



Licence number	L8395/2009/2
Licence holder	Electricity Generation and Retail Corporation T/A Synergy
Registered business address	Australia Place, 11 th Floor 15-17 William St PERTH WA 6000
DWER file number	DEC268-2
Duration	01/10/2011 to 30/09/2029
Date of amendment	24 September 2024
Premises details	Pinjar Gas Turbine Power Station Perry Road PINJAR WA 6065 Legal description - Lot 500 on Plan 59628 Certificate of Title Volume 3158 Folio 926 Crown Reserve 50389

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 52: Electric power generation: Premises (other than Premises within category 53 or an emergency or standby power generating plant) on which electrical power is generated using a fuel.	584.5 MWe

This licence is granted to the licence holder, subject to the attached conditions, on 24/9/2024, by:

MANAGER, PROCESS INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
31/12/2009	L8395/2009/1	New Application
01/10/2011	L8395/2009/2	Re-issue
31/10/2013	L8395/2009/2	Licence amendment to REFIRE format
15/8/2014	L8395/2009/2	Licence amended to change occupier name
29/04/2016	L8395/2009/2	Amendment Notice – CEO initiated amendment to extend expiry date to 30/09/2024
11/10/2018	L8395/2009/2	Amendment Notice - licence holder initiated to remove condition 3.2.3 which allows the licence holder to monitor point source emissions to air at sampling locations that are not in accordance with AS 4323.1
5/10/2022	L8395/2009/2	Licence holder-initiated amendment to remove the requirement to undertake annual emissions monitoring when gas turbines are not operational. Includes CEO initiated amendments to update licence format and remove redundant terminology and conditions.
24/09/2024	L8395/2009/2	CEO initiated licence amendment to extend the duration of the licence to 30 September 2029

Interpretation

In this licence:

- (a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

1 General

1.1 Definitions

1.1.1 In the Licence, unless the contrary intention appears:

‘Approved form’ means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER’s external website.

‘annual period’ means the inclusive period from 1 July to 30 June in the following year;

‘Approved Methodology’ means Pinjar Gas Turbines Station Environmental Licence Compliance, Methodology Report, Report No. GTB05/98, authored by Western Power and dated August 1998;

‘CEMS’ means continuous emissions monitoring system;

‘CEMS Code’ means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Environment & Conservation, Government of Western Australia;

‘CEO’ means Chief Executive Officer of the Department of Water and Environmental Regulation;

‘CEO’ for the purpose of correspondence means;

Chief Executive Officer of the Department

“submit to / notify the CEO” (or similar), means either:

Director General
Department Administering the *Environmental Protection Act 1986*
Locked Bag 10
JOONDALUP DC WA 6027

OR

Email: info@dwer.wa.gov.au

‘CO’ means carbon monoxide;

‘code of practice for the storage and handling of dangerous goods’ means the document titled ‘Storage and handling of dangerous goods: Code of Practice’ published by the Department of Mines and Petroleum, as amended from time to time;

‘dangerous goods’ has the meaning defined in the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007;

‘department; DWER’ means the department established under section 35 of the *Public Sector Management Act 1994 (WA)* and designated as responsible for the administration of the EP Act, which includes Part V Division 3

‘environmentally hazardous material’ means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

‘EP Act’ means the *Environmental Protection Act 1986*

‘Licence’ means this Licence numbered L8395/2009/2 and issued under the EP Act;

‘Licence holder’ refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted;

‘MWe’ means power output (electricity generated) in megawatts;

‘NATA’ means the National Association of Testing Authorities, Australia;

‘NATA accredited’ means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

‘NOx’ means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide;

‘normal operating conditions’ means any operation of a particular process excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

‘PM’ means total particulate matter including both solid fragments of material and miniscule droplets of liquid;

‘Premises’ means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

‘Schedule 1’ means Schedule 1 of this Licence unless otherwise stated;

‘Schedule 2’ means Schedule 2 of this Licence unless otherwise stated;

‘stack test’ means a discrete set of samples taken over a representative period at normal operating conditions;

‘SO₂’ means sulfur dioxide;

‘STP dry’ means standard temperature and pressure (0o Celsius and 101.325 kilopascals respectively), dry;

‘USEPA’ means United States (of America) Environmental Protection Agency;

‘USEPA Method 7E’ means the Test Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure);

‘usual working day’ means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia; and

‘VOCs’ means Volatile Organic Compounds

1.2 General conditions

- 1.2.1 Nothing in the licence shall be taken to authorise any emission that is not mentioned in the licence, where the emission amounts to:
- (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.
- 1.2.2 The licence holder shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
- 1.2.3 The licence holder shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.4 The licence holder shall implement all practical measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the Premises.

