



***Electricity Industry Act 2004***

***Energy Coordination Act 1994***

***Water Services Licensing Act 1995***

# **Electricity, Gas and Water Licence Application Form**

## Introduction

Licence applications to the Economic Regulation Authority (Authority) are submitted under the provisions of the *Electricity Industry Act 2004*, the *Energy Coordination Act 1994* and the *Water Services Licensing Act 1995* (**Electricity Act, Gas Act and Water Act**). Applicants should be aware of the Electricity, Gas and Water Acts' licensing provisions. While, the Authority can assist an applicant in preparing an application and provide advice in relation to the information required as part of the licensing process, it is the responsibility of the applicant to ensure that the application complies with the Electricity, Gas and Water Acts as appropriate to the type of application. The application should consist of this form and attachments addressing the information required to support the application as set out in the application guideline. All information including plans should be submitted to the Authority in duplicate, together with 3 electronic copies of the whole application. The application fee must accompany this application.

If the applicant comprises more than one legal person (e.g. a Joint Venture), the information required for this application is to be provided for each person.

The Authority is bound by its obligations relating to confidential information in the *Public Sector Management Act 1994 (WA)* and the *Economic Regulation Authority Act 2003 (WA)*.

Accordingly, the Authority has a very strict privacy policy regarding sensitive business and commercial information which is provided to the Authority as part of an application for a licence.

The Authority is bound by the *Freedom of Information Act 1992 (WA)* (**FOI Act**). Section 33 of the FOI Act requires that the Authority must consult with the party who has provided it with commercial or business information before providing access to this material to a third party.

Further, the Authority will not provide information to a third party applicant under the FOI Act if the disclosure:

- would reveal trade secrets of a person;
- would reveal information (other than trade secrets) that has a commercial value to a person and disclosure could reasonably be expected to destroy or diminish that commercial value; or
- would reveal information about the business, professional, commercial or financial affairs of a person and disclosure could reasonably be expected to have an adverse effect on those affairs or to prejudice the future supply of information of that kind to the Government or to an agency.

Finally, under the FOI Act, if the Authority resolves to release information containing commercial or business interests of a party than that party can ask the Authority to review the decision internally or may also have the decision reviewed by the Information Commissioner. The Information Commissioner's contact details are:

The Information Commissioner  
Office of the Information Commissioner  
The Department of Premier and Cabinet  
12<sup>th</sup> Floor, St Martin's Tower  
44 St Georges Terrace  
PERTH WA 6000  
Phone Number: (618) 9222 7888  
Fax Number: (618) 9325 2152  
Country callers: (tel) 1800-621-244 (WA only)  
E-Mail Correspondence: [info@foi.wa.gov.au](mailto:info@foi.wa.gov.au)

Web: <http://www.foi.wa.gov.au>

For this reason, the Authority recommends that applicants identify documents that may fall within the provisions of section 33 of the FOI Act which contain:

- information (other than trade secrets) that has a commercial value to the business; or
- any other information concerning the business, professional, commercial or financial affairs of the business.

Accordingly, the Authority seeks the applicant's views as to whether the documents contain matter that is exempt matter under clause 4 of Schedule 1 of the FOI Act. If the Authority decides that this matter is an exempt matter the Authority will refuse access to the documents by any third parties.

## Applicant Details

Applicant Details	
Name	Merredin Energy Pty. Ltd.
Registered Office (if a Corporation)	Level 4 165 Adelaide Terrace East Perth, WA, 6004
Principal Place of Business (if different from Registered Office)	As Above

Contact Details	
Primary Contact Name	Shane Jones
Mail Address	Level 4 165 Adelaide Terrace East Perth, WA, 6004
Email	shane.jones@merredinenergy.com.au
Telephone	(08) 9420 0300
Mobile	0450 956 637
Fax	(08) 9474 9900

Company Structure	
ABN or ACN	124 273 025
Legal Nature of applicant	Pty. Limited
Place of Incorporation	Western Australia
Company Directors or Principals	Shane Jones Rodney Jones Julian Widdup Roger Lloyd
Entity's Core business profile	Power Generation (Peaking)

Associated and/ Controlled entities	or No other associated companies.

## Electricity Licences

Classification of the Electricity Licence Application		
Type of Licence Application	Generation <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> Distribution <input type="checkbox"/> Retail <input type="checkbox"/> Integrated Regional <input type="checkbox"/>	
For Generation and Integrated Regional Licences	Installed Capacity	<b>82</b> _____ megawatts
For Transmission and Integrated Regional Licences	Transmission System Length	_____ kilometres
For Distribution and Integrated Regional Licences	Distribution System Length	_____ kilometres
For Retail and Integrated Regional Licences	Number of large use customers	_____
For Retail and Integrated Regional Licences	Number of small use customers	_____

## Gas Licences

Classification of the Gas Licence Application		
Type of Licence Application	Distribution <input type="checkbox"/> Trading <input type="checkbox"/>	
For Distribution Licences	Distribution System Length	_____ kilometres
For Trading Licences	Number of small use customers	_____

