ATTACHMENT C - PROPOSED RULE CHANGES IN MARK-UP - AUSWIND DETAILED RESPONSE.

Affected clause	Clause with proposed amendments	Reason	Auswind Comments
2.2.1(e)	(e) To be eligible for registration as a Generator, a person must: (1) having obtained NEMMCO's approval to do so, classify each of the generating units which that form part of the generating system it owns, operates or controls, or from which it otherwise sources electricity, as either a scheduled generating unit; and	The proposed new clause 5.3.7B provides for acceptance of performance standards by NEMMCO. It is intended that Generators should not be registered until performance standards are accepted by NEMMCO for that Generator's plant, and that NEMMCO is satisfied that the Generator will be able to comply with the performance standards.	Agree
	(2) satisfy NEMMCO that those generating units and the connection points for those generating units—comply—with—the—relevant—technical requirements set out in Chapter 5 clauses 5.3 or clauses 5.10 and 5.11(if applicable) have been complied with; and		
	(3) satisfy NEMMCO that each generating system will be capable of meeting or exceeding its performance standards.		
2.9.2(a)	(a) Subject to clause 2.9.2(d), NEMMCO must, within 15 business days after receiving the application, or after receiving the further information or clarification under clause 2.9.1(b), or within 15 business days after receiving the information requested under clauses 5.3.7A(b), S5.2.4(b) and 5.11.2, whichever is the later, give notice to the applicant that the applicant is to be admitted in the category of Registered Participant applied for if	Clauses 5.3.7A(b), S5.2.4(b) and 5.11.2 gives NEMMCO the power to access information necessary to enable it to properly assess proposed performance standards. The performance standards for new connection applications are to be assessed prior to the connection agreement being entered into. Although	Agree
	(1) an applicant meets any the eligibility requirements specified for the category of Registered Participant to which the application relates;	could technically be done just prior to the registration application. It is therefore appropriate that the time periods in clause 2.9.2(a) only run once requested information is provided.	
	(2) if the application relates to registration in one of the categories of Market Participant, the applicant is and will be able to fulfil its financial	It is also appropriate that a person seeking registration establish that that person has	

<u>2.9.2(d)</u>		Affected clause
related to ensuring power system security, reliability of supply or the quality of network service to other Network Users, or are consistent with the market objective, NEMMCO may impose such terms and conditions on any registration as NEMMCO sees appropriate.	obligations under Chapter 3 including the prudential requirements set out in clause 3.3; and (3) the applicant has complied with and will continue to be able to comply with the Rules. If NEMMCO is not reasonably satisfied that an applicant satisfies the requirements set out in clause 2.9.2(a), NEMMCO must, within 15 business days after receiving the application or after receiving the further information or clarification required under clause 2.9.1(b); (1) application; (2) further information or clarification required under clause 2.9.1(b); or (3) information requested under clauses 5.3.7A(b), \$5.2.4(b) or 5.11.2 whichever is the later, notify the applicant that it is not qualified to be registered as a Registered Participant in the relevant category and provide reasons for that determination.	Clause with proposed amendments
In the context of new generation, it is conceivable that NEMMCO might need to register Generators on a conditional basis. This is because NEMMCO's overriding responsibility is to ensure power system security, so it is appropriate that NEMMCO has the power to apply conditions to registration that ensure that that objective can be met. It is also appropriate to give NEMMCO the power to apply conditions to registration that ensure reliability of supply and the quality of network service since these are necessary to ensure that the interests of Network Users are protected.	Complied with the Rules. The reference to the prudential requirements is not necessary. Clauses 5.3.7A(b), S5.2.4(b) and 5.11.2 gives NEMMCO the power to access information necessary to enable it to properly assess proposed performance standards. As outlined above, it is therefore appropriate that the time periods in clause 2.9.2(b) only run once requested information is provided.	Reason
Delete – The clause gives NEMMCO excessive power to impose any standards on connection. Registration is too late in most circumstances to alter plant design and construction. NEMMCO must inject their requirements prior to registration. The automatic access standards are to highest level of standard which NEMMCO may impose.	Reference to "will continue to be able to comply" could be problematic. It looks to the future (ie operating prospectively, and given the Rules compliance is not based on guidelines compliance (see eg. Amendments in 3.13.3(k)(2)(iii)), the very nature of the document means it may change in the future, therefore query how could applicant anticipate whether it "will continue to be able to comply"? This may also have contractual flow-on effect as developer may look to deal with the issue in risk allocation profile, and if off-loaded onto third party, eg manufacturer, may have project development cost implications. Further, what criteria will NEMMCO apply when assessing future compliance?	Auswind Comments

Affected clause	Clause with proposed amendments	Reason	Auswind Comments
		Rather than include a provision that specifically applies to Generators (thereby creating an implication that NEMMCO cannot impose conditions on the registration of other applicants, it is appropriate that a generic power to impose conditions (albeit a conditional power) be inserted.	
3.11.7(a)	(a) In addition to the requirements under clause 4.155.12, a Market Participant which has classified a generating unit as an ancillary service generating unit or a market load as an ancillary service load must install and maintain in accordance with the standards referred to in clause 3.11.7(b) monitoring equipment to monitor and record the response of the ancillary service generating unit or ancillary service load to changes in the frequency of the power system.	This change is necessary to ensure that the appropriate cross-reference is made on implementation of these proposed Rule changes.	Agree
3.13.3(k)	(k) Subject to the restrictions and obligations in clause 5.3.8(a) NEMMCO must make the following registered bid and offer data and Network Service Provider data and updates available to a Registered Participants, on request without unreasonable delay, the following information and data if in its possession and control: (1) details of the shared transmission and distribution network impedance data and other technical data as listed in: (ii) schedule 5.5.1; (iii) schedule 5.5.2; (iii) schedule 5.5.3; and (iv) schedule 5.5.4, sufficient to carry out power system studies as reasonably required by Registered Participants for planning and/or operational purposes; and registered bid and offer data;	This clause forms the basis of NEMMCO's data policy – which allows for snapshots of the power system to be distributed to Registered Participants (including if required generating plant dynamic models). The original clause was poorly worded, and has been revised to aid clarity. The different types of data described in the clause have been separated into different sections. The reference to "Network Service Provider Data" for the modelling data has been removed, as it is not clear that all the data provided under this clause belongs to the NSP. Some of it clearly is NSP data, and this has been maintained through references to 3.13.3(f) and 3.13.3(g).	Agree

