



Draft National Electricity Amendment (Implementing a general power system risk review) Rule 2021

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.

Merryn York
Acting Chairperson
Australian Energy Market Commission

Draft National Electricity Amendment (Implementing a general power system risk review) Rule 2021

1 Title of Rule

This Rule is the *Draft National Electricity Amendment (Implementing a general power system risk review) Rule 2021*.

2 Commencement

This Rule commences operation on [date rule is made].

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 5.12.1 Transmission annual planning review

After clause 5.12.1(b)(1), insert:

- (1a) include a review of, and interactions between:
 - (i) any *emergency frequency control schemes* or emergency controls on its *network*; and
 - (ii) the settings of *protection systems* or *control systems* of *plant connected* to its *network* (including consideration of whether such settings are fit for purpose for the future operation of its *network*);

[2] Clause 5.12.1 Transmission annual planning review

In clause 5.12.1(b)(3), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[3] Clause 5.12.2 Transmission Annual Planning Report

In clause 5.12.2(c)(6A), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[4] Clause 5.12.2 Transmission Annual Planning Report

After clause 5.12.2(c)(9), insert:

- (9a) the analysis of the interactions between:
 - (i) any *emergency frequency control schemes* or emergency controls on its *network*; and
 - (ii) the settings of *protection systems* or *control systems* of *plant connected* to its *network* (including consideration of whether such settings are fit for purpose for the future operation of its *network*);

undertaken under clause 5.12.1(b)(1a), including a description of proposed actions to be undertaken to address any adverse interactions between those schemes or settings.

[5] Clause 5.13.1 Distribution annual planning review

In clause 5.13.1(d)(3)(ii), omit "and".

[6] Clause 5.13.1 Distribution annual planning review

In clause 5.13.1(d)(4), omit "." and substitute ";".

[7] Clause 5.13.1 Distribution annual planning review

After clause 5.13.1(d)(4), insert:

- (5) take into account the most recent *general power system risk review*; and
- (6) include a review of, and interactions between:
 - (i) any *emergency frequency control schemes* or emergency controls on its *network*; and
 - (ii) the settings of *protection systems* or *control systems* of *plant connected* to its *network* (including consideration of whether such settings are fit for purpose for the future operation of its *network*).

[8] Clause 5.14.1 Joint planning obligations of Transmission Network Service Providers and Distribution Network Service Providers

After clause 5.14.1(d)(3), insert:

- (3a) assess the interactions between:
 - (i) any *emergency frequency control schemes* or emergency controls on their respective *networks*; and
 - (ii) the settings of *protection systems* or *control systems* of *plant connected* to their respective *networks*,

(as identified under clauses 5.12.1(b)(1a) and 5.13.1(d)(6)) with a view to addressing any adverse impacts through joint planning;

[9] Clause 5.14.1 Joint planning obligations of Transmission Network Service Providers and Distribution Network Service Providers

In clause 5.14.1(d)(4), omit "subparagraph (3)" and substitute "subparagraphs (3) or (3a)".

[10] Rule 5.20A Frequency management planning

Omit the title of rule 5.20A and substitute "Frequency and other power system risk management planning".

[11] Clause 5.20A.1 Power system frequency risk review

Omit the title of clause 5.20A.1 and substitute "General power system risk review".

[12] Clause 5.20A.1 General power system risk review

Omit clause 5.20A.1(a) and substitute:

- (a) *AEMO* must, through a *general power system risk review* under this rule, prioritising the most material risks, review:
 - (1) *non-credible contingency events* the occurrence of which *AEMO* expects, alone or in combination, would be likely to involve uncontrolled increases or decreases in *frequency* leading to *cascading outages*, or *major supply disruptions*;
 - (1a) events and conditions not referred to in subparagraph (1), including *contingency events*, the occurrence of which *AEMO* expects, alone or in combination, would be likely to lead to *cascading outages*, or *major supply disruptions*;
 - (2) current arrangements for management of the events and conditions described in sub-paragraphs (1) and (1a);
 - (3) options for future management of the *non-credible contingency events* referred to in paragraph (1); and
 - (4) options for future management of the events and conditions referred to in paragraph (1a).

