



Australian Energy Market Commission

Rule Determination

**National Electricity Amendment
(Confidentiality Arrangements in Respect of
Information Required for Power System
Studies) Rule 2009**

Rule Proponent
National Generators Forum

19 February 2009

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About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy, established the Australian Energy Market Commission (AEMC) in July 2005 to be the Rule maker for national energy markets. The AEMC is currently responsible for Rules and policy advice covering the National Electricity Market and elements of the natural gas markets. It is a statutory authority. Our key responsibilities are to consider Rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council on Energy as requested, or on AEMC initiative.

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Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Commission	see AEMC
MCE	Ministerial Council on Energy
NECA	National Electricity Code Administrator
NEL	National Electricity Law
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NGF	National Generators Forum
NSP	Network Service Provider
Rules	National Electricity Rules
TNSP	Transmission Network Service Provider

Summary

In accordance with sections 102 and 103 of the National Electricity Law (NEL) the Australian Energy Market Commission (Commission) has determined to make the National Electricity Amendment (Confidentiality Arrangements in respect of Information Required for Power System Studies) Rule 2009 and related Rule determination. In this Rule determination, the Commission has agreed to adopt the National Generators Forum (NGF) Rule change proposal with some modifications and sets out the reasons for the Commission's determination. The Rule commences operation on 27 February 2009.

On 8 April 2008, the NGF submitted a National Electricity Rule (Rule) change proposal regarding the modification of confidentiality arrangements that have arisen as a result of the Rule amendment in respect of "Technical Standards for Wind Generation and Other Generator Connections" that commenced in March 2007.

The Rule change proposal can be divided into four sections:

- clarifying the information that may be disclosed by NEMMCO to Registered Participants and the software applications that this information be encoded in, such that the confidentiality of commercially sensitive information is maintained;
- clarifying what information may be disclosed by one NSP to another such that they can fulfil their Rule obligations while maintaining the confidentiality of commercially sensitive information;
- requiring a Generator to make available the information necessary to undertake power system studies in the form of a Releasable User Guide to be kept and administered by NEMMCO; and
- requiring NEMMCO to maintain a register of proprietary information that it has disclosed and to whom it has been disclosed.

The Commission has undertaken an extensive consultation process in considering the proposed Rule. This process included:

- publishing the Rule change proposal on 8 May 2008 in accordance with section 95 of the National Electricity Law (NEL). Submissions closed on 6 June 2008 and the Commission received 13 submissions and one supplementary submission at this first stage of consultation;
- publishing a section 107 notice on 15 August 2008 extending the publication date of the draft determination by 6 weeks owing to a number of complex issues raised during first round consultation;
- publishing the draft Rule determination and draft Rule on 26 September 2008 in accordance with section 99 of the NEL. Submissions closed on 7 November 2008 and the Commission received seven submissions at this stage of

consultation which supported the Rule change proposal with further amendments;

- publishing a section 107 notice on 18 December 2008 extending the publication date of the final determination by five weeks until the 22 January 2009; and
- publishing a section 107A notice on 22 January 2009 extending the publication date of the final determination by four weeks until 19 February 2009 to allow additional consultation of a specific issue that arose during consultation on the draft determination and the Commission's analysis.

Having considered the issues raised in the Rule change proposal, submissions, and its own analysis, the Commission is satisfied that the final Rule is likely to contribute to the achievement of the national electricity objective (NEO) and satisfies the relevant requirements under the NEL. The Commission considers the final Rule is likely to contribute to the achievement of the NEO as it will promote efficient investment and promote the efficient operation and use of, electricity services with respect to safety, reliability and security of supply of electricity, and the reliability, safety and security of the national electricity system by:

- requiring the protection of confidential information to strengthen the confidence of investors in the supply of generating components, which is likely to enhance the reliability and security of supply of electricity to the market;
- clarifying what information may be disclosed by one NSP to another such that they can fulfil their obligations under the Rules promotes efficiency by allowing NSPs to accurately model the power system. Furthermore, by requiring NSPs to maintain the confidentiality of commercially sensitive information investors will gain certainty that their intellectual property is secure;
- requiring that a Generator makes available the information necessary to undertake power system studies in the form of a Releasable User Guide to be kept and administered by NEMMCO will ensure that models of the NEM comprise accurate data of aspects of the power system;
- requiring NEMMCO to maintain a register, which identifies the Registered Participant to whom proprietary information was disclosed and the date when it was disclosed will ensure that manufacturers and suppliers of generating systems be aware of the status of their information. This will result in strengthened investor confidence, which will enhance the reliability and security of supply of electricity to the market; and
- clarifying that the information disclosed by NEMMCO is made available in more than one software format will create greater flexibility for participants undertaking power system studies. Likewise, this will result in enhancing the reliability, safety and security of the NEM.

1 The NGF Rule change proposal

On 8 April 2008, the Commission received a Rule change proposal regarding the modification of confidentiality arrangements from the National Generators Forum (NGF) entitled “Confidentiality Arrangements in respect of Information Required for Power System Studies”.

1.1 Context and background

The NGF Rule change proposal was an attempt to rectify what the NGF considered were the unintended consequences that have arisen as a result of the Rule amendment “Technical Standards for Wind Generation and Other Generator Connections” that commenced in March 2007 (the March 2007 Rule change).¹ As a result of the March 2007 Rule change, Generators are presently required to provide NEMMCO with model source code, block diagram descriptions and other detailed information pursuant to clause S5.2.4 of the Rules; however, in recognition of the need for non-disclosure to third parties, the March 2007 Rule change introduced more stringent confidentiality requirements for all information concerning these Generators.

The information presently required under clause S5.2.4 includes information that is regarded as sensitive intellectual property by some Generators, and specifically by the manufacturers of new and innovative generating systems – wind turbine manufacturers and other renewable energy service providers. Whereas, current thermal and hydro-generating technologies are considered mature technologies, wind generators and other emerging power generation technologies are rapidly evolving and are subject to intense competition in the market. Therefore, the manufacturers of these innovative technologies have an understandable interest in limiting the disclosure of intellectual property or other critical information that could compromise their competitive advantage or impinge on their position within the market.

To protect this information, the March 2007 Rule change provided for more stringent confidentiality arrangements. For example, clause 8.6.2(m) was altered to specifically exclude generator information provided under clause S5.2.4(a) (data sheets), clause S5.2.4(b)(5) (model block diagram) and clause S5.2.4(b)(6) (model source code) from being provided to any Network User as was previously the case.² Therefore, the disclosure and sharing of generator information was effectively limited solely to NEMMCO and directly affected Network Service Providers under clauses 5.3.8 and 8.6.1.³

¹ For further information see, <http://www.aemc.gov.au/electricity.php?r=20060324.143345>

² The NGF Rule change proposal, 8 April 2008, p.1.

³ Ibid. at p.2.

Consequences of the March 2007 Rule change that have been identified by NEMMCO include:⁴

- The Rules prohibit the disclosure of dynamic power system models to anyone other than an NSP, even in precompiled form, as this would entail the disclosure of Generator information provided under clause S5.2.4.; and
- The Rules prohibit the disclosure to anyone other than a NSP of load flow snapshots of the NEM, as required for the conduct of load flow and short-circuit studies, as load flow cases include information on Generator capabilities, short-circuit impedances and transformer data, which are included in NEMMCO Data Sheets and are therefore within the scope of the clause S5.2.4(a), hence excluded from disclosure under clause 8.6.2(m).

1.2 Summary of the NGF Rule change proposal

The National Generators Forums' proposed Rule is concerned with the effect of the confidentiality of information provisions in the existing Rules and it provides for:

1. NEMMCO to disclose sufficient information to Registered Participants for planning and operational purposes while protecting the commercial value of information which is only necessary to provide to NEMMCO; and
2. NSPs to disclose to other NSPs sufficient information for planning and other purposes provided that consent is obtained from the person whom provided the said information.

1.3 Issues to be addressed by the proposed Rule

1.3.1 Information disclosure to Registered Participants

Existing Generators, and parties wishing to connect to the NEM are required to provide to NEMMCO source code and functional block diagrams as described in clauses S5.2.4(b)(5) and (6) of the Rules (Proprietary Information); however, this information is often commercially valuable to the supplier of the generating system.

NGF submitted the following views. Currently "clause 3.13.3(k) permits Registered Participants to request Proprietary Information from NEMMCO. However, NEMMCO is presently unable to provide the Proprietary Information because of one or both clauses 5.3.8 and 8.6.1 in the Rules relating to confidential information".⁵

For Registered Participants "to undertake power system studies (including load flow and dynamic simulations) for planning and operational purposes, it is necessary to

⁴ Econnect submission, p.3.

⁵ The NGF Rule proposal, April 8 2008, p.2.

obtain from NEMMCO certain parts of the functional block diagrams (to be defined as a Releasable User Guide) and source code”.⁶

The NGF Rule change proposal addresses this issue by “amending the Rules to define a Releasable User Guide, to be provided to NEMMCO and inserting provisions requiring that in certain circumstances, NEMMCO may disclose the Releasable User Guide and source code (together to be termed Releasable Information) to Registered Participants”.⁷

The NGF also states that given Releasable Information contains Proprietary Information and is commercially valuable, it is essential that “the Rules restrict the form in which it may be disclosed by NEMMCO to third parties and provide for a list to be maintained of the persons to whom the information has been provided”.⁸

The NGF Rule proposal seeks to address this issue through:⁹

- Setting out the particular forms in which NEMMCO will be required to provide the Releasable Information; and
- Providing that NEMMCO is to maintain a register describing the Releasable Information that it has released and to whom it has been released.

1.3.2 Information disclosure between NSPs

The current confidentiality provisions also affect the disclosure of information from one NSP to another. Clause 5.3.8(c) provides that “a NSP may provide information obtained under Rule 5.3 to another NSP provided that the information is materially relevant to the second NSP for connection purposes”.¹⁰ For planning and other intents, it is considered necessary that NSPs be able to obtain Releasable User Guides provided to adjacent NSPs not only in relation to connection, but also in a broader range of circumstances.

The NGF Rule proposal addresses this issue by amending the Rules to provide that “NSPs may disclose Releasable User Guides to other NSPs provided that the disclosing NSP obtains the written consent of the person who provided the Releasable User Guide to NEMMCO”.¹¹

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

1.4 Consultation of the Rule change proposal

On 8 May 2008 the Commission commenced consultation under section 95 of the NEL on the Rule change proposal. The Rule change proposal was open for public consultation for four weeks. Submissions closed on 6 June 2008.

The Commission received thirteen submissions and one supplementary submission on the Rule change proposal at the first round of consultation, which are available on the AEMC website.¹² The Commission received submissions from:

- Digsilent
- Vestas
- McLennan Magasanik Associates
- Econnect Australia
- Eureka Funds Management
- Grid Australia
- Hall Michael
- NEMMCO
- Roaring 40s
- VENCORP
- Worley Parsons
- Epuron
- Siemens

The Commission also received a supplementary submission to the Rule proposal from Vestas on 13 June 2008.

On 25 September 2008, the Commission published a notice under section 99 of the NEL informing of the making of a draft Rule determination and draft Rule. Subject to amendments implemented as a result of the Commission's analysis or those raised in stakeholder submissions, the draft determination largely accepted the NGF Rule change proposal. Submissions to the draft determination closed on 7 November 2008, with seven submissions received from:

- DIGSILENT

¹² These submissions can be found at <http://www.aemc.gov.au/electricity.php?r=20080424.113727>

- NEMMCO
- Roaring 40s
- Siemens
- Grid Australia
- Vestas
- Worley Parsons

On 22 January 2009, the Commission published a notice under section 107A of the NEL informing of its intention to seek further consultation on the specific issue of transitional arrangements for the amending Rule.¹³ Submissions on the explanatory note closed on 6 February 2009, with seven submissions received from:

- Siemens
- Vestas
- NEMMCO
- Roaring 40s
- Suzlon Energy Australia
- Pacific Hydro
- Vestas, REpower Australia, Suzlon Energy Australia, and Siemens

The submissions were broadly supportive of the intent of the NGF Rule change proposal. However, many submissions sought further clarification and amendments to the final Rule to be made. The various issues raised in the submissions are identified and further discussed in Appendix A of this final determination.

The NEL requires the Commission to also have regard to any relevant MCE statements of policy principles in applying the Rule making test. The Commission notes that there are no relevant MCE statements of policy principles. The Commission further notes that an MCE exposure draft on proposed amendments to the NEL (National Electricity Market Operator (AEMO)) Amendment Bill 2009 provides obligations on the AEMO to protect confidential information. It is proposed that the current obligations on NEMMCO will be removed from the Rules and placed in the NEL with some exceptions. Proposed exceptions include where the disclosure is necessary for:

- (i) The safety, reliability or security of the supply of electricity; or

¹³ For further information on the explanatory note and the submissions received from stakeholders, see: <http://www.aemc.gov.au/electricity.php?r=20080424.113727>

(ii) The safety, reliability or security of the national electricity system.

No public hearing has been held in relation to this Rule change.

2 Methodology for developing the final determination

The Commission has determined in accordance with section 102 of the National Electricity Law (NEL) to publish this final determination and section 103 to make the final Rule.

This determination sets out the Commission's reasons for making the final Rule. The Commission has taken into account:

1. the Commission's powers under the NEL to make the Rule;
2. the proponent's Rule change proposal and proposed Rule;
3. submissions received; and
4. the Commission's analysis as to the ways in which the final Rule will or is likely to contribute to the achievement of the national electricity market objective so that it satisfies the statutory Rule making test.

2.1 The Commission's power to make a Rule

The Commission is satisfied that the final Rule falls within the subject matters for which the Commission may make Rules, as set out in section 34 of the NEL and in accordance with Schedule 1 to the NEL.

The final Rule relates specifically to item 34(1) of the NEL, which states that:

"...the AEMC, in accordance with this Law and the Regulations, may make Rules, to be known, collectively, as the "National Electricity Rules", for or with respect to –

(a) regulating –

...

- (ii) the operation of the national electricity system for the purposes of the safety, security and reliability of that system;
- (iii) the activities of persons (including Registered participants) participating in the national electricity market or involved in the operation of the national electricity system;"

The final Rule also falls under the following items referred to in Schedule 1 to the NEL, namely:

- item 1. The registration of persons as Registered participants or otherwise for the purposes of this Law and the Rules, including the deregistration of such persons or suspension of such registrations;
- item 3. Prudential requirements to be met by a person –

(a) before being registered as a Registered participant; and

(b) as a Registered participant.

item 35. Confidential information held by Registered participants, the AER, the AEMC, NEMMCO and other persons or bodies conferred a function, or exercising a power or right, or on whom an obligation is imposed, under the Rules, and the manner and circumstances in which that information may be disclosed.

The Commission is satisfied that the proposed Rule is a matter about which the AEMC may make a Rule as the proposal relates to the potential registration of persons as Registered participants; the prudential requirements of persons who are Registered Participants; and the arrangements for the disclosure of confidential modelling data held by NEMMCO for generating units and other power system equipment to other parties for planning and operational purposes.

2.2 Assessment of the final Rule: the Rule making test and the National Electricity Market Objective

2.2.1 General

The Rule making test requires the Commission to be satisfied that a Rule that it proposes to make will contribute to the achievement of the National Electricity Objective (NEO) outlined in Section 7 of the NEL.

