

South Australia

Electricity (General) (Technical Standards) Variation Regulations 2020

under the *Electricity Act 1996*

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Part 1—Preliminary

1—Short title

These regulations may be cited as the *Electricity (General) (Technical Standards) Variation Regulations 2020*.

2—Commencement

These regulations come into operation on 28 September 2020.

3—Variation provisions

In these regulations, a provision under a heading referring to the variation of specified regulations varies the regulations so specified.

Part 2—Variation of *Electricity (General) Regulations 2012*

4—Variation of regulation 11—Compliance with standards that are varied or substituted

Regulation 11—after subregulation (4) insert:

- (5) This regulation does not apply in relation to regulations 55B to 55G (inclusive).

5—Insertion of regulations 55B to 55G

After regulation 55A insert:

55B—Remote disconnection and reconnection of electricity generating plant

- (1) This regulation applies to a designated electricity generating plant that is, or is to be, connected to a relevant distribution network and that—
 - (a) is installed on or after the relevant day; or
 - (b) was installed before the relevant day if a declared component of electricity infrastructure or an electrical installation associated with the plant is replaced on or after that day.
- (2) From the prescribed day, the owner or operator of a designated electricity generating plant to which this regulation applies must ensure that the following requirements are complied with in relation to the plant:
 - (a) the plant must be capable of being remotely disconnected from, and reconnected to, the relevant distribution network;
 - (b) the owner or operator must give a relevant agent written authorisation to remotely disconnect the plant from, and reconnect the plant to, the relevant distribution network in circumstances where the owner or operator of the plant is lawfully directed to disconnect or reconnect the plant.
- (3) In addition, from 1 January 2021, the owner or operator of a designated electricity generating plant to which this regulation applies must ensure that the plant is capable of being remotely disconnected from, and reconnected to, the network by the relevant agent of the owner or operator of the plant.
- (4) The owner or operator of a designated electricity generating plant to which this regulation applies must notify their relevant agent if there is, or is to be, a change in the owner or operator of the plant as soon as practicable after becoming aware of the change (and in any event within 7 days after the change).
- (5) A designated electricity generating plant to which this regulation applies must not be connected to a relevant distribution network unless the requirements under subregulations (2) and (3) (as relevant) are complied with in relation to the plant.
- (6) The Technical Regulator may prepare and publish guidelines that set out methods for ensuring that a designated electricity generating plant is capable of being remotely disconnected from, and reconnected to, a relevant distribution network.
- (7) Guidelines published under subregulation (6) may indicate that a method is, or is not, appropriate for designated electricity generating plant with particular nameplate capacity.

- (8) For the purposes of this regulation, a particular designated electricity generating plant (*installed plant*) will be taken to be **capable of being remotely disconnected from, and reconnected to, a relevant distribution network** if the installed plant complies with a method that is appropriate for designated electricity generating plant with nameplate capacity of the installed plant set out in guidelines published under subregulation (6).
- (9) The Technical Regulator must maintain an up to date list of **declared components** for the purposes of subregulation (1)(b) on a website determined by the Technical Regulator.
- (10) The Minister may—
- (a) by notice in the Gazette, designate an electricity generating plant as a **designated electricity generating plant** for the purposes of this regulation; and
 - (b) by subsequent notice in the Gazette, vary or revoke a notice under this subregulation.
- (11) The Technical Regulator may—
- (a) by notice in the Gazette, declare that a distribution network is an **excluded distribution network** for the purposes of this regulation; and
 - (b) by subsequent notice in the Gazette, vary or revoke a notice under this subregulation.
- (12) In this regulation and regulations 55C and 55D—
- declared component**—see subregulation (9);
- designated electricity generating plant**—see subregulation (10);
- excluded distribution network**—see subregulation (11);
- prescribed day** means a day specified by the Minister by notice in the Gazette for the purposes of subregulation (2);
- relevant agent** means a person who is authorised by the owner or operator of the designated electricity generating plant to be their relevant agent and who meets the requirements set out in regulation 55C;
- relevant day**, in relation to a designated electricity generating plant, means—
- (a) the day on which the Minister publishes the first notice under subregulation (10)(a); or
 - (b) in the case of an electricity generating plant that is designated as a designated electricity generating plant after the day referred to in paragraph (a)—the day on which the electricity generating plant is so designated;
- relevant distribution network** means a distribution network other than an excluded distribution network.

