

Western Power's Proposed Amendments to the Technical Rules Submitted November 2015

Final Decision

July 2016

Economic Regulation Authority

WESTERN AUSTRALIA

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Decision

1. On 6 November 2015, Western Power submitted to the Economic Regulation Authority (**Authority**) proposed amendments to the Technical Rules pertaining to the South West Interconnected Network (**SWIN**).
2. Western Power's proposed amendments included:
 - amending the limit for Direct Current (DC) injection from zero to 0.5 per cent of the connection point rating (per phase);
 - removing out-of-date references to Australian Safety Standard AS 4777 (2005);
 - amending the current definitions of a number of terms relating to connection points; and
 - the correction of a number of typographical errors in the current Technical Rules.
3. The Authority published its Issues Paper with respect to Western Power's proposal on 10 February 2016.
4. Public submissions were made by the following parties:
 - Engineers Australia
 - Infinite Energy
 - Wood and Grieve Engineers
 - Community ElectricityOne party did not wish its name to be published.
5. On 4 May 2016, the Authority published its Draft Decision not to approve the majority of the amendments proposed by Western Power.
6. On 10 May 2016, the Authority conducted a workshop for Western Power to communicate its proposed changes to interested stakeholders. During the workshop, Western Power communicated that it had taken public submissions on its initial proposal, as well as the Authority's Draft Decision into account, and had made changes to its proposed amendments to the Technical Rules. Western Power then outlined its amended proposal and responded to stakeholders.¹
7. Western Power submitted a revised proposal to amend its Technical Rules on 18 May, 2016. The revised amendments proposed by Western Power included:
 - Removing the limit for Direct Current (**DC**) injection (Clause 3.2.1(c)(3));
 - Removing out-of-date references to Australian Safety Standard AS 4777 (2005);
 - Amendments to the definition of the term "connection point";
 - Amendments to the definition of the term "connection asset";

¹ Economic Regulation Authority & Western Power, [Proposed Amendments to the Technical Rules Submitted by Western Power in November 2016, March 2016 and April 2016](#), 10 May 2016.

- Amendments to the proposed definition of the term “point of common coupling”; and
 - Amendments to the proposed correction of the wording to clause A12.2 from “National Professional Engineers’ Register Standing” to “National Professional Engineers Register (NPER) or equivalent standing”.
8. Two submissions were received in response to the Authority’s Draft Decision, and Western Power’s revised proposal.
 9. The Authority has reviewed Western Power’s revised proposal and considers that the revised amendments are consistent with the requirements of the Code in relation to technical rules including: they are reasonable, do not impose inappropriate barriers to entry to the electricity market, and are consistent with good industry practice.
 10. The Authority also found that consistent with the requirements of the Code in relation to technical rules, Western Power’s proposed revisions have the capacity to work in an integrated fashion with the technical rules governing all interconnected networks, and also reasonably accommodate the interconnection of further networks in the future.
 11. The Authority’s Final Decision is that Western Power’s revised proposal to amend the Technical Rules complies with chapter 12 of the *Electricity Networks Access Code 2004* (the **Code**), and the Code objective.
 12. Consistent with Clause 12.53 of the Code, the Authority has determined that the date on which the approved amendments to the Technical Rules will take effect is 1 August 2016.
 13. The Authority’s considerations in coming to the above Final Decision are set out in the sections that follow.

Reasons

Background

14. Technical Rules consist of the standards, procedures and planning criteria governing the construction and operation of an electricity network. They set out the minimum standards for the facilities, loads and generators which connect to the network in order to ensure the safety of all network users.
15. Technical Rules are a requirement for all covered networks under the *Electricity Networks Access Code* (2004) (the **Code**).
16. On 6 November 2015, Western Power submitted proposed amendments to the Technical Rules to the Authority.
17. Western Power's proposed amendments included:
 - amending the limit for Direct Current (DC) injection from zero to 0.5 per cent of the connection point rating (per phase);
 - removing out-of-date references to Australian Safety Standard AS 4777 (2005);
 - amending the current definitions of a number of terms relating to connection points; and
 - the correction of a number of typographical errors in the current Technical Rules.
18. Western Power's proposal also included outstanding responses to a number of issues raised during public consultation with respect to the Authority's 2008 - 2011 review of the Technical Rules.
19. Western Power's proposal for the above amendments to the Technical Rules was made in order to accommodate emerging technologies, with particular regard to the facilitation of connecting embedded generation to the distribution network.² Western Power's proposal was made under section 12.50 of the *Electricity Networks Access Code 2004* (the **Code**).
20. On 14 December 2015, Western Power submitted an addendum to its proposal, which modified the wording to proposed clause 3.2.1(g)(2).
21. An Issues Paper was published on the Authority's website on 10 February 2016, along with an invitation for public submissions from interested stakeholders.
22. Following the publication of the Authority's Issues Paper, Western Power submitted a letter to the Authority, advising that it had received feedback from stakeholders that

² Western Power, *Submission to the Economic Regulation Authority for amendments to the Technical Rules*, November, 2015, p. 5.

