

# NATIONAL ELECTRICITY LAW

Undertaking to the Australian Energy Regulator for the purposes of section 59A of the National Electricity Law

by

**Snowtown Wind Farm Stage 2 Pty Ltd (ACN 155 626 252)**

## 1. Persons giving this Undertaking

- 1.1. This Undertaking is given to the Australian Energy Regulator (**AER**) by Snowtown Wind Farm Stage 2 Pty Ltd (ACN 155 626 252) (**Snowtown 2**) of Level 13, 664 Collins Street, Docklands VIC 3008, for the purposes of section 59A of the *National Electricity (South Australia) Law (NEL)*.

## 2. Background

- 2.1. Snowtown 2 has been the operator (**Generator**) of the Snowtown 2 wind farm, and a Registered Participant in the National Electricity Market (**NEM**) since 10 September 2013.
- 2.2. The Snowtown 2 wind farm comprises 2 generating systems, being the Snowtown South and Snowtown Stage 2 North wind farms, and a total of 90 wind turbine generating units manufactured by Siemens Ltd, each generating unit having a generation capacity of 3.0 MW, for a total registered capacity of 270 MW.
- 2.3. Each of the Snowtown 2 wind turbines features low voltage ride-through (**LVRT**) capability. The LVRT capability is activated when the voltage at the generating unit terminal dips below 90% of the normal voltage level (**undervoltage disturbance**). The purpose of the LVRT capability is to enable a wind turbine to ride through undervoltage disturbances within particular depths and particular durations.
- 2.4. Each wind turbine at the Snowtown 2 wind farm includes a repeat LVRT protection system (the **repeat LVRT protection system**). Once a wind turbine's repeat LVRT protection system is activated, it causes:
  - 2.4.1. the rotational speed of the blades of the turbine to slow;
  - 2.4.2. the turbine to cease generating active power; and
  - 2.4.3. a circuit breaker within the turbine to open, preventing the flow of active power from the turbine to the generating system's connection point with the power system.
- 2.5. Between 10 September 2013 and 10 October 2016 (the **Relevant Period**), the repeat LVRT protection system was set so as to be activated if the LVRT capability was utilised 6 times within a 30 minute period.

### *Generator performance standard obligations*

- 2.6. Snowtown 2 was required to submit its proposal for generator performance standards (**GPS**) to the local transmission network service provider (relevantly, **ElectraNet**) prior to connecting its generating systems to the power system. Following negotiation and consultation with the Australian Energy Market Operator

(AEMO), ElectraNet and Snowtown 2 agreed upon the GPS that would apply to the Snowtown 2 wind farm and its wind turbines.

2.7. As the Generator of the Snowtown 2 wind farm, Snowtown 2 was required to do the following in order to supply electricity to the power system:

- 2.7.1. obtain the approval in writing of AEMO and ElectraNet for the repeat LVRT protection system settings (clause S5.2.2 National Electricity Rules (**NER**));
- 2.7.2. provide automatically initiated protection systems to protect its plant and associated facilities against abnormal voltage excursions of the power system in accordance with S5.2 (clause 4.4.3 NER); and
- 2.7.3. ensure that its plant met or exceeded the GPS applicable to its plant (rule 4.15(a)(1) NER).

#### *Conduct of concern*

2.8. The rigorous negotiation and documenting of performance standards, and Generators' ongoing compliance with those performance standards, is important to promoting power system security and minimising the risk of cascading outages across the power system during unstable power system conditions.

2.9. The AER is concerned that:

- (a) during the Relevant Period, Snowtown 2 did not comply with the NER because it operated its generating systems with automatic protection systems which would prevent its wind turbines from riding through network voltage disturbances in accordance with Snowtown 2's GPS, in the event that they experienced more than 5 undervoltage disturbances within 30 minutes; and
- (b) on 28 September 2016, in contravention of the NER, Snowtown 2 failed to ensure that its plant and associated facilities at the Snowtown 2 wind farms complied with its GPS and, in particular, failed to ensure that they rode through network voltage disturbances.

(AER concerns).

### **3. Acknowledgement and resolution**

3.1. Snowtown 2 does not agree that it failed to comply with the NER in the circumstances set out in clause 2.9. However, Snowtown 2 acknowledges the AER concerns and offers the Undertaking in clause 6 to resolve the AER concerns.

