

Amended Licence

L8155/2004/2
EDL NGD (WA) Pty Ltd
070 941 721
Level 6 1 Eagle Street
BRISBANE QLD 4000
DER2015/001548-1
18/06/2012 to 17/06/2027
14/6/2012
24 June 2024
Broome Power Station
Part of Lot 1049 on Plan 213567
2 – 4 McDaniel Road
MINYIRR WA 6725
As defined by the map and coordinates in Schedule 1

Prescribed premises category description	Assessed design
(Schedule 1, <i>Environmental Protection Regulations 1987</i>)	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.	37 MW in aggregate

This amended licence is granted to the Licence Holder, subject to the attached conditions, on 24 June 2024 by:

MANAGER, PROCESS INDUSTRIES REGULATORY SERVICES

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

Licence history

Date	Reference number	Summary of changes
18/06/2007	L8155/2004/1	New licence application
18/06/2012	L8155/2004/2	Licence re-issue
16/08/2012	L8155/2004/2	Licence amendment
19/05/2020	L8155/2004/2	Licence Holder initiated amendment to update site boundaries and layout, addition of emergency back-up generators and authorise time limited operation of three diesel engine generators, increasing name plate capacity from 34 MW to 37MW.
24/08/2022	L8155/2004/2	Licence Holder initiated amendment to authorise additional oily water separators and extended operation of diesel generators for peak shaving and emergency standby purposes, under limited conditions.
24/06/2024	L8155/2004/2	Licence Holder initiated amendment to change stormwater management requirements relating to transformer bunds and incorporate revised day tank infrastructure.

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 means the version of the standard, guideline, or code of practice in force at the time of granting of this licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the licence;
- (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

The Licence Holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Site infrastructure and equipment		Operational requirements	Infrastructure location	
Electric power generation	17 x 1.85 MW Caterpillar G3520 C radiator cooled reciprocating gas engines	Exhaust emissions to be discharged via 17 stacks located 12.5m above ground level (AGL); Load managed using SCADA automated operating system for the purpose of managing each engine load to optimal levels.	Schedule 1: Premises layout GM01 – GM17	
	3 x CAT3512 diesel fuelled engines (total 3 MW)	Operated as emergency or standby engines (F1 - F3); Exhaust emissions to be discharged via six stacks (two per engine) located 6.5m AGL; One engine available for Peak Shaving (either F1 or F2 station) between October and April (inclusive); A second engine (either F1 or F2 station) available to run for Peak Shaving simultaneously for a maximum of 224 hours between October and April (inclusive) between 9am and 9pm, with a maximum of 64 hours across any 2 consecutive month period; and Load managed using SCADA automated operating system for the purpose of managing each engine load to optimal levels.	Schedule 1: Premises layout F1 - F3	
	2 x 1,250 MTU kVA diesel engines (total 2.5 MW) 4 x Cummins KTA 50 0.9 MW diesel	Emergency standby engines; Exhaust emissions to be discharged via 2 stacks located 5.1m AGL; and Diesel generators must be located within impermeable bunded compounds. Emergency standby engines; Exhaust emissions to be discharged via	Schedule 1: Premises layout C1 - C2 Schedule 1: Premises layout	
	fuelled generators	2 stacks located 5.1m AGL; and Diesel generators must be located within	D5 - D8	

Department of Water and Environmental Regulation

Site infrastructure and equipment		Operational requirements	Infrastructure location	
		impermeable bunded compounds.		
	Transformer stations	Must be operated to comply with AS 2067	Not shown	
Hydrocarbon / chemical storage	1 x self-bunded 55kL waste oil tank; 1 x 610 kL diesel storage tank; and 1 x 16kL oil tank (decommissioned) Diesel day tanks (x 2), waste oil tanks (x 2), and lubricant tank (x 1)	All hydrocarbon and chemical storage areas must be designed and constructed in accordance with AS 1940; and Spills or leaks of hydrocarbons and chemicals must be immediately cleaned up and stored in impervious containers for disposal via licenced contractor. Must be located within a bund that complies with AS 1940	Schedule 1: Premises layout Diesel storage tanks #1, #5 and #7 Schedule 1: Premises layout	
Contaminated stormwater treatment	Oily Water Separator Systems (2)	Hydrocarbon contaminated stormwater from the C and F station bunds, and, the bulk diesel tank bund and apron must be directed to oily water separators at L2 or L3 for treatment	Schedule 1: Premises layout L2 – L3	

