fuelled generation facilities, as well as undertaking bioenergy and other energy project feasibility studies in Australia, the UK, and the Asia-Pacific region. SKM is the owner's engineer in Mackay Sugar's 37 MW bioenergy plant that has just commenced operations.

#### 1.6 Contracts and Agreements

The following project documents are currently being negotiated and are expected to be agreed in Q1 2014:

- Sale and Purchase Contract for the site
- EPC Contract
- Feedstock Supply Contracts
- O&M Contract
- Cartage Contract
- Power Purchase Agreement
- Ash Sale Agreements
- Grid Connection Offer Agreement
- Water Supply Agreement

### Investments

Further details are provided beneath and more detailed descriptions of the EPC, O&M, and Feedstock Supply Contracts are provided in 5.0 Commercial-in-confidence information.

#### 1.7 Details of the proposed participation in the Victorian electricity industry

The Project will be located in Carwarp, Victoria and the Sale and Purchase Contract for the site has been substantially agreed. For more specifics on the site please refer to Section 5.0 Commercial-in-confidence information.

The Project will be funded by traditional project finance and the targeted date for financial close is Q1 2014, followed by a construction period lasting two and a half years. The Power Plant will commence operations in Q2/Q3 2016.

The key highlights of the Project include:

- The Australian Renewable Energy Agency (ARENA) has been considering a grant for the Project under their Emerging Renewable Program (ERP). Similarly, the Project is being considered for a State level grant. For further information and evidence, please refer to Section 5.0 Commercial-in-confidence information.
- The Power Plant will be constructed by Parsons Brinckerhoff Australia Pty Limited, as EPC Contractor.
- The Power Plant will be operated and maintained by UGL Operations and Maintenance Pty Limited (the O&M Contractor), including the management of the feedstock stockpiling on the site.
- The Cartage Contractor for the feedstock and the ash deliveries will be the Wakefield Transport Group.
- Feedstock Supply: please refer to Section 5.0 Commercial-in-confidence information.
- Power and Large-scale Generation Certificates (LGCs):
  - o The majority of the power will be sold on a merchant basis into the NEM.
  - The LGCs will be sold at spot prices on the LGC market.
  - Please refer to Section 5.0 Commercial-in-confidence information for further information around the sale of power and LGCs.

### Investments

- The Power Plant will be connected to the National Electricity Market at the Red Cliffs substation via a new 66kV single circuit overhead line. The new line will be built as part of the Project and then owned and operated by Powercor pursuant to a Connection Agreement that will be entered into with the Applicant.
- Parsons Brinckerhoff is advising the Applicant on the planning and environmental approvals required for the Project. The approvals being progressed include the EPA works approval application and the planning scheme amendment. These will be lodged shortly and granted prior to financial close.
- The ash generated by the Power Plant will be sold to ash customers pursuant to Ash Sale Agreements agreed prior to financial close where possible. Non-contracted ash will be sold into the market.
- Water for the Power Plant will be supplied to the Applicant pursuant to a water supply contract with Carwarp Water Limited.

### Investments

### 2.0 Consistency with the Commission's objectives

The granting of a generating Licence to the Applicant would assist the Commission in meeting the objectives stated in Sub-Sections 8(1) and 8(2) of the ESC Act:

2.1 To protect the long term interests of Victorian consumers with regard to the price, quality, and reliability of essential services

**Interests of Victorian consumers:** The applicant considers that the grant of a Licence to generate electricity is in the interests of Victorian electricity consumers because it will improve:

- 1) power security for the Mildura region; and
- 2) reduce transmission losses, and hence bills in the region

The grant of a Licence to the Applicant would facilitate additional generation market entry and therefore further market efficiency and competition.

**Price:** The price of electricity will be constrained by greater competition within the National Electricity Market both immediately and in the long term. The Applicant will increase the renewable energy provided from Victoria, potentially lowering the cost of LGCs, which is part of the price of electricity paid by consumers.

In addition, BB Investments has identified a number of large-scale customers who are interested in purchasing power directly (facilitated through a retailer) from the Power Plant. We anticipate that there would be significant savings to these customers, based on customer retail pricing and load profile information.

As has been recently documented, numerous consultants have forecasted that gas prices will go up substantially in the short to medium term. Diversifying away from fossil fuel generation may mitigate any flow-through electricity cost increases to customers.

**Quality:** Regarding quality the Power Plant will be built, serviced and maintained to satisfy all relevant technical requirements. The Applicant will be required to comply with generator performance standards approved by AEMO under the terms of its registration under the National Electricity Rules.

**Reliability:** The reliability of the electricity supply will be enhanced by having greater baseload generation available within the state, with a diverse fuel range. UGL, as the O&M

### Investments

Contractor will be incentivized to operate the Power Plant in a reliable and efficient manner under the O&M Contract.