**Water Licence(s)**

Classification of the Water Operating Licence Application		
Type of Licence Application	Water Supply (Potable) <input type="checkbox"/> Water Supply (Non-Potable) <input type="checkbox"/> Drainage Services <input type="checkbox"/> Irrigation Services <input type="checkbox"/> Sewerage Services <input type="checkbox"/>	
For all Water Services Operating Licence Classifications	Water System Length	_____ metres/kilometres (delete as applicable)
For all Water Operating Licence Classifications	Number of standard agreement customers	_____
For all Water Operating Licence Classifications	Number of non - standard agreement customers	_____

**Summary Description of Licence Activity**

Corporate Structure	
Brief description of the applicant's structure and key organisational relationships	Merredin Energy is owned by two private investors who combined own 53% and a private equity group who own the remaining 47%. Debt finance has been provided by the CBA.
Services/service model	
Brief description of service(s) or service model intended	Provision of reserve capacity to South West Interconnected System (SWIS) Wholesale supply of electricity (no retail electricity sales)
Service infrastructure/works	
Brief description of service infrastructure/works	The plant consists of two GE Frame 6B model 6581 turbines with Brush generators. The major ancillary items include: <ul style="list-style-type: none"> <li>* Diesel fuel unloading, storage and forwarding;</li> <li>* Water Treatment Plant and tanks;</li> <li>* Step-up transformers;</li> <li>* HV Switchyard;</li> <li>* Fire Protection System; and</li> <li>* Integrated Control &amp; Monitoring System (ICMS).</li> </ul>
Other regulatory approvals	
Provide summary information on status of other essential regulatory approvals required	Other approvals required include: <ul style="list-style-type: none"> <li>* Environmental Generation Licence (Works Approval in place);</li> <li>* Dangerous Goods Licence; and</li> <li>* Building Licences.</li> </ul>



## Areas to be covered by the licence

Designated area of the Licence Application																	
Electricity licence Area(s) and/or address to be covered by this licence.	Licence Area name: <u>SWIS Network</u> Address/location: <u>Interconnected at Merredin</u>																
Gas Supply Area(s) to be covered by this licence	<table> <tr><td>1 Kimberley</td><td><input type="checkbox"/></td></tr> <tr><td>2 Pilbara</td><td><input type="checkbox"/></td></tr> <tr><td>3 Gascoyne</td><td><input type="checkbox"/></td></tr> <tr><td>4 Mid-West</td><td><input type="checkbox"/></td></tr> <tr><td>5 Wheatbelt</td><td><input type="checkbox"/></td></tr> <tr><td>6 Goldfields-Esperance</td><td><input type="checkbox"/></td></tr> <tr><td>7 Great Southern</td><td><input type="checkbox"/></td></tr> <tr><td>8 Coastal</td><td><input type="checkbox"/></td></tr> </table>	1 Kimberley	<input type="checkbox"/>	2 Pilbara	<input type="checkbox"/>	3 Gascoyne	<input type="checkbox"/>	4 Mid-West	<input type="checkbox"/>	5 Wheatbelt	<input type="checkbox"/>	6 Goldfields-Esperance	<input type="checkbox"/>	7 Great Southern	<input type="checkbox"/>	8 Coastal	<input type="checkbox"/>
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7 Great Southern	<input type="checkbox"/>																
8 Coastal	<input type="checkbox"/>																
Water Services Operating Area(s) and/or address to be covered by this licence.	Operating Area name: _____ Address/location: _____																

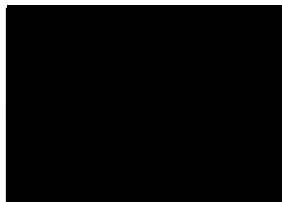
**Certification – Acknowledgement of Commitment**

I declare that the information provided in this application is correct to the best of my knowledge and I am aware of the requirements under the Act for the licence being applied for and that I have the authority to make this application on behalf of the above entity.

Signed by or on behalf of the applicant<sup>7</sup>.

Name: Shane Jones

Position: Project Manager

Signed: 

Date: 17/4/2012

<sup>7</sup> If signed on behalf of the applicant, please attach the relevant authority to bind the applicant.

## INTRODUCTION

Merredin Energy Pty Ltd (Merredin Energy) is proposing to construct, operate and maintain an 82 MW open cycle gas turbine (OCGT) power station (the "Project") at Merredin, Western Australia. The station is scheduled to enter service in July 2012 and have an operating life of around 25 years.

The station is planned to fulfil a peaking role and is expected to be called to run during periods of high system electricity demand associated with high Perth ambient temperatures.

This document provides the necessary supporting documentation for Merredin Energy's generation license application to the Economic Regulation Authority of Western Australia.

# 1 APPLICATION SUMMARY

(Approved for Publication)

## 1.1 INTRODUCTION

Merredin Energy Pty Ltd (Merredin Energy) plans to construct a peaking power station on Robartson Road in Merredin. The station will comprise two diesel fuelled open cycle gas turbines with a combined output of 82 MW. The station will be adjacent to Western Power's Merredin Terminal Station and will be connected to the south west interconnected grid at that location through a short transmission line.