Emissions and discharges

2. The Licence Holder must ensure that the emissions specified in Table 2 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Emission	Discharge point	Discharge point location	Discharge requirements		
	17 x 1.85 MW Caterpillar G3520 C radiator cooled reciprocating gas engines	Discharge points A1 – A17 inclusive as shown in Schedule 1 Figure 2	Emission point heights must be \geq 12.5m AGL		
	3 x CAT3512 diesel fuelled engines (total 3 MW)	Discharge points F1 - F3 inclusive as shown in Schedule 1 Figure 2	Emission point heights must be ≥6.5m AGL		
NOx, SO2, CO, VOC, PM	2 x 1,250 MTU kVA diesel engines (total 2.5 MW)	Discharge points C1 - C2 inclusive as shown in Schedule 1 Figure 2	Emission point heights must be <u>></u> 5.1m AGL		
	4 x Cummins KTA 50 0.9 MW diesel fuelled generators	Discharge points D5 - D8 inclusive as shown in Schedule 1 Figure 2	Emission point heights must be <u>></u> 5.1m AGL		
Treated stormwater	L2 – L3: Outlet of Oily Water Separator	Discharge Point L2 – L3 as shown in Schedule 1 Figure 2	Discharge to Oily Water Separator seepage trench		
Filtered TB1 to TB5: Outlets of transformer bunds via automatic hydrocarbon filters		Discharge Point TB1 to TB5 as shown in Schedule 1 Figure 2	Discharge must not cause scouring or erosion		
Untreated stormwater	TB1 to TB5: Outlets of transformer bunds	Discharge Point TB1 to TB5 as shown in Schedule 1 Figure 2	Discharge must not cause scouring or erosion		

Table 2: Authorised discharge points

3. The Licence Holder shall target point source emissions to air at or below the levels specified in Table 3.

Table 3: Point source emissions targets to air

Discharge point	Parameter	Target (including units) ^{1,2}	Averaging period	
A1 – A17 inclusive	Oxides of Nitrogen	<u><</u> 650 mg/m³	1 hour	

1: All units are referenced to STP dry.

2: All units are referenced to $6\% O_2$.

4. The Licence Holder must ensure that operation of the generators listed in Table 4 does not exceed the corresponding operational limits specified in Table 4.

Table 4: Operational limits

Generators	Operational Limit ¹
	For emergency or standby purposes only, all three engines may be operated individually or simultaneously without time or usage limit restrictions.
3 x CAT3512 diesel fuelled	For peak shaving, one of the three engines may operate at any time between October and April (inclusive) without a maximum usage limit.
engines	For peak shaving, a second engine may be operated simultaneously for a maximum of 64 hours across any 2 consecutive month period between October and April (inclusive) between 9am and 9pm.
	Must use low Sulphur content diesel at all times as fuel source

Note 1: Operational Limits do not apply during times the CAT3512 engines are operated as Emergency or Standby Power Generating Plant.

Emissions to land

5. The Licence Holder must ensure that emissions from the discharge point listed in Table 5 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 9.

Table 5: Discharge limits

Discharge point	Parameter	Limit
L2 – L3: Outlet of Oily Water Separator System		<u><</u> 15mg/L
TB1 to TB5: Outlets of transformer bunds via automatic hydrocarbon filters	TRH	<u>≤</u> 15mg/L
TB1 to TB5: Outlets of transformer bunds		Not detected by hydrocarbon detection strips

Monitoring

Emissions to air

- 6. The Licence Holder must monitor emissions:
 - (a) from each discharge point;
 - (b) for the corresponding parameter;
 - (c) in the corresponding unit;
 - (d) at the corresponding frequency; and
 - (e) using the corresponding method,

as set out in Table 6.