<https://www.erawa.com.au/cproot/13980/2/WP%20Submission%20for%20Technical%20Rules%20amendments%202015.PDF>

Please note an addendum was published on 18 December 2015.

<https://www.erawa.com.au/cproot/13996/2/WP%20Technical%20Rules%20Amendment%202015%20-%20Submission%20Addendum%20November%202015.pdf>

some of the proposed wording in its proposal to amend DC injection limits was unclear. Western Power's letter to the Authority included further amendments to the wording of Clause 3.2.1(g)(2), and the addition of a text box containing an explanation for the proposed amendment to the clause.

23. Public submissions were made by the following parties:
- Engineers Australia
 - Infinite Energy
 - Wood and Grieve Engineers
 - Community Electricity
 - Party who did not wish name to be published.
24. On 4 May 2016, the Authority published its Draft Decision. The Draft Decision:
- Did not approve Western Power's proposal to amend the limit for Direct Current (DC) injection from zero to 0.5 per cent of the connection point rating (per phase);
 - Approved Western Power's proposal to remove out-of-date references to Australian Safety Standard AS 4777 (2005);
 - Did not approve Western Power's proposed amendment to the definition of "connection point";
 - Approved Western Power's proposed amendment to the definition of "connection asset";
 - Approved the addition of the term "point of common coupling" to the Technical Rules glossary, but did not approve Western Power's proposed definition;
 - Approved the typographical corrections proposed by Western Power with the exception of the proposed change to the wording of clause A12.2 from "National Professional Engineers' Register Standing" to "National Professional Engineers Register (NPER) or equivalent standing".
25. On 10 May 2016, the Authority conducted a workshop for Western Power to communicate its proposed changes to interested stakeholders. During the workshop, Western Power communicated that it had taken public submissions on its initial proposal, as well as the Authority's Draft Decision into account, and had made changes to its proposed amendments to the Technical Rules. Western Power then outlined its amended proposal to the stakeholders in attendance at the workshop.³
26. Stakeholders were encouraged to ask questions about the proposed changes, and to raise any further issues that might arise as a result of the amended proposal.
27. Western Power submitted a revised proposal to amend its Technical Rules on 18 May, 2016. The revised amendments proposed by Western Power included:
- removal of the limit for Direct Current (DC) injection (Clause 3.2.1(c)(3));
 - Amendments to the definition of the term "connection point";
 - Amendments to the definition of the term "connection asset";

³ Economic Regulation Authority & Western Power, [Proposed Amendments to the Technical Rules Submitted by Western Power in November 2016, March 2016 and April 2016](#), 10 May 2016.

- Amendments to the proposed definition of the term “point of common coupling”; and
 - Amendments to the proposed correction of the wording to clause A12.2 from “National Professional Engineers’ Register Standing”.
28. Two public submissions were received by the Authority on its Draft Decision and Western Power’s amended proposal. Copies of the submissions received are available on the [ERA website](#).
29. The Authority has made its Final Decision with respect to the changes proposed by Western Power, on the basis of the amended proposal submitted by Western Power to the Authority on 18 May 2016.
30. The Authority is not required under the Code to issue a detailed decision when approving revisions to the Technical Rules. However, the Authority is committed to a transparent decision making process and accordingly, releases this Final Decision.
31. To assist it in making its decision, the Authority appointed a technical consultant, Geoff Brown and Associates (**GBA**) to provide advice on the proposed amendments. The matters raised in stakeholder submissions were also considered in the decision.