(k1) NEMMCO may, in its absolute discretion, provide information of the type described in clause 3.13.3(k) to persons who request it for the purpose of undertaking research or providing advice to Registered Participants or potential investors in the power system.	and data described System Model G System Design Data System Setting Data State and data describing Data State and practice and practice dures and practice and practice dures and practice dures and practice application of schuble power system to the power system to t	Affected. Clause with proposed amendments reasonably required by the Registered Participant to carry out power system studies (including, without limitation, load flow and dynamic simulations) for planning and operational purposes: (i) historical information relating to the operating conditions of the power system; (ii) information and data provided to
This clause has been added to enable NEMMCO to pass on standard system snapshots to power system consultants who have a need for the data. When the proxision is two broadens access to what can be regarded as highly sensitive proprietary and confidential information (e.g. in the event of manufacturers IP rights) to persons with no actual connection to the network, the projects or necessarily any concern with reliability of the network. What research is envisaged here? The proxision similarly pays no regard to proprietary nature and intellectual property rights of the parties that are source of the information provided to	This could be regarded as an attempt to or have potential impact to codify the guidelines (so that they are no longer just that, guides, but law).	is currently the clause used to obtain wind farm models. The reference to "historical information relating to the operating conditions of the power system" has been added to make it clear that information is to be given sufficient to generate a load flow file.

4.2.5(d)	3.13.3(13)	3.13.3(k2)	Affected clause
	3)	123	
(d) NEMMCO must, when determining the secure operating limits of the power system, assume that the applicable performance standards are being met, subject to: (1) a Registered Participant notifying NEMMCO, in accordance with clause 4.15(f)5.12 (f), that a performance standard is not being met; or (2) NEMMCO otherwise becoming aware that a performance standard is not being met.	other persons to whom information and data is provided or to be provided under clauses 3.13.3(k) and 3.13.3(kl), respectively, NEMMCO's estimate of the reasonable costs incurred by NEMMCO, or to be incurred by NEMMCO, in complying with a request under either of those clauses. NEMMCO may withhold the information and data until its estimate of reasonable costs is paid.	(k2) Information provided under clause 3.13.3(k)(2) is confidential information.	Clause with proposed amendments
This change is necessary to ensure that the appropriate cross-reference is made on implementation of these proposed Rule changes.	This is required to ensure that the user of the service, as opposed to the market as a whole, pays the cost of providing this service.	Current NEMMCO policy is to give out snapshots to Participants under cover of a letter saying that this is confidential information. This clause formalises that this information is to be treated as confidential. Registered Participants are bound by the Rules to treat confidential information as described in 8.6.1. Non participants (under 3.13.3(k1)) would need to sign a confidentiality agreement.	Reason
Agree	Agree This will have consequences in terms of contractual landscape and risk allocation posing implications for developers and manufacturers. The unintended effect may be increases in prices, or parties seeking to recover those costs (which are uncapped under 3.13.3(k3) from end users.	Agree The Rule as drafted does not go far enough. Declaring that information is confidential is not sufficient to protect the rights of the parties that are source of that confidential information. What are the consequences of information being declared as being consequences of information being declared as being confidential. Will the Rules outline that? Further, there is discrepancy between this provision and accompanying comment and the practical effect that 3.13(k1) is likely to have. What enforcement rights in relation to intringement (ie failure to keep information confidential) are there?	Auswind Comments NEMMCo. There may be unintended disincentive to third parties to provide information (eg manufacturers) if their commercial in-confidence information is provided to "potential investors" and "researchers" who may be direct commercial competitors. In exercise of its discretion, NEMMCO must at least have some regard to the rights and interests of the parties that are source of the information.
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4.14	4.13(a) &(b)	4.9.2(b) & (b1)	Affected
Delete	Delete	(b1)	Clause
		Subject to paragraph clause 4.9.2(b1), NEMMCO may at any time give an instruction to a Scheduled Generator in relation to any of its scheduled generating units with a nameplate rating of 30MW or more, or its generating systems of combined nameplate rating of 30 MW or more, nominating that: (1) the generating unit or generating system transformer is to be set to a nominated tap position (if it has on-load tap changing capability); (2) the generating unit or generating system's voltage excitation control system set-point is to be set to give a nominated voltage at its terminals; or (3) the generating unit or generating system is to be operated to supply or absorb a nominated level of reactive power at its terminals or at its connection point. Unless otherwise provided under an ancillary services agreement or a connection agreement, NEMMCO must not give an instruction under paragraph clause 4.9.2(b) that requires a generating unit or generating system to supply or absorb reactive power at its terminals at a level which is—outside the mandatory capability for that generating unit determined in accordance with clause \$5.2.5.1 of schedule 5.2 plant's relevant performance standard.	Cause wim proposed amendments
Clauses 4.14(a) to (i) and 4.14(l) to (o) are being moved to clause 5.11.1 after	These are being moved to clause 5.10.1(a) and (b), respectively after some amendments	NEMMCO currently requires Non-Scheduled Generators to be subject to dispatch for reactive power as a condition of registration under clause 2.2.3(c) for generating systems of 30 MW or more, but NEMMCO considers that the power to dispatch reactive power from non-scheduled generating systems of 30 MW or more should be a normal part of power system security dispatch without resort to registration powers. The changes to include "generating system" and to allow that the plant might not have a conventional excitation control system and the measurement point for reactive power might be the connection point, are necessary to be consistent with the proposed amendments to clauses \$5.2.5.1 and \$5.2.5.13. The change to the reference to "mandatory capability" is to remove an inconsistency that arose with the introduction of the performance standards regime, which replaced the concept of a "mandatory capability" with agreed performance standards. NEMMCO should be able to dispatch reactive power within the capabilities defined by the relevant performance standards.	
Agree to deletion	Agree to deletion	Wording Issue: Distribution connected wind farms often have a requirement imposed by the NSP in the connection agreement to remain within a designated voltage range to avoid affecting customer voltages. A typical case is a requirement to avoid over-voltages by absorbing reactive for high generation and low system load. Clause (b1) is only correct if NEMMCO accept the connection agreement voltage limits. The text should be changed to reflect operation within the restrictions imposed by the connection agreement and NSP operating requirements. Add "and the connection agreement with the NSP.	