The test requires the Commission to consider the implications of the proposed new Rule, for efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity in respect of:

(a) price, quality, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system.

2.2.2 The NGF Rule change proposal

The NGF Rule proposal as outlined in Chapter 1 has considered the impact of its proposal on the NEO. The NGF outlines how its Rule change proposal would meet the NEO, and considers that the proposed Rule promotes efficient:¹⁴

- "...operation of electricity services by ensuring that sufficient information can be provided to Registered Participants to undertake power system studies for planning and operational purposes thereby assisting Registered Participants to

¹⁴ The NGF Rule Change Proposal, 8 April 2008, P.p. 2-3.

operate in an efficient and informed manner, and plan for future operation in an efficient and informed manner”; and

- “...operation and use of electricity services with respect to quality, safety, reliability and security by ensuring that sufficient information can be provided to Registered Participants to undertake power system studies for planning and operational purposes. The facilitation of power system studies is likely to promote the quality, safety, reliability and security of the supply of electricity and the reliability, safety and security of the national electricity system”.

The NGF has also considered the expected costs and benefits of its Rule change proposal and the potential impacts of the change on those likely to be affected. The NGF considers that the benefits of its proposed Rule change would be likely to include:¹⁵

- “increased reliability, security, safety and quality of supply of electricity as a result of Registered Participants having sufficient information to conduct power system studies for planning and operational purposes”;
- “more efficient investment in the reliability, security, safety and quality of supply of electricity as a result of Registered Participants having the necessary information to understand what investment is required”; and
- “more efficient investment in generation technology as a result of increased certainty that proprietary information will be protected by the Rules”.

While, the NGF considers that the likely costs of its proposed Rule change would likely include “[a] minor increase in administrative costs as a result of the requirement for NEMMCO to maintain a register concerning the information that it has disclosed. This cost may be passed on to Registered Participants by NEMMCO”.¹⁶

In relation to the likely impacts of implementation of the Rule change proposal, NGF considers “that Generators, the AER and NEMMCO” would be affected.¹⁷ The NGF is of the opinion that the likely impact on these parties as a result of implementation of the Rule change proposal include:¹⁸

(a) Generators

- “...provides for Generators to obtain information that is necessary for them to conduct power system studies for planning and operational purposes.”
- “...provides comfort to generators that any proprietary technology developed by them will not be released by NEMMCO to other participants, while still

¹⁵ Ibid. at p.3.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid. at P.p. 3-4.

allowing for each Generator to obtain sufficient information from NEMMCO to conduct power system studies”.

(b) NEMMCO

- “...provides certainty for NEMMCO as to the manner in which it may disclose confidential information which it is necessary to disclose to Registered Participants in order that those Registered Participants may undertake power system studies”.
- “...provides that a register be maintained by NEMMCO in relation to information disclosed by NEMMCO. The Rule Proposal provides that NEMMCO may pass on the reasonable costs of maintaining this register to Registered Participants”.

(c) NSPs

- “...provides certainty for NSPs in relation to the circumstances in which they may provide certain confidential information referred to as a releasable user guide to other NSPs”.

2.2.3 The Commission’s test of the National Electricity Market Objective

The NGF Rule proposal identifies the potential problem in the current Rules regarding the inability of participants to obtain all information necessary for them to undertake some power system studies. Under the NGF Rule proposal NEMMCO would be able to release this information with the consent of the provider of the information. Both the security of commercially sensitive information and the ability for participants to model the NEM power system are important issues and the solution proposed by the NGF in clause 3.13.3(k) appears to address the arrangements necessary to manage these issues. Therefore, the Commission considers that the disclosure of information for undertaking power system studies will support the reliability and security of the NEM, and will thus support the NEO.

Requiring the protection of confidential information will strengthen the confidence of investors in the supply of generating components, which is likely to enhance the reliability and security of supply of electricity to the market. Therefore, the Commission considers that the protection of confidential information will support the NEO.

Clarifying what information may be disclosed by one NSP to another such that they can fulfil their obligations under the Rules promotes efficiency and allows NSPs to accurately model the power system. Furthermore, by requiring NSPs to maintain the confidentiality of commercially sensitive information investors will gain certainty that their intellectual property is secure. As a result, the quality, reliability and security of supply of electricity services will be supported. Therefore, the Commission considers clarification of information that can be shared between NSPs and the protection of proprietary information will support the NEO.

Requiring a Generator to make available the information necessary to undertake power system studies in the form of a Releasable User Guide (to be kept and administered by NEMMCO) will ensure that models of the NEM accurately represent the actual power system. Therefore, the Commission considers the formulation and administration of Releasable User Guides will support the NEO.

Requiring NEMMCO to maintain a register, which identifies the Registered Participant to whom proprietary information was disclosed and the date when it was disclosed will ensure that manufacturers and suppliers of generating systems be aware of the status of their information. This is expected to result in strengthened investor confidence, which will enhance the reliability and security of supply of electricity to the market. Therefore, the Commission considers that the formation and maintenance of a register, which identifies the Registered Participant to whom proprietary information was disclosed and the date when it was disclosed will support the NEO.

Clarifying that the information disclosed by NEMMCO is made available in more than one software format will create greater flexibility for participants undertaking power system studies. Likewise, this will result in enhancing the reliability, safety and security of the NEM. Therefore, the Commission considers the availability of more than one software format promotes the NEO.

Requiring that Connection Applicants must be either Registered or Intending Participants in order to obtain information will limit the pathways through which confidential information can be disclosed. This will result in strengthened investor confidence as proprietary information will be appropriately protected and required information will be available to those parties that need it. Investor confidence will enhance the reliability and security of supply of electricity to the market. Therefore, the Commission considers that the formation and maintenance of a register of confidential information will support the NEO.

2.3 Differences between the proposed Rule, draft Rule and final Rule

The Commission has adopted some of the NGF's proposed Rule changes in part and proposes other Rule changes to address stakeholder issues. These include clarifying what information may be disclosed by NEMMCO and how confidential proprietary information will be protected, the degree of information that may be disclosed by one NSP to another and the software formats that this information must be in. The draft Rule also requires that Connection Applicants must be either Registered or Intending Participants to obtain information from NEMMCO.

The Draft Rule specified that:

- functional block diagrams, source code and other proprietary information will be encrypted to prevent its disclosure, while information required for power system studies that is not considered confidential information will be available;
- NSPs are allowed to disseminate relevant information between themselves while maintaining the confidentiality of proprietary information;

- information can be provided in more than one software package;
- the information must be contained in a Releasable User Guide to aid market participants in undertaking power system studies;
- there are transitional arrangements to explicitly define the status of the information currently held by NEMMCO and to allow for NEMMCO to make sure that this information is kept current and up to date; and
- to obtain information from NEMMCO a participant must be either a Registered or Intending Participant. A Connection Applicant must also be either of these two types of participant.

A number of significant changes were made in the numbering and structuring of the clauses between the draft Rule and the final Rule as made. This was undertaken to state the obligation and subsequently the clauses that relate to the operation of the obligation.

Proposed draft Rule	Final Rule as made
clause 3.13.3(k1)	clause 3.13.3(l)(1)
clause 3.13.3(k2)	clause 3.13.3(l)(2)
	clause 3.13.3(l)(3)
clause 3.13.3(l)	Split into clauses 3.13.3(l) and 3.13.3(l1)
clause 11.22(c)	clause 3.13.3(l2)
clause 3.13.3(k3)	clause 3.13.3(l3)
clause 3.13.3(l1)	clause 3.13.3(l4)
clause 3.13.3(l2)	clause 3.13.3(l5)
clause 3.13.3(l3)	clause 3.13.3(l6)
clause 3.13.3(l4)	clause 3.13.3(l7)

In addition to the provisions of the draft Rule specified above, the final Rule also includes:

- a clause that ensures that the provider of model source code is unambiguous and explicit in the Rules;
- additional clauses under clause 3.13.3 that state information provided by NEMMCO under those clauses is confidential information;

- an obligation on the Generator to cooperate with the NSP for the provision of information, including source code information, and for the NSP to provide any new or revised source code information to the Generator;
- transitional arrangements that:
 - require a Generator or a person required under the Rules to register as a Generator to provide NEMMCO with a releasable user guide by 29 May 2009 or a date which NEMMCO considers is reasonable in the circumstances, but which must be no later than 27 November 2009;
 - limit the information NEMMCO may provide to Registered Participants that it received before 15 March 2007 to that authorised by the Rules to be released for the same purpose as intended by clause 3.13.3(l) at the time the information was provided; and
 - allow a Generator or a person required under the Rules to register as a Generator that has provided model source code to NEMMCO between 15 March 2007 and the commencement of this amending Rule, to provide NEMMCO with substitute model source code in respect of its generating system in conjunction with a releasable user guide, where the replacement model source code must be in accordance with NEMMCO's Generating System Model Guidelines; and
- the deletion of clause S5.2.4(b)(7) and its insertion as a new clause S5.2.4(d1) that only requires a Generator to provide new information under clause S5.2.4(d) to the extent that it is different to the information previously provided.

Subject to the above amendments, the Commission has accepted the NGF's proposed Rule for Confidentiality Arrangements in Respect of Information Required for Power System Studies.

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A Commission's analysis of the proposed Rule

In this appendix, the Commission addresses a number of issues that have been raised in submissions or that have emerged during its analysis.

In summary, there are seven areas covered in this final determination:

1. Currently existing Generators, and persons wishing to connect to the National Electricity Market (NEM) are required to provide NEMMCO with model source code and functional block diagrams (Proprietary Information). The existing Rules permit Registered Participants to request the Proprietary Information from NEMMCO; however, NEMMCO is presently unable to provide this information because of one or both clauses 5.3.8 and 8.6.1 of the Rules;¹⁹
2. It is necessary for Registered Participants to obtain from NEMMCO certain parts of the functional block diagrams (releasable user guide) and model source code for planning and operation. Therefore, there is a need to amend the Rules to define a releasable user guide and provide guidelines to allow NEMMCO to disclose the Releasable user guide and model source code (together Releasable Information) under certain circumstances;²⁰
3. Giving guidelines on the software packages that NEMMCO will be required to provide the Releasable Information in;²¹
4. Given the Releasable Information is commercially valuable, it is necessary that the Rules restrict the form in which it may be disclosed by NEMMCO to third parties;²²
5. NEMMCO to maintain a register describing the Releasable Information that is has released and to whom it has been released;²³
6. Transitional arrangements are critical to ensuring that the information provided to Registered Participants is, and remains, complete and accurate, as information missing from the power system model may make the models inaccurate or incomplete;²⁴ and
7. The proposed Rule has been proposed for information disclosure to Registered Participants. Should a similar process exist for Connection applicants.²⁵

¹⁹ The NGF Rule change proposal, 8 April 2008, Pp. 1-2.

²⁰ Ibid. at p.2.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ NEMMCO's submission on the NGF Rule change proposal, Attachment 1, Pp. 4-6.

²⁵ Ibid. Attachment 1, p.13

In developing the final Rule, the Commission has examined a number of issues, including:

- whether the Rule proposal in its current form protects the ‘commercially valuable’ proprietary information of the suppliers of power systems while still providing Registered Participants, NSPs and NEMMCO with the data required to undertake power system studies to meet the national electricity objective;
- whether the contents of a Releasable user guide should be explicitly defined in the Rules, or whether general guidelines should be adopted;
- whether the model source code should be limited to one software programme, or be allowed in several programmes;
- whether the access to information should be limited to Registered Participants or expanded to include intending participants, academics and consultancy companies;
- whether it is necessary for NEMMCO to maintain a register of the Proprietary Information that it has released to Registered Participants;
- whether there should be modifications to the NGF Rule proposal to include guidance to NEMMCO on transitional arrangements for information that has been supplied prior to this Rule change; and
- whether a similar approach to this Rule proposal in relation to the provision of information to Registered Participants should be undertaken for connection applicants.

This section details the Commission’s analysis and reasons underlying its final Rule in relation to each of the issues identified above.

A.1 Proprietary information and data confidentiality

A.1.1 The NGF proposal

The NGF Rule proposal noted that this Rule change is a result of what the NGF considered were the unintended consequences arising as a part of the Rule amendment in respect of “Technical Standards for Wind Generation and Other Generator Connections” enacted in March 2007.²⁶ As a result of the March 2007 Rule amendment, Generators are required to provide NEMMCO with model source code, block diagram descriptions and other detailed information under clause S5.2.4 of the Rules; however, in recognition of the need for non-disclosure, the March 2007 Rule change introduced more stringent confidentiality requirements for all information concerning Generators. For example, clause 8.6.2(m) was altered to specifically exclude generator information provided under clause S5.2.4(a) (data sheets), clause

²⁶ For further information see, <http://www.aemc.gov.au/electricity.php?r=20060324.143345>

S5.2.4(b)(5) (model block diagram) and clause S5.2.4(b)(6) (model source code) from being provided to any Network User as was previously the case.²⁷ Therefore, the disclosure and sharing of generator information was effectively limited solely to NEMMCO and Network Service Providers under clauses 5.3.8 and 8.6.1.²⁸

To overcome what it considered to be these unintended consequences, the NGF Rule proposal suggested modification of clause 3.13.3(k) (standing data), which permits Registered Participants to request Proprietary Information from NEMMCO.²⁹ Through this modification, the NGF's Rule change proposal would provide for "NEMMCO to disclose sufficient information to Registered Participants for planning and operational purposes while protecting the commercial value of information which is only necessary to [be] provide[d] to NEMMCO".³⁰

Additionally, the NGF Rule proposal also noted that the "confidentiality provisions in the existing Rules also affect the disclosure of information by one NSP to another. Existing clause 5.3.8(c) provides that an NSP may [only] provide information obtained under rule 5.3 to another NSP provided that the information is materially relevant to the second NSP for connection".³¹ The NGF Rule proposal recommended adding clause 5.3.8(c1) to overcome this issue.

A.1.2 First-round submissions

A.1.2.1 DIgSILENT

DIgSILENT suggested that "all data should be made available as was done in the past subject to signing a confidentiality agreement. The problem with data confidentiality has been created by manufacturers that do not want to make their dynamic models available - not even if the intended recipient of the data signs a confidentiality agreement."³²

A.1.2.2 Grid Australia

Grid Australia noted that while the Rules are clear on the responsibilities required of NSPs under clause 5.2.3(d), the rules are ambiguous in relation to a NSPs' right to share information with another NSP.³³ Further Grid Australia noted that "NSPs have and will continue to receive unencrypted data (proprietary information) as part

²⁷ The NGF Rule change proposal, 8 April 2008, p.1.

²⁸ Ibid. at p.2.

²⁹ Ibid.

³⁰ Ibid. at p.1.

³¹ Ibid. at p.2.

³² DIgSILENT's submission on the NGF Rule change proposal, p.2.

