



GPO Box 520
Melbourne VIC 3001
Telephone: (03) 9290 1444
Facsimile: (03) 9290 1457
www.aer.gov.au

Our Ref: 60978-D16/163037
Contact Officer: Peter Adams
Contact Phone: 03 9290 1465

6 December 2016

IN CONFIDENCE

SCO Officials
c/o Secretariat
COAG Energy Council

By email (energycouncil@environment.gov.au)

Dear Officials

AER compliance monitoring and enforcement role - Black System

As you are undoubtedly aware, the AER is responsible for monitoring and enforcing compliance with the National Electricity Laws and Rules.

Following the Black System events of 28 September in South Australia, a number of stakeholders have asked about the role of the AER and the scope of any investigation regarding this event. [REDACTED]

I am writing to assure you that the AER takes its compliance monitoring role very seriously and has committed significant resources to examine these events. Our investigations are reviewing all aspects of the rules that establish obligations to ensure that participants, including the AEMO, have met their requirements.

We are working closely with other regulatory agencies and those entities currently charged with also examining these events. However the number and complexity of those inquiries, and the variety of parties involved are presenting a number of challenges in terms of participants' ability to respond quickly. This in turn is impacting the AER's ability to reach firm conclusions with respect to compliance in a timely manner. The AER is attempting to coordinate and where appropriate share the information with other agencies to streamline the process. We will endeavour to provide any preliminary findings or proposed recommendations to you in confidence as soon as that analysis is complete.

Released under FOI

Issues of non-compliance may of course result in enforcement action by the AER. Such matters will be dealt with in accordance with our published 'Statement of Approach', as expeditiously as possible. If enforcement action is warranted, I will keep you abreast, obviously within the constraints of our own obligations on such matters.

I have attached a brief summary of our role and work to date in examining these events, including areas of the rules the AER considers are a priority.

I would be happy to discuss our role with you further or alternatively you can contact Peter Adams - General Manager, Wholesale Market on 03 9290 1465 for more detail.

Yours sincerely



Paula Conboy
AER Chair

Sent by email on: 06.12.2016

Released under FOI

AER Brief: COAG EC – South Australia

Key points

1. A state-wide black out (a “system black”) occurred in SA on the afternoon of 28 September during a period of significant storm activity. After restoration of supply on 29 September, the SA market remained suspended until 11 October.

3. The AER is responsible for monitoring whether participants and the Australian Energy Market Operator (“AEMO”) perform in accordance with the National Electricity Rules (“Rules”).

Background to the events in SA

28 September 2016

At 16:18 AEST on 28 September 2016, a severe storm damaged transmission and distribution electricity assets in SA.

Five transmission faults led to six voltage disturbances within 88 seconds. 445 MW of wind generation shutdown following the voltage disturbance.

The reduction in output resulted in increased flow on the main interconnector between SA and Victoria (Heywood).

Automatic protection systems were activated, tripping the interconnector, which in this case resulted in a significant under-frequency. The remaining customer load and electricity generation in SA shutdown leading to a state-wide power outage (commonly referred to as a System Black).

The power system event resulted in:

- 1900 MW of customer load in SA being shed.
- Around 1200 MW of generation in SA shutting down.
- 613 MW from neighbouring regions being disconnected.
- Damaged network infrastructure including:
 - Davenport to Mt Lock and Davenport to Belalie 275 kV line – 5 double circuit towers damaged.
 - Brinkworth to Templers West 275 kV line (East circuit) – 2 towers damaged.
 - Davenport to Brinkworth 275 kV line (East circuit) – 14 towers damaged.
 - Port Lincoln to Yadnarie 132 kV line – 1 tower damaged.¹

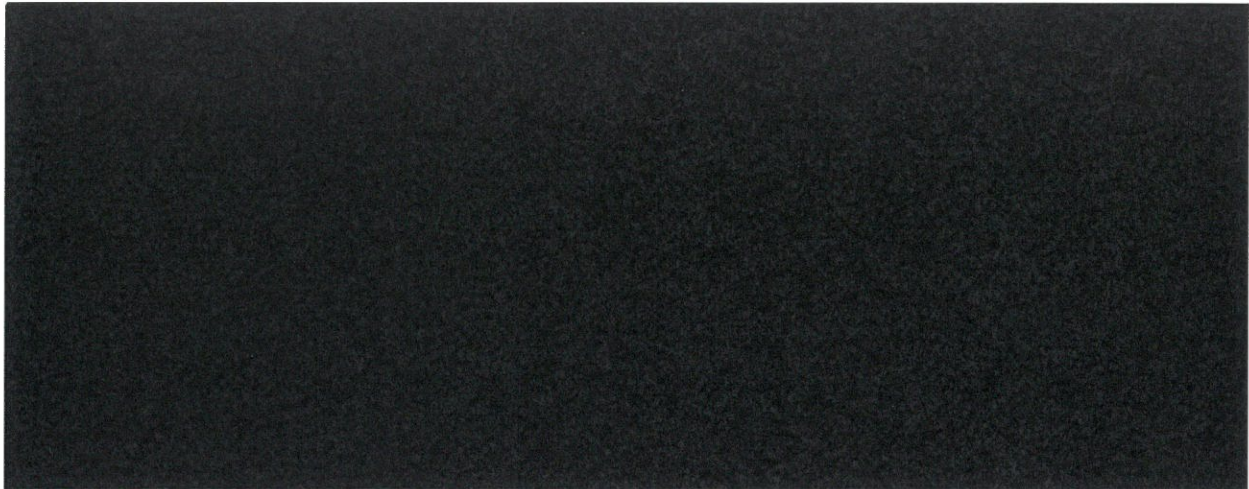
Supplies to most customers were restored over the next 24-48 hours.