Department of Water and Environmental Regulation

Discharge point	Parameter	Units ^{1, 5}	Frequency ^{2, 3, 4}	Averaging period	Method
	Volumetric flow rate	m³/s			USEPA Method 2
A1 – A17 inclusive	SO ₂		Triennially (such that each engine	60 minutes	USEPA Method 6C
inclusive	со	mg/m ³ g/s	unit is sampled once every 3 years)		USEPA Method 10
	NO _x (as NO ₂)	9			USEPA Method 7E or 7D
	Volumetric flow rate	m³/s	Triennially (such that each engine unit is sampled once every 3 years)	60 minutes	USEPA Method 2
	SO ₂				USEPA Method 6
F1 – F3	со				USEPA Method 10
inclusive	PM ₁₀	mg/m³			USEPA Method 5 or USEPA Method 17
	NO _x (as NO ₂)	g/s	Annually (such that each engine unit is sampled at least once every 12 month period)		USEPA Method 7E or 7D

Table 6: Monitoring of point source emissions to air

1: All units are referenced to STP dry

2: Triennial monitoring shall be undertaken at least 27 months apart.

3: Annual monitoring shall be undertaken at least 9 months apart

4. Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production 5: All units are referenced to $6\% O_2$

- 7. The Licence Holder shall ensure that sampling required under condition 6 of the Licence is undertaken at sampling locations in compliance with the AS4323.1
- 8. The Licence Holder shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 6 for the parameters specified in Table 6 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Emissions to land

9. The Licence Holder must monitor emissions:

- (a) from each discharge point;
- (b) at the corresponding monitoring location;
- (c) for the corresponding parameter;
- (d) at the corresponding frequency;
- (e) for the corresponding averaging period;
- (f) in the corresponding unit; and
- (g) using the corresponding method,

as set out in Table 7.

 Table 7: Discharge monitoring

Discharge	Monitoring	Parameter	Frequency	Averaging	Unit	Method	
point	location	Parameter	Frequency	period		Sampling	Analysis
L2 – L3: Outlet of Oily Water Separator	L2 – L3	TRH	Annually: at least once per year during periods of discharge			A 9 5 6 6 7 1	
TB1 to TB5: Outlets of transformer bunds via automatic hydrocarbon filters	Outlets of transformer bunds TB1- TB5		Annually: at least once per year during periods of discharge	Spot sample	mg/L	AS5667.1 and AS5667.10	NATA accredited
TB1-TB5 Outlets of transformer bunds	Transformer bunds TB1- TB5		Prior to any discharge of water to the environment	Spot sample	mg/L	Water must with hydroca detection str	arbon

Records and reporting

- **10.** The Licence Holder must maintain accurate and auditable Books including the following records, information, reports, and data required by this Licence:
 - (a) the calculation of fees payable in respect of this Licence;
 - (b) any maintenance of infrastructure that is performed in the course of complying with Condition 1 of this Licence;
 - (c) monitoring programmes undertaken in accordance with Conditions 6, 7, 8 and 9 of this licence; and
 - (d) complaints received under Condition 12 of this licence.
- **11.** The Books specified under Condition 10 must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the Licence Holder for the duration of the licence; and
 - (d) be available to be produced to an Inspector or the CEO as required.
- **12.** The Licence Holder must record the following information in relation to complaints received by the Licence Holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the Licence Holder to investigate or respond to any complaint.

- **13.** The Licence Holder must, within 7 days of becoming aware of any non-compliance with Condition 4 of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
 - (a) the time and date when the non-compliance occurred;
 - (b) if any environmental impact occurred as a result of the non-compliance and if so, what that impact is and where the impact occurred;
 - (c) the risk of any public health impact(s) as a result of the non-compliance and if so what that risk of impact is and where the risk of impact occurred;
 - (d) the details and result of any investigation undertaken into the cause of the noncompliance;
 - (e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
 - (f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.
- **14.** The Licence Holder must:
 - (a) undertake an audit of their compliance with the Conditions of this Licence during the preceding Annual Period; and
 - (b) prepare and submit to the CEO by no later than 31 July after the end of that Annual Period an Annual Audit Compliance Report for that Annual Period in the Approved Form.
- **15.** The Licence Holder must submit to the CEO by no later than 31 July after the end of each Annual Period, an Annual Environmental Report for that Annual Period for the Conditions listed in Table 8, and which provides information in accordance with the corresponding requirement set out in Table 8.