	(iii) to address a Connection Applicant's reasonable expectations of the level and standard of power transfer capability that the relevant network should provide; and	(ii) to establish the process to be followed by a Registered Participant or a person intending to become a Registered Participant to establish or modify a connection to a network or to alter generating plant connected to a network;	(i) to detail the principles and guidelines governing connection and access to a network;	(2) has the following purposesaims:	(1) provides the framework for connection to a transmission network or a distribution network and access to the networks forming part of the national grid; and	(a) This Chapter:	5.1.2(a) 5.1.2 Purpose	4.15 Delete			Affected Clause with proposed amendments	
to establish processes to ensure	plicant's level and capability should	followed a person egistered nodify a to alter	xess to a	to generating plant.	the first of the frank whereas 5.2.5 clearly includes alterations to a be ambiguous in that changes to interpreted as only those that change the physical link to the transmission or distribution network, whereas 5.2.5 clearly includes alterations	The	This change is required to clarify that Chanter 5 also deals with alterations to	Clause 4.15 is being moved to clause 5.12 after some amendments.	Clauses 4.14(j) and (k) are being moved to clause 5.11.2(a) and (b), respectively, after some amendments.	some amendments.	Reason	
							Agree	Agree to deletion			Auswind Comments	

Affected clause	Clause with proposed amendments	Reason	Auswind Comments
5.1.3(b2)	(b2) A Registered Participant or person intending to become a Registered Participant may request connection of a facility, modification of a connection, or alteration of connected plant at a standard below an automatic access standard if the connection, modification to the connection, or alteration of connected plant does not adversely affect other Registered Participants: (1) power system security;	These changes are required to clarify that the provisions apply to modification of connections and alterations of connected plant. Further, previously the clause referred to any adverse effect on other Registered Participants. This is too broad a test and it is appropriate to restrict the clause to the specific instances in (1), (2) and (3).	Agree
5.2.2(b)	(b) The Rules apply to all: (1) all connection agreements made after 13	There is no need to refer to modifications of connection in (3) as there will already be in place a	Agree
	(2) all deemed connection agreements created pursuant to under clause 5.2.2(a); and	in (1) or (2).	
	(3) all requests to establish connection or modify an existing connection after 13 December 1998.		
5.2.2(c) & (d)	Delete	There is no need for clause 5.2.2(c). Its effect is unclear and it is confusing. Chapter 5 no longer contains mandatory technical requirements that could conflict with the connection agreement.	Agree to deletion
		There is no need for clause 5.2.2(d). Its operation is unclear given the obligations set out in clauses 5.2.3 (Obligations of Network Service Providers), 5.2.4 (Obligations of Customers) and 5.2.5 (Obligations of Generators).	
5.2.5(a)	(a) Each A Generator must plan and design its facilities and	It is important that the performance standards take precedence over the	Agree

Affected Scheme	Clause with proposed amendments	Reason	Auswind Comments
	ensure that its facilities they are operated to comply with:	connection agreement because:	
	(1) its connection agreement with a Network Service Provider the performance standards applicable to those facilities;	 performance standards are assessed by NEMMCO in the context of system security, reliability of supply and quality of sunply: 	
	(2) subject to clause 5.2.5(a)(1), all applicable performance standards its connection agreement with a Network Service Provider; and	of the existing proced d in differences bety	
	(3) subject to clause 5.2.5(a)(2), the system standards.	connection agreements and performance standards, which must not be allowed to undermine that process;	
11.		 performance standards are only amended with the agreement of the parties, and any subsequent agreement should take precedence over an earlier agreement; and 	
		• the connection agreement is a private arrangement between third parties and the Rules should override those agreements where the Rules cover the field, ie system security, reliability of supply and quality of supply in the NEM.	
		When the technical requirements in schedule S5.2 were mandatory, it was necessary for any variations agreed in a connection agreement to take precedence over schedule S5.2. but now that the	
		mandatory requirements have been converted into automatic and minimum access standards that is no longer required and undermines the concept of performance standards.	
A		For new connections, there should be no inconsistencies as the performance standards will be recorded in the connection agreement. NEMMCO will	

need to refer to existing or
simplified process is more efficient.
Modifications to plant can occur without modifications to the connection. There is generally no need to go through a full connection enquiry process for a connection who is modificing plant and a connection who is modificing plant and a
now dealt with in clause
reference to altered
have imput into the drafting of the the performance standards and they will be accepted by NEMMCO subject to the connection agreement being executed.

Agree – provided that only minimum standards that are achievable are written into the rules.	Clause 5.3.4A must reference reliability of supply as this concept is also central to the proper operation of the market. Some of the technical requirements impact reliability of supply as well as power system security (notably \$5.2.5.9 and \$5.2.5.12): a change to the technical	(a) A negotiated access standard must: (1) be no less onerous than the corresponding minimum access standard specified by the Network Service Provider in accordance with clause 5.3.3(b1)(2); (2) be set at a level that will not adversely affect	5.3.4A(a)
Agree	This change is needed to ensure that the inquirer is told that the TNSP will be involved in the planning carried out in respect of a generating system connected to a distribution network where that generating system is more than 10 MW.	(i) will need to be involved in planning to make the connection or will be involved under clause 5.3.5(f); and	5.3.3(b)(1)(i)
Agree – Provided this is managed by the NSPs appropriately	Clause 5.3.2(e) has been added to allow for the situation where one project has an adverse impact on another project. Until now, clause 5.3.8 has prevented the NSP disclosing such information to the connection applicant, even though the information may be of critical importance to the viability of the second project and the NSP is required to negotiate in good faith. This modification attempts to address this problem by allowing the release of basic information of competing projects for which an application to connect has been received and more detailed information of competing projects for which an offer to connect has been made.	(e) For the purposes of clause 5.3.2(d), where the performance or operation of plant that is the subject of an application to connect could be materially affected by another project, the Network Service Provider must provide to the Connection Applicant the following information about the other project sufficient to identify the extent of the impact: (1) if an application to connect has been received in respect of the other project, information of the types specified in clause S5.4 but not clauses S5.4(d) or S5.4(i), consistent with the application to connect of the other project; and (2) if an offer to connect of the other project; and specified in clauses S5.2.4(b), and S5.5. consistent with the offer to connect of the other project.	5.3.2(e)
	Anyone can make a connection inquiry.	Participant, who wishes A person wishing to lodge or consider is considering lodging an application to connect to a network must first make a connection enquiry by advising the Local Network Service Provider of the type, magnitude and timing of the proposed connection to the network of that Local Network Service Provider.	
Auswind Comments	Reason	Clause with proposed amendments	Affected