The primary role of the power station is to support the operation of the grid by providing peak generating capacity at times of high electricity demand. In general, this will be during periods of high temperatures in the Perth metropolitan area. The power station will also run to support the grid in the event that supply from other generators is restricted. This could be during breakdowns of other generators or gas supply interruptions.

It is anticipated that the power station will run for less than 300 hours each year.

## 1.2 MERREDIN ENERGY STRUCTURE AND KEY ORGANISATIONAL RELATIONSHIPS

This power station project was initiated several years ago by Namarkkon Pty Ltd but this company was unable to secure funding. In November 2010 the company was acquired by the current investors and the name was changed to Merredin Energy. This is a special purpose project vehicle for the sole purpose of building, owning and operating the Project within a non-recourse project finance funding structure.

Merredin Energy is Perth based with the majority ownership held by Western Australian residents who have strong links to the electricity generation industry here. Minority ownership is held by an eastern states investment company.

Construction of the power station is being undertaken by Balcatta based CTEC Pty Ltd under an engineer-procure-construct contract. CTEC recently completed the similar Kwinana Swift power station at Kwinana Beach and is currently constructing several other gas turbine power stations. The construction team comprises both local and Perth based personnel.

Oversight of the power station design and construction is being undertaken by Perth Energy, an electricity generator and retailer that has been operating in the Western Australian market for over 10 years. It owns the Kwinana Swift power station and is the third largest electricity retailer selling to a range of business and industrial customers. Perth Energy brings direct experience of ownership and operation of similar generation plant within the local market as well as a strong electricity trading capability.

The power station will generally operate without staff at the site. It will be started, run and stopped remotely by Western Power under a contract with Merredin Energy. Western Power will operate the power station to meet Merredin Energy's requirements but will also be able to start it in the event that overall electricity supply is tight due to high demand or problems with other generators.

### **1.3 SERVICE MODEL**

The power station has been certified by the Independent Market (IMO) operator for the 2012/13 Reserve Capacity Year and has been assigned 70 MW for this initial year of operation. It has been assigned 82 MW for the following year and it is anticipated that this reserve capacity level will be maintained through the lifetime of the project. Merredin Energy will either trade these capacity credits bilaterally to an electricity retailer or will sell them directly to the IMO at the published Reserve Capacity Price.

Merredin Energy will offer its electrical output into the Short term Energy Market at its marginal cost of production. Because the power station is fuelled on diesel this price will be close to the alternative maximum STEM price and it is unlikely that substantial amounts of electricity will be sold. Merredin Energy will, however, seek to sell electricity bilaterally where this can be commercially achieved.

Merredin Energy does not plan to sell electricity directly to retail customers.

### **1.4 DESCRIPTION OF WORKS INVOLVED**

The power station will have two General Electric Frame 6 open cycle gas turbines each driving a Brush alternator. The gas turbines will have water injection to maintain power output during high ambient temperatures and to minimise the emission of nitrous oxides. Each gas turbine will have an air filter to remove dust and particulates from the inlet air. The exhaust will be emitted through 20 metre high exhaust stacks which incorporate silencers.

The gas turbines will be fuelled by low sulphur diesel fuel which will be stored in three horizontal fuel tanks each with a capacity of 150,000 litres. Fuel will be delivered to site by road tankers. The fuel unloading area and fuel tanks are bunded to minimise the risk of any fuel spillages contaminating the environment.

Merredin Energy has funded an upgrade to the Water Corporation's supply to provide sufficient water for the power station. This is stored in a 529 kL tank on site before being treated in a dedicated water treatment plant. This demineralised water is stored in a 700 kL tank before being injected into the gas turbine engines. Waste water from the treatment plant is directed to a lined evaporation pond.

Two 250 kL tanks hold water for fire fighting. These are connected to a ring main and sprinklers that cover all major plant items. The gas turbines also each have a dedicated fire protection system.

Electricity from the generators is transformed to 132 kV and exported through a single circuit overhead transmission line to the adjacent Western Power terminal station.

The power station has a fully integrated control and monitoring system at the site which permits local operation. Once the plant is accepted for service, dispatch will normally be exercised by Western Power from its centralised power system control centre. No operating staff will normally be required at site. Inspection and maintenance will be undertaken by staff from Merredin and Perth.

## **1.5 OTHER ESSENTIAL REGULATORY APPROVALS**

The plant received Works Approval no W4892/2011/1 from the Department of Environment and Conservation (DEC) on 19 May 2011. Upon completion of the project, Merredin Energy will seek the approval of the DEC for an operating licence.

The project was granted a Dangerous Goods Licence to cover its liquid fuel storage on 23 July 2009.

Planning Consent for the overall project was awarded by the Merredin Shire on 5 June 2007. Building Licences covering the various site structures have been granted progressively as detailed design has been completed.