Regulatory Requirements

32. Under Section 12.50 of the Code, a service provider may submit to the Authority a proposal to amend the Technical Rules at any time.
33. The objectives for Technical Rules as specified in section 12.1 of the Code are that they:
- a) are reasonable;
 - b) do not impose inappropriate barriers to entry to a market;
 - c) are consistent with good electricity industry practice; and
 - d) are consistent with relevant written laws and statutory instruments.
34. The Authority must not approve Technical Rules for a network unless it determines that the technical rules:
- a) if the *network* is part of an *interconnected system* - work in an integrated fashion with the *technical rules* governing all *interconnected networks*; and
 - b) reasonably accommodate the interconnection of further *networks* in the future.
35. The Authority may reject the proposal if in its opinion, the proposal is misconceived or lacking in substance, or has been made on trivial or vexatious grounds.
36. As soon as practicable, the Authority must consider whether the proposed amendments are consistent with Chapter 12 of the Code and the Code objective, having regard to any exemptions granted under sections 12.34 and 12.41, and then either approve or not approve the proposed amendments by publishing a notice of its decision, and if the decision was to approve the proposed amendments, the date on which the amendments commence.

37. The objective of the Code is to promote the economically efficient:
- a) investment in: and
 - b) operation of and use of,
- networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.
38. Under section 12.54, the Authority must consult the public in accordance with Appendix 7 if it considers the proposed amendments to the Technical Rules to be substantial, and must approve the proposed amendment only if it considers that the amendment will not have a material adverse effect on the service provider or a user.

Public Submissions

39. Submissions in response to the Authority's Draft Decision were received from:
- Clean Energy Council (**CEC**)
 - Craig Carter of Murdoch university (**Craig Carter**)

Considerations of the Authority

40. Each of Western Power's proposed amendments are considered separately below.

Clause 3.2.1 - DC Injection

Draft Decision

41. Western Power originally proposed to amend the limit for the amount of direct current that can be injected into the distribution system by low voltage connections from zero to 0.5 per cent of the connection point rating (per phase).
42. The clause most affected by Western Power's proposed change to the Technical Rules was clause 3.2.1 (c)(3) Power System Performance Standards, Harmonics: A User must not inject into the transmission or distribution system any DC component of current produced by its own equipment."
43. Excessive levels of DC injected into the network may result in corrosion, increased harmonic distortion, and reduced efficiency in the operation of devices reliant on magnetic cores. For these reasons, the current limit for the injection of DC current into the distribution network is zero.
44. Applicants seeking to connect solar PV inverters at ratings greater than 30 kVA are currently restricted from connecting to the network due to the existing provisions in the Technical Rules, which specify that the limit for the amount of direct current that can be injected into the distribution system is zero. Western Power considered that this zero-limit imposes additional expenses on customers who wish to connect to the low voltage network because it requires modifications to inverters and connection points in order to make them compliant with the Technical Rules.
45. By updating clause 3.2.1 to allow for the injection of a small amount of direct current into the network, Western Power hoped to remove barriers to entry for the increasing number of customers with photovoltaic systems who wish to connect to its network.

46. In its technical report to the Authority, GBA recommended that Western Power's proposed amendment to Clause 3.2.1(c)(3) not be accepted. Instead, GBA recommended that the requirement for zero DC injection be deleted from the Technical Rules, in keeping with other jurisdictions in Australia and in New Zealand.⁴
47. GBA also recommended that Western Power's proposed addition of Clause 3.2.1(g) to the Technical Rules not be approved, because this addition may impose unnecessary compliance costs on some users, given Western Power's acknowledgement that the requirement may be removed in future on the basis of further investigation.⁵
48. GBA agreed with Western Power that high levels of DC current in an electrical network can have an adverse impact; however, GBA also noted that the severity of this impact is not well established.⁶ GBA also noted that there are other methods available, besides limiting the amount of DC injection, which can be employed to mitigate the risks associated with the injection of DC into the low voltage network.⁷
49. The Authority agrees with Western Power that changes to the clauses in the Technical Rules dealing with the limit of DC injection into the network need to be made. However, the Authority also noted that advice from the Authority's technical consultant, GBA, and submissions from stakeholders suggested that setting any type of limit for DC injection creates more issues for users of the Western Power network.
50. The Authority therefore questioned why it would not be appropriate to remove a limit to the injection of DC into the low voltage network altogether, and noted that currently, standard exemptions to the Technical Rules are enabling the connection of users with PV systems to the low voltage network.⁸
51. Accordingly, the Authority's Draft Decision was to not approve Western Power's proposed changes to Clause 3.2.1(c), or the addition to the Technical Rules of Clause 3.2.1(g). Instead, the Authority recommended that further consideration needed to be given to how the matter of DC injection is dealt with in the Technical Rules.

Revised proposal

52. Subsequent to a period of public consultation and the publication of the Authority's Draft Decision, Western Power amended its proposal.
53. Western Power's revised proposal removed limits for DC injection from the Technical Rules altogether.