### **4. Commencement of the Undertaking**

4.1. This Undertaking comes into effect (**Commencement Date**) when:

- 4.1.1. the Undertaking is executed by Snowtown 2; and
- 4.1.2. the AER accepts the Undertaking so executed.

4.2. Upon the Commencement Date, Snowtown 2 undertakes to assume the obligations set out in clause 6 below.

### **5. Expiry and variation**

5.1. This Undertaking expires (**Expiry Date**) once all of the following have occurred:

- 5.1.1. ElectraNet has approved Snowtown 2's modified GPS; and
- 5.1.2. AEMO has registered Snowtown 2's modified GPS (NER rule 4.14(n))

- 5.2. Snowtown 2 may apply to withdraw or vary the Undertaking at any time, but this Undertaking will only be taken to be withdrawn or varied on the date on which the AER consents to such withdrawal or variation.
- 5.3. The AER may, if requested by Snowtown 2, expressly waive or vary in writing any of the obligations contained in the Undertaking or extend the date by which any such obligation is to be satisfied.

## 6. Undertaking

6.1. Snowtown 2 undertakes that, it will use its best endeavours, by carrying out the steps outlined in clause 6.2 below, to update the GPS and connection agreement for the Snowtown 2 wind farm within 6 months after the Commencement Date (or as soon as practicable thereafter) to:

- 6.1.1. expressly provide for the operation and settings of the repeat LVRT protection system; and
- 6.1.2. make any other incidental or minor amendments including, but not limited to, inserting definitions and correcting typographical errors.

For the avoidance of doubt, Snowtown 2 will not be required to modify the GPS or connection agreement for the Snowtown 2 wind farm to the extent that Snowtown 2 would be unable to comply without altering the Snowtown 2 generating units or generating system.

6.2. Snowtown 2 undertakes that:

6.2.1. Within 10 Business Days of the Commencement Date, Snowtown 2 will propose an Independent Expert for the AER's approval to complete an Independent Review of the GPS and connection agreement. If the AER does not approve the Independent Expert Snowtown 2 nominates, then Snowtown 2 will liaise with the AER to identify a candidate acceptable to the AER within a further 5 Business Days.

6.2.2. Within 10 Business Days of receiving notice of the AER's approval of the Independent Expert, Snowtown 2 will engage the Independent Expert to complete an Independent Review of the GPS and connection agreement for the Snowtown 2 wind farm and prepare a report, including recommendations, addressing the following matters:

- a) whether the Snowtown 2 wind farm GPS and connection agreement expressly provide for the operation of its multiple LVRT setting;
- b) to the extent that the Snowtown 2 wind farm GPS and connection agreement do not expressly provide for the operation of its multiple LVRT setting,
  - 6.2.2.b.1. the modifications which would be required to expressly provide for the operation of Snowtown 2's multiple LVRT setting; and
  - 6.2.2.b.2. any other incidental or minor amendments to the Snowtown 2 wind farm GPS.

6.2.3. Snowtown 2 will, within 10 Business Days of engaging the Independent Expert, submit to the AER for approval, a detailed Independent Review Proposal developed jointly with the Independent Expert which addresses the matters in 6.2.2 above. The proposal must include details of how the Independent Expert will conduct the review and the matters to be addressed by

the Independent Expert in its final report. If the AER has concerns about the proposal, Snowtown 2 will make revisions to the proposal in conjunction with the Independent Expert within 5 Business Days of the AER notifying Snowtown 2 of its concerns and submit the revised Independent Review Proposal to the AER for approval.

6.2.4. Snowtown 2 will use its best endeavours to ensure that the Independent Expert will:

- a) commence the Independent Review within 15 Business Days of Snowtown 2 receiving notice of the AER's approval of the Independent Review Proposal;
- b) complete the Independent Review within 40 Business Days of the Independent Review commencing;
- c) provide Snowtown 2 with a final Independent Review report within 20 Business Days of completion of the Independent Review; and
- d) have full, free and unrestricted access to all Snowtown 2 functions, staff, records, documentation and information necessary to conduct the Independent Review.