2 Emissions

2.1 Point source emissions to air

- 2.1.1 The licence holder shall ensure that where waste is emitted to air from the emission points in Table 2.1.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Emission point reference and location on Map of emission points	Emission Point	Emission point height (m)	Source, including any abatement
A1	Turbine 1	10.6	A Hitachi frame 6 turbine rated at 37.4 MW when firing on natural gas and for baseload operation and 36.6MW when firing on distillate.
A2	Turbine 2	10.6	
A3	Turbine 3	10.6	A European Gas Turbines frame 6 turbine rated at 38.3 MW when firing on natural gas and for baseload operation and 37.5 MW when firing on distillate
A4	Turbine 4	10.6	
A5	Turbine 5	10.6	
A6	Turbine 7	10.6	
A7	Turbine 9	24	A John Brown Engineering frame 9 turbine rated at 116.4 MW when firing on natural gas and for baseload operation.
A8	Turbine 10	24	
A9	Turbine 11	24	An EGT frame 9 turbine rated at 123.7MW when firing on natural gas and for baseload operation.

3 Monitoring

3.1 General monitoring

- 3.1.1 The licence holder shall ensure that all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 3.1.2 The licence holder shall ensure that annual monitoring is undertaken at least 9 months apart.
- 3.1.3 The licence holder shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.
- 3.1.4 The licence holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer’s specifications.
- 3.1.5 The licence holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of point source emissions to air

- 3.2.1 The licence holder shall undertake the monitoring in Table 3.2.1, according to the specifications in that table, on a rotational basis such that each frame 6 turbine stack (A1-A6) is tested at least once every 6 years and each frame 9 turbine stack (A7-A9) is tested at least once every 3 years, while the turbine is being fired on gas.

Table 3.2.1: Monitoring of point source emissions to air					
Emission point reference	Parameter	Units ¹	Averaging period	Frequency ^{2,3}	Method
Any one of A1, A2, A3, A4, A5, A6,	NOx	mg/m ³ g/s	Stack Test (minimum 30 minute average)	Annually or at least once every three years for each emission point reference	USEPA Method 7E
Any one of A7, A8, A9				Annually or at least once every six years for each emission point reference	USEPA Method 7E

Note 1: All units are referenced to STP dry

Note 2: All units are referenced to 15% O2.

Note 3: Emissions monitoring of gas turbines 1, 2, 3, 4, 5, 7, 9, 10, 11 may be deferred if they are not operational within the emissions testing cycle within a given annual period to the subsequent monitoring period provided that each gas turbine is monitored within a three year period for A1-A6; or within a six year period for A7-A9.

3.2.2 The licence holder shall calculate on a monthly basis emissions data for parameters listed in Table 3.2.2 according to the specifications in that table using the Approved methodology.

Table 3.2.2: Calculations of emissions to air				
Emission point reference	Parameter	Units ¹	Frequency ²	Method
A1-A9	NOx	mg/m ³ g/s	Monthly	Approved Methodology
	SO ₂			
	PM			
	CO			
	VOCs			

Note 1: All units are referenced to STP dry

Note 2: All units are referenced to 15% O₂.

3.2.3 The licence holder shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 3.2.1 for the parameters specified in Table 3.2.1 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

4 Information

4.1 Records

4.1.1 All information and records required by the licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 4.1.1 (d) be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

4.1.2 The licence holder must:

- (a) undertake an audit of their compliance with the conditions of their licence during the preceding annual period; and
- (b) prepare and submit to the CEO by 1 October each year an Annual Audit Compliance Report in the approved form.

4.1.3 The licence holder shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

4.2.1 The licence holder shall submit to the CEO an Environmental Report by 1 October 2023 and biennially thereafter. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table for the preceding two annual periods.

Table 4.2.1: Environmental Report		
Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.	None specified
	Quantities of materials used	
	Quality and quantity of wastes produced	
3.2.1	Summary of last testing year for each turbine	Table
	Test dates for each turbine over the previous 8 annual reporting periods.	
3.2.2	Emissions data for the mass flow rate (g/minute) and concentrations for emissions (mg/m ³) from the power generation equipment, for parameters including NOx, SO ₂ , PM, CO and VOC, for each existing turbine calculated using the Approved Methodology	None specified
4.1.3	Compliance	Approved form
4.1.4	Complaints summary	None specified
Table 3.2.1	NOx stack monitoring data	AR1 ¹ and NATA laboratory certificates

Note 1: Form is-in Schedule 2

4.2.2 The licence holder shall ensure that the Environmental Report also contains:

- any relevant process, production or operational data recorded under Condition 3.1.3; and
- an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets with the data being presented in tabular format and significant results presented in graphical format including a discussion of any peaks in this data.