¹ Current data indicates that damage to the Davenport – Brinkworth 275 kV and the Port Lincoln – Yadnarie 132 kV lines occurred following the Black System.

Released under FOI

Following the events, AEMO suspended the SA market and invoked pricing and dispatch schedules (as required under the Rules).

On Thursday, 29 September 2016, pursuant to clause 3.14.3 (2) of the Rules, AEMO was directed to keep the SA market suspended pursuant to a Ministerial direction under the *Essential Service Act 1981* (SA). On 11 October the Ministerial direction was revoked.



The role of the AER

The responsibility for managing power system events rests with AEMO, in conjunction with the local Transmission and Distribution network service providers, jurisdictional coordinators and other market participants in accordance with the Rules, and standards established by the AEMC's Reliability Panel. The AER does not have an operational role in this regard.

The AER's role is to monitor, investigate and enforce compliance with national energy legislation and rules. Section 15 of the Electricity Law sets out the AER's core functions and powers in relation to wholesale market enforcement.

The AER investigates and make inquiries regarding breaches or possible breaches of the national energy laws including powers to:

- compulsorily require the production of information and documents.
- take appropriate enforcement action, such as:
 - issuing infringement notices
 - accepting voluntary or court enforceable undertakings, and
 - instituting proceedings in relation to breaches of obligations under national energy laws.

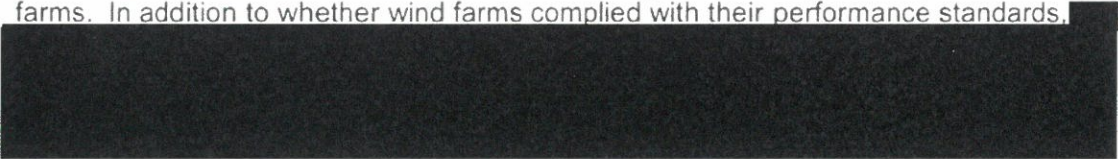
The AER prioritises investigating compliance during significant market events. The AER is investigating all aspects of the System Black event against the requirements of the Rules. This includes reviewing material gathered and reports prepared by other entities (including AEMO) to determine whether those involved satisfied all applicable obligations.

The AER may be required to use its information gathering powers to collect evidence as part of its investigation. The AER is also conducting a targeted assessment of any compliance issues associated with the 1 December 2016 event.

Released under FOI

Compliance investigation

The areas of focus for the AER's investigation of the System Black event include, but are not limited to:

1. PRE-EVENT - AEMO and ElectraNet's actions in the lead up to the storm event, in particular whether they used the mechanisms available to them under the Rules.
2. EVENT - a key issue revolves around the low voltage ride through setting of the wind farms. In addition to whether wind farms complied with their performance standards,

3. SYSTEM RESTART ANCILLARY SERVICES (SRAS) - although the system successfully restarted, there were a number of issues with contracted providers. Given broader industry concern about AEMO's approach to acquiring sufficient SRAS to meet the relevant standard, this is an area we are reviewing closely.
4. MARKET SUSPENSION - given the duration of the market suspension was longer than was contemplated during the design stage of the suspension arrangements. The AER is looking closely at this area and its impacts. We are reviewing whether AEMO complied with certain obligations when directing participants to manage power system security.

Specific areas of the Electricity rules include, but are not limited to:

Generators' compliance with technical performance standards (clause 4.15)

Generators are required to satisfy performance criteria particularly during power system events.

Network Service Providers' compliance with performance requirements (clauses 5.2.3 and 5.7.4)

NSPs have responsibility to ensure the protection and control systems operate in accordance with performance and system standards and criteria established in the Rules.

SRAS (clauses 3.11, 4.8.12 and 4.8.14)

AEMO contract with providers for services to restart the power system in the event that a black system event occurs. Participants are required to establish local black system procedures and respond appropriately during a power system restoration.

