



Quarterly Compliance Report

October – December 2007

March 2008

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Glossary

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator (see www.aer.gov.au)
AEST	Australian Eastern Standard Time
associated Regulations	The <i>National Electricity (South Australia) Regulations (South Australia)</i> made under the National Electricity Act
AVR	Automatic Voltage Regulators
DNSP	Distribution Network Service Provider
LNSP	Local Network Service Provider
Market	The Australian electricity wholesale exchange operated and administered by NEMMCO, and the national electricity system (NEM), which covers the following regions as at December 2007: New South Wales, Queensland, Snowy Mountains, South Australia, Victoria and Tasmania
MWh	Megawatt hour
National Electricity Act	<i>National Electricity (South Australia) Act 1996 (South Australia)</i>
NEL	National Electricity Law, being a Schedule to the National Electricity Act
NEM	National Electricity Market (see “Market”)
NEMMCO	National Electricity Market Management Company
NER	National Electricity Rules, made under Part 7 of the NEL
NSP	Network Service Provider
QNI	Queensland/New South Wales Interconnector
Registered Participants	Entities operating within the NEM, the majority of which are registered by NEMMCO under the NEL and the NER (see NEMMCO’s Registration and Exemption lists)
TNSP	Transmission Network Service Provider

Summary

The purpose of this Quarterly Compliance Report is to summarise the results of the compliance monitoring and enforcement activities undertaken by the Australian Energy Regulator (AER) during the period October to December 2007.

The report outlines the AER's approach to compliance monitoring and details compliance outcomes during the relevant quarter. The basis of the AER's approach is a comprehensive risk assessment of obligations under the NER. The risk assessment is used by the AER in selecting monitoring mechanisms and determining the intensity and type of response to identified compliance issues. Details are provided in the "Compliance and Enforcement – Statement of Approach" published by the AER in August 2007.

The investigations and reporting section of this report:

- provides an update on the AER's investigation into the events of 16 January 2007
- indicates that investigations into market outcomes in October and early November 2007 in south west Queensland and north west New South Wales are continuing
- refers to three \$5,000/MWh events during the quarter under examination.

The report summarises the progress of the AER's compliance audit program relating to technical performance standards (and associated compliance programs), which commenced in December 2007. Audit findings will be summarised in future Quarterly Compliance Reports.

In terms of targeted compliance reviews, the AER's focus during the December 2007 quarter was on NER obligations relating to operational communication between Registered Participants, NEMMCO and Network Service Providers (NSPs) and the obligations on NSPs following a connection enquiry. Based on the information received, all targeted Registered Participants demonstrated that they are aware of their obligations under the NER. However, the AER will liaise with one Registered Participant to discuss further the nature of their existing compliance arrangements, and two other Registered Participants to seek confirmation from them on the implementation of specific compliance systems and processes.

Future targeted areas of compliance will include: power system security requirements; forecasting and testing Generator obligations; metering installations and data obligations; interactions between Distribution Network Service Providers (DNSPs); network connection processes.

Finally, the report provides a summary of rebidding issues identified by the AER during the December 2007 quarter, and details of a rebidding review for the whole of the 2007 calendar year.

1 Introduction

The Australian Energy Regulator (AER) is responsible for compliance monitoring, reporting and enforcement in the National Electricity Market (NEM).

Section 15 of the National Electricity Law (NEL) sets out the function and powers of the AER which include the requirement to:

- (a) monitor compliance by Registered Participants and other persons with the NEL, the National Electricity Rules (NER) and associated Regulations; and
- (b) investigate breaches or possible breaches of provisions of the NEL, the NER or associated Regulations that are not offence provisions.

In carrying out its monitoring functions, the AER collects and analyses information from Registered Participants and the National Electricity Market Management Company (NEMMCO). In accordance with clause 8.7.1 of the NER, the AER aims for:

- consistency in monitoring over time
- no unnecessary discrimination between Registered Participants
- cost effective monitoring for Registered Participants, the AER and NEMMCO
- transparency, with information published, or otherwise made available to the market, subject to any confidentiality requirements.

The AER aims to assist Registered Participants achieve high levels of compliance with the NEL, NER and associated Regulations. Through the publication of this report the AER aims to facilitate Registered Participants' understanding of relevant obligations.

This report provides an overview of the AER's approach to compliance monitoring and a summary of outcomes of the AER compliance and enforcement activities during the period October to December 2007.

2 Compliance monitoring outcomes

The AER monitors the operation and performance of the NEM, conducts special investigations and reports on market outcomes and/or specific events and aims, in the first instance, to encourage voluntary compliance by Registered Participants.

In August 2007, the AER issued a “Compliance and Enforcement – Statement of Approach”¹ which, amongst other things, provides greater transparency about the AER’s compliance monitoring strategy. The aims of this strategy are to:

- assist the AER with meeting its statutory obligations under the NEL to monitor and enforce compliance with the NEL, the associated Regulations and the NER
- produce meaningful outcomes from the perspective of all Registered Participants and stakeholders by efficiently targeting its compliance monitoring, investigation and enforcement activities.

In developing the compliance monitoring strategy, the AER undertook a comprehensive compliance risk assessment by reviewing each of the 1500 provisions in the NER. The AER primarily uses this risk assessment to help determine which monitoring mechanism to use for each provision of the NER, the intensity of monitoring, and the enforcement response where breaches are identified.

The mechanisms available to the AER include:

- audits
- targeted compliance reviews
- market monitoring.

The outcomes of the AER’s investigations, reporting and application of the above compliance mechanisms during the December 2007 quarter are set out in this report.

The AER is keen to hear from any Registered Participant and other interested parties on any matters of compliance, including with respect to the specific areas targeted or proposed to be targeted for review.

¹ A copy of this Statement is available from the AER’s website - see <http://www.aer.gov.au/content/index.phtml/itemId/685897/fromItemId/656069>.

2.1 Investigations and \$5,000/MWh reports

The AER undertakes investigations in accordance with its function and powers under section 15 of the NEL. Where the AER's monitoring identifies potential breaches of the NEL, NER or associated Regulations, an investigation is conducted to establish the existence, nature and extent of any breach.