⁴ Geoff Brown and Associates, *Review of Western Power's Application for Technical Rule Amendments*, 24 April, 2016, p. 7.

⁵ Geoff Brown and Associates, *Review of Western Power's Application for Technical Rule Amendments*, 24 April, 2016, p. 7.

⁶ Geoff Brown and Associates, *Review of Western Power's Application for Technical Rule Amendments*, 24 April, 2016, p. 6.

⁷ Geoff Brown and Associates, *Review of Western Power's Application for Technical Rule Amendments*, 24 April, 2016, p. 6.

⁸ Western Power's list of exemption from the Technical Rules shows that there are currently 28 exemptions from the Clause dealing with DC injection limits, which have been approved by Western Power. Western Power, *List of exemptions from compliance with the Technical Rules granted by Western Power after 1 July 2007*, 16 January 2016, p. 6. <https://www.erawa.com.au/cproot/14034/2/WP-%20Updated%20list%20of%20ExemptionsTech%20Rules-%20December%202015.PDF>

54. Western Power outlined its revised proposal to amend the DC injection limit at the Technical Rules workshop, held by the Authority at its offices in Albert Facey House on 10 May 2016. Western Power also proposed in the workshop that rather than setting a limit on DC injection to prevent harmonic distortion, it would rely on other sections in the Technical Rules which are already in place to ensure that limits on harmonic distortion are met.
55. Western Power's amended proposal was consistent with the comments that it made during the workshop. In its amended proposal, Western Power outlined that while excessive amounts of DC injection may have negative consequences on the network, it was currently impractical to monitor all of the different kinds of load that may result in DC injection.

Public Submissions

56. One submission from the Clean Energy Council (**CEC**) was received by the Authority with respect to the proposed amendments to the limit for DC injection.
57. The submission from the CEC addressed Western Power's proposed removal of DC injection limits from the Technical Rules. The CEC supported the removal of the DC injection limit, and considered that the AS4777 standard sufficiently addressed any possible issues regarding the injection of DC into the SWIS.
58. The CEC also considered that Western Power's revised proposal to remove any limits for DC injection altogether would effectively remove barriers to efficient market entry for consumers with embedded generation systems wishing to connect to the network.

Final Decision

59. The Authority considers that Western Power's revised proposal takes into account comments made in submissions from stakeholders, as well as advice from GBA, the Authority's technical Consultant.
60. The Authority also notes that Western Power has taken any possible ill effects on the network from DC injection into account in its revised proposal, and has determined that the benefits to consumers outweigh the risk of damage to the network.⁹
61. The Authority therefore approves Western Power's proposal to remove Clause 3.2.1(c)(3) from the Technical Rules.

AS 4777 Date Amendments

Draft Decision

62. Western Power proposed to remove references to the applicable year of Australian Safety Standard AS 4777 2005 in the current Technical Rules, and replace them simply with references to AS 4777 in order to avoid the requirement to update the Technical Rules each time the standard is amended.

⁹ Western Power, Submission to the Economic Regulation Authority for amendments to the Technical Rules, November 2015 – Part A- Version 3,

63. Western Power stated that if this amendment is not made, then only those inverters certified under AS 4777 2005 will be compliant under clause 3.7 and Attachment 12 of the Technical Rules.
64. Western Power submitted that while there is a low risk that changes to AS 4777 may be made that are unacceptable to the Western Power network, it is within Western Power's power to not approve connections until any identifiable issues are resolved.
65. Western Power noted that it has consulted with Technical Rules stakeholders who are also involved in the periodic amendments to AS 4777, who have confirmed that the adoption of updates to the standard should be made automatically rather than require a separate update to the Technical Rules.
66. The Authority's technical consultant, GBA, considered that Western Power's proposed amendment was prudent, and recommended that Western Power consider making similar amendments to clauses which refer to other references and standards.
67. Taking account of GBA's advice and the submissions from Engineers Australia, Community Electricity, and WGE, the Authority considered that Western Power's proposed amendment is prudent.
68. The Authority therefore approved Western Power's proposal to remove references to the applicable year of Australian Safety Standard AS 4777 2005 in the current Technical Rules, and replace them simply with references to AS 4777.

Revised Proposal

69. Western Power's proposal to remove references to the applicable year of Australian Safety Standard AS 4777 2005 in the current Technical Rules, and replace them simply with references to AS 4777 remained unchanged.

Public Submissions

70. One submission was received by the Authority from Craig Carter highlighting an inconsistency in Western Power's references to AS/NZS 4777, where it has in some instances been incorrectly referred to as AS 4777.