³³ Grid Australia's submission on the NGF Rule change proposal, p.2.

of connection applications, as required under the Rules. However, it is noted that the NGF Rule proposal does not propose any change to this provision”.³⁴

“Grid Australia considered that there is a need for the Rules to specify that NSPs have the authority to share unencrypted data with other NSPs and between NSPs and NEMMCO, for the purpose of fulfilling their Rule obligations.”³⁵ The NGF Rule proposal asserted that only encrypted data be transferred from one NSP to another, which Grid Australia considers will impede the functionality of NSPs. Grid Australia maintains that without detailed unencrypted data in relation to connection applications, “NSPs cannot determine the impact of such a connection on their networks and other connected parties, and hence upon the obligations they are legally required to meet”.³⁶

Grid Australia proposed that a new clause 3.13.3(k3) be added to the Rules, to allow NSPs to fulfil their requirements under the NEL, with a provision to permit NSPs to exchange unencrypted data between themselves.³⁷ In addition, Grid Australia recommended that when Releasable Information is disclosed the third parties should not require the permission of the originator of the Releasable Information, because “the situation could arise where the Releasable Information seeking party is or could be perceived to be in competition with the originator of the Releasable Information”.³⁸ Therefore, Grid Australia recommends that NEMMCO be responsible for determining whether the Releasable Information is disclosed or not.

In respect of clause 5.3.8(c1) in the NGF Rule proposal, Grid Australia recommended that this clause be deleted, as Grid Australia does not believe that NSPs should be the custodians of, or responsible for the disclosure of Releasable Information. It was recommended that this function lie exclusively with NEMMCO.

A.1.2.3 Siemens

In relation to confidentiality agreements, Siemens suggested that “information should only be provided subject to a confidentiality agreement being in place, in particular between the recipient and the receiver”. Ideally Siemens would prefer “confidentiality agreements being entered into between the manufacturers (discloser) and the Registered Participants, NSPs and NEMMCO respectively”.³⁹

When information is disclosed, Siemens agrees with Vestas that the original discloser of the dynamic model be notified of its release. Furthermore that there be greater clarity of the numerical parameters in the dynamic model. However, Siemens is of the opinion that notification in itself was not sufficient and a “comprehensive process

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid. at p.3.

³⁸ Ibid.

³⁹ Siemens’ submission on the NGF Rule change proposal, p.1.

needs to be inserted [in the Rules] to enable objections by the discloser of the information”.⁴⁰

A.1.2.4 Roaring 40s

Roaring 40s stated that “current confidentiality arrangements require further enhancement to give developers and manufacturers full confidence that their intellectual property is adequately protected”.⁴¹ Furthermore, Roaring 40s noted that currently there are no punitive provisions in the Rules in relation to either a NSP or NEMMCO inadvertently breaching confidentiality provisions and releasing sensitive proprietary information. To this end, Roaring 40s suggested that the Commission consider options for amending the Rules to either introduce penalties that are commensurate with the damage caused by the breach of confidentiality provisions, or require that Registered Participants sign contractual confidentiality agreements with NEMMCO or the relevant NSP.⁴²

A.1.2.5 Econnect

Econnect noted that the NGF Rule proposal would not address all of the current issues with the provision of data for power system studies and should be augmented with additional information. Econnect stated that the “current Rules restrict the provision of static information contained in the Generating System Data Sheets, and therefore prevent the release to Registered Participants of much of the data required for static and dynamic power system studies”.⁴³

To address this issue, Econnect suggested that clause 5.3.8 be modified to provide a new category of ‘releasable information’ in respect of generator connections. This new information was to cover load flow data requirements and could be disclosed by NEMMCO or a NSP to a Registered Participant to undertake power system studies for planning and operational purposes. The information Econnect recommended be included as ‘releasable information’ and where it was to be drafted in the Rules was outlined in their submission.

A.1.2.6 VENCORP

VENCORP noted that a “NSP has clearly defined responsibilities under the Rules that would be undermined by the NGF Rule proposal”.⁴⁴ Existing rule 5.2.3(d)(8) states that a NSP “use its reasonable endeavours to ensure that modelling data used for planning, design and operational purposes is complete and accurate...”, which VENCORP believed could not be done without complete models of all generators on the network. Furthermore, VENCORP observed that there are other obligations that

⁴⁰ Ibid. at p.2.

⁴¹ Roaring 40s submission on the NGF Rule change proposal, p.3.

⁴² Ibid. at P.p. 3-4.

⁴³ Econnect’s submission on the NGF Rule change proposal, p.6.

⁴⁴ VENCORP’s submission on the NGF Rule change proposal, p.1.

NSPs have under the Rules that would be made more difficult without complete generator models being available.⁴⁵

VENCorp broadly supported the NGF Rule proposal; however, while VENCorp did not advocate the unfettered provision of proprietary information to any Registered Participant who requests the information, VENCorp suggested that NSPs “be allowed to obtain the complete models and be allowed to share them with other NSPs and NEMMCO to carry out their obligations under the Rules”.⁴⁶

A.1.2.7 NEMMCO

NEMMCO noted that there were a number of significant issues that needed to be addressed in relation to the extent of information required by NSPs for providing network limit advice to NEMMCO. “The proposed Rule does not recognise that TNSPs need to receive detailed and potentially confidential information, other than when “the information or data is materially relevant to that provider for *connection*”. A local NSP (and, in respect of an embedded generating unit, the local TNSP) receives confidential block diagram information. However, under the NGF Rule proposal, a TNSP that is not “local” would only receive information from NEMMCO to the same level of detail as any other Registered Participant.”⁴⁷ NEMMCO further noted that the NGF Rule proposal noted the level of detail that was required for a connection application; however, did not consider the level of information that was required for network limiting advice (including stability related network limits) from TNSPs to NEMMCO. “The relatively unrestricted sharing of information between TNSPs and NEMMCO is essential for operation of the power system in a safe and efficient manner.”⁴⁸ In particular, TNSPs require access to functional block diagrams for small signal models for oscillatory stability studies that are used for a number of purposes relating to stability and security of the power system. To meet the requirements of TNSPs, NEMMCO suggested the inclusion of a number of clauses under clause 3.13.3(l) of the proposed Rule.⁴⁹

For the provision of information from one NSP to another the NGF Rule proposal suggested the inclusion of clause 5.3.8(c1); however, NEMMCO thought that this clause was unnecessary and be removed to allow NSPs to exchange materially relevant information at their discretion. If the clause was included there should be a requirement for the information that can be shared to be clarified precisely.⁵⁰

⁴⁵ Ibid. at P.p. 1-2.

⁴⁶ Ibid. p.2.

⁴⁷ NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, p.2.

⁴⁸ Ibid.

⁴⁹ Ibid. at p.3.

⁵⁰ Ibid. at p.12.

In relation to the signing of confidentiality agreements between parties NEMMCO noted that this issue has been discussed at a number of forums in the past and made the following comments:⁵¹

1. ...appropriate and expected that a confidentiality agreement be entered into between a Registered Participant or NEMMCO and its consultants or advisers for confidential information;
2. ...the current Rules have worked to date and it is not necessary for confidentiality agreements between Registered Participants and NEMMCO; and
3. ...[adding] another layer of documentation above the Rules obligations would result in greater costs and could also stifle the delivery of information as parties negotiate the terms of a confidentiality agreement.

A.1.2.8 Vestas (Supplementary)

Vestas in its supplementary submission stated that “limiting the provision of information such that the intellectual property [proprietary information] of the provider is not compromised is essential ... and the NGF proposal goes a long way towards this objective. Many Generators and wind turbine manufacturers consider model source code to be confidential information, as it contains critical [proprietary information].”⁵² To this end, Vestas noted that “should the provision in the current Rules remain unchanged in relation to provision of model source code to NEMMCO, there should be no valid reason for a[n] open source code model to be provided to any other party. Any models provided to any other party (Registered Participants and NSPs) should be in a secured format (object code or encrypted format) in such a way that protects the proprietary information.”⁵³ Vestas also stated that the performance of the model whether in source code or in encrypted form provided the same performance.

A.1.3 The Commission’s consideration and reasoning in the draft Rule determination

A.1.3.1 Protection of proprietary information

The NGF’s proposed clause 3.13.3 sought to allow NEMMCO to release information that is reasonably required to carry out power system studies (including load flow and dynamic simulations) for planning and operational purposes. The Rule proposal also allowed for the disclosure of a Generator’s confidential information provided confidential design information and model source code was retained in a secured format and/or a releasable user guide. Submissions from Vestas, Roaring 40s and Siemens outlined the importance of keeping proprietary information secure such that

⁵¹ Ibid. at p.13.

⁵² Vestas’s supplementary submission on the NGF Rule change proposal, p.3.

⁵³ Ibid.

intellectual property rights were maintained. To protect this information, the NGF Rule proposal suggested the inclusion of clause 3.13.3(k2) and NEMMCO suggested the inclusion of clause 3.13.3(l1). The Commission accepted that the addition of these clauses would allow for the protection of proprietary information.

The NGF Rule proposal suggested the deletion of subclauses 3.13.3(k)(2)(i), (ii) and (iii); however, NEMMCO was of the opinion that this information was required by Registered Participants for planning and operational purposes and recommended that these subclauses be retained within the Rules. NEMMCO suggested that these subclauses be retained under a new clause 3.13.3(k3) and amended them to include additional information that NEMMCO considered was required, but cannot currently be disclosed. This information does not contain proprietary information and is important for undertaking power system studies. Therefore, the Commission accepted NEMMCO's suggestion to retain this information in the Rules.

The NGF Rule proposal recommended the deletion of clause 8.6.2(m), because without its deletion, information that is provided in accordance with clauses S5.2.4(a), (b)(5) and (b)(6) would not be able to be disclosed. The Commission accepted the NGF Rule proposal to delete clause 8.6.2(m) as this clause prevents the disclosure to connection applicants of information provided under clauses S5.2.4(a), (b)(5) and (b)(6), which maybe required by them to complete a connection agreement, and which is currently considered confidential information.

NEMMCO suggested that a clause be added to classify the information that is provided by NEMMCO under clauses 3.13.3(l) and (l2) as confidential information, as this information is only to be provided to NSPs and TNSPs such that they can fulfil their obligations under the Rules. In the absence of this NEMMCO would normally declare any information it provides as confidential information. To avoid this issue, NEMMCO suggested amendments to clause S5.2.4(f).⁵⁴ Given that these clauses pertain to information including functional block diagrams, the Commission accepted NEMMCO's suggested amendment to these clauses to protect against the disclosure of this type of information.

Vestas in its submission stated that any models provided to any other party (Registered Participants and NSPs) should be in a secured format (object code or encrypted format) in such a way that protects the proprietary information. For NSPs to fulfil their obligations under the NEL they require the same level of detailed data as that of NEMMCO. The Commission believes it is important for the long-term safety and reliability of the power system that NSPs have access to all information that allows them to fulfil their Rule obligations. NEMMCOs suggested clause 3.13.3(l2) would permit NSPs to obtain all necessary information from NEMMCO, which would include functional block diagrams; however, with the addition of suggested clause 3.13.3(l3) would not contain source code. Furthermore, the addition of clauses 3.13.3(l4) and S5.2.4(f) would deem this information to be confidential and would oblige NSPs not to disclose it.

⁵⁴ NEMMCO's submission on the NGF Rule change proposal, Attachment 1, P.p. 12-13.

A.1.3.2 Confidentiality agreements

The signing of confidentiality agreements between a Registered Participant and their consultants or advisors is appropriate and expected. However, the signing of individual confidentiality agreements between the discloser (manufacturer) and recipients (Registered Participants, NSPs and NEMMCO) would add an extra layer of legal documentation above the Rules and is likely to result in additional costs and delays in the delivery of the required information. The Commission therefore, did not include provisions for the signing of individual confidentiality agreements in the draft Rule.

A.1.3.3 Information transfer between NSPs

The NGF Rule change proposal suggested the inclusion of clause 5.3.8(c1) to facilitate the efficient transfer of information between adjacent NSPs provided the first NSP obtains the written approval from the provider of the said information to disclose it. In contrast, in its submission Grid Australia considered that this clause is unclear on the process for obtaining and releasing information. In particular Grid Australia raised three questions:⁵⁵

1. should a NSP seek the permission to disclose information from the originator of the information directly or through NEMMCO?;
2. if sought directly is it the responsibility of the NSP or the originator of the information to inform NEMMCO of the disclosure and if so, it is unclear how?; and
3. if sought directly from NEMMCO, whether it is the responsibility of the originator of the information or NEMMCO to advise the NSP that consent has been given to disclose the information?

Given this uncertainty and the expected loss of administrative efficiency Grid Australia recommended that it would be more appropriate and efficient that the party seeking information should do so directly through NEMMCO, and given these reasons clause 5.3.8(c1) was deleted from the Rule as made.

NEMMCO also noted in its submission that “it is not clear why this clause is necessary unless it is for the avoidance of doubt that a NSP may release the releasable user guide to another NSP”.⁵⁶ NEMMCO suggested that this clause be deleted and allow a local NSP to share materially relevant information with another NSP at its discretion. The Commission rejected the NGF’s proposed clause 5.3.8(c1), which would subsequently allow local NSPs to share materially relevant information with another NSP at their discretion, as is currently the case.

Grid Australia proposed that a new clause 3.13.3(k3) be added to the Rules, to allow NSPs to fulfil their requirements under the NEL, with a provision to permit NSPs to

⁵⁵ Grid Australia’s submission on the NGF Rule change proposal, p.3.

⁵⁶ NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, p.12.

exchange unencrypted data between themselves.⁵⁷ VENCORP was in agreement with Grid Australia that NSPs be allowed to obtain complete models and share them amongst themselves to fulfil their NEL obligations. In addition, NEMMCO noted in its submission that a local NSP (and, in respect of an embedded generating unit, the local TNSP) receives confidential block diagram information. However, under the NGF Rule proposed, a TNSP that is not “local” would only receive information from NEMMCO to the same level of detail as to any other Registered Participant, which would not enable them to efficiently undertake power system studies. To meet the information requirements of TNSPs, NEMMCO suggested the inclusion of clauses 3.13.3(12), (13) and (14) to the NGF’s proposed Rule. For the safe and secure operation of the power system, NSPs require the same level of data as that of NEMMCO, therefore, the Commission accepted the inclusion of NEMMCO’s suggested clauses.

A.1.3.4 Introduction of penalties to the Rules

In relation to the submission by Roaring 40s regarding “that the Commission consider options for amending the Rules to introduce penalties that are commensurate with the damage caused by the breach of confidentiality provisions”⁵⁸, the Commission noted that Division 2, Section 36 of the NEL prohibits the Commission to make Rules that “create criminal offenses or impose civil penalties for breaches”.⁵⁹ Therefore, the Commission did not include penalties in the Rule to be made.

A.1.4 The Commission’s findings in relation to this issue in the draft determination

In its draft determination, the Commission accepted the following proposals:

- deletion of clause 8.6.2(m) exceptions
- the amendments by NEMMCO to clarify which information is confidential under clause S5.2.4(f)
- deletion of clause 5.3.8(c1), which would subsequently allow NSPs to share materially important information between themselves

The Commission rejected the following in its draft Rule determination:

- to include provisions for the signing of individual confidentiality agreements between parties in the draft Rule.
- to include penalties in the Rules for the disclosure of proprietary information by market participants.

⁵⁷ Grid Australia’s submission on the NGF Rule change proposal, p.3.

⁵⁸ Roaring 40s submission on the NGF Rule change proposal, p.3.

⁵⁹ National Electricity Law, p.54.