Information gathering powers under sections 21 and 28 of the NEL allow the AER to obtain search warrants and to compel the production of information and documents that are relevant to its monitoring and enforcement functions. The AER will usually seek information on a voluntary basis in the first instance.

This part of the report provides an update on:

- the outcomes during the quarter arising from past AER investigations
- the market events occurred during the December 2007 quarter.

This part of the report also provides a summary on reporting by the AER under Chapter 3 of the NER, relating to events where the spot price exceeded \$5,000/MWh.

Appendix A of this report lists the investigations and \$5,000/MWh reports undertaken by the AER during the previous 12 months.

2.1.1 Investigation into the events of 16 January 2007

In the previous Quarterly Compliance Report, the AER presented the details of its investigation into the bushfire events of 16 January 2007. The AER indicated that it was in the process of undertaking enforcement and other action relating to all instances of non-compliance associated with that event.

On 29 October 2007, the AER imposed a penalty of \$60,000 on the State Electricity Commission of Victoria, trading as Vicpower Trading, when it issued three infringement notices because of Vicpower Trading's failure to accurately reflect its ancillary service capability in the National Electricity Market. Vicpower Trading offers frequency control services on behalf of an aluminium smelter at Point Henry, near Geelong in Victoria. The smelter's three potlines are separately registered by NEMMCO to provide frequency services. At the time the bushfires caused the main transmission links into Victoria to fail, the smelter load at Point Henry was interrupted because of commercial decisions taken by VicPower to shut down two potlines and in response to the low frequency prevailing during the disturbance for the other potline. This meant the smelter was unavailable to provide frequency services for more than 30 minutes. Vicpower Trading failed to satisfy its obligations under the Rules by continuing to offer frequency control services into the market even though it was unable to provide the services.

On 20 December 2007 NEMMCO reported on its undertaking to the AER regarding actions it would take to address the shortcomings identified by the AER. A copy of the correspondence is available on the [AER website](#).

The AER has proposed rule changes to the Australian Energy Market Commission (AEMC) to improve NEMMCO's operating practices related to the reclassification of

credible contingencies. In addition, the AER has begun its auditing of Generators' performance standard compliance programs required under Chapter 4 of the NER, by first targeting those generators involved in the events of 16 January 2007 (see part 5.1 for more details).

2.1.2 Investigation into the events of 8, 10 and 29 October and 4 November 2007

On 8, 10 and 29 October, and 4 November 2007, the reclassification of lines in south west Queensland and north west New South Wales resulted in NEMMCO invoking constraints that restricted generation in south west Queensland and reduced the export limit across QNI, forcing flow south.

The AER wrote to two Registered Participants seeking further information primarily regarding their rebidding behaviour in accordance with clause 3.8.19(b)(2) of the NER. Investigations are continuing.

2.1.3 Spot price events exceeding \$5,000/MWh

Clause 3.13.7(d) of the NER requires the AER to publish reports whenever the NEM spot price² exceeds \$5,000 per MWh in a trading interval³. As well as assisting the AER to identify instances of non-compliance, these reports provide greater transparency about the operation of the NEM.

During the December 2007 quarter, the spot price exceeded \$5,000/MWh on three occasions. Dates and details of the events associated with each occasion follow:

- 22 October - the spot price in New South Wales reached \$7,858/MWh. The price spike resulted from the inappropriate operation of network constraints. A planned network outage in New South Wales led to other network constraints (used to manage the normal operation of the network) to produce incorrect limits and power system security⁴ violations. As a result, imports from Queensland into New South Wales and generation at Macquarie Generation's Bayswater and Liddell Power Stations were significantly reduced. NEMMCO declared a scheduling error. There were, however, no security violations during this period. The high price was also reflected across other regions. Turnover in the energy market for the 10 am trading interval was \$46 million. This represented 60 per cent of the total turnover for the day.
- 4 November - the spot price in Queensland exceeded \$5,000/MWh in two trading intervals, reaching \$5,723/MWh at midday and \$6,000/MWh at 12.30 pm. High

² The price for electricity in a trading interval at a regional reference node or a connection point as determined in accordance with clause 3.9.2 of the NER.

³ A 30 minute period ending on the hour (AEST) or on the half hour and, where identified by a time, means the 30 minute period ending at that time.

⁴ Power system security is defined in the NER as "The safe scheduling, operation and control of the power system on a continuous basis in accordance with the principles set out in clause 4.2.6" of the NER.

prices continued over much of the rest of the day. A planned network outage of the Tarong to Braemar line reduced available supplies in the region, constraining off generation in south west Queensland and forcing flows across the QNI counter price. This outage, combined with constraints to manage the counter price flows, had significant impacts on supply to Queensland, resulting in forecast prices of \$100/MWh for the period around midday compared to around \$25/MWh in New South Wales. Rebidding of capacity into higher prices by Stanwell, combined with an unplanned outage of CS Energy's Swanbank unit E, drove the price in Queensland to exceed \$5,000/MWh.

- 31 December – on this day, extreme temperatures in South Australia resulted in very high demand, peaking at 2776 MW (96 MW below the record). A multiple unplanned outage of network equipment at Moorabool, which is close to Melbourne, reduced the ability to supply load to the north east of Victoria from Melbourne. To manage this reduction in capability, network constraints were invoked that increased flows into Victoria from the Snowy region and forced counter price flows from South Australia across the Murraylink interconnector. The forced exports from South Australia further tightened the supply and demand balance in that region. The spot price in South Australia reached \$5,057/MWh at 1 pm.

2.2 Audits

As outlined in part 2 of this report, audits are one of the mechanisms used by the AER to implement its compliance and enforcement strategy. The AER may conduct audits to verify and assess compliance by Registered Participants with their obligations under the NEL, the associated Regulations and the NER. There are two main types of audits:

- audits of Participants' internal systems and processes
- technical audits focusing on compliance with technical standards under the NER.

