



Electricity Generation Licence

Hornsdale Power Reserve Pty Ltd ACN 619 311 983 This licence was issued by the **Commission** on 13 October 2017 and last varied on the date specified below.

Adam Wilson

Chief Executive Officer and Commission authorised signatory

13 June 2020

<u>Date</u>

Variation history

Amendment number	Variation date	Reason
ESCOSA01	October 2019	Licence varied to reflect amendments to the Act.
ESCOSA02	June 2020	Licence varied to increase battery capacity to 150MW and to amend Schedule 2.

1 Definitions and interpretation

- 1.1 Words appearing in bold like **this** are defined in Part 1 of Schedule 1.
- 1.2 Clauses 1 to 20 (inclusive) in this licence must be interpreted in accordance with the rules set out in Part 2 of Schedule 1.
- 1.3 The conditions set out in Schedule 2 must be interpreted in accordance with:
 - (a) the rules set out in Part 2 of Schedule 1; and
 - (b) clause 1 of Schedule 2.

2 Grant of licence

- 2.1 The **licensee** is licensed under Part 3 of the **Act** to operate the **electricity generating plant** specified in Part A of the Annexure, at the location specified in Part B of the Annexure, subject to the conditions set out in:
 - (a) clause 3 to 21 (inclusive) of this licence; and
 - (b) schedule 2 of this licence.

3 Term

- 3.1 This licence commences on the date it is issued and continues until it is:
 - (a) surrendered by the licensee under section 29 of the Act; or
 - (b) suspended or cancelled by the **Commission** under section 37 of the **Act**.

4 Fees

4.1 The **licensee** must pay the applicable licence fees in accordance with section 20 of the **Act**.

5 Access

- 5.1 The **licensee** must:
 - (a) in accordance with, and to the extent required by, the Electricity Transmission Code, grant to a network service provider, rights to use, or have access to, those parts of the licensee's electricity generating plant that are interconnected or interface with the network service provider's assets for the purpose of ensuring the proper integrated operation of the South Australian power system and the proper conduct of the operations authorised by the network service provider's transmission licence or distribution licence; and
 - (b) in the absence of agreement as to the terms on which such rights are to be granted, comply with a determination of the **Commission** as to those terms.

6 Dispute resolution

- 6.1 A dispute relating to the granting of rights to use or have access to the interconnecting assets of the **licensee's electricity generating plant** referred to in clause 5 shall be resolved in accordance with any applicable **industry code** developed by the **Commission** for the resolution of disputes.
- 6.2 Clause 6.1 does not apply to the extent the dispute is subject to resolution in accordance with or under the **National Electricity Rules**.

7 Compliance with Codes

7.1 The **licensee** must:

- (a) comply with all applicable provisions of the **Electricity Transmission Code**, the **Electricity Distribution Code** and the **Electricity Metering Code**;
- (b) comply with all applicable provisions of any other **industry code** or **rule** made by the **Commission** from time to time; and
- (c) notify the Commission if it commits a material breach of the Electricity Transmission Code, the Electricity Distribution Code or the Electricity Metering Code within 3 days after becoming aware of that breach.

8 Safety, reliability, maintenance and technical management plan

8.1 The **licensee** must:

- (a) prepare, maintain and periodically revise a safety, reliability, maintenance and technical management plan dealing with matters prescribed by **regulation**;
- (b) obtain the approval of the **Technical Regulator**:
 - (i) to the plan (prior to commencement of the operation of **the electricity generating plant** to which the plan relates); and
 - (ii) to any revision of the plan;
- (c) comply with the plan as approved from time to time in accordance with clause 8.1(b); and
- (d) undertake audits of its compliance with the plan from time to time and report the results of those audits to the **Technical Regulator**, in the form required by the **Technical Regulator**.

9 National electricity market

9.1 Subject to clause 9.2, **licensee** must hold and comply with the conditions of any registration required under the **National Electricity Rules** granted by **AEMO** (or the person responsible for the granting of such registrations under the **National Electricity Law** or the **National Electricity Rules**) at all times that such registration is required for the operations authorised by this licence.

- 9.2 In respect of the **electricity generating plant** which the **licensee** is authorised to operate under this licence, the **licensee**:
 - (a) must obtain registration as a semi-scheduled or scheduled generator under the National Electricity Rules; and
 - (b) must not apply for any **generating unit** within that **electricity generating plant** to be classified as a non-scheduled **generating unit** under the **National Electricity Rules**.

10 Information to AEMO

The **licensee** must, following a request from **AEMO**, provide to **AEMO** such documents and information as **AEMO** may reasonably require for the performance of its functions.