A.1.5 Second round submissions

A.1.5.1 Grid Australia

As per their first round submission, Grid Australia notes that “unencrypted information is required by NSPs to fulfil their Rule obligations”.⁶⁰ Grid Australia also recognises that NEMMCO’s submission stated that “NSPs may also require this information to meet their own Rule and jurisdictional obligations”⁶¹; however, drafting of the draft Rule did not convey this intent sufficiently. Grid Australia’s concern is that limiting a NSPs access to information could limit the efficacy of NEMMCO’s models which will impact on the overall efficiency of the NEM. Therefore, to ensure that NSPs have access to unencrypted information and explicit functional block diagrams, Grid Australia suggests modification of clause S5.2.4(b)(6) as follows:⁶²

“to NEMMCO and Network Service Providers, model source code associated with the model in subparagraph (5) in an unencrypted form suitable for at least one of the software simulation products nominated by NEMMCO and Network Service Providers and in a form that would allow conversion for use with other software simulation products by NEMMCO”

Grid Australia also acknowledges that NEMMCO should be able to charge for the costs incurred in supplying market participants with functional block diagrams and encrypted information. However, Grid Australia recommends that “instead of NEMMCO charging for the provision of modelling information, contemplated by the draft Rule, generators requiring NEMMCO to protect their intellectual property should cover any additional costs incurred by NEMMCO, in maintaining the functional block diagrams and encrypted information required to undertake power system studies”.⁶³ Should the Commission continue with the intent outlined in its draft Rule determination, Grid Australia recommends that the wording of clause 3.13.3(l) be amended such that NSPs are removed from the obligation to pay for information received from NEMMCO.⁶⁴

A.1.5.2 NEMMCO

In clause 3.13.3(k2), NEMMCO notes that “NEMMCO must provide information in certain forms ‘unless NEMMCO obtains the written consent of the person who provided the information to NEMMCO to provide it in a different form’”.⁶⁵ However, the draft Rule could be interpreted as meaning that only a consent that NEMMCO has sought and obtained would enable NEMMCO to release the

⁶⁰ Grid Australia’s submission on the draft Rule determination, p.3.

⁶¹ Ibid.

⁶² Ibid. at p.4.

⁶³ Grid Australia’s submission on the draft Rule determination, p.4.

⁶⁴

⁶⁵ NEMMCO’s submission on the draft Rule determination, Attachment 1, p.1.

information in another form. A minor change to the Rule would allow the person who requests the information to obtain the consent themselves. NEMMCO subsequently suggests “replacing the word “obtains” with “is given” in clause 3.13.3(k2) to allow this flexibility”.⁶⁶

NEMMCO notes that there should be clarification in the final Rule in respect of “identification of the provider of information under circumstances where information has been provided on behalf of another party, or where there has been a change in ownership of the underlying assets”.⁶⁷ To overcome this issue NEMMCO suggests that clause 11.22(c) that was drafted in the Transitional Arrangements be relocated under clause 3.13.3(k) and modified to permit an unambiguous identification of the provider of information in all cases. Suggested drafting of this new clause is provided in NEMMCO’s submission.⁶⁸

NEMMCO also notes in its submission that there could be an issue “where an existing model is considered to be unsatisfactory and tests and analysis of test data are required to establish a new model”.⁶⁹ Under these circumstances it is usually the relevant NSP that is responsible for establishing the new model, and it is expected that the NSP and Generator would cooperate; however, there is no requirement for this to happen under the Rules. Therefore, NEMMCO suggests the following amendment to the Rules that would “require the Generator to cooperate with the NSP for the provision of information, including model source code information, and for the NSP to provide any new or revised model source code information to the Generator”.⁷⁰ It has been suggested that this amendment be done under clause 5.7.6 ‘Tests of generating units requiring changes to normal operation’.

A transcription error in the draft Rule was also noted by NEMMCO in clause 3.13.3(k3)(6) where clauses S5.5.3 and S5.5.4 have been written rather than Schedule 5.5.3 and Schedule 5.5.4.⁷¹

A.1.5.3 Siemens

Siemens agrees with Roaring 40s submission to the NGF Rule change proposal that there are currently no penalties in the Rules that penalise participants for breaches of confidentiality provisions and should be included.⁷²

⁶⁶ Ibid.

⁶⁷ Ibid. at P.p. 1-2.

⁶⁸ Ibid. at p.2.

⁶⁹ Ibid. at p.3.

⁷⁰ Ibid.

⁷¹ Ibid. at p.1.

⁷² Siemens submission on the draft Rule determination, p.2.

A.1.5.4 Vestas

In clause 3.13.3(12) of the draft Rule, Vestas notes that the information mentioned in subparagraph (2) is essentially the same information as that of subparagraph (1). Moreover, Vestas does not consider that this information is required by NSPs, therefore, to overcome this duplication Vestas suggests that clause 3.13.3(12)(2) is deleted.⁷³

In respect of clause 3.13.3(14), Vestas states that “all the clause needs to say is that information disclosed under rule 3.13.3 is confidential information, as rule 8.6.2 then governs that confidential information”.⁷⁴ Moreover, in clause S5.2.4(f) removal of the words ‘subject to clauses...’ is recommended as Vestas believes that as the information under this clause has been deemed confidential information and that “rule 8.6.2 is sufficient to specify how that confidential information is dealt with”.⁷⁵

A.1.6 The Commission’s consideration and reasoning in the final Rule determination

A.1.6.1 Protection of proprietary information

The Commission notes that an MCE exposure draft on proposed amendments to the NEL (National Electricity (Australian Energy Market Regulator (AEMO)) Amendment Bill 2009) proposes obligations on AEMO to protect confidential information. One of the proposed amendments is to remove the confidentiality obligation on NEMMCO from the Rules under rule 8.6 and place this obligation in the NEL. It is not foreseen that this will affect how the Rules govern confidentiality in respect of this Rule determination. Therefore, the Commission has accepted Vestas’ proposed amendments, with the addition of clauses 3.13.3(1)(3) and 3.13.3(17), that state information provided under those clauses is confidential information, and amendment of clause S5.2.4(f). The Commission considers that references to ‘confidential information’ in a Rule require compliance with rule 8.6, therefore concludes that confidentiality of the information will be maintained under the amended provisions. .

A.1.6.2 Provision of information to NSPs

The policy position of the Commission in the draft Rule determination was to allow NSPs to obtain the information that they require to undertake their obligations under the NEL, which included the provision of functional block diagrams, generating unit, and generating system static and dynamic model information, but not the model source code information. As noted by Vestas, while the functional block diagrams and generating unit, and generating system static and dynamic model information are essentially subsets of the same data, both sets of information are required by

⁷³ Vestas’ submission on the draft Rule determination, Attachment 1, P.p. 3-4.

⁷⁴ Ibid. at p.2.

⁷⁵ Ibid.

TNSPs to provide network limit advice relating to power system stability limits to NEMMCO and are both necessary. The Commission considers it important that NSPs are able to obtain the aforementioned information; however, given that the model source code contains confidential design information, the provision to NSPs of this information has not been included in the final Rule. Therefore, the Commission has not included the suggested drafting by Grid Australia in the final Rule.

However, as noted by NEMMCO in its submission, there are cases where Generators are not the providers of information – for example an NSP, therefore the Rules need to be unambiguous as to the provider. To ensure that the provider of model source code information is clear, NEMMCO has suggested the inclusion of a new clause in clause 3.13.3. The Commission has accepted the inclusion of a new clause 3.13.3(12) that identifies the provider of the model source code to NEMMCO both before and after the commencement date of the final Rule. The Commission has further amended clause 3.13.3(12) to capture those persons that have undertaken an application to connect, but who are not currently registered as Generators under the Rules as an additional provider of model source code under clauses S5.2.4(b) or S5.2.4(d). Furthermore, NEMMCO also notes that NSPs are often the creators of models, which they keep updated; however, there is currently no obligation in the Rules for cooperation between NSPs and the relevant Generator when data is out of date. The solution that NEMMCO proposes under clause 5.7.6 will oblige cooperation between NSPs and Generators and also allow for the provision to NSPs of unencrypted Generator model information for the updating of models. However, such that design information remains confidential only the relevant NSP to which the connection application applies will be able to request this information from the Generator. The Commission also notes that in clause 5.7.6(h) the obligation for NSPs to provide the updated model to NEMMCO has been removed, as it is understood that this information will be provided to NEMMCO by the Generator under clause S5.2.4(d). The Commission accepts the inclusion of NEMMCO's proposed clause 5.7.6(f1) and amendment of clause 5.7.6(h) provided that only the NSP for which the Generator's connection application pertains is able to access the information.

The Commission notes Grid Australia's suggestion that "generators requiring NEMMCO to protect their intellectual property should cover any additional costs incurred by NEMMCO, in maintaining the functional block diagrams and encrypted information required to undertake power system studies". However, given that this would be administratively burdensome on NEMMCO to implement, the Commission considers that giving NEMMCO the discretion to charge a fee to cover all reasonable costs incurred in providing this service is the most efficient method. The Commission considers that exempting NSPs from being charged a fee could create a situation where NSPs request information over and above what is required to provide network limit advice relating to power system stability limits to NEMMCO. The Commission therefore, considers that information provided to NSPs by NEMMCO under new clause 3.13.3(15) will be exempt a fee; however, for other information NSPs will be treated like other Registered Participants. Therefore, the Commission did not accept Grid Australia's suggested amendment of clause 3.13.3(l).

A.1.6.3 Introduction of penalties to the Rules

Siemens suggests that the Commission augment the Rules to include penalties, such that if a Registered Participant discloses confidential information, that they are liable for that disclosure. However, as noted in the draft Rule determination, pursuant to Division 2, Section 36 of the NEL, the Commission is prohibited from making Rules that “create criminal offenses or impose civil penalties for breaches”. Therefore, the Commission has not considered the introduction of penalties to the final Rule.

A.1.7 The Commission’s findings in relation to this issue in the final determination

The Commission has accepted the following proposals in its final Rule determination:

- Vestas’ proposed amendment of clause S5.2.4(f) clarifying which information is confidential;
- NEMMCO’s proposed deletion of rule 11.22(c) from the transitional arrangements of the proposed draft Rule and the addition of a new clause 3.13.3(12) in the final Rule to be made to clarify the providers of model source code information;
- Further amendment of clause 3.13.3(12) to add a new class of provider of model source code that refers to a person required under the Rules to register as a Generator;
- Grid Australia’s proposed amendment of clause 3.13.3(l) of the proposed draft Rule, renumbered clause 3.13.3(11) in the final Rule to be made to exempt NSPs from being charged a fee by NEMMCO to obtain information under clause 3.13.3(15);
- NEMMCO’s proposed amendment to clause 3.13.3(k2)(1) of the proposed draft Rule, renumbered clause 3.13.3(l)(i) in the final Rule to be made;
- amendment of the transcription error in clause 3.13.3(k4)(6) of the proposed draft Rule, renumbered clause 3.13.3(13)(6) in the final Rule to be made;
- addition of NEMMCO’s proposed new clause 5.7.6(f1) to oblige NSPs and Generators to cooperate in respect of provision of information to update models;
- addition of a new clause 3.13.3(l)(3) that states that any information provided by NEMMCO under clause 3.13.3(l) to a Registered Participant is confidential information; and
- addition of a new clause 3.13.3(17) that states that any information provided by NEMMCO under clause 3.13.3(15) to a Transmission Network Service Provider is confidential information.

The Commission has rejected the following in its final Rule determination:

- to include Grid Australia’s proposed amendment of clause S5.2.4(b)(6);
- to include Vestas’ proposed deletion of clause 3.13.3(12)(2); and
- to include penalties in the Rules for the disclosure of proprietary information by market participants.

A.2 Releasable user guides

A.2.1 The NGF proposal

It is often necessary for Registered Participants to obtain from NEMMCO certain parts of the functional block diagrams and model source code for the purpose of undertaking power system studies (including load flow and dynamic simulations) for planning and operational purposes.⁷⁶ The NGF Rule proposal suggested that the functional block diagrams could be termed a releasable user guide. Furthermore, to overcome issues with the provision of proprietary information, amending the Rules to define a releasable user guide – which must be provided to NEMMCO – and inserting provisions requiring that in certain circumstances, NEMMCO may disclose the releasable user guide and model source code (together termed Releasable Information) to Registered Participants. A definition of releasable user guides to be included in Chapter 10 Definitions of the Rules was proposed in the NGFs proposed Draft Rule as follows:⁷⁷

“**Releasable user guide:** a document associated with a functional block diagram that contains sufficient information to enable a *Registered Participant* to use the encrypted model source code to carry out *power system* studies for planning and operational purposes”.

A.2.2 First round submissions

A.2.2.1 Vestas

Vestas in its submission suggested an amendment to be made to the definition of a releasable user guide proposed by NGF as follows:⁷⁸

“**Releasable user guide:** a document associated with a functional block diagram that contains ~~(sufficient information to enable)~~ the numerical values associated with the software model for the purpose of a Registered Participant (to use) using the encrypted model source code to carry out *power system* studies for planning and operational purposes”.

⁷⁶ NGF Rule change proposal, p.2.

⁷⁷ Ibid, at Attachment A, p.7.

⁷⁸ Vestas’ submission on the NGF Rule change proposal, p.1.

A.2.2.2 NEMMCO

In relation to the contents of a releasable user guide, NEMMCO recommended in its submission that the Rules specify explicitly what should be included in a releasable user guide as the NGF Rule proposal states that a releasable user guide contain “sufficient information”, which could be too vague for the person preparing the Guide.⁷⁹

NEMMCO suggested a definition and contents that could be included in a releasable user guide, including possible drafting of the Rule in its submission as follows:⁸⁰

“**Releasable user guide:** a document associated with a functional block diagram and model source code provided under clause S5.2.4(b) (combined, forming the “**model**”) that contains sufficient information to enable a *Registered Participant* to use the encrypted model source code provided under clause 3.13.3(l) to carry out *power system* studies for planning and operational purposes. The information must include, but is not limited to:

- (i) the **model** parameters and their values;
- (ii) information about how the **model** parameter values vary with the operating state or output level of the *plant* or with the operating state or output level of any associated *plant*;
- (iii) instructions relevant to the use and operation of the encrypted model source code provided under clause 3.13.3(l);
- (iv) [optional] a description, including relevant functional block diagrams (which may be in simplified form), of the *generating unit*, *generating system* or related *plant*, as appropriate, to enable a person trained in carrying out *power system* simulation studies to understand the *plant* technology and performance;
- (v) Settings of *protection systems* that are relevant to load flow or dynamic simulation studies;
- (vi) Information provided in accordance with Schedule 5.5 that is not part of the **model** or the **model** parameters, which are required to allow modelling of the *generating unit*, *generating system* or related *plant* in *power system* load flow or dynamic simulation studies;
- (vii) *Connection point* details including parameters and values, location, *network augmentations* or modifications and other relevant *connection* information; and
- (viii) If the *generating unit* or *generating system*, as appropriate, is not yet *connected*, the expected *connection* and commissioning dates.”

NEMMCO also noted that depending on transitional arrangements “there may be a releasable user guide for each generating system or generating unit in the NEM”,

⁷⁹ NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, p.6.