Final Decision

71. The Authority notes the submission from Craig Carter, and considers that references to Australian Safety Standards should be consistent and correct throughout the Technical Rules.
72. The Authority's Final Decision is therefore to approve Western Power's proposal to remove references to the applicable year of Australian Safety Standard AS 4777 2005 in the current Technical Rules.
73. The Authority also recommends that where incorrect references to AS 4777 have been made in the Technical Rules, these should be replaced with references to AS/NZS 4777.

Clarification of Definitions

Draft Decision

74. Western Power proposed to amend the definition of a number of terms used throughout the Technical rules. The terms to which the amendment of definitions has been proposed are:
- Connection Point;
 - Connection Assets; and
 - Point of Common Coupling.
75. Western Power also proposed to include a number of new terms to the Technical Rules Glossary, in order to further improve the clarity of the term “connection point”.
76. The Authority did not approve Western Power’s proposed amendments to the term “connection point”.
77. The Authority considered that the alternative wording recommended by GBA would be a more appropriate definition for the term “connection point”:
- ‘A point on the network where the Network Service Provider’s primary equipment is connected to primary equipment owned by a user’
78. The Authority also did not approve the addition of the terms “bi-directional point”, “entry point”, and “exit point” to the Glossary of the Technical Rules.
79. The Authority accepted Western Power’s proposed amendment to the definition of the term “connection assets”.
80. The Authority did not accept Western Power’s proposed definition of the term “point of common coupling”. The Authority considered that Western Power should instead adopt the definition suggested by GBA, or some variant of this suggested definition:
- “The point on the network where the connection assets for a connection point are connected to assets that are shared with other network assets”.

Revised Proposal

81. Western Power reiterates that the current definitions of the term “connection point” in both the Technical Rules and the Access Code are contractual in nature, which is necessarily distinct from the physical definition of the term “connection point”.
82. Western Power considers that its revised proposal to amend the definition of the term “connection point” accommodates both the contractual and physical nature of the term.
83. Western Power submits that it is important to decouple metering assets from primary equipment in order to provide clarity to the concept of a connection point.
84. Western Power’s revised proposal to amend the definition of the term “connection point” is set out in Table 1, below.

Table 1 Current, proposed, and revised proposal for the definition of the term “connection point” in the Technical Rules.

Term	Current Definition	Proposed Definition	Revised Proposal
Connection Point	The agreed point of supply established between the Network Service Provider and a User	<p>For contractual purposes: A point on the network identified in, or to be identified in, a contract for services as an entry point or an exit point or a bi-directional point.</p> <p>For references to a physical location: A point on the network on which network assets (owned by Western Power) are connected to assets owned by another person’</p>	A point on the network where the <i>Network Service Provider’s primary equipment</i> (excluding metering assets) is connected to <i>primary equipment</i> owned by a <i>User</i> .

85. Western Power has revised its proposed amendment to the definition of the term “connection assets”. The current definition, proposed amendment and revised proposal are outlined in Table 2 below.

Table 2 Current, proposed, and revised proposal for the definition of the term “connection assets” in the Technical Rules.

Term	Current Definition	Revised Proposal
Connection Assets	The equipment that allows the transfer of electricity between the electricity transmission or distribution system and an electrical system that is not part of that transmission or distribution system. This includes any transformers or switchgear at the point of interconnection (including those that operate at a nominal voltage of less than 66 kV) but does not include the lines and switchgear at the connection point that form part of the electricity transmission or distribution system.	For a connection point, means all of the network assets that are used only in order to transfer electricity to or from the connection point.

86. Western Power has also revised its proposed definition of the term “point of common coupling”. The proposed definition and revised proposal are outlined in Table 3 below:

Table 3 Proposed, and revised definition of the term “point of common coupling” in the Technical Rules.

Term	Proposed definition	Revised Proposal
Point of common coupling	The point on the WPN at which Western Power requires compliance with the Technical Rules clauses 2.3.3(a) and 2.3.4(a). Under normal circumstances this compliance is required at the connection point but Western Power may, at its sole discretion allow the “point of common coupling” to be at a point on the network upstream from the connection point, where it is reasonable to do so in accordance with good electricity industry practice	The point on the network where <i>connection assets</i> associated with a <i>connection point</i> are connected to primary network assets that are shared with other <i>Users</i> .

87. Western Power submits that its revised proposal for the definition of “point of common coupling” adds clarity to its meaning and is also aligned with the suggestions made by the Authority in the Draft Decision.