[13] Clause 5.20A.1 General power system risk review

After clause 5.20A.1(b), insert:

- (b1) For the purposes of subparagraph (a)(1a):
 - (1) *AEMO* must consider events and conditions that present a material risk of *cascading outages* or *major supply disruptions* associated with any or a combination of:
 - (i) increases or decreases in *voltage*;
 - (ii) levels of *inertia*;
 - (iii) the availability of *system strength services*;
 - (iv) the operation or interaction of *emergency frequency control schemes* and emergency controls, including as identified by:
 - (A) *Transmission Network Service Providers* in their *Transmission Annual Planning Report* under clause 5.12.2, and
 - (B) *Distribution Network Service Providers* in their *Distribution Annual Planning Report* under clause 5.13.2; and

- (2) *AEMO* may consider events and conditions that present a material risk of *cascading outages* or *major supply disruptions* associated with any factors other than those listed in subparagraph (1) that *AEMO* considers appropriate, including events or conditions arising on *distribution networks*.

[14] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[15] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(1), before "referred to in paragraph (a)", insert "or events or conditions".

[16] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(1)(i), (ii) and (iii), after "event", insert "or conditions".

[17] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(2), after "events", insert "and conditions".

[18] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(2)(i), after "event", insert "or condition".

[19] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(2)(ii), after ";" omit " and".

[20] Clause 5.20A.1 General power system risk review

In clause 5.20A.1(c)(2)(iii), after "options;" insert " and".

[21] Clause 5.20A.1 General power system risk review

After clause 5.20A.1(c)(2)(iii), insert:

- (iv) after consultation with *Transmission Network Service Providers* and *Distribution Network Service Providers*, include an explanation of the reason why certain events and conditions were, or were not, considered by *AEMO* to be priorities for assessment.

[22] Clause 5.20A.2 Power system frequency risk review process

Omit the title of clause 5.20A.2 and substitute "General power system risk review process".

[23] Clause 5.20A.2 General power system risk review process

Omit clause 5.20A.2(a) and substitute:

- (a) *AEMO* must undertake a *general power system risk review* no less than annually.

[24] Clause 5.20A.2 General power system risk review process

In clause 5.20A.2(b), before "*Transmission Network Service Providers*", insert "relevant".

[25] Clause 5.20A.2 General power system risk review process

In clause 5.20A.2(b), after "*Transmission Network Service Providers*", insert "and relevant *Distribution Network Service Providers*".

[26] Clause 5.20A.2 General power system risk review process

In clause 5.20A.2(b), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[27] Clause 5.20A.2 General power system risk review process

Omit clause 5.20A.2(d) and substitute:

- (d) When undertaking a *general power system risk review* (including the assessment of the risks identified in clause 5.20A.1(b1)):
 - (1) *AEMO* must consult with relevant *Network Service Providers*;
 - (2) *AEMO* may consult with any other parties it considers appropriate, including without limitation, *Jurisdictional System Security Coordinators*; and
 - (3) *AEMO* must, on commencement of the *general power system risk review*, publish an approach paper setting out:
 - (i) The:

- (A) *non-credible contingency events* identified by *AEMO* under clause 5.20A.1(a)(1); and
- (B) the events and conditions identified by *AEMO* under clause 5.20A.1(a)(1a),

to be assessed by *AEMO* in the *general power system risk review*, and an explanation for why *AEMO* considers those *non-credible contingency events* and other events and conditions should be priorities for assessment;

- (ii) the approach and methodologies used in assessing each *non-credible contingency event* and other events and conditions;
- (iii) information inputs and assumptions used by *AEMO* in assessing each *non-credible contingency event* and other events and conditions; and
- (iv) *AEMO's* approach to consulting with relevant parties for the purposes of the *general power system risk review*,

and invite submissions within a period of at least 10 *business days* of the date specified in the approach paper.