The AER conducts a rolling program of reviews of Registered Participants' compliance strategies and plans. Those reviews are conducted cooperatively and involve one-on-one discussions with Registered Participants. The reviews provide the opportunity to engage Registered Participants and to discuss compliance issues and challenges faced by these parties in discharging their NER obligations.

The following part of the report provides an update on the AER's auditing activities during the quarter.

2.2.1 Technical standards

The AER has engaged consultants to assist with a series of technical audits with respect to the technical performance standards and associated compliance programs required under the NER. The scope of the audits is in part to:

- consider what constitutes "good electricity industry practice" within the meaning of the NER, but not limited to experience within Australia, with respect to every element of a Registered Participant's performance standards compliance program
- determine how a Registered Participant ensures that its plant complies with the applicable registered performance standard(s) including the facilities and arrangements the Registered Participant has put in place to monitor and record performance of its plant
- determine whether the compliance program provides for effective monitoring of the performance of the Registered Participant's plant and a reasonable assurance of ongoing compliance with each element of the registered performance standard(s).

The audits will also review the overall effectiveness of the compliance programs instituted by the relevant Registered Participants including:

- the effectiveness of the processes, arrangements and methods used by the Registered Participant to ensure that its plant complies with the applicable registered performance standard(s)
- the compliance program records setting out the results of the performance monitoring conducted by the Registered Participant
- the process for incorporating the results of performance monitoring into the compliance program on a dynamic basis.

In the first instance, the AER has targeted those Generators that were explicitly referred to in its report into the event of 16 January 2007. The AER also stated that it would audit the protection and control systems and load shedding facilities of the Victorian transmission business, SP AusNet, following the events of 16 January. That audit has also commenced.

The AER will apply this technical audits program to other Registered Participants in the near future.

2.3 Targeted compliance reviews

Targeted compliance reviews complement the AER's broader monitoring activities. The AER targets a minimum of 24 specific NER provisions each year for detailed compliance reviews.

Each quarter, the AER intends to target, on average, six provisions based on the compliance risk assessment referred to in part 2 of this report. Appendix B lists the provisions targeted during the previous 12 months.

Criteria for selecting the provisions for review include:

- all relevant areas of the NER are considered and provisions with relatively high compliance risk are targeted as a matter of priority
- both systemic issues and the potential for isolated but significant incidents are addressed
- there is no unnecessary discrimination between Registered Participants, who are generally selected at random.

The primary aims of targeted compliance reviews are to determine:

- Registered Participants' understanding of their obligations under the NER
- what systems and processes, including compliance programs and plans, Registered Participants have in place to deal with their obligations.

While the majority of obligations under the NER do not require Registered Participants to establish specific compliance programs, the AER will take into account a Participant's compliance culture in determining the type of enforcement action to take in responding to breaches of the NEL, the NER and associated Regulations. In assessing the Participant's compliance, the AER will, amongst other things, consider systems and processes in place, whether they are up-to-date, and whether they are applied appropriately.

In the October – December 2007 quarter, the AER targeted a range of provisions focused on operational communication between Registered Participants, NEMMCO and Network Service Providers (NSPs) and the obligations on NSPs following a connection enquiry. The provisions targeted were:

- Protection or control system abnormality (clause 4.8.2)
- Instructions to Registered Participants (clause 4.9.3)
- Dispatch-related limitations on Scheduled Generators (clause 4.9.4)

- General responsibilities of Registered Participants (clause 4.9.8)
- Records of power system operational communication (clause 4.11.4)
- Response to connection enquiry (clause 5.3.3)
- Preparation of offer to connect (clause 5.3.5)
- Testing by Registered Participants of their own plant requiring changes to normal operation (clause 5.7.5).

2.3.1 Protection or control system abnormality

Clause 4.8.2(a) of the NER imposes an obligation on Registered Participants to advise NEMMCO whenever they become aware that any relevant protection or control system is defective or unavailable for service. If NEMMCO considers the situation to be a threat to power system security, NEMMCO may direct that the equipment protected or operated by the relevant system be taken out of operation or operated as NEMMCO directs. Clause 4.8.2(b) requires a Registered Participant to comply with a direction given by NEMMCO under clause 4.8.2(a).

As part of the compliance review of clause 4.8.2 of the NER, the AER requested information from Ecogen Energy, Energy Brix Australia, Loy Yang Marketing Management Company and TRUenergy, which included:

- details of the criteria used by targeted Registered Participants to determine in what circumstances NEMMCO should be advised of any defective or unavailable protection or control system for the purposes of clause 4.8.2(a)
- confirmation that the targeted Registered Participants have systems and procedures in place to detect and advise NEMMCO whenever they become aware of any defective or unavailable protection or control system and to comply with any directions given by NEMMCO under clause 4.8.2(a)
- details of how the above systems and procedures are being applied in practice.

Response summary

Ecogen Energy

To meet the requirements of clause 4.8.2, Ecogen Energy relies on a reporting procedure which defines conditions that would give rise to a requirement to advise NEMMCO. Examples of those conditions are:

- faulty or unstable operation of Automatic Voltage Regulators (AVR)
- the loss of the ability to change generator transformer tap⁵ settings

⁵ This term is defined under the NER as follows: “Where a tap changer is fitted to a transformer, each tap position represents a change in voltage ratio of the transformer which can be manually or automatically adjusted to change the transformer output voltage. The tap position is used as a reference for the output voltage of the transformer.”

- the complete loss or isolation of protection schemes on the generator, generator transformer or auxiliary transformer protection schemes
- excessive clearance time on back-up protection.

The procedure applies to all generating units under Ecogen Energy's direct management and control. It includes a reporting and escalation process and assigns responsibilities to key staff. Supporting this procedure is an integrated management system, relied on to manage regulatory compliance obligations, as well as document and control authorisations.

Loy Yang Marketing Management Company (LYMMCo)

LYMMCo explains that the control and management of Loy Yang A Power Station, in terms of asset operations and management and dispatch and marketing, is jointly undertaken by Loy Yang Power Management (LYPM) and LYMMCo, respectively.