Managing contingency events (clause 4.2.3)

AEMO has power system obligations during abnormal conditions, including reclassifying non-credible contingencies. AEMO is required to keep the market informed, consider risks (non-credible contingencies), apply established assessment criteria, reclassify power system assets at risk and keep the power system secure and operational.

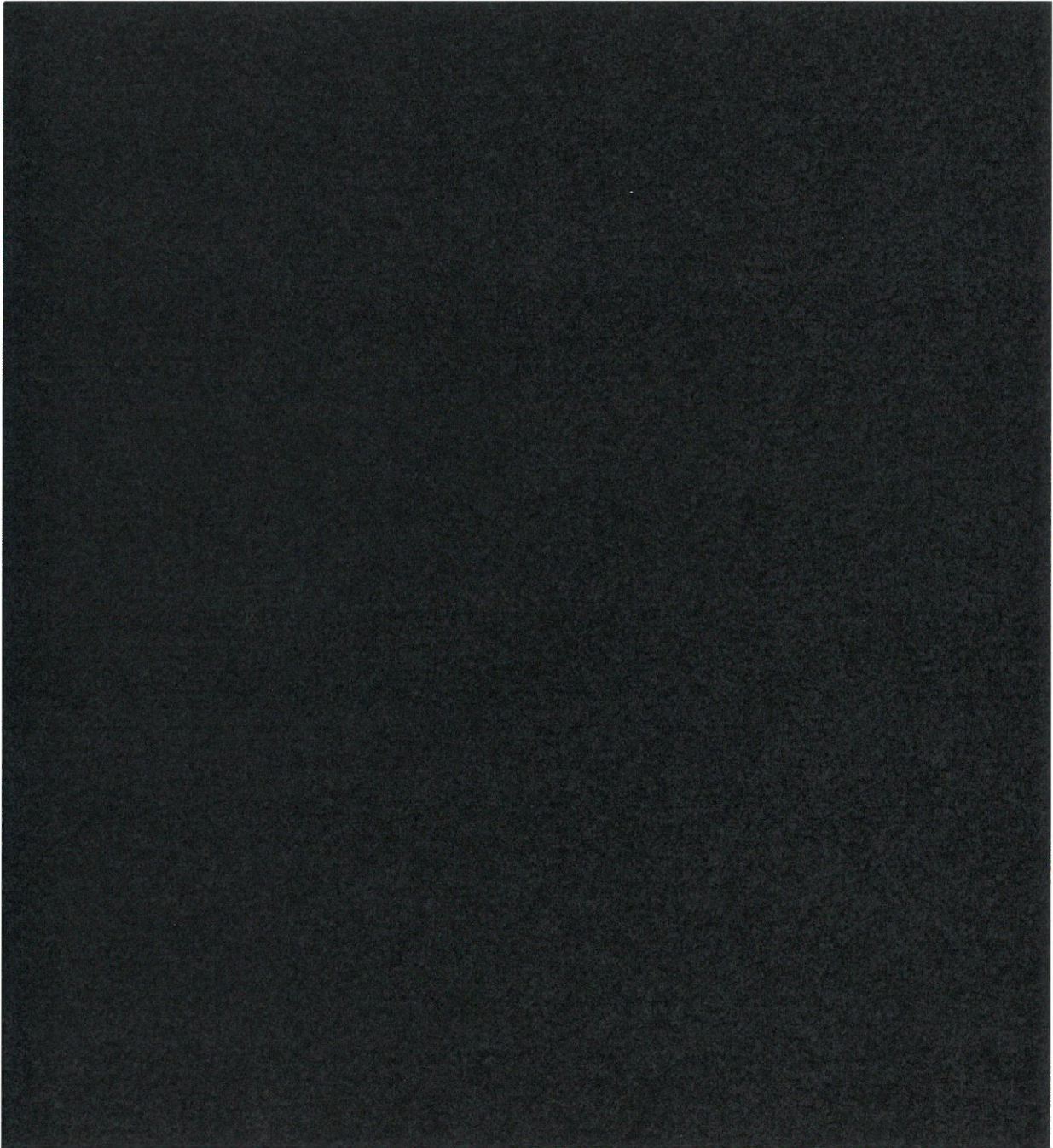
Released under FOI

Procedures relating to market suspension and pricing (clause 3.14)

AEMO has to meet certain conditions when suspending normal market operations and comply with procedures for operating the power system when the market is suspended. This includes when and how AEMO can declare a market suspended; the procedure for calculating spot and ancillary service prices and eligibility for compensation.

Other issues

More broadly, processes relating to information provision, industry participants' responsibilities and obligations (chiefly under clause 4.3) and power system security operations (clause 4.8) will also be reviewed.



Released under FOI