⁸⁰ Ibid. at P.p. 6-8.

which could potentially decrease market efficiency.⁸¹ To overcome this, NEMMCO suggested the inclusion of an additional paragraph under proposed clause 3.13.3, which would allow NEMMCO to provide information relating to “requests for information required for load flow and dynamic stability studies; model parameters and parameter values; and information derived from the listed sources [allows NEMMCO to collect information into a form suitable for use with the encrypted models, and in load flow files]”.⁸²

Finally NEMMCO suggested that the “requirement not to alter the releasable user guide is only reasonable if the information provided in each releasable user guide is complete and correct”.⁸³ Therefore, the Rules should “require a Generator to amend a releasable user guide when it is incomplete, inaccurate or out of date”, and NEMMCO suggested that as this information also pertains to information contained in clause S5.2.4(b) of the Rules that it is reasonable that these requirements be combined with that of releasable user guides through amendment of clause S5.2.4(d).⁸⁴

A.2.2.3 Grid Australia

Grid Australia noted in its submission that while the NGF Rule proposal gives a definition of Releasable Information to be contained in a releasable user guide, this in itself is not enough. “Given that every generator currently not supplying unencrypted data to market participants will be required to provide Releasable Information for the provision of power flow analysis, in the interests of efficiency, this process should only be undertaken once.”⁸⁵ Grid Australia was of the opinion that the information to be included in a releasable user guide should be decided by market participants, such that all participants needs are met, and a minimum set of requirements are developed.

A.2.2.4 Worley Parsons

The NGF Rule proposal provides for a releasable user guide to provide the information that is itemised in subparagraph S5.2.4(b)(5) of the Rules; however, in its submission Worley Parsons suggested that this information should be augmented with “the complete voltage ratio and impedance information pertaining to any generator transformers – as this information is also interpreted to fall within the definition of confidential information”.⁸⁶ Without the provision of this information Worley Parsons indicated that it is not possible to perform accurate power system studies necessary for the planning and negotiation of generator and load connections.

⁸¹ Ibid. at p.8.

⁸² Ibid. at p.9.

⁸³ Ibid.

⁸⁴ Ibid. at p.10.

⁸⁵ Grid Australia’s submission on the NGF Rule change proposal, p.4.

⁸⁶ Worley Parsons submission on the NGF Rule change proposal, p.2.

Worley Parsons also noted that “many power system studies require the release of dynamic information pertaining to Generators and Generator transformers that are in parts of the network remote to the immediate section of the network being modelled. To ensure that the objectives of the Rule proposal are met, it is also important that the release of information relating to such remote assets of the system is allowed under the provisions of any changes to the Rules”.⁸⁷

A.2.2.5 Epuron

The Epuron submission was in agreement with that of the Worley Parsons submission and states that there has been “ongoing frustration due to the inability to access the fundamental network data required to complete network studies in relation to connection applications”.⁸⁸

A.2.2.6 Roaring 40s

The NGF Rule proposal under clauses 3.13.3(k1) and 5.3.8(c1) requires NEMMCO to provide Registered Participants and NSPs with a releasable user guide; however, Roaring 40s did not believe that the Rule proposal adequately defined what a releasable user guide was and what its contents should be.

Roaring 40s proposed that “a releasable user guide be a document provided by the participant registering the plant [for] which the model represents and explicitly identified as such by the participant”.⁸⁹ The releasable user guide was to include the following items:

- (a) Sufficient information for a user to operate the encrypted or compiled version of the model in power system studies;
- (b) Not include functional block diagrams;
- (c) Be provided by the Registered Participant during the construction process; and
- (d) For avoidance of doubt, no information provided to NEMMCO prior to the date of this Rule change can be deemed to be a releasable user guide unless NEMMCO is requested to do so by a participant who supplied the said information.⁹⁰

A.2.2.7 Econnect

Econnect in its submission provided an extensive discussion of the information that is required to adequately undertake power system studies. In addition, the existing Rules restrict the provision of static information contained in Generating System

⁸⁷ Ibid.

⁸⁸ Epuron’s submission on the NGF Rule change proposal, p.1.

⁸⁹ Roaring 40s submission to the NGF Rule change proposal, p.4.

⁹⁰ Ibid.

Data Sheets, therefore preventing Registered Participants from obtaining the data required for both static and dynamic power system studies. To overcome this issue, Econnect suggested that modifications are made to clause 5.3.8 to provide for a new category of Releasable Data in relation to Generator connections. This new category would cover the required load flow data and would be able to be disclosed by an NSP or NEMMCO to a Registered Participant in order to carry out power system studies for planning and operational purposes and would include the following information.⁹¹

“Releasable data; in connection with a generating unit or generating system, the following items of information provided subject to clause S5.2.4:

- (a) Generator and transformer MVA rating;
- (b) Maximum and minimum sent out real power capability;
- (c) Maximum and minimum sent out reactive power capability;
- (d) Voltage setpoint and controlled busbar for load flow solution purposes;
- (e) Nominal short-circuit impedance for positive, negative and zero-sequence;
- (f) Transformer vector group and off-nominal tap ratio;
- (g) Transformer positive, negative and zero-sequence impedance; and
- (h) Transformer tapping range and voltage control limits.”⁹²

Furthermore, Econnect suggested the inclusion of a new clause 5.3.8(b1) pertaining to Releasable data and to whom it may be disclosed and provided possible drafting for this clause.

A.2.2.8 Vestas (supplementary)

In relation to releasable user guides, Vestas in its submission defined what it believes these Guides to mean, (1) to act as a guide to the model such that any user who receives the model is able to operate it and integrate the model into a grid study easily and efficiently, and (2) to provide information about the model and the Generators plant that will assist a user in undertaking certain system studies (similar to the Releasable Data outlined in Econnect’s submission).⁹³

Vestas recommended that the term releasable user guide be clearly defined in the Rules and recognise that the information will be used for limited purposes such as dynamic and load flow studies. With the understanding that this data is not confidential in any way there is more certainty for all concerned, as to what is required to be provided and under what terms.

⁹¹ Econnect’s submission to the NGF Rule change proposal, P.p. 4-6.

⁹² Ibid. at p.8.

⁹³ Vestas’ supplementary submission on the NGF Rule change proposal, p.4.

A.2.3 The Commission’s consideration and reasoning in the draft Rule determination

A.2.3.1 Definition of releasable user guides

The Commission agreed with the opinions outlined in the submissions above that to prevent unnecessary confusion a releasable user guide be clearly defined in the Rules. Furthermore, the Commission agreed with NEMMCO’s amendments to the NGF’s proposed drafting of the Rule in relation to the addition of the relevant clauses outlining where the information making up the releasable user guides is to be sourced in the Rules. It was also the opinion of the Commission that the drafting proposed by Vestas adds clarity to the definition and was included in the draft Rule. Therefore, with further amendments from the Commission the draft Rule in relation to the definition of a releasable user guide was drafted as follows:

“Releasable user guide: a document associated with a functional block diagram and model source code provided under clause S5.2.4(b) (combined, forming the **“model”**) that contains sufficient information to enable a *Registered Participant* to use the encrypted model source code provided under clause 3.13.3(l) to carry out *power system* studies for planning and operational purposes.”

A.2.3.2 Contents to be included in a releasable user guide

Roaring 40s and Vestas in their submissions both stated that a ‘Releasable user guide should contain sufficient information to act as a guide for a user to operate the encrypted or compiled version of the model and integrate the model into power system studies easily and efficiently’. The Commission agreed that this should be the function of a releasable user guide.

Roaring 40s and Vestas also noted that ‘releasable user guides should provide information about the Generators plant that will assist a user to undertake certain power system studies; however, should not include information pertaining to functional block diagrams’ as this contains proprietary information. NEMMCO’s submission noted that information pertaining to functional block diagrams need not be included in a releasable user guide. While the functional block diagram provides useful information on performance and potential interactions, in particular, those generating systems nearby, it also contains confidential design information, so it was suggested that the diagrams could be provided in ‘simplified form’, although this may reduce the value of information. To maintain confidentiality of design information the Commission did not mandate the release of functional block diagrams in releasable user guides.

The NGF Rule proposal suggested the inclusion of clause 3.13.3(k1) in relation to NEMMCO’s obligation to disclose a releasable user guide. NEMMCO in its submission noted that the words ‘unaltered form’ in clause 3.13.3(k1) could lead to the information contained in releasable user guides becoming incorrect or out of date and suggested the inclusion of clause 5.2.4(d) so that the information was always correct and complete. The Commission agreed that releasable user guides should be

periodically updated such that the information was up to date and complete and accepted NEMMCO's suggested clauses S5.2.4(d)(1), (2) and (3), which will allow for NEMMCO to maintain the accuracy of this data.

Under Schedule 5.5 of the Rules, Worley Parsons noted that currently, complete voltage ratio and impedance information pertaining to any generator transformers fall within the definition of confidential information. In addition, the existing Rules restrict the provision of static information contained in Generating System Data Sheets (clauses S5.5.7(a)(1) and (2) outlined below), therefore preventing Registered Participants from obtaining the data required for both static and dynamic power system studies.⁹⁴ To overcome this issue, Econnect suggested that modifications are made to clause 5.3.8 to provide for a new category of Releasable Data in relation to Generator connections. NEMMCO also notes that clause S5.2.4(f) made information provided under clause S5.2.4(a) confidential, and this includes any information provided under Schedule 5.5. Some essential information (such as generating unit transformer data) cannot currently be disclosed by NEMMCO and should be included in the releasable user guide – to overcome this issue NEMMCO suggests the inclusion of item (vi) under their definition of releasable user guides.

“S5.5.7(a) NEMMCO must, subject to paragraph (b), develop and publish by 1 March 2008, in accordance with the Rules consultation procedures:

(1) a Generating System Design Data Sheet describing, for relevant technologies, the generating system design parameters of generating units and generating systems including plant configurations, impedances, time constants, non-linearities, ratings and capabilities, to be provided under clauses S5.2.4 and this schedule 5.5;

(2) a Generating System Setting Data Sheet describing, for relevant generation and control system technologies, the protection system and control system settings of generating units and generating systems including configurations, gains, time constants, delays, deadbands, non-linearities and limits, to be provided under clauses S5.2.4 and this schedule 5.5.”

Grid Australia was of the opinion that the information to be included in a releasable user guide should be decided by market participants, such that all participants needs are met, and a minimum set of requirements are developed.

In relation to the contents of a releasable user guide, the suggested drafting by NEMMCO stated that “the information must include, but is not limited to”, followed by a list of information to be included; however, item (iv) is optional which is contradictory. Whether a Generator includes information about their plant in the form of functional block diagrams is a commercial decision to be made by that company. For the above reasons, the Commission agreed with NEMMCO's suggested contents for releasable user guides with the omission of item (iv).

⁹⁴ National Electricity Rules, Version 21, S5.5.7, p.461.

A.2.4 The Commission’s findings in relation to this issue in the draft Rule determination

The Commission:

- agreed with the NGF Rule proposal as to the inclusion of subparagraph (b)(7) in clause S5.2.4 Provision of Information in relation to the provision of a releasable user guide to NEMMCO and NSPs with amendments from NEMMCO;
- agreed with the NGF Rule proposal as to the deletion of “and” from clause S5.2.4(b)(5)(iii) and the inclusion of “and” in clause S5.2.4(b)(6) to provide continuity in the Rules;
- agreed with the NGF Rule proposal as to the inclusion of a definition for a releasable user guide in Chapter 10 Definitions with amendments from Vestas and NEMMCO;
- agreed with NEMMCO’s suggested amendment of clause S5.2.4(d) and insertion of clauses S5.2.4(d)(1), (2) and (3), to allow NEMMCO to keep the information contained in releasable user guides current and up to date; and
- agreed with NEMMCO’s suggested contents of a releasable user guide to be placed in Chapter 10 definitions with the exception of item (iv).

A.2.5 Second round submissions

A.2.5.1 Siemens

In respect of the definition of a releasable user guide, Siemens makes the following comments in its submission. In the NGF Rule change proposal, the original text made it clear that the “model code for power system studies that a Registered Participant can request from NEMMCO shall be in an encrypted form”.⁹⁵ However, in the draft determination, the definition was unclear as to whether the model source code provided under the guide is encrypted as deemed fit by the original discloser. Therefore, Siemens suggests that the “definition of a releasable user guide be modified so it is clear that no party other than NEMMCO will obtain access to the unencrypted model source code”.⁹⁶

In addition, Siemens notes that in respect of the contents to be included in a releasable user guide that Siemens “wants to prevent information that is not intended by the original discloser to be included in the releasable user guide being provided to a third party”.⁹⁷ To prevent the disclosure of sensitive information,

⁹⁵ Siemens submission on the draft Rule determination, P.p. 1-2.

⁹⁶ Ibid.

⁹⁷ Ibid. at p.2.

Siemens suggests that “it is important that NEMMCO and the original discloser agree what information is needed for the releasable user guide”.⁹⁸

A.2.5.2 Vestas

Vestas notes that the definition of a releasable user guide as drafted in the draft determination includes:⁹⁹

1. “requirements that may disclose information of a confidential and proprietary nature;
2. specifies information that would not reasonably be required by a Registered Participant to carry out power system studies;
3. refers to information that is not specifically defined in the Rules (for example, ‘model parameters’, ‘model parameters and their values’); and
4. potentially also includes information that Generators and Connection applicants are not currently required to provide under clause S5.2.4 or elsewhere”.

Further to the points mentioned above, Vestas is “concerned that requiring the inclusion in the releasable user guide of the information described in paragraph (v)¹⁰⁰ of the definition of that term in the draft Rule will have exactly the effect that the Commission accepted should be avoided and that this paragraph should be deleted”.¹⁰¹ Of particular concern to Vestas are points (1), (2) and (3) noted above and paragraphs (i), (ii) and (v) of the proposed definition for a releasable user guide in the draft Rule determination. To resolve these issues, Vestas suggests that the definition be further refined and proposes suggested drafting in Attachment 2 of its submission.

A.2.6 Submission on the explanatory note regarding the specific issue of the transitional arrangements

A.2.6.1 Joint submission of Vestas, REpower Australia, Suzlon Energy Australia and Siemens

The joint submission states that to “prepare the information required under Schedule 5.5 in accordance with the documents released by NEMMCO (Generating System Design Data Sheet, Generating System Setting Data Sheet and Generating System Model Guidelines) requires information normally contained in a functional block

⁹⁸ Ibid.

⁹⁹ Vestas’ submission on the draft Rule determination, Attachment 1, p.2.

¹⁰⁰ See NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, p.6., or this final Rule determination, Pp. 27-28.

¹⁰¹ Vestas’ submission on the draft Rule determination, Attachment 1, p.3.

diagram to be disclosed”.¹⁰² The Commission has noted that the release of functional block diagrams within the releasable user guide will not be mandated; however, the joint submission is concerned that “requiring the inclusion in the releasable user guide of the information described in paragraph (5) of the definition of that term in the draft Rule will have exactly the effect that the Commission accepted should be avoided”.¹⁰³ It is, therefore, proposed within the joint submission that this paragraph (5) be deleted from the final Rule. The joint submission also provides amended drafting of paragraphs (1) and (2) to provide clarity and remove wording that the joint submission believes is not adequately defined within the Rules.