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(1) accept the proposed regorianed access standard in NEMACO's reasonable opinion, adversely in on the basis of impact on eliability in content at the regoriated access standard it can the basis of impact on eliability on respect of the connection of generalizing behavior in respect of the connection of generalizing behavior adversely affect reasonable opinion adversely affect reasonable opinion adversely affect reasonable opinion adversely affect quality, of supply or the connection of generalizing behavior in interconnection of other major reasonable opinion adversely affect reasonable opinion adversely affect quality of supply. Or means that a security in pact is translated the plants, of supply for other respect of a matter allowed to a reliability impact set also comments adversely affect power system occurs; in the supply for other Activorse for a matter allowed to a reliability inpact set also comments adversely affect power system occurs; in the content opinion, adversely affect quality of supply. Or other Activorse for a matter showed between the requirements of supply for other Activorse for the Activ	5.3.4A(g)							Affected clause
but neither had a specific power to reject sonable opinion, adversely it on the basis of impact on reliability. There is a grey area between security and reliability impacts. In the operational sense of security something that affects the operating plant. In the operating envelope can often be managed by reductions in transfers on ethor major transmission network elements, which means that a security impact is translated to a reliability impact. See also comments that power system security; under clause 5.3.4A(a). There is a grey area between security and reliability impacts. In the operational remembers or other major managed by reductions in transfers on interconnectors or other major managed by reductions in transfers on interconnectors or other major transmission network elements, which means that a security impact is translated to a reliability impact. See also comments under clause 5.3.4A(a). There is a grey area between security and reliability impacts. In the operational to a reliability impact or other major transmission network elements, which means that a security impact is translated to a reliability impact. See also comments under clause 5.3.4A(a).	Delete	(5)	(4)	(3)			(2)	Clause with po
but neither had a specific power to reject it on the basis of impact on reliability. There is a grey area between security and reliability impacts. In the operational sense of security something that affects the operating envelope can often be managed by reductions in transfers on interconnectors or other major transmission network elements, which means that a security impact is translated to a reliability impact. See also comments under clause 5.3.4A(a).		in respect of the connection of generating plant in NEMMCO's reasonable opinion, not satisfy clause 5.3.4A(a)(5).	in the opinion of NEMMCO or the Network Service Provider, in respect of a matter allocated to NEMMCO or the Network Service Provider, respectively, be lower than the corresponding minimum access standard, or	in the Network Service Provider's reasonable opinion, adversely affect quality of supply for other Network Users; or		proposed by the Connection Applicant would: in respect of the connection of generating plant, in NEMMCO's reasonable opinion adversely affect reliability of supply: or (i) in NEMMCO's reasonable opinion; adversely affect power system security: of	in NEMMCO's reasonable opinion, adversely affect power system security; or eject the proposed negotiated access standard if connection at the negotiated access standard	oposed amendments
- ***		R b"	IO IO II IO				it on the basis of There is a grey area reliability impacts. sense of security such the operating environments.	Reason Not neither had a sp
13、 300000000000000000000000000000000000	acceptance					tions in transfers on or other major ork elements, which y impact is translated ct. See also comments (a).	impact on reliability. between security and In the operational omething that affects elope can often be	ecific power to reject
Le commence of								Auswind Comments

5.3.7(a)	5.3.6(e)	5.3.5(g)	5.3.5(d)(1)	5.3.5(a)	Affected
(a)	Delete	Delete	(1)	(a)	Clause
If the Connection Applicant wishes to accept an offer to			the performance technical requirements for the equipment to be connected;	The Network Service Provider to whom the application to connect is submitted: (1) at the automatic access standard in accordance with under clause 5.3.4; or (2) at a negotiated access standard that has been accepted by the Network Service Provider in accordance with under clause 5.3.4A(d); (3) at any applicable plant standard; must proceed to prepare an offer to connect in response.	Clause with proposed amendments
	This clause is a legacy of the Code prior to the introduction of negotiated access standards. The concept of variations is now specifically dealt with under the negotiation of access standards between minimum and automatic levels.	This is no longer required due to the proposed changes in this package.	The change is for consistent usage of the terms "performance standards" and "technical requirements".	performance standards and the relationship between performance standards is now dealt with in clauses 5.3.7A and 5.3.7B (transitional arrangements are in clauses 5.10 and 5.11). The reference to clause 5.3.4A(d)(1) is now clause 5.3.4A(d) because of the change described above. "a Network Service Provider" has been changed to "the Network Service Provider" because it is specific to that connection. Clause 5.3.3(b.3) deems applicable plant standards to be an automatic access standard or negotiated access standard may be accepted as a automatic access standard or negotiated access standard or negotiated access standard. Therefore the reference to applicable plant standard is not necessary.	Reson
Agree	Agree to deletion: with comment: removal of this clause takes away the TNSPs ability to consider geographic or local conditions.	Agree to deletion.	Agree	Agree	Auswind Comments

	This is being moved to clause 5 3 7A/A		
Agree to deletion.	This is being moved to clause 5.3.7A.	Delete	5.3.7(e)
		(a3) The Network Service Provider and the Connection Applicant must not enter into the proposed connection agreement until NEMMCO has accepted the proposed performance standard.	
		(a2) The proposed performance standards must be based on the automatic access standard or, if the procedures in clause 5.3.4A have been followed, the negotiated access standard.	
Agree		(a1) The proposed connection agreement must include proposed performance standards with respect to each of the technical requirements identified in schedules 5.2, 5.3 and 5.3a where applicable and each proposed performance standard must have been established in accordance with the relevant technical requirement.	<u>5.3.7</u>
		dgreement with each relevant Network Service Provider identified in accordance with clause 5.3.3(b)(2) and, in doing so, must use its reasonable endeavours to negotiate in good faith with all parties with which the Connection Applicant must enter into negotiate such a connection agreement.	
		connect, the Connection Applicant must: (1) [Deleted]	
Auswind Comments	Reason	Clause with proposed amendments	Affected ::