For the purposes of meeting the requirements of clause 4.8.2 of the NER, LYMMCo refers to established processes, which consist of detailed procedures and relevant staff training. As part of determining the nature of, and addressing, any trip or fault, there are formal assessment and reporting procedures. Where a fault relates to:

- the generation system
- the excitation system⁶
- any form of electrical protection
- other high voltage related plant

the Loy Yang Power Engineering High Voltage Group is consulted, and the unit is not placed back in service until an assessment by that group is completed. Notification to NEMMCO follows, as required.

LYMMCo's procedures are integrated in a document management system, and to ensure that they are followed and maintained, LYPM reviews such procedures on a 3-yearly basis.

TRUenergy

TRUenergy refers to an "evolving approach to compliance" with respect to clause 4.8.2 of the NER. In the context of its Yallourn generating asset, reliance is made on informal arrangements for notification to the Local Network Service Provider (LNSP), VENCORP, and NEMMCO. TRUenergy also indicated that a quality management system is being developed that incorporates a performance standard compliance process covering clause 4.8.2 of the NER. The system includes a co-ordination and reporting process.

In terms of the Hallett Power Station in South Australia, which TRUenergy has owned only since July 2007, reliance is made on the previous asset owner's legacy

⁶ This term is defined under the NER as follows: "In relation to a generating unit, the automatic control system that provides the field excitation for the generator of the generating unit (including excitation limiting devices and any power system stabiliser)."

documents. While there are no written procedures associated with the requirements of clause 4.8.2 of the NER, TRUenergy advises that there is evidence of relevant testing. A quality management system is also in the process of being introduced in order to formalise the informal notification arrangements that currently apply, as in the case of Yallourn.

Energy Brix Australia (EBA)

EBA states that it would notify NEMMCO in the event of any defective or unavailable control if the plant were to remain in service during such event. The plant would generally be shut down until the necessary repairs take place. EBA also referred to continuous monitoring of the performance of control systems, as well as testing which occurs every 3 years. This monitoring is managed through EBA's maintenance management system. The arrangements described by EBA do not appear to be directly related to the requirement to notify NEMMCO under clause 4.8.2 of the NER.

Review outcomes

For the purposes of clause 4.8.2 of the NER, Registered Participants would be expected to, firstly, identify the relevant protection and control systems that may impact on power system security and, secondly, implement a process or procedures to ensure that NEMMCO is advised whenever these systems fail or are out of service.

As part of this compliance review, the AER notes that each targeted Registered Participant is aware of its obligations. Ecogen Energy and LYMMCo detailed comprehensive procedures to ensure compliance. TRUenergy is establishing processes as part of its technical standards compliance program, and EBA appears to have less formal arrangements in place. The AER will monitor developments with respect to TRUenergy's compliance program and will liaise with EBA to discuss its arrangements further.

2.3.2 Instructions to Registered Participants

Like Scheduled Generators, Market Customers that have registered a load as being scheduled by NEMMCO must submit bids and be capable of being dispatched in each 5-minute dispatch period. Scheduled loads can typically include large industrial processes or pump storage systems. The NEM has 1320MW of scheduled loads comprising 600MW of pumps located in the Snowy Mountains, 480MW at Wivenhoe in Queensland and the 240MW Bendeela and Kangaroo Valley pumps at Shoalhaven in New South Wales.

Under clause 4.9.3(d) of the NER, a Market Customer must, with respect to scheduled loads in relation to which a dispatch offer has been submitted for a particular trading interval, ensure that appropriate personnel and/or electronic facilities are available at all times to receive and immediately act upon dispatch instructions issued by NEMMCO.

As part of the compliance review relating to clause 4.9.3(d) of the NER, the AER requested information from the only operators of scheduled loads within the NEM - Snowy Hydro, Tarong Energy and Eraring Energy. The request included:

- details of the systems and procedures in place to ensure that appropriate personnel and/or electronic facilities are available at all times to receive and immediately act upon dispatch instructions issued by NEMMCO
- details of how these systems and procedures are integrated with the generator trading arrangements in practice
- details of any audits or testing of those systems and procedures, including the regularity and a summary of the results of such audits or tests.

Response summary

Snowy Hydro

Snowy Hydro, which operates the pump storage scheme in the Snowy Mountains, advises that its control room situated at Cooma is equipped with market software applications and suitable electronic control facilities to receive and respond to dispatch instructions for its schedule load. The control room is provided with a pre-dispatch display that enables staff to be notified in advance of the likelihood of a dispatch instruction being received.

Trading arrangements are flexible and typically involve daily bids based on expectations of prices over the coming days and rebidding of available capacity to make adjustments in response to changes. Snowy Hydro states that, in the unlikely event of unavailability of remote control facilities, the availability of the scheduled load would be bid as zero until staff are available locally to start the pumps on verbal request from control room staff.

Snowy Hydro also explains that these arrangements involve an ongoing review of any dispatch non-conformances notified by NEMMCO, daily review of dispatch targets and actual dispatch and review of causer pay factors related to ancillary service payments for unexpected outcomes.

Tarong Energy

Tarong Energy, which operates the pump storage scheme at Wivenhoe in Queensland, utilises the same procedures for receiving and responding to load dispatch instructions as it does for Generator dispatch instructions. These include continual connectivity to NEMMCO and backup links. The received data is monitored by both the operations and trading staff on a 24 hour, 7 day basis. This data is fully alarmed for immediate response to changing instructions.

Tarong Energy informs that it has imbedded dispatchable load tools in all appropriate trading systems. These procedures are compliant with market requirements for dispatch and are governed by the same conformance boundaries as dispatchable generation.

Monthly analysis of Wivenhoe pump start/stop conformance with targets is carried out to ensure that all dispatch targets are followed. Changes to Tarong Energy's bidding system are comprehensively tested prior to being brought into operation. This ensures that both the bidding of pumps and the primary vehicle for receiving dispatch targets is tested for appropriate functionality.