11 System controller

11.1 The **licensee** must comply with any directions given to it by the **System Controller**.

12 Information to the Commission

- The **licensee** must, from time to time, provide to the **Commission**, in a manner and form determined by the **Commission**:
 - (a) details of the **licensee's** financial, technical and other capacity to continue the operations authorised by this licence; and
 - (b) such other information as the Commission may require from time to time.
- The **licensee** must notify the **Commission** of any changes to its **officers**, and (if applicable) major shareholders, within 30 days of that change.

13 Operational and compliance audits

- The **licensee** must undertake periodic audits of the operations authorised by this licence and of its compliance with its obligations under this licence and any applicable **industry codes** in accordance with the requirements of any applicable guideline issued by the **Commission** for this purpose.
- The **licensee** must also conduct any further audits at a frequency and in manner approved by the **Commission**.
- The results of audits conducted under this clause must be reported to the **Commission** in a manner approved by the **Commission**.
- The **Commission** may require the licensee to use an independent expert approved by the **Commission** to conduct audits under this clause.
- The **Commission** may require the costs of using an independent expert approved by the **Commission** to conduct audits under this clause to be met by the **licensee**.

14 Confidentiality

The **licensee** must, unless otherwise required by law, this licence, an **industry code**, or the **National Electricity Rules**, comply with any **rules** made by the **Commission** from time to time relating to the use of information acquired by the **licensee** in the course of operating the business authorised by this licence.

15 Community service

The **licensee** must comply with the requirements of any scheme approved and funded by the Minister for the provision by the State of customer concessions or the performance of community service obligations by the **electricity entities**.

16 Compatibility

The **licensee** must not do anything to its **electricity generating plant** affecting the compatibility of its **electricity generating plant** with any **distribution network** or **transmission network** so as to prejudice public safety or the security of the power system of which the **electricity generating plant** forms a part.

17 Insurance

- 17.1 The **licensee** must undertake and maintain during the term of this licence insurance against liability for causing bush fires.
- The **licensee** must provide to the **Commission** a certificate of the insurer or the insurance broker by whom the insurance was arranged (in a form acceptable to the **Commission**) to the effect that such insurance is adequate and appropriate, given the nature of the **licensee's** activities conducted under this licence and the risks associated with those activities.

18 Compliance with laws

The **licensee** must comply with all applicable laws including, but not limited to, any technical or safety requirements or standards contained in regulations made under the **Act**.

19 Switching Manual

- 19.1 The **licensee** must:
 - (a) prepare and maintain an internal switching manual in accordance with the **regulations**; and
 - (b) comply with any other requirements relating to switching prescribed in the **regulations**.

20 Variation

20.1 This licence may only be varied in accordance with section 27 of the **Act**.

21 Transfer

21.1 This licence may only be transferred in accordance with section 28 of the **Act**.

Schedule 1: Definitions and Interpretation

Part 1 - Definitions

In clauses 1 to 20 (inclusive) of this licence:

Act means the Electricity Act 1996 (SA).

AEMO means the Australian Energy Market Operator Ltd (ACN 072 010 327).

business day means a day on which banks are open for general banking business in Adelaide, excluding a Saturday or Sunday.

Commission means the Essential Services Commission established under the ESC Act.

distribution licence means a licence to operate a distribution network granted under Part 3 of the Act.

distribution network has the meaning given to that term under the Act.

Electricity Distribution Code means the code of that name made by the **Commission** under section 28 of the **ESC Act** which regulates connections to a **distribution network** and the supply of electricity by distributors.

electricity entity means a person who has been granted a licence under Part 3 of the **Act** to carry on operations in the electricity supply industry.

electricity generating plant includes all **generating units** and all other equipment involved in generating electrical energy authorised to be operated by the **licensee** under this licence.

Electricity Metering Code means the code of that name made by the **Commission** under section 28 of the **ESC Act** which regulates the installation, maintenance and testing of meters.

Electricity Transmission Code means the code of that name made by the **Commission** under section 28 of the **ESC Act**.

ESC Act means the Essential Services Commission Act 2002 (SA).

generator means a holder of a licence to generate electricity granted under Part 3 of the Act.

generating unit has the same meaning given to the term under the National Electricity Rules

industry code means any code made by the **Commission** under section 28 of the **ESC Act** from time to time.

licensee means Hornsdale Power Reserve Pty Ltd (ACN 619 311 983).

National Electricity Rules has the meaning given to that term in the National Electricity Law.