		(6)	Į	5.3.7A 5.3.7. (a)	Affected Clau
(3) can be complied with, based on the information provided to NEMMCO by the Network Service Provider and the Connection Applicant,	 satisfies the technical requirements set out in schedules 5.1, 5.2, 5.3 and 5.3a subject to any derogation applicable to the plant to which the proposed performance standards apply; is drafted to enable, in NEMMCO's reasonable opinion, a compliance program to be instituted and maintained in respect of the performance standard under clause 5.12(c); and 	llowin .7A(b .ess wl		(a) The Network Service Provider and the Connection Applicant must jointly advise NEMMCO when a proposed connection agreement has been negotiated between them and submit to NEMMCO the proposed performance standards for assessment by NEMMCO. The Natural Service Provider must forward to	Clause with proposed amendments
				Throughout Chapter 5 the term 'access standard' has been adopted to refer to the automatic or negotiated standards that are recorded in the connection agreement. The standards in the connection agreement are proposed performance standards until they are accepted by NEMMCO and recorded on the register.	Reason
16			The commercial terms of a connection agreement are no concern of NEMMCO's.	Where NEMMCO have the words 'copy of the proposed connection agreement' – this should be limited to the relevant technical and operational sections of the connection agreement.	Auswind Comments

	<u>5.3.7B</u>		Affected
	(a) NEMMCO must, if it assesses that the proposed performance standard submitted under clause 5.3.7A(a): (1) satisfies the requirements set out in clause 5.3.7A(c), accept the proposed performance standard on the condition that the connection agreement is entered into; or (2) does not satisfy the requirements set out in clause 5.3.7A(c), reject the proposed performance standard.	(d) NEMMCO, or in respect of a matter concerning the quality of supply to Network Users, NEMMCO in consultation with the relevant Network Service Provider, must, when assessing the proposed performance standard for a particular requirement based on any provision of schedules 5.1, 5.2, 5.3 and 5.3a, require a Connection Applicant to meet or exceed the minimum access standard but must not require the Connection Applicant to exceed the relevant automatic access standard for that requirement. (e) A Generator must forward to NEMMCO prior to registration relevant metering installation details of the proposed plant and connection, including: (1) the proposed metering installation; (2) arrangements for the Metering Provider to obtain physical access to the metering installation. (f) NEMMCO must, within 20 business days of the receipt of the information referred to in clause 5.3.7A(e), advise the relevant Network Service Provider and Generator whether the proposed metering installation is acceptable for those metering installations associated with those connection points that are classified as metering installation types 1, 2, 3 and 4 as specified in schedule 7.2.	Clause with proposed amendments
The state of the s	This clause clarifies the process and criteria for acceptance of performance standards. Note that the reference to Registered Participants in clause 5.3.7B(d) includes Connection Applicants by virtue of the definition of Registered Participant.		Reason
17	Agree		Auswind Comments

Affected clause	Clause with proposed amendments (b) NEMMCO must advise the Connection Applicant and the Network Service Provider of its decision to accept or reject the proposed performance standard within 30 business days of the receipt by NEMMCO of the
	business days of the receipt by NEMMCO of the information referred to in clauses 5.3.7A(b) and \$5.2.4 (if applicable).
	(c) If NEMMCO rejects a proposed performance standard under clause 5.3.7B(a)(2), NEMMCO must, when advising the person under clause 5.3.7B(b) also provide the person with detailed reasons for its decision to reject the proposed performance standard.
	(d) A Registered Participant whose proposed performance standard is rejected under clause 5.3.7B(a)(2) may dispute NEMMCO's decision to reject the proposed performance standard.
	(e) If a dispute arising under clause 5.3.7B(d) is not resolved in accordance with clause 8.2.4 within 60 business days. notwithstanding any other provision in clause 8.2, the Adviser must refer the dispute for resolution to a DRP for determination in accordance with clauses 8.2.6A to 8.2.6D.
5.3.8	5.3.8 Provision and use of information
	(a) The data and information to be provided by a Connection Applicant under clause 5.3 must be:
	(1)
	(3)

The data a may be deferred to be promay be deferred access site for the centred allowed 1 (1) The data may only allowed 1 (1) (1)	in the in in the in in the in in the in										Affected clause
	Reason Property Pr	unless the disclosure is to Network Service Provider, on contain data and information load characteristics described				(3) advise NEMMCO of services described in clause 3.11.4(j).	determine the extent of any augmentation or extension; or		(a1) The data and information to be provided under clause 5.3 may be disclosed by a Network Service Provider to NEMMCO and by NEMMCO to a Network Service Provider for the purpose of enabling Network Service Providers or NEMMCO (as the case may be) to:	provided under a connection agreement in the circumstances set out in clauses 5.3.2(b), 5.3.8(a1), 5.3.8(a2) and 5.3.8(a3).	
	Allowand	지 10 대 1	nt la	K i.s.	थ बाह्य हो हो प्रस्	Ö.	<u>lā.</u>	H OI FI EI	ie ie io i3	<i>-</i> 0	
	I PARTICIPATION OF THE PARTICI										

										5.3.9			Affected
(4) proposed amendments to the relevant performance standard being, for each relevant technical requirement for which the proposed	(3) in respect of the generating system as altered, the information described in clause S5.2.4(b); and	(2) in respect of the generating system as altered, details of the generating unit design data and generating unit setting data in accordance with schedule S5.5 or the Generating System Model Guidelines, Generating System Design Data Sheet, or Generating System Setting Data Sheet.	(1) a description of the nature of the alteration and the timetable for implementation;	(b) The Generator must submit to the Network Service Provider, with a copy to NEMMCO:	S5.2.9, this clause 5.3.9 must first be followed by the Generator.	in a manner that will affect the performance of the generating system relative to any of the technical requirements set out in clauses \$5.2.5. \$5.2.6. \$5.2.8 and	(2) proposes to alter a generating system for which performance standards have been previously accepted by NEMMCO.	1	(a) If a Generator: (1) proposes to alter a connected generating system;	5.3.9 Procedure to be followed by a Generator proposing to alter a Generating System	 (b) A person intending to disclose information under clause 5.3.8(a)(3)(a1) must first advise the relevant Connection Applicant of the extent of the disclosure. 	could be derived as an identifiable component.	Clause with proposed amendments
		Centration from the annie prairie	not easily modified, and requiring an performance standards to be reassessed to current standards may discourage		does not require that all performance standards need to be reconsidered, just those that may be affected by the	An important aspect of this clause is that it clarifies that a modification to plant	2 0	It is therefore important that the Rules be	the alteration has an impact without actually modifying the connection.	The existing provisions of clause 5.3 apply to modifying a connection. It is nossible to after generating plant where			Reason
						OURCE DATINGS.	parties, as it infers unlimited liability—how will this be dealt with in risk allocation? It also limits responsibility of parties for their own responsibilities and shifts it onto	Clause 5.3.9(e) is unworkable commactually between the	not be required.	Agree with alterations to the table to ensure it is accurate. Adequate statements on design or test data should satisfy – a submission under 5.3.9(b)(4) should			Auswind Comments