Eraring Energy

Eraring Energy, which operates the Shoalhaven pump storage scheme in New South Wales, states that it is in a position to receive and immediately act upon dispatch instructions issued by NEMMCO via its market trading application, NEMIS. Located within the Kangaroo Valley Control Centre (where the Shoalhaven pumps are operated from), NEMIS has a live connection to NEMMCO's market systems and provides 5 minute dispatch targets, pre-dispatch information. It has an alert function that aids Eraring to adjusting pumping volumes to align with NEMMCO dispatch targets. NEMIS is operational at all times and there is a disaster recovery process to provide for business continuity.

Changes in availability or pumping schedules are promptly notified to the Duty Trader who will then bid/rebid immediately. IT systems are subject to regular internal and external audits, security audits and annual disaster recovery testing.

Review outcomes

Snowy Hydro, Tarong Energy and Eraring Energy all operate significant generation portfolios in addition to the scheduled loads, with integrated systems for responding to dispatch instructions. The AER is satisfied that the systems and processes put in place by the targeted Participants appear appropriate for ensuring compliance with clause 4.9.3(d) of the NER.

The AER emphasises the importance of regular testing and/or other reviews (e.g. in the form of audits) to ensure that the systems and procedures in place operate optimally given the requirement for Participants to be able to receive and immediately act upon dispatch instructions issued by NEMMCO at all times.

2.3.3 General responsibilities of Registered Participants – complying with dispatch instructions

In December 2006, the AER issued a [compliance bulletin](#) to the NEM relating to the non-conformance provisions of clause 3.8.23 of the NER and the responsibilities of Registered Participants to follow dispatch instructions as required by clause 4.9.8(a) of the Rules. The objective of this compliance bulletin was to clarify the AER's expectations, including the approach the AER intends to take with respect to monitoring compliance with these provisions of the Rules.

Clause 4.9.8(a) requires a Registered Participant to comply with dispatch instructions issued by NEMMCO unless to do so would, in the Registered Participant's reasonable opinion, be a hazard to public safety or materially risk damaging equipment.

Clause 4.9.8(b) states that a Scheduled Generator must ensure that each of its scheduled generating units is at all times able to comply with the latest generation dispatch offer under Chapter 3 in respect of that generating unit.

As part of the compliance review relating to clause 4.9.8 of the NER, the AER requested information from Babcock and Brown Power and Infratil Energy Australia, which included:

- details of the processes or systems in place to ensure any scheduled generating unit is at all times able to comply with the latest generation dispatch offer

- details of the criteria used to determine whether compliance with a dispatch instruction would be a hazard to public safety or materially risk damaging equipment.

Babcock and Brown Power were randomly selected to respond with respect to its generators at Bairnsdale power station in Victoria and Bell Bay power station (BB3) in Tasmania. Infratil Energy Australia was targeted with respect to Angaston Power Station in South Australia.

Response summary

Babcock and Brown Power (BBP)

BBP advises that, while there are various systems and processes in place to ensure compliance with dispatch instructions, these have not been reduced to writing. Reliance is made on traders and generating unit operators' awareness of applicable NER and the exercise of their judgment on a case-by-case basis.

BBP further advises that, as a result of the AER's targeted compliance review, BBP would begin reviewing its compliance reporting regime across the expanded BBP portfolio, during the first quarter of 2008 with a view to introducing adequate procedures and systems.

Infratil Energy Australia (IEA)

IEA owns only one Generator, being the Angaston Power Station in South Australia. IEA advises that a third party is responsible for the bidding and dispatch of the Angaston Power Station (which is operated remotely). IEA is directly responsible for providing information to this third party on scheduled and unscheduled outages, daily capacity, generation reports and real time generation data. The third party then submits dispatch offers and rebids based on the information available.

The third party's control room is contacted directly regarding changes to station capacity, including details of any circumstances when compliance with a dispatch instruction would have resulted in a hazard to public safety or materially risk damaging equipment. In its response, IEA also refers to "extensive protection systems to prevent danger to site personnel, the public & plant during abnormal generation".

Review outcomes

The AER views compliance with clause 4.9.8(a) of the NER as being a critical aspect of ensuring the security of the power system. In its \$5,000/MWh Report covering the events of 4 November 2007 in Queensland, the AER flagged concerns with respect to Registered Participants following dispatch instructions, particularly during times of network congestion. As a consequence, the AER has commenced an investigation into the above Queensland events.

From the information provided, the AER is satisfied that each of the targeted Participants is aware of the above obligations. For IEA and other similar situations where operations are managed by a third party, responsibility to comply with any applicable obligation remains with the Registered Participant.

As a result of this compliance review, the AER notes that BBP is now in the process of implementing such systems and procedures. The AER will engage in further

communications with BBP to follow-up on the development and implementation of the anticipated systems and processes.

As in the case of clause 4.8.2 of the NER, the AER will continue to monitor compliance in this area by means of other reviews, including audits.

2.3.4 Dispatch related limitations on Scheduled Generators

Under clause 4.9.4 of the NER, a Scheduled Generator must not:

- send out any energy from a scheduled generating unit, except in the circumstances listed under clause 4.9.4 (a)(1)-(5)
- adjust the transformer tap position or excitation control system voltage set point of a scheduled generating unit, except in the circumstances listed in clause 4.9.4 (b)(1)-(4)
- energise a connection point in relation to a scheduled generating unit without prior approval from NEMMCO. This approval must be obtained immediately prior to energisation
- synchronise a scheduled generating unit to, or de-synchronise a scheduled generating unit from, the power system without prior approval from NEMMCO or other than in response to a dispatch instruction except de-synchronisation as a consequence of the operation of automatic protection equipment or where such action is urgently required to prevent material damage to plant or equipment or in the interests of safety
- change the frequency response mode of a scheduled generating unit without the prior approval of NEMMCO or
- remove from service or interfere with the operation of any power system stabilising equipment installed on that generating unit

unless in its reasonable opinion, public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment.

