





# **Electricity Generation Licence**

South Australian Water Corporation ABN 69 336 525 019 This licence was issued by the **Commission** on 8 July 2014 and last varied on the date specified below.

Adam Wilson

Chief Executive Officer and Commission authorised signatory

23 April 2021

<u>Date</u>

## Variation history

| Amendment number | Variation date | Reason   |
|------------------|----------------|--|
| ESCOSA01         | 8 August 2018  | Licence varied to include a generating plant at Crystal Brook workshop.  |
| ESCOSA02         | 12/12/2018     | Licence varied to reflect amendments to the Act update outdated references and include a generating plant at Hope Valley Water Treatment Plant.  |
| ESCOSA03         | April 2020     | Licence varied to include a generating plant at Swan Reach and Hahndorf.   |
| ESCOSA04         | September 2020 | Licence varied to include a generation plant at Morgan Whyalla Pumping 3 Station.  |
| ESCOSA05         | October 2020   | Licence varied to include additional generation plant at Glenelg, Aldinga, Balhannah and Onkaparinga Hills.  |
| ESCOSA06         | December 2020  | Licence varied to include additional generation plant at<br>Morgan Whyalla Pumping Station No. 1, Morgan Whyalla<br>Pumping Station No. 2 and Morgan Whyalla Pumping<br>Station No. 4. |
| ESCOSA07         | March 2021     | Licence varied to include additional generation plant at the<br>Adelaide Desalination Plant – Stage 1  |
| ESCOSA08         | April 2021     | Licence varied to include additional generation plant at Myponga   |

### 1 Definitions and interpretation

- 1.1 Words appearing in bold like **this** are defined in Schedule 1.
- 1.2 This licence must be interpreted in accordance with the rules set out in Schedule 2.

#### 2 Grant of licence

2.1 The **licensee** is licensed under Part 3 of the **Act**, and subject to the conditions set out in this licence, to generate electricity using the electricity generating plant as specified in Schedule 3.

#### 3 Term

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

#### 4 Access

- 4.1 The **licensee** must:
  - (a) in accordance with, and to the extent required by, the Electricity Transmission Code, grant to an electricity entity holding a transmission licence or a distribution licence, rights to use, or have access to, those parts of the licensee's electricity generating plant that are interconnected or interface with the electricity entity'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 that electricity entity'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.

## 5 Dispute resolution

- A dispute relating to the granting of rights to use or have access to the inter-connecting assets of the **licensee's** electricity generating plant referred to in clause 4 shall be resolved in accordance with any applicable **industry code** developed by the **Commission** for the resolution of disputes.
- 5.2 Clause 5.1 does not apply to the extent the dispute is subject to resolution in accordance with or under the **National Electricity Rules**.

## 6 Compliance with codes

- 6.1 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.

# 7 Safety, reliability, maintenance and technical management plan

#### 7.1 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**:
- (c) to the plan (prior to commencement of the operation of the electricity generating plant to which the plan relates); and
  - (i) to any revision of the plan;
  - (ii) comply with the plan as approved in accordance with clause 7.1(b);
- (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**.

#### 8 National electricity market

8.1 The **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 System controller and AEMO

- 9.1 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 under the **Act.**
- 9.2 The Licensee must comply with any directions given to it by the **System Controller**.

#### 10 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.

#### 11 Operational and compliance audits

- 11.1 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 Codes in accordance with the requirements of any applicable guidelines issued by the **Commission**.
- The **licensee** must also conduct any further audits at a frequency and in manner approved by the **Commission**.
- 11.3 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**.

## 12 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.

### 13 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**.

## 14 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.

#### 15 Insurance

- 15.1 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.

## 16 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**.

## 17 Switching Manual

- 17.1 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**.

#### 18 Variation

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

#### 19 Transfer

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

#### Schedule 1 - Definitions

In this licence:

Act means the Electricity Act 1996 (SA);

AEMO means the Australian Energy Market Operator Limited (ABN 94 072 010 327);

**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 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;

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

Licensee means the South Australian Water Corporation (ABN 69 336 525 019);

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);

regulation means a regulation made under 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**; and

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

### Schedule 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 a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns;
- (f) a reference to any statute, regulation, proclamation, order in council, ordinance or by-law includes all statures, 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;
- (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 3 - Licensed Operations