Public Submissions

88. No public submissions were received with respect to Western Power’s proposed amendments to the Technical Rules Glossary.

Final Decision

89. The Authority considers that the revised definitions proposed by Western Power add clarity to the meaning of terms used in the Technical Rules.
90. The Authority therefore accepts Western Power’s revised definitions of the terms “connection point” and “point of common coupling”.
91. The Authority’s Draft Decision was to accept Western Power’s proposed amendment to the definition of the term “connection assets”. Western Power’s revised proposal amends the definition approved by the Authority in its Draft Decision by including a reference directly to the provision of covered services, rather than simply to the transfer of electricity to or from the connection point.
92. The Authority has clarified with Western Power that the amendment in its revised proposal to the definition approved by the Authority in its Draft Decision was a typing error. Western Power had advised the Authority that its revised proposal for the definition of the term “connection assets” is that it remain consistent with the definition accepted by the Authority in its Draft Decision.
93. Correspondence to this effect from Western Power to the Authority is available on the Authority’s website.¹⁰

¹⁰ Western Power, [Amendment to definition of Connection Assets](#), 31 May 2016.

94. The Authority therefore approves Western Power's revised proposal to maintain the definition of the term "connection point", as accepted by the Authority in its Draft Decision.

Typographical Errors

Draft Decision

95. In its original proposal of November 2016, Western Power identified a number of typographical errors in the Technical Rules document since its publication in 2011. Western Power proposed the following amendments to resolve these errors:
- Section 2.2.11 Long Term Voltage Stability (b) – correct the spelling of the word "contingency".
 - Section 3.3.1 General (e)(5) – correct the spelling of the word "rectify"
 - Section 3.3.3.1 Detailed Technical Requirements Requiring Ongoing Verification –
 - (b) – correct the spelling of the word "requirements"
 - (f) – correct the spelling of the word "facility"
 - (g) – correct the spelling of the word "compliance"
 - 3.6.1 Overview –
 - the addition of 10kVA single phase energy systems to energy systems which are not covered by clause 3.6.1, which addresses small generation units connected to the low voltage system via inverters;
 - specification that 30 kVA three phase energy systems are not subject to clause 3.6.1; and
 - the addition of the word "concerns" to the end of the second point in the list of issues addressed by clause 3.6, so that the sentence now says, "resulting in safety and security of supply concerns".
 - 3.6.10.3 Islanding Protection (c) – correct the spelling of the word "physically"
 - 3.6.12 Failure of Generator's Protection equipment – remove the second consecutive instance of the word "the" from a sentence.
 - 5.7.1 User's Advice (a) -
 - correct the spelling of the word "operation"
 - correct the spelling of the word "affect"
 - Attachment 5 Submission Requirements for Electrical Plant Protection, pg 164
 - correct the spelling of the word "diagrammatic"
 - Attachment 12 Testing and Commissioning of Small Power Stations Connected to the Distribution System -
 - (A12.1) – replace the word "specifies" with the word "lists".
 - (A12.2) – the specification that certification by a chartered professional engineer must be by the National Professional Engineers' Register or equivalent.

96. In its Draft Decision, the Authority accepted Western Power’s proposed amendments to the typographical errors outlined in its proposal, except for the proposed amendment to Clause A12.2.
97. The Authority instead considered that Western Power should make the following amendments to Clause A12.2:
- replace current references to the National Professional Engineers Register (**NPER**), with references to the National Engineering Register (**NER**); and
 - remove the term “or equivalent” from the end of Clause A12.2, or qualify how and by whom equivalence is to be determined.

Revised Proposal

98. Western Power has amended its proposed revisions to Clause A12.2, to incorporate comments made in public submissions and by the Authority’s technical consultant.
99. The revised wording to Clause A12.2 is as follows:
- “The Generator must provide certification by a chartered professional engineer with National Engineering Register standing in relevant areas of expertise that the facilities comply with the Rules, the relevant connection agreement, good engineering practice and relevant standards”.

Public Submissions

100. There were no public submissions made which addressed Western Power’s revised amendments to Clause A12.2.

Final Decision

101. The Authority considers that this revision adequately addresses the concerns of stakeholders and accordingly accepts Western Power’s revised proposal to amend the wording of clause A12.2.
102. The Authority’s technical consultant, GBA, has recommended that the amendments to the wording of clause A12.2 be adopted where relevant throughout the Technical Rules. The Authority considers that it would be prudent for Western Power to consider this recommendation.