55C—Relevant agents

- (1) A person may be authorised, on or before 31 December 2020, to be a relevant agent by an owner or operator of a designated electricity generating plant to which regulation 55B applies if the person—
 - (a) is suitably qualified in accordance with the requirements set out in any guidelines under subregulation (4); and
 - (b) nominates, in accordance with any guidelines under subregulation (4), the technology they will use to remotely disconnect plant from, and reconnect plant to, the relevant distribution network; and
 - (c) gives a written undertaking to the Technical Regulator, in the form determined by the Technical Regulator, that the person will—
 - (i) complete, on or before 31 December 2020, all actions necessary to allow the person to remotely disconnect plant from, and reconnect plant to, the network; and
 - (ii) demonstrate, on or before 31 December 2020, that the technology nominated by them under paragraph (b) is capable of remotely disconnecting plant from, and reconnecting plant to, a relevant distribution network to the satisfaction of the Technical Regulator.
- (2) A person may be authorised, on or after 1 January 2021, to be a relevant agent by an owner or operator of a designated electricity generating plant to which regulation 55B applies if the person—
 - (a) is suitably qualified in accordance with the requirements set out in any guidelines under subregulation (4); and
 - (b) has nominated, in accordance with any guidelines under subregulation (4), the technology they will use to remotely disconnect plant from, and reconnect plant to, the relevant distribution network; and
 - (c) has completed all actions necessary to allow the person to remotely disconnect plant from, and reconnect plant to, the network; and
 - (d) has demonstrated that the technology nominated by them under paragraph (b) is capable of remotely disconnecting plant from, and reconnecting plant to, a relevant distribution network to the satisfaction of the Technical Regulator.
- (3) A person must not act contrary to, or fail to comply with, a written undertaking given under subregulation (1)(c).
- (4) The Technical Regulator may prepare and publish guidelines that set out the requirements for, and role and responsibilities of, a relevant agent.

55D—Register of relevant agents

- (1) The Technical Regulator must keep and maintain a register of relevant agents for the purposes of regulations 55B and 55C.
- (2) The requirement under subregulation (1) will be taken to be satisfied if the Technical Regulator adopts a register maintained by another person or body that the Technical Regulator is satisfied contains the information specified by subregulation (3).
- (3) The register must contain the following information:
 - (a) the location and size of each designated electricity generating plant to which regulation 55B applies;
 - (b) the name and contact details of the relevant agent for each designated electricity generating plant to which regulation 55B applies.
- (4) Information contained in the register may be provided to the following persons:
 - (a) a person with lawful authority to direct that a designated electricity generating plant be disconnected from, or reconnected to, a relevant distribution network;
 - (b) the operator of a relevant distribution network.

55E—Export limits for electricity generating plant

- (1) This regulation applies to a designated electricity generating plant that is, or is to be, connected to a relevant distribution network and that—
 - (a) is installed on or after the relevant day; or
 - (b) was installed before the relevant day if a declared component of electricity infrastructure or an electrical installation associated with the plant is replaced on or after that day.
- (2) The owner or operator of a designated electricity generating plant to which this regulation applies must ensure that the following requirements are complied with in relation to the plant:
 - (a) the plant's inverter is remote communications capable;
 - (b) on or after the prescribed day—
 - (i) the plant is capable of being export limited; and
 - (ii) the export limits of the plant are capable of being updated remotely.
- (3) A designated electricity generating plant to which this regulation applies must not be connected to a relevant distribution network unless the requirements under subregulation (2) are complied with in relation to the plant.

- (4) The Technical Regulator must prepare and publish guidelines that set out the requirements for ensuring that an inverter is ***remote communications capable***.
- (5) The Technical Regulator may prepare and publish guidelines that set out methods for ensuring that—
 - (a) a designated electricity generating plant is capable of being export limited (***export limiting methods***); and
 - (b) the export limits of a designated electricity generating plant are capable of being updated remotely (without a person being required to attend the site of the designated electricity generating plant) (***remote updating methods***).
- (6) Guidelines published under subregulation (5) may indicate that a method is, or is not, appropriate for designated electricity generating plant with particular nameplate capacity.
- (7) For the purposes of this regulation—
 - (a) a designated electricity generating plant (generally) is ***capable of being export limited*** if the electricity exported to a relevant distribution network from the plant can be programmed to not exceed thresholds (***export limits***), which may vary at different times of the day; and
 - (b) a particular designated electricity generating plant (***installed plant***) will be taken to be ***capable of being export limited*** if the installed plant complies with an export limiting method that is appropriate for designated electricity generating plant with nameplate capacity of the installed plant set out in guidelines published under subregulation (5); and
 - (c) the export limits of a designated electricity generating plant (***installed plant***) will be taken to be ***capable of being updated remotely*** if the installed plant complies with a remote updating method that is appropriate for designated electricity generating plant with nameplate capacity of the installed plant set out in guidelines published under subregulation (5).
- (8) The Technical Regulator must maintain an up to date list of ***declared components*** for the purposes of subregulation (1)(b) on a website determined by the Technical Regulator.
- (9) The Minister may—
 - (a) by notice in the Gazette, designate an electricity generating plant as a ***designated electricity generating plant*** for the purposes of this regulation; and
 - (b) by subsequent notice in the Gazette, vary or revoke a notice under this subregulation.