Chause with proposed sineadments alteration to the squipment will affect the performance of the senerality statem, the applicable automatic access standard or a proposed regrolled access standard or a proposed regrolled access standard determined by application of clause 5.3.4A as if that clause determined by application of clause 5.3.4A as if that clause determined by application to the submission. (c) Without otherwise limiting clause 5.3.4A as if that clause determined below is taken to affect the performance of the generating system relative to technical requirements specified in column 1 of the table set out below is taken to affect the performance of the generating system relative to technical requirements specified in column 2. Column 1 (altered scutpment) Column 2 Column 2 Column 2 Column 3 Column 2 Society S										Affected clause
Reason		voltage control system		Ve	power converter	machine windings	Column 1 [altered equipment]		alteration performar applicable proposed by applica applied to	Clause with proposed ame
Reason	S5.2.5.11, S5.2.5.14	S5.2.5.3C, S5.2.5.12, S5.2.5.13	S5.2.5.3C, S5.2.5.12, S5.2.5.13	S5.2.5.2, 2, S5.2.5.13	S5.2.5.2, S5.2.5.13, S5.2.	<u>85.2.5.1, 85.2.5.2, 85.2.9</u>		clause, a proposed alteration to the clause, a proposed alteration to the ed in column 1 of the table set out to affect the performance of the relative to technical requirements in 2 thereby necessitating a submission b)(4):	to the equipment will affect the ce of the generating system, the automatic access standard or a negotiated access standard determined ation of clause 5.3.4A as if that clause the submission.	ndments
			<u> </u>							Reason
										Š
		control	ontrol system control	control system control	ve compensation \$5,2,5,1, \$5,2,5,2, \$5,2,5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,12, \$5,2,5,14, \$5,2,5,14, \$5,2,5,14	S5.2.5.1 S5.2.5.2 S5.2.5.12 S5.2.5.13 S5.2.5.14 S5.2.5.2 ensation S5.2.5.1 S5.2.5.2 control S5.2.5.12 S5.2.5.13 control S5.2.5.3C S5.2.5.12 S5.2 system S5.2.5.3C S5.2.5.12 S5.2 control S5.2.5.11 S5.2.5.11 S5.2.5.14	S5.2.5.1, S5.2.5.2, S5.2.9 S5.2.5.1, S5.2.5.2, S5.2.5.1 S5.2.5.1, S5.2.5.13, S5.2.5 Sation S5.2.5.1, S5.2.5.2 S5.2.5.1, S5.2.5.1 S5.2.5.1 S5.2.5.12, S5.2.5.13 S5.2.5.12, S5.2.5.12 control S5.2.5.3C, S5.2.5.12, S5.2 stem S5.2.5.3C, S5.2.5.12, S5.2 sontrol S5.2.5.31, S5.2.5.14	(clause) S52.5.1, S52.5.2, S52.9 S52.5.1, S52.5.2, S52.5.2, S52.5.12, S52.5.13, S52.5.1 ion S5.2.5.1, S5.2.5.1, S5.2.5.1 itrol S5.2.5.3C, S5.2.5.12, S5.2. Itrol S5.2.5.3C, S5.2.5.12, S5.2. Itrol S5.2.5.3C, S5.2.5.12, S5.2. Itrol S5.2.5.3C, S5.2.5.12, S5.2. Itrol S5.2.5.3C, S5.2.5.12, S5.2.	Without otherwise limiting clause 5.3.9(b)(4) purposes of that clause, a proposed alteratic equipment specified in column 1 of the tab below is taken to affect the performance generating system relative to technical recessitating as under clause 5.3.9(b)(4): Column 1 Column 2 Altered equipment) Column 2 Column 2 Column 3 Altered equipment) S5.2.5.1, S5.2.5.2, S5.2.5.2 power converter S5.2.5.1, S5.2.5.2, S5.2.5.1 Power converter S5.2.5.1, S5.2.5.2, S5.2.5.1 Executive compensation plant S5.2.5.1, S5.2.5.1 S5.2.5.1, S5.2.5.1. S5.2.5.1, S5.2.5.1. S5.2.5.1, S5.2.5.1. S5.2.5.1, S5.2.5.1. S5.2.5.1.	alteration to the equipment will a performance of the generating sy applicable automatic access standard of by application of clause 5.3.4A as if 1 applied to the submission. Without otherwise limiting clause 5.3.9(b)(4) purposes of that clause, a proposed alteration of clause 5.3.9(b)(4) purposes of that clause, a proposed alteration of the tab below is taken to affect the performance generating system relative to technical reconstruction of the tab below is taken to affect the performance generating system relative to technical reconstruction column 2 thereby necessitating a symmetric generation of the tab below is taken to affect the performance generating system relative to technical reconstruction of the tab below is taken to affect the performance generating system (clause 5.3.9(b)(4): Column 2 Solumn 3 Solumn 4 Solumn 5 Solumn 6 Solumn 9 S