6.2.5. Within 2 Business Days of Snowtown 2's receipt of the Independent Expert's findings and recommendations, Snowtown 2 will provide the final Independent Review report to the AER.

6.2.6. Within 20 Business Days of Snowtown 2's receipt of the Independent Expert's findings and recommendations, Snowtown 2 will provide the AER with Snowtown 2's response to the findings including the steps that Snowtown 2 will take to implement all recommendations. If Snowtown 2 is unable to implement any of the Independent Expert's recommendation, it will provide the AER with its reasons for its inability and the Independent Expert's response to those reasons. This response will be from Snowtown 2's Chief Executive Officer, unless that person is on leave at the required time, in which case it will be from his/her delegate.

6.2.7. Snowtown 2 undertakes that, following Snowtown 2's provision of its response to the Independent Expert's findings and recommendations, Snowtown 2 will:

- a) submit, within 20 Business Days, its proposed modifications to the GPS and connection agreement to AEMO, ElectraNet and ESCOSA incorporating all of the reasonable recommendations of the Independent Expert; and
- b) negotiate in good faith with AEMO, ElectraNet and ESCOSA and use its best endeavours to achieve a modification of the terms of the GPS and connection agreement for the Snowtown 2 wind farm which implements all reasonable recommendations of the Independent Expert and which is registered by AEMO under rule 4.14(n) of the NER and approved by AEMO and ElectraNet under S5.2.2 of the NER.

6.2.8. Snowtown 2 will notify the AER in writing within 5 Business Days of any failure to comply with the dates identified within this Undertaking.

## **7. Acknowledgements**

7.1. Snowtown 2 consents and acknowledges that:

- 7.1.1. the AER may authorise a member of the AER or a member of the AER staff, to exercise a decision making function under this Undertaking on its behalf and that authorisation may be subject to any conditions the AER may impose;
- 7.1.2. the AER will make this Undertaking publicly available including by publishing it on the AER's website;
- 7.1.3. the AER will, from time to time, make public reference to the Undertaking in news media statements and in AER publications;
- 7.1.4. the AER reserves its rights and remedies (including to institute legal proceedings against Snowtown 2 seeking penalties and other relief) in relation to any breaches of the NER or NEL which have occurred before or after the Commencement Date, including in respect of matters referred to in this Undertaking; and
- 7.1.5. this Undertaking in no way derogates from the rights and remedies available to any other persons arising from the alleged conduct.

## 8. Costs

- 8.1. Snowtown 2 must pay all of its own costs in relation to this Undertaking.

## 9. Notification

- 9.1. Any notice or communication to the AER pursuant to this Undertaking must be sent to:

Name: General Manager – Compliance & Enforcement

Address: Australian Energy Regulator

GPO Box 520

Melbourne VIC 3001

Email: Attn: GM Compliance & Enforcement [AERCompliance@aer.gov.au](mailto:AERCompliance@aer.gov.au)

- 9.2. Any notice or communication to Snowtown 2 pursuant to this Undertaking must be sent to:

Name: Executive General Manager - Generation & Trading

Address: Tilt Renewables

Level 23, 535 Bourke Street

Melbourne VIC 3000

Email: [REDACTED]

- 9.3. Snowtown 2 must notify the AER of a change to its contact details within five *business days*.

## 10. Definitions

- 10.1. Terms used in this Undertaking are set out below.

Term	Meaning
AER	Australian Energy Regulator
AEMO	Australian Energy Market Operator