As part of the compliance review relating to clause 4.9.4 of the NER, the AER requested information from Callide Power Trading, IPM Australia and Millmerran Energy Trader, which included:

- details of the systems or procedures in place to ensure that the obligations contained in clause 4.9.4 are being met, in particular clause 4.9.4(a)(1) and the self-commitment procedures
- details concerning how these systems or procedures are applied in practice
- details of any criteria used to determine whether a material risk of equipment damage exists or public safety is threatened.

Response summary

Callide Power Trading (CPT)

CPT is the registered entity for the dispatch of the Callide C Power Station. This station is jointly owned by InterGen Australia and CS Energy, and managed by Callide Power Management (CPM). CPT submits offers to NEMMCO based on the

joint owners' trading requirements. Callide Power Management (CPM) manages the Power Station, while CS Energy operates and maintains it.

CPT advises that it complies with the requirements of clause 4.9.4(a)(1)-(5) with respect to the Callide C Power Station. The transformer tap changer and automatic voltage control set point are operated by CPM in automatic mode, unless agreement is reached with CPT and/or NEMMCO. CPM has notified and requested CPT approval prior to energising a connection point. It has also notified and requested approval from CPT and/or NEMMCO prior to synchronise or de-synchronise a scheduled generating unit except as a consequence of automatic protection. All operational issues of this nature are managed through Joint Venture guidelines and CPT procedures. These procedures require liaison with NEMMCO at all relevant times to ensure that relevant obligations are being met. Specifically CPT advises NEMMCO by means of bids and verbal follow up when the units are synchronising and de-synchronising.

CPT also advises that it is not aware of any instances where the requirements of clause 4.9.4 have not been followed.

IPM Australia

IPM operates the Loy Yang B Power Station. IPM states that, through its quality management system, it has established detailed internal procedures and instructions set out a document entitled “National Electricity Market Operating Instructions”, which covers the requirements of clause 4.9.4 of the NEM.

IPM stated that it has not conducted any audits specifically aimed at identifying compliance with the above clause. Nevertheless, its overarching quality management system (which incorporates the above operating instructions) involves general quality system audits as a part of maintaining ISO9001 certification.

IPM also states that operations at Loy Yang B Power Station are generally conducted in accordance with applicable operating instructions. IPM states that this can be substantiated through operational logbooks. However, as a result of the AER's targeted compliance review, IPM has also identified instances when the requirements of their internal instructions do not always occur. Accordingly, Loy Yang B Power Station is developing, in the first instance, refresher training for relevant personnel.

Millmerran Energy Trader

Millmerran states that its procedure, “Electricity Market Processes V1.1”, is in place to address clause 4.9.4(a) and clause 4.9.4(d) of the NER. This document is being re-drafted to meet the requirements of clause 4.9.4(b). Clause 4.9.4(e) and (f) are addressed in two other procedures entitled “DCS Modification and Change Management” and “Performance Standard Compliance Monitoring”, respectively.

In practice, operations staff will only adjust the transformer tap position or excitation control system as directed by NEMMCO. The tap positions are sent to NEMMCO, where they are monitored for deviations from their instructions. Energisation of the connection point is always undertaken by the relevant NSP, Powerlink, in conjunction with station staff through switching sheets.

Audits to assess compliance with the relevant NER provisions have not been undertaken as yet. In regard to clause 4.9.4(f), settings verifications are undertaken on a two-yearly basis. An assessment of settings was carried out in December 2007 for both Millmerran units 1 and 2 and both were found to be compliant.

Review outcomes

Overall, the AER is satisfied that the various systems and processes put in place by the targeted Participants, if applied as described, appear reasonable for ensuring compliance with clause 4.9.4(d) of the NER.

Nevertheless, the AER again emphasises the importance of regular testing and/or other reviews (e.g. in the form of internal audits). When breaches of clause 4.9.4 (or, indeed, any other NER clause) are identified, the AER will take into account a Registered Participant's systems and processes in place in determining its enforcement response, but will also review whether those systems and processes are up-to-date and being applied as intended.

2.3.5 Records of power system operational communication

Under clause 4.11.4(a), NEMMCO must record each telephone operational communication in the form of log book entries or by another auditable method which provides a permanent record as soon as practicable after making or receiving the operational communication.

Under clause 4.11.4(b), these records must include the time and content of each communication and must identify the parties to each communication.

Clause 4.11.4(c) permits voice recordings of telephone operational communications. However, NEMMCO must ensure that the person having the conversation receives an audible indication that the conversation is being recorded. Furthermore, clause 4.11.4(d) requires NEMMCO to retain all operational communications records including voice recordings for a minimum of 7 years.

As part of the compliance review relating to clause 4.11.4 of the NER, the AER requested information from NEMMCO, which included:

- confirmation that NEMMCO records each telephone operational communication as soon as practicable after making or receiving the operational communication, and that these recordings extend to offline operational communications
- details of the systems or procedures in place to record telephone operational communications and retain such records for a minimum of 7 years
- details of how the records are maintained during this period.

Response summary

NEMMCO distinguishes online and offline operational communications. Online communications are recorded in the following ways:

- via the "Electronic Power System Operational Communication Log" which maintains records of all relevant communications from 3 November 1998, that are retained indefinitely

- via voice recording between NEMMCO and Participants, and between NEMMCO's two control centres or each centre and other NEMMCO staff, which are retained for at least 7 years.

Offline communications are restricted to the following activities:

- outage approval for transmission elements, the records of which are retained indefinitely;
- directions in the medium or short term, consisting of confirmation emails, which are retained for at least 7 years (in addition, the associated Market and Participant Notices are kept indefinitely).

Review outcomes

NEMMCO has outlined how its processes for operational communications are handled in a manner that is in accordance with the obligations under clause 4.11.4 of the NER. Based on the information provided, the AER is satisfied that these processes give reasonable assurance of ongoing compliance in this area.

2.3.6 Response to connection enquiry

The AER announced last quarter that it would target the area of network connection requirements of Chapter 5 of the NER.

Under clause 5.3.3(a), in preparing a response to a connection enquiry, the NSP must liaise with other NSPs with whom it has connection agreements if the NSP believes, in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected.