	5.3.10							Affected Clause
(a) A Generator must not commis plant until the Generator has s clause 5.3.9 has been complied performance standard submitted: (1) either meets the auto applicable to the relevance, if the performance the automatic access su	generating system. 5.3.10 Acceptance of Perfe	(f) The Network Ser immediately join to an existing c into between th	anticipated to be Service Provider the submission. require payment NEMMCO. On I Service Provides account of the cother Network appropriate.	(e) The Network Seconsidering the seconsidering the secons	remote control and monitoring system	auxiliary supplies	protection system	Clause with proposed amendments
A Generator must not commission altered generating plant until the Generator has satisfied NEMMCO that clause 5.3.9 has been complied with and each amended performance standard submitted: (1) either meets the automatic access standard applicable to the relevant technical requirement or, if the performance standard does not meet the automatic access standard, it would not be	generating system. Acceptance of Performance Standards for Generating Plant that is Altered	The Network Service Provider and the other party must immediately jointly advise NEMMCO when a variation to an existing connection agreement has been entered into between them in relation to an alteration to a	anticipated to be incurred by it and any other Network Service Providers and NEMMCO in the assessment of the submission. The Network Service Provider must require payment of such a fee if so requested by NEMMCO. On payment of the required fee, the Network Service Provider must pay such amounts as are on account of the costs anticipated to be incurred by the other Network Service Providers and NEMMCO as appropriate.	The Network Service Provider may, as a condition of considering the submission made under clause 5.3.9(b), require payment of a fee to meet the reasonable costs	S5.2.5.14, S5.2.6.1, S5.2.6.3	<u>85.2.5.1, 85.2.5.2, 85.2.8</u>	S5.2.5.3A, S5.2.5.3B, S5.2.5.3C, S5.2.5.8, S5.2.5.9	endments
determining whether to acce proposed performance submitted on alteration of plant.	This clause is required to set out the procedure and tests to be applied in							Reson
modification to meet its existing performance standard.	An alteration to an existing generating system should only require the performance of the plant post							Auswind Comments

lear Agree sted of Auswind supports the NGF comment on this clause. It not not not not not not not not not no	This change is necessary to make it clear that clause 5.4 (Design of Connected Equipment) applies to the alteration of generating plant. Also amended to clarify date when Tasmanian installations are covered. These changes are necessary to ensure that any inconsistency between the plant and the performance standards are resolved before commissioning. As the performance standards are accepted subject to the execution of the Connection Agreement the reference to connection agreement can be removed.	This eClause 5.4 applies only to new installations and modifications to existing installations (including, without limitation, alterations to existing generating plant). After 13 December 1998 (in the case of installations located in participating jurisdictions other than Tasmania) and after the date that Tasmania becomes a participating jurisdictions other than Tasmania) and after the date that Tasmania becomes a participating jurisdiction of the case of installations located in Tasmania. At any stage prior to commissioning the facility in respect of a connection, the Registered Participant or the person intending to be registered as a Generator must advise the relevant Network Service Provider and NEMMCO in writing of any inconsistency between the proposed equipment and the provisions of the relevant connection agreement performance standards and, if necessary, the Network Service Provider and the Registered Participant or the person intending to be registered as a Generator must negotiate in good faith any necessary changes to the connection agreement relevant performance standards under clause 5.3.9. (b) If there is an inconsistency in a connection agreement performance standard identified in clause 5.4.2(a), the Registered as a Generator and Network Service Provider registered as a Generator and Network Service Provider	5.4.1
		rejected if clauses 5.3.4A(a) and 5.3.4A(d) were applied at the time the submission of performance standards is received by NEMMCO: (2) is drafted to enable, in NEMMCO's reasonable opinion, a compliance program to be instituted and maintained in respect of the performance standard under clause 5.12(c); and (3) can be complied with, based on the information provided to NEMMCO.	
Auswind Comments	Reson - 12 12 12 12 12 12 12 12 12 12 12 12 12	Clause with proposed amendments	Affected :-

			generating unit's or generating		
	It is a requirement for block diagram to be provided, here the shift is to provide system models—this is a completely new approach. If that is the intent here, then there has to be some transitional period to allow parties to comply as well as allow room for validation		(ii) does not have evidence demonstrating that a generating unit complies with the technical—requirements—set—out—in clause \$5.2.5—of—schedule \$.2		
			standards in respect of one or more technical requirements of clauses S5.2.5, S5.2.6, S5.2.8 or S5.2.9 of schedule 5.2 and the relevant connection agreement; or		
		references to performance standards, and to include inadequate models used to assess power system security as grounds	(i) a generating unit or generating system does not comply with its performance		
igingi.	Agree	These amendments are to change the reference to technical requirements to	(e) If NEMMCO: (1) is satisfied that:	(e)	5.7.3(e)
Formatted: Highlight	Wording – should be inclusive and add 'or generating system" where NEMMCO refer to "generating unit" as for wind farms some standards are only met at the connection point by the generating system. This clause fails to support the principle of flexibility that NEMMCO has promoted.	This change is required to ensure that correct referencing is applied.	(c) If, prior to the <i>Generator</i> implementing a compliance program in accordance with the requirements of clause 4.15(b)5.12(b), a performance test or monitoring of in-service performance demonstrates that a <i>generating unit</i> is not complying with one or more technical requirements of clause \$5.2.5 of schedule 5.2 and the relevant <i>connection agreement</i> or one or more of the <i>performance standards</i> for that <i>generating unit</i> then the <i>Generator</i> must:	(c)	5.7.3(c)
	NEMMCO has promoted.		generating units complies with the applicable technical requirements of clause S5.2.5 of schedule 5.2 and the relevant connection agreement and the performance standards for that generating unit.		
	Wording – should be inclusive and add 'or generating system" where NEMMCO refer to "generating unit" as for wind farms some standards are only met at the connection point by the generating system. This clause fails to support the principle of flexibility that	This change is required to ensure that correct referencing is applied.	(a) Each Generator must, prior to the Generator implementing a compliance program in accordance with clause 4.15(b)5.12(b), provide evidence to any relevant Network Service Provider with which that Generator has a connection agreement and NEMMCO that each of its	(a)	5.7.3(a)
			Nothing in this clause 5.4.2 affects the operation of clause 5.3.6(c1).	(c)	
			connection unless the facility or the connection agreement performance standard has been varied to remove the inconsistency.		
	Auswind Comments	Reason	Clause with proposed amendments	2	Affected clause