<b>BSE</b>	Black System Event
<b>Business Day</b>	has the meaning give to it in Chapter 10 of the NER
<b>Commencement Date</b>	is the date the Undertaking comes into effect under clause 4 of this Undertaking.
<b>ElectraNet</b>	ElectraNet Pty Ltd (ACN 094 482 416)
<b>ESCOSA</b>	Essential Services Commission of South Australia
<b>Expiry Date</b>	has the meaning given to that term by clause 5 of this undertaking.
<b>Generator</b>	has the meaning give to it in Chapter 10 of the NER
<b>GPS</b>	Generator performance standards
<b>Independent Expert</b>	<p>means a third party who is not a Related Body Corporate of Snowtown 2.</p> <p>The third party carrying out the Independent Review must:</p> <ul style="list-style-type: none"> <li>• be able to act without bias and without any actual or potential conflicts of interest with reference to the following criteria: <ul style="list-style-type: none"> <li>○ is not a present or past staff member or director of Snowtown 2;</li> <li>○ has not acted and does not act for, and does not consult and has not consulted to, Snowtown 2 in any matters relating to compliance with the NEL or NER; and</li> <li>○ has no significant shareholding or other interests in Snowtown 2;</li> </ul> </li> <li>• have professional competence to apply established audit standards and techniques to carry out the Independent Review to a high standard;</li> <li>• have a system of quality controls to ensure the Independent Review report is of a professional standard;</li> <li>• have relevant expertise in compliance with GPS; and</li> <li>• be able to conduct the Independent Review in accordance with the Undertaking.</li> </ul>
<b>Independent Review</b>	<p>means an assessment of:</p> <ol style="list-style-type: none"> <li>a) whether the Snowtown 2 wind farm GPS and connection agreement expressly provides for the operation of its multiple LVRT setting; and</li> <li>b) to the extent that the Snowtown 2 wind farm GPS and connection agreement do not expressly provide for the operation of its multiple LVRT setting, the</li> </ol>

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modifications which would be required to do so without materially compromising the capacity or functionality of the Snowtown 2 wind farm under its existing GPS or connection agreement.

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<b>LVRT</b>	low-voltage ride through
<b>NEL</b>	National Electricity (South Australia) Law
<b>NEM</b>	National Electricity Market
<b>NER</b>	National Electricity Rules
<b>Related Body Corporate</b>	Has the meaning given by section 4A(5) of the <i>Competition and Consumer Act 2010</i>
<b>Snowtown 2</b>	Snowtown Wind Farm Stage 2 Pty Ltd (ACN 155 626 252)

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## 11. Interpretation

- 11.1. In the interpretation of this Undertaking, the following provisions apply unless the context otherwise requires:
- 11.1.1. a reference to this Undertaking includes all of the provisions of this document including its annexures;
  - 11.1.2. headings are inserted for convenience only and do not affect the interpretation of this Undertaking;
  - 11.1.3. if the day on which any act, matter or thing is to be under this Undertaking is not a Business Day, the act, matter or thing must be done on the next Business Day;
  - 11.1.4. a reference in this Undertaking to any law, legislation or legislative provision includes any statutory modification, amendment or re-enactment, and any subordinate legislation or regulations issued under that legislation or legislative provision;
  - 11.1.5. a reference in this Undertaking to any company includes a company over which that company is in a position to exercise control within the meaning of section 50AA of the *Corporations Act 2001*;
  - 11.1.6. a reference in this Undertaking to any agreement or document is to that agreement or document as amended, novated, supplemented or replaced;
  - 11.1.7. a reference to a clause, part, schedule or attachment is a reference to a clause, part, schedule or attachment of or to this Undertaking;
  - 11.1.8. an expression importing a natural person includes any company, trust, partnership, joint venture, association, body corporate or government agency;
  - 11.1.9. where a word or phrase is given a defined meaning, another part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning;
  - 11.1.10. a word which denotes the singular also denotes the plural, a word which denotes the plural also denotes the singular, and a reference to any gender also denotes other genders;

- 11.1.11. a reference to the words 'such as', 'including', 'particularly' and similar expressions can be construed without limitation;
- 1.1.2. a construction that would promote the purpose or object of this Undertaking (whether expressly stated or not) will be preferred to a construction that does not promote that purpose or object.
- 11.1.12. a reference to:
- a) a thing (including but not limited to, a chose in action or other right) includes part of that thing; and
  - b) a party includes its successors and permitted assigns.

**Executed by**

Snowtown Wind Farm Stage 2 Pty Ltd (ACN 155 626 252) pursuant to section 127(1) of the *Corporations Act 2001*.



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Director



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Secretary

This 4<sup>th</sup> day of November 2020.

**ACCEPTED BY THE AUSTRALIAN ENERGY REGULATOR PURSUANT TO SECTION 59A OF THE NATIONAL ELECTRICITY LAW.**



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Clare Savage – Chair

This.....22.....day of.....December.....2020.

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