Table 8: Annual Environmental Report

Condition	Requirement	
6	 (a) Monitoring of point source emissions to air data in tabulated and graphical form including the sampling date; 	
	(b) a comparison of the monitoring data against the targets set in condition 3;	
	 (c) an assessment and interpretation of the data including comparison to historical trends; and 	
	(d) copies of laboratory sample analysis reports.	
9	 (a) results of the discharge to land monitoring from the outlet of the Oily Water Separators and the outlet of the transformer bunds including the sampling date; 	
	(b) a comparison of the monitoring data against the discharge limit set in condition 5; and	
	(c) copies of laboratory sample analysis reports.	
12	The Report must contain a summary of complaints records for the reporting Annual Period.	
-	The Report must contain any issues raised from inspections or incident responses during the reporting period together with details as to how these have been addressed / rectified or, if the required work has yet to be completed, how and when they will be completed / rectified.	
-	The Report must contain any changes to site boundaries, location of groundwater monitoring bores, surface drainage channels and on-site or off-site impacts or pollution.	

Definitions

In this Licence, the terms in Table 9 have the meanings defined.

Table 9: Definitions

Term	Definition
ACN	Australian Company Number
AGL	above ground level
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
Annual Period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
Approved Form	the AACR Form template approved by the CEO for use and available via DWER's external website.
AS 1940	Australian Standard 1940-2004: The storage and handling of flammable and combustible liquids
AS 2067	Australian Standard 2067-2008: Substations and high voltage installations exceeding 1 kV a.c.
AS 4323.1	means Australian Standard AS 4323.1-2021 Stationary source emissions
AS5667.1	means Australian Standard AS5667.1:1998 Water quality - Sampling - Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
AS5667.10	means Australian Standard AS5667.10:1998 Water quality - Sampling - Guidance on sampling of waste waters
automatic hydrocarbon filters	means filters designed to capture hydrocarbon residues from contaminated water and which automatically shut off flow once hydrocarbon capacity of not greater than 15 mg/L TRH is reached.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: <u>info@dwer.wa.gov.au</u>
Department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.

Term	Definition
Emergency or Standby Power	means the use of power generation equipment during periods of emergency or as a standby power source, including times such as:
Generating Plant	 when generators are operated for brief periods throughout the year to ensure regular servicing;
	 preceding, during and following cases of disruption to the supply of LNG to the Main Station as reasonably required to manage LNG inventories and maintain the continuous supply of electricity to the Broome community (unlimited hours); and
	 in the event of unplanned equipment failure that affects the use of a gas generator(s) (unlimited hours).
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
Hydrocarbon detection strips	means a paper or cloth strip chemically prepared to detect hydrocarbons in water with a sensitivity to transformer oil of 15 mg/L TRH or less
Inspector	means an inspector appointed by the CEO in accordance with s. 88 of the EP Act
Licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
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.
NATA	means the (Australian) National Association of Testing Authorities
Peak Shaving	means a Prime Generator used during peak times of usage to allow load management of electricity supplied
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Prime Generator	means a generator used as a Premises main source of continuous power
STP dry	means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively), dry
TRH	Total Recoverable Hydrocarbons
USEPA Method 2	means United States Environmental Protection Agency Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)
USEPA Method 5	means United States Environmental Protection Agency Method 5 - Determination of Particulate Matter Emissions from Stationary Sources
USEPA Method 6	means United States Environmental Protection Agency Method 6 - Determination of Sulfur Dioxide Emissions from Stationary Sources
USEPA Method 6C	means United States Environmental Protection Agency Method 6C - Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)

Term	Definition
USEPA Method 7D	means United States Environmental Protection Agency Method 7D - Determination of Nitrogen Oxide Emissions from Stationary Sources (Alkaline-Permanganate/Ion Chromatographic Method)
USEPA Method 7E	means United States Environmental Protection Agency Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)
USEPA Method 10	means United States Environmental Protection Agency Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
USEPA Method 17	means United States Environmental Protection Agency Method 17 - Determination of Particulate Matter Emissions from Stationary Sources
Waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is depicted by the red boundary and defined by the coordinates in Figure 1.



Figure 1: Map of the boundary of the prescribed premises

L8155/2004/2 (Date of amendment 24 June 2024)

Premises layout

The layout of the prescribed premises is shown in the map below (Figure 2).



Figure 2: Premises layout including authorised discharge points and monitoring locations

L8155/2004/2 (Date of amendment 24 June 2024)