|    | Location                                   | Technical details of generating plant   | Generating capacity | Maximum<br>export level                   |
|----|--|---|---------------------|---|
| 1  | Bolivar Waste<br>Water Treatment<br>Plant  | 3 x Jenbacher JMS 616 GS-B.L four stroke, internal combustion, reciprocating gas engines, and | 9.9MW               | 9.9MW                                     |
|    |  | 1 x Detroit Diesel Allison 501-KB industrial gas turbine engine,                              |                     |   |
| 2  | Crystal Brook<br>Workshop                  | 308 x LG NeON 2 solar panels (total capacity of 100.1kW)                                      | 132.4kW             | 132.4kW                                   |
|    |  | 40 x Suntech solar panels (total capacity of 9.8kW)   |                     |   |
|    |  | 3 x Ecoult Ultraflex Batteries (total capacity of 22.5kW)                                     |                     |   |
| 3  | Hope Valley Water<br>Treatment Plant       | 4,600 x 330W solar photovoltaic panels  | 1.5MW               | 1.5MW                                     |
| 4  | Hahndorf Waste<br>Water Treatment<br>Plant | 684 x JA Solar JAM72S01-375/PR solar panels   | 200kW               | 200kW                                     |
| 5  | Swan Reach<br>Pumping Station<br>no 1      | 16,576 x JA Solar JAM72S01-380/PR solar panels  | 4.95MW              | 4.95MW                                    |
| 6  | Swan Reach<br>Pumping Station<br>no 2      | 7,308 x JA Solar JAM72S01-380/PR solar panels   | 2.5MW               | 2.5MW                                     |
| 7  | Swan Reach Raw<br>Water Pump<br>Station    | 2,268 x JA Solar JAM72S01-380/PR solar panels   | 750kW               | 750kW                                     |
| 8  | Swan Reach<br>Filtration Plant             | Battery energy storage system   | 550kVA              | 550kVA                                    |
| 9  | Morgan Whyalla 3<br>Pumping Station        | 19,656 x JA Solar JAM7S01-380/PR ground mounted E-W tracking panels, and                      | 7.5MW               | 6.22MW                                    |
|    |  | 3 x 2.5MVA (SMA Sunny Central 2500) inverters   |                     |   |
| 10 | Glenelg Waste<br>Water Treatment<br>Plant  | 4,000 x JAP6(K) 72/330/4BB ground-mounted fixed solar photovoltaic panels                     | 3.675MVA            | Main feeder:<br>3.19MW<br>Back up feeder: |
|    |  | 1 x gas TESS Generating Unit (Flex GT333S)  |                     | 1.15MW                                    |
|    |  | 3 x existing digester gas Generating Units (JW 316 GS), and                                   |                     |   |
|    |  | 40 x solar photovoltaic inverter-generating units (Fronius Eco 27.3-3-S).                     |                     |   |

|    | Location  | Technical details of generating plant  | Generating capacity | Maximum<br>export level |
|----|---|--|---------------------|-------------------------|
| 11 | Aldinga Waste<br>Water Treatment<br>Plant             | 3,996 x 380W JA solar JAM72S01-380/PR ground mounted fixed tilt panels                               | 1.89MVA             | 1.125MW                 |
|    |   | 17 x 75kVA (SMA Sunny Highpower Peak) inverters  |                     |                         |
|    |   | 1 x 612.5kVA Tesla Powerpack inverter (10 power stages @420VAC, 70kVA nameplate variant power), and  |                     |                         |
|    |   | 6 x 90KW battery energy storage packs with total of 540kW capacity (1,056kWh).                       |                     |                         |
| 12 | Balhannah Summit<br>Storage Water<br>Filtration Plant | 2,916 x 380W JA solar JAM72S01-380/PR ground mounted fixed tilt panels                               | 1.341MVA            | 1.1MW                   |
|    |   | 13 x 75kVA (SMA Sunny Highpower Peak1) inverters   |                     |                         |
|    |   | 1 x 366kVA Tesla Powerpack 2.5 inverter (6 power stages @420VAC, 70kVA nameplate variant power), and |                     |                         |
|    |   | 3 x 90kW battery energy storage packs with total of 270kW capacity.                                  |                     |                         |
| 13 | Onkaparinga Hills<br>Water Pump<br>Station            | 1,144 x 380W JA solar JAM72S01-380/PR ground mounted fixed tilt panels                               | 595kVA              | 530kW                   |
|    |   | 7 x 50kVA (SMA Sunny Tri power Core1) inverters  |                     |                         |
|    |   | 1 x 245kVA tesla Powerpack 2 inverter (4 power stages @420VAC, 70kVA nameplate variant power), and   |                     |                         |
|    |   | 2 x 90KW battery energy storage packs with total of 180kW capacity {360kWh).                         |                     |                         |
| 14 | Morgan Whyalla 1<br>Pumping Station                   | 16,128 x 380W JA solar JAM72S01-380/PR ground mounted E-W tracking panels                            | 5.5MW               | 4.6MW                   |
|    |   | 2 x 2.75 megavolt amperes (MVA) (SMA Sunny Central 2750) inverters.                                  |                     |                         |
| 15 | Morgan Whyalla 2<br>Pumping Station                   | 15,456 x 380W JA solar JAM72S01-380/PR ground mounted E-W tracking panels                            | 5.5MW               | 4.6MW                   |
|    |   | 2 x 2.75MVA (SMA Sunny Central 2750) inverters   |                     |                         |

|    | Location                                    | Technical details of generating plant   | Generating capacity | Maximum<br>export level |
|----|---|---|---------------------|-------------------------|
| 16 | Morgan Whyalla 4<br>Pumping Station         | 15,456 x 380W JA solar JAM72S01-380/PR ground mounted E-W tracking panels 2 x 2.75MVA (SMA Sunny Central 2750-EV)   | 5.5MW               | 4.56MW                  |
| 17 | Adelaide<br>Desalination Plant<br>– Stage 1 | inverters  32,984 x 380W JA solar JAM72S01-380/PR ground mounted fixed tilt panels  4 x 2.75MVA (SMA Sunny Central 2750) inverters  1 x 3.14MW and 2 x 2.31MW Tesla Powerpack Systems comprising of:  ▶ 4 x 0.642MVA Tesla Powerpack inverters (10 power stages @440VAC, 70kVA nameplate variant power), and  ▶ 9 x 0.577MVA Tesla Powerpack inverters (9 power stages @440VAC, 70kVA nameplate variant power). | 18.76MVA            | 15MW                    |
| 18 | Myponga Water<br>Filtration Plant           | 2,088 x 380W JA solar JAM72S01-380/PR ground mounted fixed tilt panels  10 x 75kVA solar PV inverters (SMA Sunny Highpower Peak1)  1 x 490kVA Tesla Powerpack 2 inverter (8 power stages @420VAC, 70kVA nameplate variant power, and  2 x 90kW battery energy storage packs with total of 180kW capacity (352 kilowatt-hour)  | 1.24MVA             | 657kW                   |



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