4.2.3 The licence holder shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date	Format or form
-	Copies of original monitoring reports submitted to the licence holder by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the licence holder from third parties

4.3 Notification

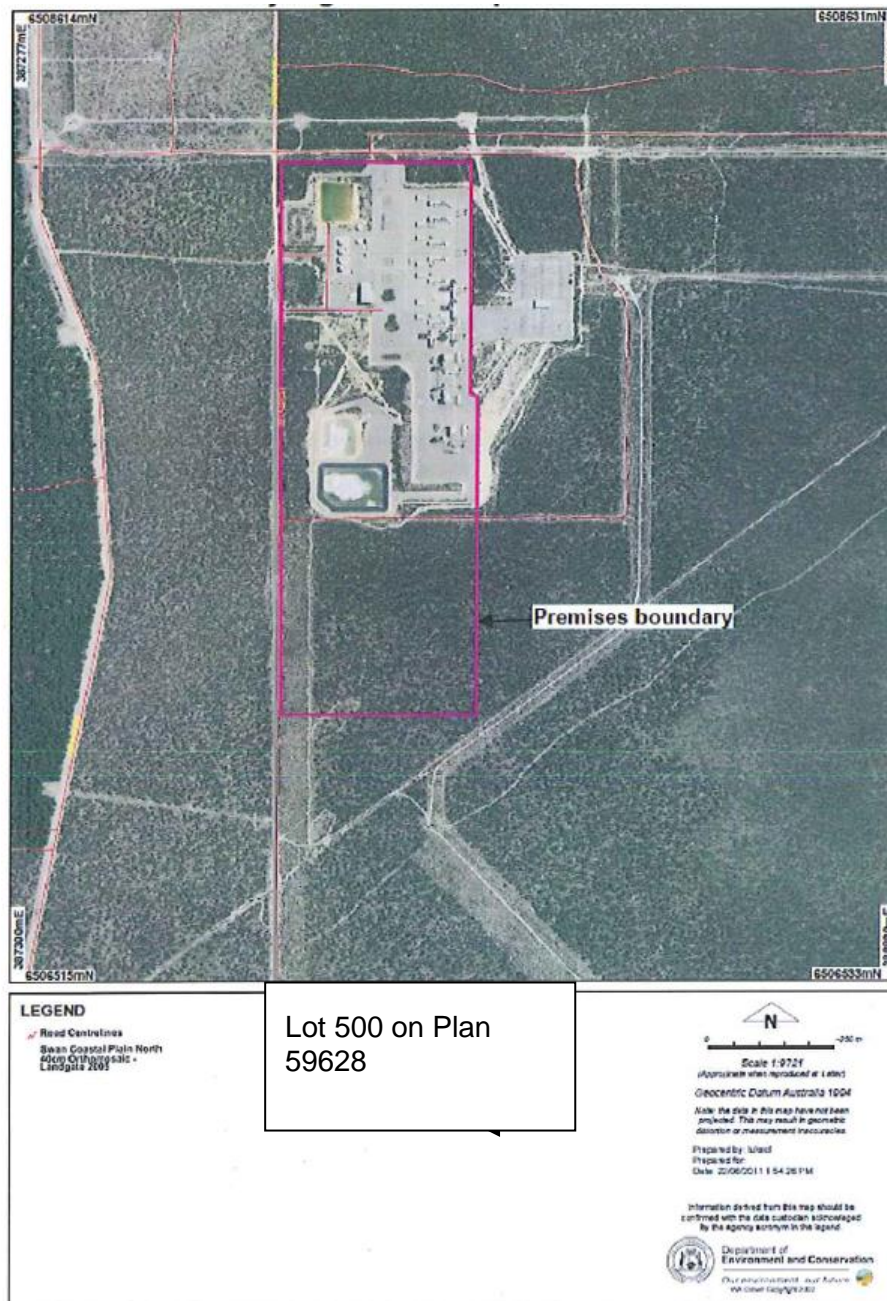
4.3.1 The licence holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement	Format or form
3.1.5	Calibration report	As soon as practicable.	None specified

Schedule 1: Maps

Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.



Map of emission points

The locations of the emission points defined in Tables 2.1.1, 3.2.1 and 3.2.2 are shown below.



Schedule 2: Reporting and notification form

Licence: L8395/2009/2

Licence holder: Electricity Generation and Retail Corporation T/A Synergy

Form: AR1

Period:

Name: Monitoring of point source emissions to air

Form AR1: Monitoring of point source emissions to air						
Emission point	Parameter	Result ^{1,2} (mg/m ³)	Result ^{1,2} (g/s)	Averaging period	Method	Sample date & times
	NOx				USEPA Method 7E	

Note 1: All units are referenced to STP dry

Note 2: All units are referenced to 15% O₂

Signed on behalf of Electricity Generation and Retail Corporation T/A Synergy:Date: