



## **Draft National Electricity Amendment (System restart services, standards and testing) Rule 2020**

under the National Electricity Law to the extent applied by:

- (a) the National Electricity (South Australia) Act 1996 of South Australia;
- (b) the Electricity (National Scheme) Act 1997 of the Australian Capital Territory;
- (c) the Electricity - National Scheme (Queensland) Act 1997 of Queensland;
- (d) the Electricity - National Scheme (Tasmania) Act 1999 of Tasmania;
- (e) the National Electricity (New South Wales) Act 1997 of New South Wales;
- (f) the National Electricity (Victoria) Act 2005 of Victoria;
- (g) the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015 of the Northern Territory; and
- (h) the Australian Energy Market Act 2004 of the Commonwealth.

The Australian Energy Market Commission makes the following Rule under the National Electricity Law.

John Pierce  
Chairman  
Australian Energy Market Commission

## **Draft National Electricity Amendment (System restart services, standards and testing) Rule 2020**

### **1 Title of Rule**

This Rule is the *Draft National Electricity Amendment (System restart services, standards and testing) Rule 2020*.

### **2 Commencement**

Schedule 1 of this Rule commences operation on 1 October 2020.

Schedule 2 of this Rule commences operation on [2 April 2020].

### **3 Amendment to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 1.

### **4 Savings and Transitional Amendment to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 2.

## **Schedule 1      Amendment to the National Electricity Rules**

(Clause 3)

### **[1] Clause 3.11.7      Guidelines and objectives for acquisition of system restart ancillary services by AEMO**

In clause 3.11.7(a1), after "lowest" insert "overall".

### **[2] Clause 3.11.7      Guidelines and objectives for acquisition of system restart ancillary services by AEMO**

In clause 3.11.7(c), after "lowest" insert "overall".

### **[3] Clause 3.11.7      Guidelines and objectives for acquisition of system restart ancillary services by AEMO**

After clause 3.11.7(d)(3), insert a new clause 3.11.7(d)(3A):

(3A) guidance to *Registered Participants* on the frequency with which testing under clause 4.3.6 is likely to occur and the factors influencing a decision of *AEMO* to conduct a test under clause 4.3.6(a), including (but not limited to) the types of conditions or changes in the *power system* which could necessitate a test;

### **[4] Clause 3.11.7      Guidelines and objectives for acquisition of system restart ancillary services by AEMO**

After clause 3.11.7(d)(4), insert a new clause 3.11.7(d)(4A):

(4A) a process for assessing whether the arrangements used in the testing of *system restart ancillary services* are consistent with those planned to be used in the deployment of *system restart ancillary services* following a *major supply disruption* and assessing the impact of any inconsistencies;

### **[5] Clause 4.3.1      Responsibility of AEMO for power system security**

After clause 4.3.1(pa), insert a new clause 4.3.1(paa):

(paa) to manage and coordinate any activities reasonably required to prepare for and implement an effective response to a *major supply disruption*. Such activities include (but are not limited to):

- (1) overseeing the testing of *system restart ancillary services* or any other equipment or process *AEMO* reasonably requires to be tested; and
- (2) managing and coordinating the effective restoration of *supply*, including the development of *system restart ancillary services*;

## **[6] Clause 4.3.4 Network Service Providers**

After clause 4.3.4(a), insert a new clause 4.3.4(a1):

- (a1) Each *Network Service Provider* must:
  - (1) participate in and facilitate testing of *system restart ancillary services*;
  - (2) comply with the *SRAS Guideline*; and
  - (3) take all reasonable steps to facilitate the effective deployment of *system restart ancillary services*.

## **[7] Clause 4.3.6 System restart test obligations**

After clause 4.3.5, insert a new clause 4.3.6:

### **4.3.6 System restart test obligations**

#### **Test program**

- (a) At least once every 3 years, *AEMO* must undertake a test for each *electrical sub-network* to verify whether the *system restart plan* as it relates to that *electrical sub-network* is likely to be consistent with the achievement of the *system restart standard* or the *AEMO power system security responsibilities* for that *electrical sub-network*. *AEMO* must notify the relevant *Transmission Network Service Provider* of its intention to undertake a test in respect of that *electrical sub-network*.
- (b) If a *Transmission Network Service Provider* receives a notice under paragraph (a), it must within 10 *business days* notify *AEMO* of any *Registered Participant* in respect of *plant* connected to its *network* that is required to participate in the test in accordance with the relevant procedures developed under clause 4.8.12(j).
- (c) *AEMO* must consult with the *Transmission Network Service Provider* and the *Registered Participants* notified under paragraph (b) on the timing and scope of the test and consider any submissions when preparing the *test program*.
- (d) After consulting with the relevant *Transmission Network Service Provider* and *Registered Participants* under paragraph (c), *AEMO* may prepare the *test program* for the test and provide that *test program*

to the *Transmission Network Service Provider* and the *Registered Participants*.

- (e) The *test program* must be designed to achieve the objective of the test set out in paragraph (a) having regard to the following principles:
  - (1) *power system security* must be maintained in accordance with Chapter 4;
  - (2) the extent and duration of variation from the *central dispatch* outcomes that would otherwise occur in the absence of the test should be minimised; and
  - (3) to the extent reasonably practicable, the timing, duration and technical specifications of the test should consider and be coordinated with the operational requirements of the *Transmission Network Service Provider* and other affected *Registered Participants* so as to minimise the cost and impact of the test on the operations of all parties.
- (f) The *test program* must include a test period, being a specified four week period in which the test will occur and which period must start at least 6 months after the date the *test program* is provided to the *Transmission Network Service Provider* and the *Registered Participants*.
- (g) At least 20 *business days* prior to the start of the test period, *AEMO* must notify the *Transmission Network Service Provider* and the *Registered Participants* of the date on which the test will occur in the test period.
- (h) If, at any time before or during a test under this clause 4.3.6, *AEMO* considers that it is necessary to modify the *test program* (including its timing), *AEMO* may modify the *test program* by giving notice as soon as reasonably practicable to the *Transmission Network Service Provider* and *Registered Participants*. If *AEMO* defers the test, it must reschedule the test as soon as reasonably practicable having regard to the principles in paragraph (e).
- (i) *AEMO* and the *Transmission Network Service Provider* must conduct the test in accordance with the *test program*.
- (j) Each *Registered Participant* whose *plant* is included in a test under this clause 4.3.6 (including the *Transmission Network Service Provider*, as applicable) must:
  - (1) provide information reasonably requested by *AEMO* or the *Transmission Network Service Provider* for the purpose of the test and ensure that such information is prepared in accordance with *good electricity industry practice*;

- (2) cooperate with, and comply with instructions given by, *AEMO* and the *Transmission Network Service Provider* in planning, preparing for and conducting the test; and
- (3) act in good faith in respect of, and not unreasonably delay, the test.

### **Costs**

- (k) Each *Registered Participant* and *AEMO* must bear its own costs associated with tests conducted under this clause 4.3.6 except to the extent provided for under this clause 4.3.6. Nothing in this clause 4.3.6 prevents recovery of testing costs under an *ancillary services agreement*.
- (l) If an instruction is given to a *Registered Participant* (other than a *Transmission Network Service Provider*) by *AEMO* or the *Transmission Network Service Provider* under subparagraph (j)(2) and such instruction is not given under an *ancillary services agreement*, then for the purposes of clause 3.15.7A only:
  - (1) the instruction is taken to be a *direction* for services other than *energy* and *market ancillary services*; and
  - (2) the *Registered Participant* is taken to be a *Directed Participant*, and that *Directed Participant* in respect of a test must be compensated at the fair payment price of the services determined in accordance with clause 3.15.7A, as modified under paragraph (m).
- (m) The following principles and amendments apply to the application of clause 3.15.7A to a *Directed Participant* under paragraph (l):
  - (1) the *Directed Participant* is only entitled to compensation for direct costs incurred as a result of the test;
  - (2) direct costs include fuel costs, incremental operation and maintenance costs and wear and tear attributable to the specific circumstances related to the *plant's* operation during the test;
  - (3) direct costs exclude claims for losses by third parties and opportunity costs, including lost revenue from the *market*;
  - (4) the principles in clause 3.15.7A(c)(1)(ii)(C) and (D) do not apply; and
  - (5) clauses 3.15.7A(e) and (e1) do not apply.
- (n) The *Directed Participant* under paragraph (l) is not entitled to any compensation in relation to a test pursuant to clause 3.15.7B.
- (o) The *AER* must exclude the impact of any testing under this clause 4.3.6 from the operation of a *service target performance incentive scheme* for a *Transmission Network Service Provider*.

**Post-test report**

- (p) Within 3 months of completion of a test, *AEMO* must prepare and publish a report outlining:
  - (1) how *AEMO* sought to incorporate the results of its consultation with the *Transmission Network Service Provider* and affected *Registered Participants* into the *test program*;
  - (2) how *AEMO* sought to minimise the costs and operational impacts of the test; and
  - (3) whether the *system restart plan* the subject of the test operated consistently with the achievement of the *system restart standard* and the *AEMO power system security responsibilities* for an *electrical sub-network*.
- (q) Any report published by *AEMO* pursuant to clause 4.3.6(p) must not disclose *confidential information*.

**[8] Clause 4.8.12 System restart plan and local black system procedures**

Before clause 4.8.12(a), insert a new heading, "System restart plan".

**[9] Clause 4.8.12 System restart plan and local black system procedures**

Before clause 4.8.12(d), insert a new heading, "Local black system procedures".

**[10] Clause 4.8.12 System restart plan and local black system procedures**

In clause 4.8.12(f)(1), after "*system restart plan*;" omit "and".

**[11] Clause 4.8.12 System restart plan and local black system procedures**

After clause 4.8.12(f)(1), insert a new clause 4.8.12(f)(1A):

- (1A) include any action the *Generator* or *Network Service Provider* must take following any *major supply disruption* to assist the safe implementation of the *system restart plan*; and

**[12] Clause 4.8.12 System restart plan and local black system procedures**

Before clause 4.8.12(j), insert a new heading, "Communication protocols".

**[13] Clause 4.8.12 System restart plan and local black system procedures**

Omit clause 4.8.12(j) and substitute:

- (j) *AEMO and Network Service Providers must jointly develop written communication protocols to facilitate the exchange of all information relevant to the roles played by AEMO, Network Service Providers, Generators, Customers and other Registered Participants in the preparation and implementation of the system restart plan.*

**[14] Clause 4.8.12 System restart plan and local black system procedures**

After clause 4.8.12(j), insert:

- (k) The written communication protocols prepared under clause 4.8.12(j) must:
  - (1) specify the categories of information required to, and the timing and process by which information will, be exchanged between:
    - (i) *AEMO and Network Service Providers, SRAS Providers, Generators, Customers and other Registered Participants as relevant, in order for AEMO to prepare and implement the system restart plan and for AEMO and the relevant parties to give effect to the system restart plan;*
    - (ii) *Transmission Network Service Providers and Distribution Network Service Providers and Customers connected to the Transmission Network Service Provider's transmission network regarding the nature of connection point and load characteristics;*
    - (iii) *Network Service Providers and Generators regarding connection point characteristics and the nature of switching that may need to be conducted during the process of restoring the power system; and*
    - (iv) *Distribution Network Service Providers and parties connected to the Distribution Network Service Provider's distribution network regarding the nature of connection point and load characteristics.*
  - (2) where the communication protocols prepared under clause 4.8.12(j) are constituted by a number of documents, be clearly identifiable as the communication protocols to be utilised during the restoration of the *power system* after a *major supply disruption*;
  - (3) where the communication protocols incorporate procedures or protocols in other documents, the document must be clearly



identified and referenced and the circumstances under which those procedures or protocols are to be used in a *major supply disruption* must be clearly identified; and

- (4) require that revisions or updates of the protocols are jointly developed and are documented.
- (l) *AEMO and Network Service Providers, SRAS Providers, Generators, Customers and other Registered Participants* as relevant must take all reasonable steps to comply with the written communication protocols developed pursuant to clause 4.8.12(j).
- (m) *AEMO and Network Service Providers, SRAS Providers, Generators, Customers and other Registered Participants* as relevant must comply with a reasonable request for information made by *AEMO* or a *Network Service Provider* pursuant to the written communication protocols prepared pursuant to clause 4.8.12(j).

## **[15] Chapter 10                      Substituted Definitions**

Substitute the following definitions in alphabetical order:

### ***black start capability***

A capability that allows a *generating unit, facilities, plant* or combination of *plant and facilities*, following *disconnection* from the *power system*, to be able to deliver electricity to either:

- (a) a *connection point*; or
- (b) a suitable point in the *network* from which *supply* can be made available to other *generating units*,

without taking *supply* from any part of the *power system* following *disconnection*.

### ***system restart ancillary service or SRAS***

A service provided by *plant* or *facilities* with:

- (a) *black start capability*; or
- (b) the capabilities described in the *SRAS Guideline* to supply one or more services to sustain the stable energisation of *generation* and *transmission*,

sufficient to facilitate the restoration and maintenance of *power system security* and the restart of *generating units* following a *major supply disruption*.

### ***test program***

In respect of an *inter-network test* or a system restart test under clause 4.3.6, means the program and co-ordination arrangements for the test including (without limitation):

- (1) test procedures;
- (2) the proposed timing of the test;
- (3) operation procedures to manage *power system security* during the test;
- (4) required *power system* conditions for conducting the test;
- (5) for an *inter-network test*, test facilitation services including, as necessary, *ancillary services* required to achieve those *power system* conditions;
- (6) criteria for continuing or concluding a test and the decision-making process relevant to the test; and
- (7) contingency arrangements.

## Schedule 2 Savings and Transitional Amendment to the National Electricity Rules

(Clause 4)

### [1] Chapter 11 Savings and Transitional Rules

In Chapter 11, insert a new Part ZZZ[X]:

#### Part ZZZ[X] System restart services, standards and testing

#### 11.[XXX] Rules consequential on the making of the National Electricity Amendment (System restart services, standards and testing) Rule 2020

##### 11.[xxx].1 Definitions

For the purposes of this rule 11.[xxx]:

**Amending Rule** means the National Electricity Amendment (System restart services, standards and testing) Rule 2020.

**commencement date** means the date of commencement of Schedule 2 of the Amending Rule.

##### 11.[xxx].2 SRAS Guideline

- (a) By 1 October 2020, and in accordance with the *Rules consultation procedures*, AEMO must amend the *SRAS Guideline* to take into account the Amending Rule.
- (b) If, prior to 1 October 2020 and for the purposes of amending the *SRAS Guideline* in anticipation of the Amending Rule, AEMO undertook consultation or a step equivalent to that required in the *Rules consultation procedures*, then that consultation or step is taken to satisfy the equivalent consultation or step under the *Rules consultation procedures*.

##### 11.[xxx].3 System restart standard

- (a) As soon as practicable after the commencement date, and in accordance with the consultation requirements in clause 8.8.3, the *Reliability Panel* must update the *system restart standard* to take into account the Amending Rule.
- (b) On and from the commencement date and until such time as the *system restart standard* is updated in accordance with paragraph (a), the *system restart standard* is to be interpreted as if it applied to *system restart ancillary services* as defined under the Amending Rule.