- (10) The Technical Regulator may—
- (a) by notice in the Gazette, declare that a distribution network is an ***excluded distribution network*** for the purposes of this regulation; and
 - (b) by subsequent notice in the Gazette, vary or revoke a notice under this subregulation.
- (11) In this regulation—
- declared component***—see subregulation (8);
- designated electricity generating plant***—see subregulation (9);
- excluded distribution network***—see subregulation (10);
- prescribed day*** means a day specified by the Minister by notice in the Gazette for the purposes of subregulation (2)(b);
- relevant day***, in relation to a designated electricity generating plant, means—
- (a) the day on which these regulations come into operation; or
 - (b) in the case of an electricity generating plant that is designated as a designated electricity generating plant after the day referred to in paragraph (a)—the day on which the electricity generating plant is so designated;
- relevant distribution network*** means a distribution network other than an excluded distribution network.

55F—Voltage ride through for low voltage inverters of electricity generating plant

- (1) Subject to subregulation (2), this regulation applies to an electricity generating plant that is, or is to be, connected to a distribution network through a low voltage inverter and that—
- (a) is installed after the commencement of this regulation; or
 - (b) was installed before the commencement of this regulation if the plant's inverter is replaced after the commencement of this regulation, unless the inverter is replaced under warranty.
- (2) Despite subregulation (1)(a), this regulation—
- (a) does not apply to an electricity generating plant installed after the commencement of this regulation where a written application to connect the plant to the distribution network was received by the operator of the distribution network on or before 10 August 2020; but
 - (b) does apply to such an electricity generating plant if the plant's inverter is subsequently replaced, unless the inverter is replaced under warranty.

- (3) The owner or operator of an electricity generating plant to which this regulation applies must ensure that the low voltage inverter of the plant—
- (a) on or before 31 March 2021—is a designated inverter; or
 - (b) has been tested in accordance with both of the following procedures relating to voltage ride through:
 - (i) a procedure published from time to time by AEMO;
 - (ii) a procedure in *Australian Standard AS/NZS4777.2*.
- (4) An electricity generating plant to which this regulation applies must not be connected to a distribution network unless the requirements under subregulation (3) are complied with in relation to the plant.
- (5) The Technical Regulator must, from the commencement of this regulation until 31 March 2021, keep and maintain a publicly available register of *designated inverters*, being inverters that meet the following requirements:
- (a) the manufacturer of the inverter has provided the Technical Regulator with a test report that demonstrates that the inverter meets a procedure published from time to time by AEMO relating to voltage ride through, excluding any requirement in the procedure that the test be conducted at an appropriate testing facility;
 - (b) the manufacturer of the inverter has given a written undertaking to the Technical Regulator, in the form determined by the Technical Regulator, that—
 - (i) they will complete the testing referred to in subregulation (3)(b) through an appropriate testing facility on or before 31 March 2021; and
 - (ii) if the inverter fails to pass a test referred to in subregulation (3)(b) through an appropriate testing facility, they will—
 - (A) replace any such inverter supplied after the commencement of this regulation with an inverter that passes the tests referred to in subregulation (3)(b) through an appropriate testing facility; or
 - (B) upgrade any such inverter supplied after the commencement of this regulation so that the inverter passes the tests referred to in subregulation (3)(b) through an appropriate testing facility;

- (c) the importer of the inverter (if any) has given a written undertaking to the Technical Regulator, in the form determined by the Technical Regulator, that, if the inverter fails to pass a test referred to in subregulation (3)(b) through an appropriate testing facility, they will—
 - (i) replace any such inverter supplied after the commencement of this regulation with an inverter that passes the tests referred to in subregulation (3)(b) through an appropriate testing facility; or
 - (ii) upgrade any such inverter supplied after the commencement of this regulation so that the inverter passes the tests referred to in subregulation (3)(b) through an appropriate testing facility.
- (6) A person must not act contrary to, or fail to comply with, a written undertaking given under subregulation (5)(b) or (c).
- (7) In this regulation—

appropriate testing facility means a testing facility that meets any requirements set out in a procedure published from time to time by AEMO relating to voltage ride through;

designated inverter—see subregulation (5);

importer means a person who imports an inverter into Australia.

55G—Meters

A meter installed at premises on or after the commencement of this regulation must—

- (a) be capable of separately measuring and controlling an electricity generating plant and controllable load from essential load (whether or not there is electricity generating plant or controllable load at the premises); and
- (b) be installed in accordance with any guideline prepared and published by the Technical Regulator in respect of wiring, meter configurations and other installation requirements.

Note—

As required by section 10AA(2) of the *Subordinate Legislation Act 1978*, the Minister has certified that, in the Minister's opinion, it is necessary or appropriate that these regulations come into operation as set out in these regulations.

Made by the Governor

with the advice and consent of the Executive Council

on

No of 2020