# 2.2 To facilitate efficiency in regulated industries and the incentive for efficient long term investment

The granting of the Licence is consistent with this objective because the Applicant and the associated augmentations to the Powercor distribution system represent efficient long term electricity industry investments and will facilitate future electricity investments, particularly in the biomass sector.

#### 2.3 To facilitate the financial viability of regulated industries

The granting of the Licence is consistent with this objective because it will improve the financial viability of the Victorian electricity generation industry.

# 2.4 To ensure that the misuse of monopoly or non-transitory market power is

#### prevented

The granting of the Licence is consistent with this objective because it will result in the creation of new electricity generation and further competition in the Victoria market.

#### 2.5 To facilitate effective competition and promote competitive market conduct

The granting if the Licence is consistent with this objective because it will result in the creation of new electricity generation in regional Victoria.

# 2.6 To ensure that regulatory decision making has regard to the relevant health, safety, environmental and social legislation applying to the regulated industry

The granting of the Licence is consistent with this objective because the development and operation of the Applicant will be subject to all relevant health, safety, environmental and social legislation applying to the Victorian electricity industry.

# 2.7 To ensure that users and consumers (including low-income or vulnerable customers) benefit from the gains from competition and efficiency

The granting of the Licence is consistent with this objective for the reasons outlined in paragraph 2.1 above.

### Investments

### 3.0 Information on financial viability

The current base case assumes that the majority of power and all the LGCs will be sold on a merchant basis, at spot prices. Please refer to Section 5.0 Commercial-in-confidence information for further details on the sale of power and LGCs.

A detailed financial model for the Project has been prepared by BB Investments to assess the feasibility of the Project. The Project's base case is financially viable (i.e. provides appropriate returns for financiers) based on the following key inputs. For further detail please refer to Section 5.0 Commercial-in-confidence information.

- 1) Power and LGC Sales: The Power Plant will produce approximately MWh p.a. of electricity (and the equivalent amount of large-scale generation certificates (LGCs)). A power consultant has prepared a detailed report for the Project, forecasting Victorian power and LGC prices up to 2040. The report includes four different scenarios around the carbon tax and renewable energy target.
- 2) **Ash Revenue:** By financial close the Applicant will have contracted to sell approximately half of the ash produced by the Power Plant. Only the contracted portion of the ash sales is modeled.
- 3) EPC: The construction of the Power Plant will be undertaken by Parsons Brinckerhoff under a fixed price, and time EPC Contract. The agreed price is modeled.
- 4) **O&M:** The operations and maintenance costs for the Power Plant have been inputted into the financial model based on agreed pricing with UGL.
- 5) **Feedstock:** Pricing for the feedstock has been agreed with the Feedstock Suppliers and this has been used in the model.
- 6) **Cartage:** The modeled Cartage costs are based on:
  - a. fixed costs such as labour and overheads (subject to CPI); and
  - b. fuel costs (subject to diesel price escalation).
- 7) **Grant Funding:** Please refer to Section 5.0 Commercial-in-confidence information.
- 8) **Senior Debt Financing Costs:** BB Investments has been working with its financial arranger for the Project and has developed a bankable project finance structure.

### Investments

The Project has received significant interest from a leading bank, which is currently performing due diligence on the Project.

9) **Equity:** BB Investments is the lead sponsor and has invested in over 70 infrastructure projects with a total value of over £13 billion. BB Investments understands the risk profile and required returns for these types of infrastructure and utility projects.

Based on the above inputs, and under all of the power and LGC forecast prices the returns to financiers (debt and equity) would be in a suitable range for the Project to raise funding and proceed to financial close.

Further information around the financial viability of the Project can be made available upon the request of the Essential Services Commission. For further detail please refer to Section 5.0 Commercial-in-confidence information.

#### 4.0 Information on technical capacity

Please refer to Section 1.0 Information on the Applicant and nature of the application, particularly the information provided for Balfour Beatty, Parsons Brinckerhoff, UGL and SKM.

Please also refer to the "Experience in the Electricity Industry" section as well as details provided on the organisational structure and resumes and experience of key staff for the Project in Section 5.0 Commercial-in-confidence information.

Please also refer to the O&M Agreement key components summary and scope of services within Section 5.0 Commercial-in-confidence information, as well as the Appendix 1 for the organisational capability of UGL as the O&M Contractor. This information is to be treated as commercial-in-confidence information.

Please find attached Appendix 2 for the organizational capability of Balfour Beatty and its experience in similar electricity markets. This information is to be treated as commercial-inconfidence information.

Balfour Beatty Investments, on behalf of the Applicant, has submitted and been granted an intending participant registration status with AEMO. Please refer to Appendix 3 for a copy of this application and Appendix 6 for the granted status. This information is to be treated as commercial-in-confidence information.

### Investments

BB Investments has been working to substantially decrease the risk of the Project and ensure it is bankable. Please refer to the Project Risk and Mitigation Strategy Table in Section 5.0 Commercial-in-confidence information.

Further details can be provided at the request of the Essential Services Commission.

Information here onwards is considered commercial-in-confidence information.