A.2.7 The Commission’s consideration and reasoning in the final Rule determination

A.2.7.1 Definition of a releasable user guide

DIgSILENT notes that the definition is unclear as to whether or not the model source code provided under the guide is encrypted is deemed fit by the original discloser. The Commission considers that the definition states that a releasable user guide is a document that enables “a Registered Participant to use the encrypted model source code provided under clause 3.13.3(l)”, that is, the guide pertains to information that has been encrypted to protect its proprietary information.

The Commission has not accepted Vestas’ suggested amendment of the definition of a releasable user guide to include the “numerical values associated with the software model”. The Commission is of the opinion that there may be instances for any particular model where the parameter values are not numerical and the definition proposed by Vestas would not capture this. The Commission considers that Vestas’ proposed amendment that states “the information in a releasable user guide must include...” adds clarity and has been accepted.

The Commission has not accepted Vestas’ suggested amendment of the definition of a releasable user guide to include the “numerical values associated with the software model”. The Commission is of the opinion that there may be instances for any particular model where the parameter values are not numerical and the definition proposed by Vestas may not capture this. The Commission considers that Vestas’ proposed amendment that states “the information in a releasable user guide must include...” adds clarity and has been accepted. Subsequently the amended definition of a releasable user guide for the final Rule is given as follows:

“Releasable user guide: a document associated with a functional block diagram and source code provided under clause S5.2.4(b) (combined, forming the “**model**”) that contains sufficient information to enable a *Registered Participant* to use the encrypted source code provided under clause 3.13.3(l)

¹⁰² Joint submission of Vestas, REpower Australia, Suzlon Energy Australia and Siemens on the explanatory note, p.5.

¹⁰³ Ibid.

to carry out *power system* studies for planning and operational purposes. The information in a *Releasable user guide* must include, but is not limited to:"

A.2.7.2 Contents of a releasable user guide under the definition

In respect of the contents of a Releasable user guide under the definition, Vestas has suggested the deletion of items (1), (2), and (5); however, the Commission considers that if these items are deleted from the final Rule that NEMMCO would be able to release an encrypted model, but not the model parameters and their values , thus effectively preventing Registered Participants from adequately performing power system studies for planning and operational purposes, or in the preparation of an application to connect. Therefore, the Commission has not accepted Vestas' suggested deletion of clause 3.13.3(k3)(4) or items (1), (2), and (5) of the Releasable user guide.

Furthermore, should NEMMCO be required to provide information under clause 3.13.3(l), which could include model parameter values and load flow data derived from a releasable user guide (clause 3.13.3(k3)(4)), the Commission considers that clauses 3.13.3(k2)(1) and (2) would be necessary to ensure that this information is provided in a secure format that will protect its confidentiality.

The Commission has not accepted the joint submissions suggested amendment to items (1) and (2) of the releasable user guide, because the releasable user guide pertains to information provided under clause S5.2.4(b) and, therefore, this is not the appropriate place to define that the model parameters and model parameter values relate only to the generating system itself. Moreover, as noted above the Commission does not support change that could effectively prevent Registered Participants from adequately performing power system studies for planning and operational purposes, or in the preparation of an application to connect as this would not be consistent with the national electricity objective. Therefore, the Commission has not accepted any amendment of the drafting of items to be included in a releasable user guide. .

In relation to item (5), the Commission accepts the concerns raised in the joint submission that this item may include information normally contained in a functional block diagram. However, Schedule 5.5 contains information that is required to allow modelling for power system load flow or dynamic simulation studies, therefore, the Commission considers retaining this item is important, but will limit the release of information to the extent reasonably necessary for power system load flow or dynamic simulation studies to allow the protection of commercially sensitive information.

A.2.8 The Commission's findings in relation to this issue in the final Rule determination

The Commission has accepted the following proposals in its final Rule determination:

- Vestas’ suggested amendment of the definition of a releasable user guide to add clarity; and
- amendment of item (5) such that only information to the extent reasonably necessary to allow power system load flow or dynamic simulation studies can be released.

A.3 Software products for release of model data

A.3.1 The NGF proposal

In the draft Rule provided by the NGF, clauses 3.13.3(k2)(1) and (2) state the forms in which data may be disclosed by NEMMCO.¹⁰⁴

A.3.2 First round submissions

A.3.2.1 DIgSILENT

The terminology used in the Rule proposal in relation to “object code” would in DIgSILENT’s view limit data encryption to one software product only and unless the data is made available in all software formats in use in the NEM, the release of encrypted data would not work. There are currently a number of software packages used throughout the NEM and DIgSILENT is concerned that the NGF Rule proposal would “limit the market to use one software tool only and thereby eliminate all competing products from the NEM”.¹⁰⁵

A.3.2.2 Worley Parsons

Worley Parsons noted in its submission that the Rule proposal requires the release of some data in an encrypted format, which Worley Parson’s considers will effectively lock the power system planning environment into one version of one software package that could progressively become obsolete. Furthermore, this could prevent engineering checks to be carried out on the encrypted data and Worley Parson’s believed a better approach would be to allow industry to decide the best engineering tools to use.¹⁰⁶

A.3.2.3 NEMMCO

Suggested that the word “one” in clause 3.13.3(k2)(2) is too restrictive and that a greater level of flexibility would be more appropriate, recommending that the “one”

¹⁰⁴ NGF Rule change proposal, Attachment A, p.2.

¹⁰⁵ DIgSILENT’s submission on the NGF Rule change proposal, P.p. 1-2.

¹⁰⁶ Worley Parsons submission on the NGF Rule change proposal, p.2.

be amended to “a”, which would allow NEMMCO to provide information in several formats.¹⁰⁷

A.3.3 The Commission’s consideration and reasoning in the draft determination

It was the opinion of the Commission that the terms ‘compiled information’, ‘encrypted information’ or ‘a secured format’ used in the NGF Rule proposal are consistent with terms used to conceal sensitive proprietary information in a model, and does not limit the model to one software product or preclude the use of other models that are used throughout the NEM, as has been suggested in both Worley Parson’s and DIgSILENT’s submissions. The NGF Rule proposal suggested the addition of clause 3.13.3(k2) in relation to the ‘forms’ in which NEMMCO may disclose information provided under clause S5.2.4(b)(6).

NEMMCO noted in its submission that for the provision of model source code in an encrypted form, it was suggested that the words “or another form” be added to clause 3.13.3(k2).¹⁰⁸ In addition, the Commission was in agreement with NEMMCO that use of the word “one” in clause 3.13.3(k2)(2) could create confusion and unjustifiably imply that data be compiled in one software format only and should be replaced with the word “a”.

A.3.4 The Commissions findings in relation to this issue in the draft Rule determination

- The Commission accepted NEMMCO’s proposed amendment to the NGF’s proposed clause 3.13.3(k2)(2).

A.3.5 Second round submissions

A.3.5.1 DIgSILENT

DIgSILENT notes that there are two practical implications of the purposed Rule change, namely:¹⁰⁹

1. “NEMMCO will only maintain a Siemens PSS/E dynamic model, which cannot be interpreted by any other software. This would require that many participants acquire expensive new PSS/E software, as it will not be possible to conduct dynamic simulations given all data available to network participants will be in an encrypted form; and

¹⁰⁷ NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, p.11.

¹⁰⁸ Ibid. at p.10.

¹⁰⁹ DIgSILENT’s submission on the draft Rule determination, P.p. 1-2.

2. NEMMCO will request models in Siemens PSS/E form by default as this is most commonly used by them. Where studies are conducted with DIgSILENT PowerFactory software (such as local dynamic ride-through studies), there may be an implied requirement for the delivery of two dynamic models by the Generator – one for the study and a separate model to comply with NEMMCO requirements”.

To resolve these issues, DIgSILENT proposes the following amendments to the draft Rule:¹¹⁰

- (a) clause S5.2.4(6): replace the existing rule word “nominated’ by the word ‘approved’; and
- (b) clause 3.13.3(k2)(2): replace the proposed rule wording “in a form that can be interpreted by a software simulation product nominated by NEMMCO” with the words “in a form that can be interpreted by at least three different software simulation products approved by NEMMCO”.

A.3.5.2 Worley Parsons

In respect of the software products for the release of model data, Worley Parsons notes that as amended in clause 3.13.3(k2)(2), the releasable user guide will be released in a form that can be interpreted by a software simulation product nominated by NEMMCO. However, the principle that should be “explicitly catered for in the Rules is that the specific software packages used in system planning are not relevant, while it is of crucial importance that the mathematics underlying a specific simulation is known”.¹¹¹ In order to allow NEMMCO (or any other party) to convert a model from one software platform to another, Worley Parsons suggests that “the draft Rule is augmented with words such that the underlying mathematics of the model are always available to a central authority such as NEMMCO”.¹¹²

A.3.6 The Commission’s consideration and reasoning in the final determination

It is neither the intention of the Commission to dictate which software simulation packages can be utilised in the market, nor to impose any provisions in the Rules that would lead to a loss of competition in respect of what packages may be used. The Commission also notes that existing clause S5.2.4(b)(6) states “...and in a form that would allow conversion for use with other software simulation products by NEMMCO”, which would imply that NEMMCO must understand the underlying mathematics and will be the central authority for conversion to other software simulation packages, as was raised in Worley Parsons’ submission. The Commission also considers that the wording of clauses 3.13.3(k2)(2) (this clause has been renumbered 3.13.3(l)(2) in the final Rule to be made) and S5.2.4(b)(6) will not lock the

¹¹⁰ Ibid. at p.2.

¹¹¹ Worley Parsons submission on the draft Rule determination, P.p. 1-2.

¹¹² Ibid.

system into using just one software simulation package, nor will it preclude the use of other software simulation packages, provided that the data is submitted in a form that can be converted as dictated by the Rules.

A.3.7 The Commission’s findings in relation to this issue in the final determination

The Commission has made no changes in respect of this issue in its final determination.

A.4 Expanding information access beyond Registered Participants

A.4.1 The NGF proposal

The NGF Rule proposal pertained to the disclosure of information from NEMMCO to NSPs and/or Registered Participants, or from a NSP to an adjacent NSP for planning and operational purposes.

A.4.2 First round submissions

A.4.2.1 McLennan Magasanik Associates, Worley Parsons, Hill Michael, Econnect, Epuron and DigSILENT

DigSILENT in its submission proposed “that all data be made available as was done in the past subject to signing a confidentiality agreement”.¹¹³ McLennan Magasanik and Epuron proposed “that the parties eligible to obtain data necessary to perform power system studies should be widened to include *bona fide* consultants offering power system analysis services”¹¹⁴, while Hill Michael proposed that the available data to these parties be expanded to include “all network assets, generators and load models”.¹¹⁵ Worley Parsons in its submission proposed that the Rules “should provide for NEMMCO to disclose sufficient information to not only Registered Participants, but also to Intending Participants and the engineering consultants (or agents) formally engaged by Registered Participants and Intending Participants”.¹¹⁶

Econnect in its submission went further to suggest the “creation of a special category of NEM participant for the registration of *bona fide* consultants and academic researchers to obtain and retain data in confidence for power system studies”¹¹⁷ and suggested that “Rule 2.6 and clause 8.6.2(m) are amended to allow consultants and

¹¹³ DigSILENT’s submission on the NGF Rule change proposal, p.2.

¹¹⁴ McLennan Magasanik Associates submission on the NGF Rule change proposal, p.1. and Epuron’s submission on the NGF Rule change proposal, p.1.

¹¹⁵ Hill Michael’s submission on the NGF Rule change proposal, p.2.

¹¹⁶ Worley Parsons submission on the NGF Rule change proposal, p.1.

¹¹⁷ Econnect’s submission on the NGF Rule change proposal, p.6.

academics to be registered by NEMMCO as a new category of Special Participant and obtain Releasable Information “ .¹¹⁸

A.4.2.2 Eureka Funds Management

Eureka suggested in its submission “that the parties eligible to obtain data necessary to perform power system studies should be widened to include Intending Participants” .¹¹⁹

A.4.2.3 VENC Corp

VENC Corp supported that NGF Rule proposal, but only if it were restricted to Registered Participants exclusive of NEMMCO and NSPs.¹²⁰

A.4.2.4 Siemens, Vestas (supplementary)

These submissions were categorically opposed to any Rule change that would permit the supply to and retention of power system static and dynamic data by a broader range of recipients than the presently proposed Registered Participants.¹²¹ Vestas went further to add that it did not support “the unfettered provision of [proprietary information] to Registered Participants who require it for studies such as load flow, static and dynamic system studies” .¹²²

A.4.3 The Commission’s consideration and reasoning in the draft Rule determination

- The amendments to the Rules that have been outlined in issue A.1 Proprietary Information and Data Confidentiality will make it easier for Registered Participants to obtain information.
- clause 2A.2.7(a) of the Rules states that “an intending applicant [participant] (other than NEMMCO) or an alternative proponent may request information from NEMMCO in order to prepare a technically competent application”, therefore, the Commission was of the opinion that Intending Participants are able to obtain information from NEMMCO to assist with connection applications.
- Consultants work with Registered Participants and/or Intending Participants directly and therefore should be able to obtain the required information from their clients.

¹¹⁸ Ibid. at p.8.

¹¹⁹ Eureka’s submission on the NGF Rule change proposal, p.1.

¹²⁰ VENC Corp’s submission on the NGF Rule change proposal, p.2.

¹²¹ Siemens submission on the NGF Rule change proposal, p.2.

¹²² Vesatas’ supplementary submission on the NGF Rule change proposal, p.3.

- For the above reasons, there is no need to increase the parties that are eligible to obtain information.

A.4.4 The Commission’s findings in relation to this issue in the draft Rule determination

The Commission was of the opinion that there is no necessity to increase the number of third parties that have access to information from NEMMCO and it should be limited to the current Registered and Intending Participants only.

A.4.5 Second round consultation

A.4.5.1 Worley Parsons

While Worley Parsons agrees with the policy position and intent of the Commission in the draft Rule determination, “the key problem under the Rules as they currently stand is that our clients (Registered Participants and/or Intending Participants) have often not been given access to the required information”.¹²³ The intent of the Commission is that in future, the required information will be released to Registered Participants by NEMMCO; however, Worley Parsons believes that as the Rules do not sanction this pass-on of information that there could still be problems. Therefore, Worley Parsons proposes that the draft Rule be “augmented with words that sanction consultants who work with Registered Participants and/or Intending Participants being given access to the required information, subject to appropriate confidentiality clauses if necessary”.¹²⁴

A.4.6 The Commission’s consideration and reasoning in the final Rule determination

Worley Parsons agrees with the policy position and intent of the Commission in its draft Rule determination; however, is still concerned that the Rules do not sanction the passing on of information from Registered Participants to consultants, especially in respect of confidential information. The Rules govern how market participants in the NEM interact with one another to promote the national electricity objective and the relationship between Registered Participants and their consultants is a commercial undertaking between both parties undertaken outside of their Rule obligations and it is not appropriate for the Rules to govern this interaction.. Consequently, the Commission considers that given Registered Participants are able to garner the required information under the Rules, the obligation is then on the Registered Participant to sign bilateral confidentiality agreements with their consultants. This will place the legal obligation to maintain confidentiality of the provided information between the Registered Participant and their consultant. In summary, the Commission does not agree with the inclusion of provisions in the

¹²³ Worley Parsons submission on the draft Rule determination, p.2.

¹²⁴ Ibid.

Rules that would place an obligation on Registered Participants to provide information to third parties (consultants).