Clause 5.3.3(b) provides that the NSP must, within 10 business days after receipt of the connection enquiry or a request from the Connection Applicant to the LNSP to process the connection enquiry, provide the information listed in writing to the Connection Applicant.

Clause 5.3.3(b1) requires that the NSP, within 20 business days after receipt of the connection enquiry or a request from the Connection Applicant to the LNSP to process the connection enquiry, provide the Connection Applicant with written details of each technical requirement relevant to the proposed plant listed in clause 5.3.3(b1).

Under clause 5.3.3(c), within 20 business days after receipt of the connection enquiry and all such additional information (if any) advised under clause 5.3.2(b) or, if the Connection Applicant has requested the LNSP to process the connection enquiry under clause 5.3.2(d), within 20 business days after receipt of that request, the NSP must provide to the Connection Applicant written advice of all further information which the Connection Applicant must prepare and obtain to enable the NSP to assess an application to connect.

As part of the compliance review relating to clause 5.3.3 of the NER, the AER requested information from Victorian DNSPs, namely CitiPower, SP AusNet and United Energy Distribution, which included:

- details of the systems or procedures that the targeted NSPs have in place to ensure that these obligations are being met
- details concerning how these systems or procedures are being applied in practice, including:
 - details of the manner in which the targeted NSPs liaise with other NSPs with whom it has connection agreements when it believes that compliance with the terms and conditions of those agreements will be affected
 - confirmation that the targeted Participants provide the prescribed information to connection applicants under clauses 5.3.3(b), 5.3.3(b1) and 5.3.3(c) within the prescribed time frames
 - the extent to which Victorian derogations in clause 9.7.4 of the NER impacts, in practical terms, on the targeted Participants' obligations under clause 5.3.

The AER notes that, in addition to obligations under the NER, NSPs are also required to meet various State-based obligations.

Response summary

CitiPower

CitiPower has a regulatory group whose role includes ensuring compliance with legislative requirements is achieved. Compliance is reviewed through annual "Electricity Supply Industry Compliance Questionnaires", which are developed from a centralised database comprising all applicable legislative and regulatory obligations. These questionnaires aid with compliance self-assessments by designated managers and the identification of any non-compliance. Regulatory compliance is also addressed through annual internal audits.

CitiPower advises that its processes are consistent with the requirements of clause 5.3.3 of the NER.

CitiPower provides relevant technical information to the customer in response to a connection enquiry. The level of detail and timeframe for a response is tailored according to the complexity of the customer's needs, the existing network capacity to deliver the customer's needs and the number of affected market stakeholders.

CitiPower assesses connection applications and undertakes system planning studies or reviews to determine their impact on the electricity distribution system. The relevant NSP is notified and consulted as necessary when the applicants' load or other connection characteristics affect connection agreements with other NSPs.

An applicant's connection enquiry would be reviewed by network planners to identify any affected connection agreement. Negotiations would then occur with the affected NSP to determine the most appropriate course of action.

SP AusNet

SP AusNet relies on a negotiation framework with a Manager Customer Solutions personally overseeing the connection enquiry process.

Upon receipt of a connection enquiry, SP AusNet responds within the nominated time frames with a standard letter as outlined in the above negotiation framework. SP AusNet writes to those NSPs likely to be affected by a connection application. It is the responsibility of the referred NSPs to coordinate planning requirements with the proponents' connection requirements, although depending on the nature of proposal, SP AusNet may take a facilitation role in this process.

SP AusNet will not proceed to enter into a connection agreement with a new proponent that affects another NSPs future planned works unless SP AusNet has written agreement from the affected NSPs.

SP AusNet undertakes detailed discussions with proponents when contact is first made. Leading up to the application, a consultative process with the proponent is conducted to ensure the proponent has sufficient information.

If the proposed development is likely to affect future plans of another NSP, SP AusNet facilitates coordination and determines the best way for the proposed development to be appropriately implemented. Once the coordination has occurred and all parties have agreed, written confirmation is obtained.

United Energy Distribution (UED)

UED advises that it has systems and processes to manage connection enquires, which are designed to comply with its State-based electricity distribution licence obligations, as well as the requirements under clause 5.3.3 of the NER.

All connection enquiries that are straightforward are addressed within one business day. If an enquiry cannot be immediately answered, the matter is escalated but with the assurance that it is responded to within 5 business days of receiving the request.

Where necessary, UED liaises with other NSPs with which it has connection agreements. Following receipt of a connection enquiry, the basic information listed in clause 5.3.3(b) is generally provided to the applicant within 10 business days. There is a regular exchange of information until both parties are satisfied with the information provided.

The relevant transmission NSP, VENCORP, is notified of all generators that will materially impact fault levels at the transmission connection points or have other network impacts, such as changes to power quality. If the proponent's proposal will have an impact upon a part of the shared network with another distributor, then the technical and commercial issues are reviewed in consultation with the network planning engineers from the other distributor. UED also consults NEMMCO in relation to large generator projects.

Following receipt of the requisite information, UED's policy is to issue a written offer within 20 business days. The firm connection offer includes all the relevant information listed in clause 5.3.3.

UED also advises that it provides the prescribed information in relation to a generation connection enquiry under clauses 5.3.3(b), (b1) and (c) within the prescribed time frames.

Review outcomes

Clause 5.3.3 establishes a framework which consists of defined communication steps and deadlines which NSPs are required to adhere to, to ensure that connection enquiries are handled in a thorough and timely manner.

Each of the targeted Registered Participants refer to various systems and procedures in this area. On the basis of the responses received, it appears that these systems and procedures, if applied as described, are appropriate in enabling these NSPs to comply with requirements of clause 5.3.3 of the NER.

2.3.7 Preparation of offer to connect

Clause 5.3.5(a) of the NER requires an NSP to prepare an offer to connect in response to an application to connect that satisfies the automatic access standard or at a negotiated access standard.

Clause 5.3.5(b) requires that the NSP use its reasonable endeavours to advise the Connection Applicant of all risks and obligations in respect of the proposed connection associated with planning and environmental laws not contained in the NER.