5.7.6(a1)					Affected
(a1) If NEMMCO reasonably considers that: (1) the analytical parameters for modelling of a generating unit or generating system are inadequate; or (2) available information, including results from a previous test of a generating unit or generating system are inadequate to determine parameters for modelling purposes. This is necessary because NEMMCO has a previous test of a generating unit or generating system are inadequate to determine parameters for modelling to request testing to determine analytical parameters for modelling purposes. This is necessary because NEMMCO has a responsibility for power system and ability to ensure power system security, and ability to ensure power system security is strongly affected by the quality of models used to determine stability of models used to determine and model developed in accordance with NEMMCO under the model of models used to determine and parameters for modelling purposes. This is necessary because NEMMCO a right manufacture and NSP to exercise its power to require an NSP to exerc	NEMMCO may direct the relevant Generator to operate the relevant generating unit or generating system at a particular generated output or in a particular mode until the relevant Generator submits evidence reasonably satisfactory to NEMMCO that the generating unit or generating system is complying with the relevant technical requirement(s)—performance standard and performing substantially in accordance with its analytical model.	(3) holds the reasonable opinion that there is or could be a threat to the power system security because of the performance of the generating unit,	could be, a threat to power system security because of the performance of the generating unit or generating system, or because the inadequacy of its analytical model is adversely affecting NEMMCO's ability to assess power system security, including power transfer capabilities;—and	system's performance is not adequately represented by the applicable analytical model provided under clause 5.7.6(g) or clause \$5.2.4; and	Clause with proposed amendments
right to Agree power to analytical es. This O has a security, security, stability				inplications.	Auswind Comments

Affected clause	Clause with proposed amendments	Reason	Auswind Comments
	NEMMCO may direct a Network Service Provider to require a Generator to conduct a test under clause 5.7.6(a). NEMMCO may witness such tests.		
5.7.6(g)	(g) The Network Service Provider must provide to a Generator such details of the analytic parameters of the model derived from the tests referred to in chause 5.7.6 for any of that Generator's generator The Generator must provide the test records obtained from a test under clause 5.7.6(a) to the Network Service Provider, who must derive the analytical parameters for the applicable model developed in accordance with the Generating System Model Guidelines, or otherwise agreed with NEMMCO under clause \$5.2.4(b1)(2) and provide them to NEMMCO and the relevant Generator.	This amendment gives NEMMCO access to analytical parameters derived from tests under clause 5.7.6.	Agree
5.7.6(h)	(h) Each of the Generator, the Network Service Provider and NEMMCO must bear its own costs associated with tests conducted under this clause 5.7.6 and no compensation is to be payable for financial losses incurred as a result of these tests or associated activities.	This amendment adds NEMMCO and NSP to list of parties to bear their own costs for testing. (NSP previously only implied).	Excluding further testing carried out under 5.7.6(a1) at NEMMCO's request and cost.
5.10	5.10.1 Submission of Performance Standards on or about the Performance Standards Commencement Date (a) A Generator, Customer or Market Network Service Provider who, at the performance standards commencement date, engages in the activity of owning, controlling or operating plant must, within 30 days of the performance standards commencement date, submit to NEMMCO proposed performance standards for that plant, to be: (1) in the case of a person who is registered as a Generator in relation to that plant — in accordance with schedule 5.2; (2) in the case of a person who is registered as a Customer in relation to that plant — in	Clause 5.10.1(b) has been rewritten from 4.13.(b). The words "confidential information" have been removed because some of the information required is considered elsewhere in the Rules to be "confidential information", but nevertheless may need to be provided. Clause 5.10.1(c) is required to correct an anomaly in the current Rules where people with signed connection agreements who were not Registered Participants at the time of the last changes to the Code (preceding the change to Rules), but who subsequently became registered, are not covered by the process to create performance standards either	Auswind support the NGF proposed derogation and comments below. A derogation is a more appropriate manner to deal with transitional changes with a sunset date. Must refer to the standards outlined in 5.10.3

Affected clause	Clause with proposed amendments accordance with schedule 5.3 or	_ 19813
	accordance with schedule 5.3; or (3) in the case of a person who is registered as a Market Network Service Provider in relation to	_ ~
	that plant—in accordance with schedule 5.3a. (b) A Network Service Provider must, on request by a person	Clause 5.10.1(e) is required as a transitional arrangement for the introduction of the new process where
		performance standards are assessed before the connection agreement is signed.
	nably ations I(d).	
	(c) A person who, at the performance standards commencement date:	
	(1) was not registered as a Generator, Customer or Market Network Service Provider; and	
	(2) was either;	
	(i) party to a connection agreement; or	
	(ii) negotiating a connection agreement, the negotiation of which was not subject to clause 5.3.4A; and	
	(3) who subsequent to the performance standards commencement date, but prior to the date this clause 5.10.1 became effective ("effective date"), registered as a Generator, Customer or Market Network Service Provider,	
	must, within 30 days of the effective date, submit to NEMMCO proposed performance standards for that plant in accordance with clause 5.10.1(e).	
	(d) A person who at the effective date was not registered as a Generator, Customer or Market Network Service Provider, but was party to a connection agreement must, within 30 days of the effective date, submit to NEMMCO proposed performance standards for that plant in	

		Affected :
A proposed performance standard submitted by a Generator or person under clauses 5.10.1 or 5.10.2 must be at a standard at least equal to: (a) where there is already a relevant registered performance standard, that registered performance standard.	The performance standards required to be submitted under clause 5.10.1(c) and (d) must be in accordance with: (1) schedule 5.2 if they are to be registered by a Generator in relation to relevant plant.; or (2) schedule 5.3 if they are to be registered by a Market Network Service Provider in relation to relevant plant.; or (3) schedule 5.3a if they are to be registered by a Market Network Service Provider in relation to relevant plant. 5.10.2 Submission of Performance Standards where the Technical Requirements Change (a) If, subsequent to the establishment of the performance standards were assessed changes, or has changed in any respect, or a new technical requirement is inserted into the Rules, the relevant Generator, Customer or Market Network Service Provider must, submit to NEMMCO a proposed performance standard for each of the changed technical requirements. (b) A Network Service Provider must, on request by a person who has made a submission under clause 5.10.2 whose facility is connected to the Network Service Provider's network, provide that person with all performance data and other information reasonably required by that person to enable it to satisfy its clause 5.10.2(a) obligations.	Clause with proposed amendments
This clause is required so that the performance standards submitted are not of a lesser standard than what currently is agreed or if there is no agreement, then what is technically achievable by the plant.	The existing Rules are deficient in that they do not deal with the situation where the technical requirements change. It is important that Generators address any changes in the technical requirements to ensure system security, reliability and quality of supply are maintained. Clause 5.10.2 is inserted to correct this omission.	Reason
Performance standards should be based on point of connection requirements and not be based on a generalistic one. For instance, a requirement for a connection a weak grid location may also be deemed to apply to similar installation in a different	Not acceptable – Open ended requirement. This provides no regulatory certainty. Participants may be required to upgrade their plants after building and agreeing performance standards.	Auswind Comments