A.4.7 The Commission’s findings in relation to this issue in the final Rule determination

The Commission has made no changes in respect of this issue in its final determination.

A.5 NEMMCO to maintain a register of proprietary information

A.5.1 The NGF proposal

The NGF Rule proposal stated that “as Releasable Information is commercially valuable, it is necessary that the Rules restrict the form in which it may be disclosed by NEMMCO to third parties and provide for a list to be maintained of the persons to whom the information has been provided”. The Rule proposal recommended that NEMMCO be responsible for maintaining a register describing the Releasable Information that it has released and to whom it has been released.¹²⁵

A.5.2 First round submissions

A.5.2.1 VENCORP and Grid Australia

VENCORP’s experience indicated that most connection applicants find it more time and cost effective to provide complete models (not just user guides) directly to the host NSP. VENCORP has also found that applications can be more quickly and effectively processed when adjacent NSPs are able to freely share information amongst themselves. Thus having NEMMCO as the sole repository of Releasable Information may work against these goals.¹²⁶

Grid Australia in its submission noted that it “does not consider that there is a need for a Releasable Information register ... however, in the event that the Commission determines that a register is required, Grid Australia agreed with the NGF that NEMMCO is the appropriate party to establish and maintain such a register”.¹²⁷

NEMMCO made no comment on this issue in its submission and only suggested minor amendments to the NGF Rule proposal.

¹²⁵ NGF Rule change proposal, p.2.

¹²⁶ VENCORP’s submission on the NGF Rule change proposal, p.2.

¹²⁷ Grid Australia’s submission on the NGF Rule change proposal, P.p. 4-5.

A.5.3 The Commission’s findings in relation to this issue in the draft Rule determination

The Commission accepted the NGF Rule proposal that NEMMCO establish, maintain and publish a register outlining the information that it has provided to Registered Participants.

The Commission accepted the following proposals:

- The inclusion of clause 3.13.3(p1) to the Rules with amendments by NEMMCO from its submission.

A.5.4 Second round submissions

A.5.4.1 Siemens

In conjunction with maintaining a register, Siemens notes that the “Registered Participants should be required to give an acknowledgement that the confidential information provided must be kept confidential and secure at all times and if there were a breach of this obligation, the original discloser will suffer loss and damage.”¹²⁸

A.5.4.2 Vestas

Vestas suggests that the drafting of clause 3.13.3(p1) is insufficient in its current form and proposes that it is drafted more explicitly. Vestas provides proposed drafting for the final Rule in its submission.¹²⁹

A.5.5 The Commission’s consideration and reasoning in the final Rule determination

Siemens notes that Registered Participants should be required to give an acknowledgement that the confidential information provided must be kept confidential and secure at all times, which the Commission considers will be achieved within the Rules under clauses 3.13.3(l)(3), 3.13.3(l7), S5.2.4(f) and rule 8.6. However, as noted in section A.1.6.3 above, under Division 2, Section 36 of the NEL, the Commission is prohibited from making Rules that “create criminal offenses or impose civil penalties for breaches”. Therefore, the Commission is unable to introduce penalties in the final Rule for breaches of confidentiality that may cause loss or damage.

Vestas has suggested that the drafting of clause 3.13.3(p1) be amended to be more explicit. While the Commission considers that this has merit, Vestas has suggested

¹²⁸ Siemens submission on the draft Rule determination, p.3.

¹²⁹ Vestas’ submission on the draft Rule determination, Attachment 2, p.5.

drafting that is out of scope in respect of this Rule determination. The Commission considers it more appropriate that the register that NEMMCO must, establish, maintain and publish should only pertain to information that contains proprietary information and therefore should be limited to the information to be disclosed under clause 3.13.3(l) not all the information under clause 3.13.3 as suggested by Vestas. Furthermore, the Commission considers that publishing what information has been released may divulge the purpose for which a participant has requested the information, which may have commercial implications for the participant in respect of potential future investments lessening competition in the market. Therefore, the Commission accepts the addition of clause 3.13.3(p1)(1) with the amendments above and (3), but has not placed a requirement on NEMMCO to give a description of the information that has been released.

A.5.6 The Commission's findings in relation to this issue in the final Rule determination

The Commission has accepted the following proposals in its final Rule determination:

- Vestas' proposed amendment to clause 3.13.3(p1), through the addition of clauses 3.13.3(p1)(1) and (3) with amendments from the Commission to clause 3.13.3(p1)(1) to ensure that it only applies to information provided under clause 3.13.3(l).

A.6 Including provision for transitional arrangements

A.6.1 Raised by NEMMCO

Raised by NEMMCO in its submission as a possible issue.

A.6.2 First round submissions

A.6.2.1 Grid Australia

Grid Australia noted in its submission that "the NGF Rule proposal does not address the issue of developing Releasable Information for existing Generators. Without such a requirement, key data would not be available to other market participants for the purposes of undertaking power system studies relevant to a connection application."¹³⁰

¹³⁰ Grid Australia's submission on the NGF Rule change proposal, p.4.

A.6.2.2 Roaring 40s and Siemens

Roaring 40s was of the opinion that “no information provided to NEMMCO prior to the date of this Rule change can be deemed as a “releasable user guide” unless NEMMCO is requested to do so by the participant who supplied the said information.”¹³¹

Conversely, in relation to the information that NEMMCO currently holds for generating units and generating systems in the NEM, Siemens proposed that “new provisions be inserted [in the Rules] to ensure that [prior] information may only be released in accordance with these new Rules upon receiving the consent of the original discloser of the information and a confidentiality agreement being put in place”.¹³²

A.6.2.3 NEMMCO

NEMMCO raised three main points in its submission about transitional arrangements:

1. What is the status of information currently held by NEMMCO?;
2. Who is the provider of information for existing model information?; and
3. How does NEMMCO obtain releasable user guides for existing models?

Much of the information that NEMMCO currently holds was obtained before existing clause S5.2.4(b)(6) was made and therefore is not pursuant to this Rule obligation. In addition, a large quantity of the existing data that NEMMCO holds has been developed by TNSPs, in cooperation with Generators and is the intellectual property of the TNSPs – that is that Generators have not always been the providers of model information. NEMMCO did not think it necessary for Generators to develop releasable user guides for existing plant, provided that transitional arrangements allowed NEMMCO to release information of the types contained in releasable user guides that it holds for existing plant and plant under development.

NEMMCO recommended that transitional arrangements recognise that the model information that NEMMCO currently holds as being the equivalent of releasable user guides and gave possible drafting of the Rules for proposed clause 3.13.3(k2) to ascertain the provider of the model source code information received by NEMMCO.¹³³

¹³¹ Roaring 40s submission on the NGF Rule change proposal, p.4.

¹³² Siemens submission on the NGF Rule change proposal, p.1.

¹³³ NEMMCO’s submission on the NGF Rule change proposal, Attachment 1, P.p. 4-5

A.6.3 The Commission’s consideration and reasoning in the draft Rule determination

Transitional arrangements are needed to ensure that the information provided to Registered Participants is, and remains, complete and accurate, as information that is missing from the power system model may make that model inaccurate or unworkable. As previously mentioned in A.2 releasable user guides, the Commission was of the opinion that NEMMCO’s suggested clauses S5.2.4(d)(1), (2) and (3) would allow NEMMCO to make sure that all information provided is current and up to date.

The Commission agreed with NEMMCO’s suggested additional clauses to the draft Rule that recognised that the information already held by NEMMCO be equivalent to that of a releasable user guide. The Commission considered that the addition of these clauses would allow NEMMCO the discretion to provide information of the type to be included in releasable user guides without placing an obligation on Generators to create releasable user guides for current generating units. The Commission also considered that these releasable user guides would not be retrospective and only apply to Generators connecting to the NEM from the commencement of this draft Rule. The transition period for NEMMCO to update its system must be completed within 12 months.

A.6.4 The Commission’s findings in relation to this issue in the draft Rule determination

The Commission accepted NEMMCO’s proposal to include transitional arrangements in the draft Rule.

The Commission accepted the following:

- the inclusion of Transitional arrangements under new rule 11.22.

A.6.5 Second round submissions

A.6.5.1 Roaring 40s and Vestas

Roaring 40s notes that the transitional arrangements in the draft Rule “allow NEMMCO to release information ‘of the type required in a releasable user guide’, which could create the situation where sensitive information that was previously confidential could be released at the discretion of NEMMCO”.¹³⁴ To overcome this issue, Roaring 40s suggests the “necessity of grandfathering the protection of information provided to NEMMCO on a confidential basis”.¹³⁵

¹³⁴ Roaring 40s submission on the draft Rule determination, P.p. 1-2.

¹³⁵ Ibid. at p.2.

Similarly, Vestas also notes that a result of National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007 No. 2, any party who has submitted information to NEMMCO since March 2007 has done so in the knowledge that clause 8.6.2(m) operated to prevent the disclosure of this information. However, as the draft Rule recommended the deletion of clause 8.6.2(m), the information that has been provided since this time is no longer protected. Therefore, Vestas proposes the inclusion of additional clauses to the transitional arrangements to fully protect the said information.¹³⁶

A.6.6 Explanatory note on the specific issue of transitional arrangements¹³⁷

In the draft Rule determination, the Commission noted that the proposed obligation to provide a releasable user guide would not be retrospective in operation and would only apply to Generators connecting to the NEM from the commencement of the final Rule. The intent was not to compel the disclosure of information that was provided previously to NEMMCO in good faith. Roaring 40s and Vestas' submissions raised concerns that the transitional arrangements stating information provided to NEMMCO since the March 2007 Rule change¹³⁸ contains confidential information and should not be disclosed in a releasable user guide.

The Commission was concerned that without the proposed transitional arrangements, NEMMCO could only release power system modelling information that would be incomplete and, therefore, not of the quality required to undertake adequate power system studies. Further, even if NEMMCO sought the agreement of the relevant Generator to use the information that it already holds, NEMMCO might not receive the required consent in all cases. This could result in problems for connecting parties having incomplete dynamic data, which may cause inefficiencies in connections.

To resolve the issue of incomplete modelling data, the Commission proposed to include transitional arrangements in the final Rule that require Generators to provide NEMMCO with information of a type required in a releasable user guide. The Commission published an explanatory note on 22 January 2009 seeking further stakeholder consultation on the transitional arrangements in respect of information that NEMMCO holds at the commencement of this amending Rule. These transitional arrangements sought to avoid unnecessary duplication and administrative cost on Generators and outlined the following the exceptions:

- For information that was provided to NEMMCO prior to 15 March 2007, the commencement date of the March 2007 Rule change, NEMMCO was able to disclose sufficient information to Registered Participants for the purpose of modelling the operation of the power system, to the extent reasonably necessary

¹³⁶ Vestas' submission on the draft Rule determination, Attachment 1 p.4., and Attachment 2, P.p. 6-7.

¹³⁷ See explanatory note on the AEMC website at:
<http://www.aemc.gov.au/electricity.php?r=20080424.113727>

¹³⁸ The "March 2007 Rule change" refers to "National Electricity Amendment (Technical Standards for Wind Generation and Other Generator Connections) Rule 2007 No 2."

to enable a Network User to develop an application to connect. Therefore, the suggested drafting of the transitional arrangements has been amended to state that information received by NEMMCO prior to this date can be deemed information of the type to be included in a releasable user guide; or

- For information received after this date until commencement of this amending Rule, either the Generator must provide a releasable user guide within three months, or provide NEMMCO with written consent for NEMMCO to use relevant information that it holds at the commencement date of the amending Rule.

A.6.7 Submissions on the explanatory note

A.6.7.1 Pacific Hydro

Pacific Hydro notes in its submission that “this Rule change concerns information that typically does not belong to the Generator” and consequentially Pacific Hydro could not provide NEMMCO with the necessary consent to allow the release of this information as it was provided on a confidential basis.¹³⁹ To overcome this issue, Pacific Hydro suggests that either of the following two options would need to happen to comply with the proposed Rule. Either “negotiations with the owners of the information (generator and auxiliary equipment) to provide a releasable user guide, or development of a new model in a releasable form”.¹⁴⁰ However, Pacific Hydro is of the opinion that the time period of three months stipulated in the explanatory note is too short and a period of at least nine months is more appropriate.

A.6.7.2 Roaring 40s

Roaring 40s states that it has serious concerns with proposed rule 11.25(b)(1) of the transitional arrangements as “it provides NEMMCO the right to ‘deem’ currently confidential information to be a ‘releasable user guide’, so removing protection of intellectual property”.¹⁴¹ Roaring 40s further asserts that “NEMMCO has the power to cause substantial loss of production from connecting generators by making registration (and hence commissioning) conditional on provision of sensitive information. Therefore, it is incorrect to say that information provided to NEMMCO prior to March 2007 has lower levels of sensitivity or is now freely available in the public domain. Roaring 40s suggest that the AEMC be guided by principles that treat new and existing generators in the same manner and suggest the deletion of rule 11.25(b)(1) from the final Rule. Roaring 40s also notes that compliance within the three month timeframe envisioned in the transitional arrangements may not be possible.

¹³⁹ Pacific Hydro’s submission on the explanatory note, p.1.

¹⁴⁰ Ibid.

¹⁴¹ Roaring 40s submission on the explanatory note, Pp. 1-2.

A.6.7.3 Suzlon Energy Australia

In its submission Suzlon Energy Australia notes that as “wind power plants consist of auxiliary equipment provided by other suppliers it would take considerable time to negotiate and obtain the relevant information for the releasable user guide”.¹⁴² Therefore, to aid in the preparation of a releasable user guide, Suzlon suggests that nine months be provided to undertake this process.

Clause S5.2.4 sets out what information a connection applicant must provide to NEMMCO or a NSP and clauses S5.2.4(b)(1)-(4) set out the triggers that dictate when that information is provided. Suzlon Energy Australia however notes that these triggers as currently drafted would not allow for the provision of a releasable user guide under clause S5.2.4(b)(8). But, a change to clause 3.13.3(l) would give an alternative avenue for providing the releasable user guide through the transitional phase.

A.6.7.4 Siemens

The definition of the provider of model source code information under clause 3.13.3(l2), states that the provider is either the Generator, NSP or the TNSP. As the original discloser of the information is often a generator manufacturer like Siemens, or others, Siemens proposes that an additional clause be placed under 3.13.3(l2) that identifies “the original discloser of the model source code information to NEMMCO”.¹⁴³ This is primarily as Siemens wants to “avoid any distribution of confidential information to parties other than NEMMCO, [therefore] it is essential that any model source code information requested by NEMMCO under the Rules can be provided directly by the original discloser to NEMMCO”.¹⁴⁴

A.6.7.5 NEMMCO

In its submission, NEMMCO states “one of the specific principles of the transitional arrangements is that the types of data required for a releasable user guide must be available for all generating systems”.¹⁴⁵ There is the risk that applicants in the process of registering at the commencement date of the amending Rule would not have to provide a releasable user guide because this will be a new requirement. Given that it is unclear when they should provide the guides, NEMMCO suggests it would seem reasonable to allow registration applicants until 29 May 2009 to provide the guides.

Similarly NEMMCO notes that it will also be unclear for persons that apply for registration after the commencement date as to when they should provide a releasable user guide. This is primarily due to the provision of information under

¹⁴² Suzlon Energy Australia’s submission on the explanatory note, p.1.