National Electricity Law means the National Electricity Law referred to in the National Electricity (South Australia) Act 1996 (SA).

network service provider means the holder of a **distribution licence** or a **transmission licence** (as the case may be) issued by the **Commission** under Part 3 of the **Act**.

rule means any rule issued by the Commission under section 28 of the ESC Act.

System Controller means the person licensed under Part 3 of the **Act** to exercise system control over a power system.

Technical Regulator means the person holding the office of Technical Regulator under Part 2 of the Act.

transmission licence means a licence to operate a **transmission network** granted under Part 3 of the Act.

transmission network has the meaning given to that term under the Act.

Part 2 - Interpretation

In this licence, unless the context otherwise requires:

- (a) headings are for convenience only and do not affect the interpretation of this licence;
- (b) words importing the singular include the plural and vice versa;
- (c) words importing a gender include any gender;
- (d) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any governmental agency;
- (e) a reference to any statute, regulation, proclamation, order in council, ordinance or bylaw includes all statutes, regulations, proclamations, orders in council, ordinances or by-laws varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, orders in council, ordinances, by-laws and determinations issued under that statute;
- (f) a reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns;
- (g) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document;
- (h) an event which is required under this licence to occur on or by a stipulated day which is not a **business day** may occur on or by the next **business day**.

SCHEDULE 2

Interpretation of this schedule

1. Interpretation

- 1.1 Terms used in this schedule and also in the National Electricity Rules (NER) have the same meaning in this schedule as they have in those rules (unless otherwise specified or unless the context otherwise requires).
- 1.2 This schedule retains the numbering convention of the 2017 model licence conditions.
- 1.3 For the purposes of this schedule, the term:

Commission means the Essential Services Commission established under the Essential Services Commission Act 2002

licensee means Hornsdale Power Reserve Pty Ltd (ACN 619 311 983).

Disturbance ride through capability

9. Disturbance ride-through (voltage phase angle shift)

9.1 The generating system of the licensee must not include any vector shift or similar relay/protective function acting upon voltage phase angle which might operate for phase angle changes less than 20 degrees.

System strength

11. System strength

- 11.1 Individual components of plant within the generating system of the licensee, which includes but is not limited to generating units and dynamic reactive power plant, must be capable of operating down to the following levels at the high voltage terminals in relation to each component:
 - (a) minimum short circuit ratio of 1.5, and
 - (b) minimum positive sequence X/R ratio of 2.

System restoration

16. System restoration

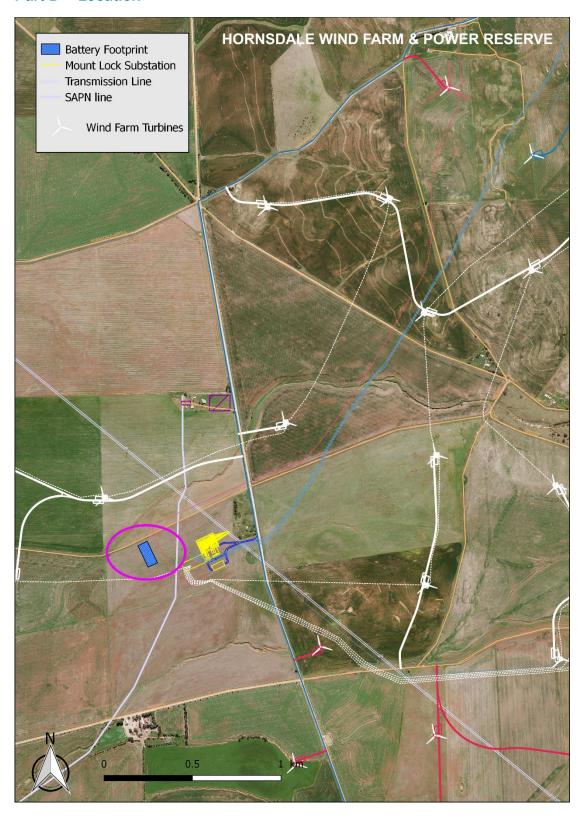
- 16.1 Where sufficient minimum fault level is available from online synchronous machines, the generating system of the licensee must have the following capability in the event of a black system:
 - (a) the generating system must be capable of operation with auxiliary loads only for 180 minutes while system load is being restored, and
 - (b) the generating system, including, but not limited to, each of its generating units and dynamic reactive power plant (as applicable) must have the capability to provide steady-state and dynamic reactive power when operating with auxiliary loads only for 180 minutes while system load is being restored.

ANNEXURE

Part A –Electricity generating plant

A series of Tesla batteries with a total combined maximum output capacity of 150MW.

Part B - Location





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