[28] Clause 5.20A.2 General power system risk review process

After clause 5.20A.2(d), insert:

- (e) A *Network Service Provider* must co-operate with *AEMO* in the conduct of *general power system risk reviews* and provide to *AEMO* all information and assistance reasonably requested by *AEMO* in connection with *general power system risk reviews* to enable *AEMO* to undertake *general power system risk reviews* expeditiously.

[29] Clause 5.20A.3 Power system frequency risk review report

Omit the title of clause 5.20A.3 and substitute "General power system risk review report".

[30] Clause 5.20A.3 General power system risk review report

Omit clause 5.20A.3(a) and substitute:

- (a) As soon as reasonably practicable following the completion of a *general power system risk review*, *AEMO* must publish a report setting out its findings and recommendations on the matters set out in clause 5.20A.1.

[31] Clause 5.20A.3 General power system risk review report

In clause 5.20A.3(b), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[32] Clause 5.20A.3 General power system risk review report

In clause 5.20A.3(c), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[33] Clause 5.20A.4 Request for protected event declaration

In clause 5.20A.4(a), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[34] Clause 5.20A.5 Request to revoke a protected event declaration

In clause 5.20A.5(a), omit "*power system frequency risk review*" wherever occurring and substitute "*general power system risk review*".

[35] Clause 5.22.10 Preparation of ISP

After clause 5.22.10(a)(5)(vi), insert:

(viA) outcomes of the *general power system risk review*;

[36] Clause 5.22.10 Preparation of ISP

After clause 5.22.10(b)(7), insert:

(7a) the most recent *general power system risk review*;

[37] Clause S5.1.10.1a Emergency frequency control schemes

Omit clause S5.1.10.1a(a)(1) and substitute "[Deleted]".

[38] Clause S5.1.10.1a Emergency frequency control schemes

In clause S5.1.10.1a(c), omit "*power system frequency risk review*" and substitute "*general power system risk review*".

[39] Schedule 5.8 Distribution Annual Planning Report

At the end of Schedule 5.8(n)(2), omit "." and substitute "; and".

[40] Schedule 5.8 Distribution Annual Planning Report

After paragraph (n) of Schedule 5.8, insert:

(o) the analysis of the interactions between:

- (1) any *emergency frequency control schemes* or emergency controls on its *network*; and
- (2) the settings of *protection systems* or *control systems* of *plant connected* to its *network* (including consideration of whether such settings are fit for purpose for the future operation of its *network*);

undertaken under clause 5.13.1(d)(6), including a description of proposed actions to be undertaken to address any adverse interactions between these schemes or settings.

[41] Clause 8.8.1 Purpose of Reliability Panel

In clause 8.8.1(a)(2d), omit "*power system frequency risk reviews*" and substitute "*general power system risk reviews*".

[42] Chapter 10 New Definition

In Chapter 10, insert the following new definition in alphabetical order:

general power system risk review

A review described in clause 5.20A.1(c).

[43] Chapter 10 Omitted definition

In Chapter 10, omit the following definition:

power system frequency risk review

Schedule 2 Savings and Transitional Amendment to the National Electricity Rules

(Clause 4)

[1] New Part ZZZZ[X] Implementing a general power system risk review

In Chapter 11, after Part ZZZZ[X], insert:

Part ZZZZ[X] Implementing a general power system risk review

11.[XXX] Rules consequential on the making of the National Electricity Amendment (Implementing a general power system risk review) Rule 2021

11.[XXX].1 Definitions

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

Commencement Date means [the date the National Electricity Amendment (Implementing a general power system risk review) Rule 2021 is made].

11.[XXX].2 First general power system risk review

Despite clause 5.20A.2(a), *AEMO* must complete the first *general power system risk review* within 18 months of the Commencement Date.