¹⁴³ Siemens submission on the explanatory note, Pp. 1-2.

¹⁴⁴ Ibid.

¹⁴⁵ NEMMCO’s submission on the explanatory note, Pp. 1-2.

clause S5.2.4(b) being triggered by the earlier of four circumstances, which is usually the application to connect. Hence, NEMMCO suggests that additional transitional arrangements are inserted that state "the releasable user guide should be provided with a registration application, where a releasable user guide has not been provided under clause S5.2.4(b)".¹⁴⁶ As for the timing of this request, NEMMCO suggests allowing applicants until 29 May 2009 to do so, if they have applied for registration after the commencement date of the amending Rule and prior to 29 May 2009. Finally NEMMCO also notes that the provision of model model source code for clause 3.13.3(l), provided by the Generator under clause S5.2.4(b)(6) would be subject to this uncertainty.

A.6.7.6 Vestas

Vestas considers that the proposed time frame for the provision of a releasable user guide is too short. Vestas suggests that "a fixed date (29 November 2009) be set as the date by which releasable user guides must be provided".¹⁴⁷

Vestas does not support the insertion of the first exception of rule 11.25(b) where information of the type to be included in a releasable user guide was provided to NEMMCO before 15 March 2007. Vestas's reasoning is that this information was provided in accordance with rule 5.3 and was confidential and that only a subset of this information was able to be released by NEMMCO under clause 8.6.2(m) to the extent reasonably necessary to enable a Network User to develop an application to connect. Therefore, "any suggestion that the whole of the information submitted to NEMMCO prior to that date can be 'deemed information of the type to be included in a releasable user guide' is strongly resisted".¹⁴⁸ It could be argued that the effect of the first exception to the transitional arrangements is to change the purpose for which confidential information could be used, after that information was disclosed, thus Vestas suggests that this exception is deleted from the Rule. Vestas also considers that the first exception to the transitional arrangements would "lead to the situation where intending participants are provided with different packages of information in relation to different generating systems depending on whether the generator which operates a particular generating system provided information to NEMMCO before or after 15 March 2007, or before or after the date of commencement of the draft Rule".¹⁴⁹ Vestas considers it is preferable that all Generators be required to provide a releasable user guide in accordance with the Rules, to ensure consistency of information to Intending Participants while still protecting the legitimate interests of Generators and their suppliers, which would also reduce the administrative burden on NEMMCO.

In respect of the second exception, rule 11.25(b)(2), Vestas considers that the best outcome from a regulatory perspective would be for all Generators to provide a releasable user guide for their generating systems regardless of whether the

¹⁴⁶ Ibid.

¹⁴⁷ Vestas' submission on the explanatory note, p.1.

¹⁴⁸ Ibid. at Pp. 2-4.

¹⁴⁹ Ibid. at Pp. 4-5

information was provided before or after 15 March 2007. For this reason, Vestas considers that rule 11.25(b)(2) be deleted from the final Rule.

A.6.7.7 Joint submission of Vestas, REpower Australia, Suzlon Energy Australia and Siemens

The joint submission considers that the “proposed deadline of 29 May 2009 for the provision of a releasable user guide is too short ... the date should be extended to 29 November 2009, in recognition of the amount of work required to prepare suitable releasable user guides for our respective projects”.¹⁵⁰

In respect of the level of detail of the source code, the joint submission notes that “certain parties have provided to NEMMCO since 15 March 2007 very detailed source codes on the clear understanding that this information was confidential and could not be disclosed (because of clause 8.6.2(m) of the Rules)”.¹⁵¹ Further the joint submission asserts that even “after encryption of such source codes, access to the encrypted versions enable a detailed investigation of the capabilities of the individual generating units and of the solutions applied to satisfy specific grid connections requirements”. As a result of this back-engineering it may be possible for confidential information that is contained within the encrypted models to be obtained by a competitor. Therefore, to have sufficient protection of the commercially sensitive information, the joint submission proposes that “Generators who connected one or more generating systems in the NEM before the commencement date of this amending Rule have the opportunity, as an option, to provide to NEMMCO an alternative source code of the model of the generating system(s) in conjunction with the releasable user guide”.¹⁵² The encrypted version of the model source code shall contain sufficient information to enable a Registered Participant to carry out power system studies for planning and operational purposes. The joint submission further proposes that this option to provide an alternative model source code be “retained for new connections to the NEM after this amending Rule takes effect ... [to] permit wind turbine manufacturers to continue providing detailed models to NEMMCO and NSPs and yet keep their intellectual property sufficiently protected with regard to Registered Participants”.¹⁵³

In respect of the encryption of the source code, the joint submission proposes that “Generators who connected a generating system in the NEM before the commencement date of the amending Rule have the option of providing to NEMMCO a releasable encrypted source code. This releasable encrypted model source code could be based on the model source code already held by NEMMCO or based on the alternative source code [of the model of the generating system(s) in conjunction with the releasable user guide]”.¹⁵⁴ To give comfort to the suppliers of

¹⁵⁰ Vestas, REpower Australia, Suzlon Energy Australia and Siemens’ joint submission on the explanatory note, p.1.

¹⁵¹ Ibid. at p.3.

¹⁵² Ibid. at p.4.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

generating units and to Generators about precisely what confidential information is being provided by NEMMCO to the Registered Participants along with the releasable user guide, the joint submission proposes that when NEMMCO moves from one software platform to another, “the Generators have the option of providing to NEMMCO, within a specified timeframe, an updated version of the releasable encrypted model source code in the required software platform”.¹⁵⁵ The joint submission also considers that this option be retained for Generators connecting to the NEM after the commencement date of the amending Rule.

A.6.8 The Commission’s consideration and reasoning in the final Rule determination

A.6.8.1 Time limit for providing information of the type required in a releasable user guide

The Commission considers that, in the interest of ensuring Registered Participants are provided with the relevant information they require to undertake power system studies for planning and operational purposes in a timely manner a shorter transitional period is desirable. The Commission recognises the concerns of stakeholders that the period of three months outlined in the proposed transitional arrangements may not afford them sufficient time to prepare and adequately test information to provide to NEMMCO of a type required in a releasable user guide. These stakeholders have proposed a transitional period of nine months. The Commission notes however that NEMMCO considers a three month timeframe is achievable. The Commission has concluded that to quickly facilitate the provision of information to market participants a transitional period of three months is appropriate. However, the Generator may provide the releasable user guide to NEMMCO after 29 May 2009 at a date which NEMMCO considers is reasonable in the circumstances, but which must be no later than 27 November 2009.

A.6.8.2 Transitional arrangements for information provided to NEMMCO before 15 March 2007

Vestas and Roaring 40s have both highlighted that before March 2007 the information provided to NEMMCO in respect of an application to connect under rule 5.3 was considered confidential information and rule 8.6 governed how this confidential information was handled. In addition, at this time clause 8.6.2(m) governed which subset of this information was able to be released by NEMMCO “for the purpose of modelling the operation of the power system, to the extent reasonably necessary to enable a Network User to develop an application to connect”.¹⁵⁶ To adequately reflect the concerns raised by Vestas and Roaring 40s related to the disclosure of confidential information, the Commission considers that amending clause 11.25.2(a)(1) to mirror the purpose for which information that NEMMCO was able to provide before 15 March 2007 would address this. The Commission considers

¹⁵⁵ Ibid.

¹⁵⁶ National Electricity Rules, Version 13, clause 8.6.2(m) Exceptions.

this would alleviate concerns about retrospective operation of the amending Rule and only allow the provision of information authorised by the Rules for the same purpose as intended by clause 3.13.3(l) at the time this information was provided.

A.6.8.3 Transitional arrangements for information provided to NEMMCO after 15 March 2007

Stakeholders have noted that information of the type required in a releasable user guide typically does not belong to the Generator and the Generator is therefore not able to give written consent for its release. This is usually because generating unit manufacturers are the owners of this information. Siemens has suggested that to overcome this issue that a new category of provider of model source code information is inserted under clause 3.13.3(l2). The Commission considers that it is the Generator that is the relevant person in respect of generating systems in the NEM, and it is with Generators that NEMMCO has an ongoing relationship. Therefore, the Commission has rejected Siemens proposed amendment to clause 3.13.3(l2) and intends to place the obligation on the Generator to negotiate with the manufacturer to provide the information of a type required in a releasable user guide.

The joint submission of Vestas, Suzlon Energy Australia, REpower Australia and Siemens noted since 15 March 2007 a number of Generators have provided NEMMCO with very detailed model source code on the basis that it was confidential and NEMMCO could not disclose it. Their concern is that after commencement of this amending Rule, clause 3.13.3(l) would allow NEMMCO to disclose the model source code information in an encrypted form, which could result in the disclosure of confidential information to competitors in the market. As part of the Generator's obligation to provide a releasable user guide, these stakeholders would also like the option to provide alternative model source code information. The Commission accepts there is a limited risk that back-engineering of the encrypted model source code could result in an approximate knowledge of how the associated generating system operates that could result in the partial disclosure of commercially sensitive information. Therefore, the Commission considers that allowing the Generator to re-submit substitute model source code in respect of its generating system in conjunction with a releasable user guide would address this problem. However, the Commission considers it important that the substitute model source code must be in accordance with NEMMCO's Generating System Model Guidelines outlined in Schedule 5.5 of the Rules, which would be achieved by requiring the substitute model source code for clause S5.2.4(b)(6) to only be accepted if it complies with clause S5.2.4(c).

The joint submission proposes that the option of delivering substitute model source code be retained for new connections to the NEM after commencement of this amending Rule, which would in effect allow Generators to provide two models, one to NEMMCO and NSPs, and another for release to Registered Participants. The Commission is not able to accept the inclusion of this provision in the final Rule as it considers this to be out of scope in relation to the current Rule change proposal. While the Commission considers there maybe merit in this proposed amendment, it could not be considered as a preferred Rule as it has been raised late in the Rule

making process and no public consultation can be sought at this stage on its inclusion in the final Rule.

In respect of providing NEMMCO with releasable encrypted source code, the Commission considers that given Generators have been given the option of providing substitute model source code that NEMMCO will be able to release under clause 3.13.3(l), NEMMCO is best placed to encrypt this model source code in the software application requested by the Registered Participant requiring information. Therefore, the Commission has not placed an obligation on Generators to provide encrypted source code.

A.6.8.4 Transitional arrangements for persons in the process of registration with NEMMCO

Suzlon Energy Australia suggested amendment of clause 3.13.3(l) to state that information received under clause 11.25.2(a) is deemed to be releasable user guide information provided under clause S5.2.4(b)(8). However, the Commission considers that clause 11.25.2(e) of the transitional arrangements would allow NEMMCO to treat the information that it receives under clauses 11.25.2(a) and 11.25.2(b) as releasable user guide information required by clause S5.2.4(b)(8) and has not included Suzlon Energy Australia's proposed amendment in the final Rule.

The Commission considers the following suggestion by NEMMCO is a valid risk – that applicants that have fulfilled one of the obligations under clauses S5.2.4(b)(1)-(4), but are as yet not registered as a Generator under the Rules, may result in cases where the requirement to provide a releasable user guide, or the timing of that provision is unclear. The Commission considers that the addition of a new transitional arrangement (clause 11.25.2(b)) that specifies persons required under the Rules to register as a Generator would be provided the same opportunity (as for registered Generators) to be able to consent to NEMMCO using relevant information which that person has already provided to NEMMCO. This additional provision is drafted as for a registered Generator to capture information that has been provided to NEMMCO before and after 15 March 2007. The Commission has also added an additional transitional arrangement, clause 11.25.2(d), that provides for a person required under the Rules to register as a Generator, that is a person who has already provided information to NEMMCO under clause S5.2.4(b), but is not currently registered as a Generator the option of providing NEMMCO with substitute model source code under clause S5.2.4(b)(6).

A.6.9 The Commission's findings in relation to this issue in the final Rule determination

The Commission has accepted the following proposals in its final Rule determination:

- NEMMCO's proposed deletion of proposed rule 11.22(c) in the draft Rule and its insertion in new clause 3.13.3(l2) to unambiguously identify the provider of model source code information;

- amendment of rule 11.25(b) of the draft provisions for the transitional arrangements in the explanatory note, new clause 11.25.2(a) to require a Generator to provide NEMMCO with a releasable user guide by 29 May 2009 or a date which NEMMCO considers is reasonable in the circumstances, but which must be no later than 27 November 2009.
- amendment of rule 11.25(b)(1) as drafted in the explanatory note, new clause 11.25.2(a)(1) to limit the information NEMMCO may provide to Registered Participants to the provision of information authorised by the Rules for the same purpose as intended by clause 3.13.3(l) at the time this information was provided;
- new clause 11.25.2(c) in the transitional arrangements that allows a Generator that has provided model source code to NEMMCO between 15 March 2007 and the commencement of this amending Rule, to provide NEMMCO with substitute model source code in respect of its generating system in conjunction with a releasable user guide, only if the replacement model source code is in accordance with NEMMCO's Generating System Model Guidelines; and
- new clauses 11.25.2(b) and 11.25.2(d) in the transitional arrangements that allow a person required under the Rules to register as a Generator, but who is not currently registered as a Generator to be able to consent to NEMMCO using information which that person has already provided to NEMMCO, and the opportunity for this person to provide NEMMCO with substitute model source code.

The Commission has rejected the following proposals in its final Rule determination:

- amendment of clause 3.13.3(l2) to allow a manufacturer to be identified as a new category of provider of the model source code information;
- amendment of the transitional arrangements to allow a Generator to provide two variants of model source code in respect of a generating system; and
- an obligation on Generators to provide encrypted model source code to NEMMCO.

A.7 Rule proposal augmented to include connection applicants

A.7.1 NEMMCO

Raised by NEMMCO in its submission, NEMMCO stated that the information provision requirements in the NGF Rule change proposal have been proposed for information disclosure to Registered Participants; however, connection applicants need not be Registered Participants. NEMMCO suggested that a similar process to the NGF proposal be established to determine the requirements for provision of information to connection applicants described in clause S5.2.4(e)(5)(i). NEMMCO recommended that the NGF Rule proposal and the issue of connection applicants be kept separate as NEMMCO is not involved directly in connection enquiries.

A.7.2 The Commission’s consideration and reasoning in the draft Rule determination

The Commission considered there was a risk of confidential information being disclosed under the Rules’ current arrangements for the provision of information by NSPs to Connection Applicants as set out in clause S5.2.4(e). The Commission considers that this risk would be addressed by introducing a new requirement into the Rules that a Connection Applicant, seeking information under the current clause S5.2.4(e), must be registered as an “Intending Participant” in accordance with rule 2.7.

A.7.3 The Commission’s findings in relation to this issue in the draft Rule determination

To implement this decision the Commission made the following draft amendments in the Rules:

- clause S5.2.4(e) was substituted with a new draft requirement that a Connection Applicant, seeking information under the current clause S5.2.4(e), must be registered as an “Intending Participant” in accordance with rule 2.7;
- as a consequence of the latter amendment, the content of clause S5.2.4(e) became the new draft clause S5.2.4(e1); and
- minor consequential amendments to cross references to clause S5.2.4(e) were made in clauses S5.2.8(a)(2)(i) and S5.2.8(b)(2).