Furthermore, clause 5.3.5(d) requires that the NSP, in preparing the offer to connect, must consult with NEMMCO and other Registered Participants with whom it has connection agreements, if the NSP believes in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected, in order to assess the application to connect and determine:

- the technical requirements for the equipment to be connected
- the extent and cost of augmentations and changes to all affected networks
- any consequent change in network service charges
- any possible material effect of this new connection on the network power transfer capability including that of other networks.

As part of the compliance review relating to clause 5.3.5 of the NER, the AER requested information from ElectraNet, Powerlink Queensland, SP AusNet, Transend Networks, TransGrid and Powercor Australia, which included:

- details of the process applied by the targeted NSPs when they proceed to prepare an offer to connect in response to an application submitted at the automatic access standard or at a negotiated access standard
- details concerning how the targeted NSPs ensure Connection Applicants are advised of all risks and obligations associated with planning and environmental laws not contained in the NER
- details of the manner in which the targeted NSPs consults with NEMMCO and other Registered Participants with whom it has connection agreements if it reasonably believes that compliance with the terms and conditions of those connection agreements will be affected, including whether this is typically undertaken in writing and the usual time between consultations and the lodging of the application to connect.

- details of any criteria or procedures in place used to make an assessment as to whether a connection agreement will be affected, and how these are applied in practice.

Response summary

ElectraNet

ElectraNet advises that it has in place dedicated personnel and integrated processes and procedures as part of its project management methodology in this area. According to ElectraNet, these measures combined ensure compliance with the NER and other applicable obligations.

The key phases of ElectraNet's process for preparing an offer to connect are:

- Initiation phase: to process connection enquiries and facilitate the lodgement of an application to connect.
- Concept phase: to identify and assess viable connection options and confirm a preferred connection option for further detailed studies and scoping.
- Scope/definition phase: to undertake the detailed technical studies on the preferred connection option and to develop the detailed scope for the offer to connect, including identification of risks and obligations associated with planning and environmental laws, developing negotiated access standards where required and identification of works providing prescribed transmission services, negotiated transmission service or non-regulated transmission services.

ElectraNet works closely with all connection applicants to ensure that they are aware of their obligations. Environmental, planning and other statutory risks are assessed separately throughout the connection process. ElectraNet consults both verbally and in writing throughout the connection process to ensure that all affected parties are informed.

ElectraNet assesses the compliance of new connection applicants against the requirements of the schedules to Chapter 5 of the NER.

Powerlink Queensland

Powerlink has an internal process to establish or modify a connection in order to ensure compliance with clause 5.3.5 and to ensure efficient and timely connection. It has different business processes for each type of connection enquiry – Generator or Customer.

In practice, there are normally significant discussions and interactions prior to a formal connection enquiry – a “concept” phase. A concept enquiry typically considers multiple connection options and results in a single formal connection enquiry that can be efficiently processed by Powerlink. Powerlink works closely with connection applicants to develop, research, investigate and assess the viability of all proposed connection options.

Powerlink's offer to connect involves Powerlink offering a negotiated service at the connection point located within Powerlink's substation. Powerlink states that, since its existing substations already have relevant environmental and planning approvals,

there are generally no planning or environmental issues that will result in risks and obligations to the connection applicant.

During the concept and connection enquiry phases, Powerlink undertakes preliminary analysis to identify risks and costs. During the application to connect phase, Powerlink, in conjunction with NEMMCO, undertakes a detailed assessment of the performance standards proposed by the applicant in order to assess whether there is an adverse impact on other network users. In practice, the negotiated access standards are set at a level to ensure the technical terms of existing Connection and Access Agreements are not adversely affected.

Transend

Transend has set out the process to be followed in dealing with a connection enquiry or application, in its “Connection Enquiry/Application Procedure”.

Transend will clarify with the applicant any planning and environmental risk for assets Transend is constructing. Once it has received all the necessary information, Transend sends a letter advising of the need to liaise with local Councils and relevant State Government departments in order to obtain development approval.

NEMMCO is advised once the connection enquiry is received, the application fee is received, the Generator Performance Standards are completed to a point of being suitable for submission and subsequent discussion/negotiation, and the Generator Performance Standards are agreed. If a load or generation connection can be identified as having an adverse impact on an existing customer, that customer will be advised. There are, however, no formal procedures or guidelines used to identify adverse impacts.

Transend makes an offer to connect within the time specified in the preliminary program as agreed with the applicant. Each connection application in respect of a generator is examined in detail against each of the technical requirements set out in Schedule 5.2.5. Each connection application in respect of a load is examined against the requirements set out in Schedule 5.3. The technical requirements of Schedule 5.1a and 5.1 are also reviewed to assess the potential impacts of new developments.

TransGrid

Procedures have been established by TransGrid to manage connection applications. The procedure “Preparation of Offer to Connect” defines the steps to be followed in preparing an Offer to Connect submitted at the automatic access standard or at a negotiated access standard. It includes discussing risks and obligations in meeting planning and environmental laws.

If TransGrid reasonably believes that compliance with the terms and conditions of those connection agreements will be affected, it advises NEMMCO and parties with whom TransGrid has connection agreements.

TransGrid’s procedure “Technical Analysis of Connection Applications through to Registration” sets out the procedure and criteria for making an assessment as to whether a connection agreement will be affected. TransGrid generally performs

technical work and studies to identify the impacts of the proposed connection and access standards on the wider network and other connected parties.

Powercor Australia

Powercor advises that it follows processes consistent with Chapter 5 of the NER when preparing an offer to connect. The preliminary process ensures the applicant is advised of relevant risks and obligations associated with planning and environmental laws not contained in the NER.

If Powercor reasonably believes that compliance with the terms and conditions of connection agreements with NEMMCO and other Registered Participants will be affected, Powercor would seek to consult with them immediately.

When dealing with a generation application, Powercor consults with VENCORP requesting advice as to what reasonable system conditions should be studied. Other parties are informed in writing if there is potential for them to be affected.

Review outcomes

Clause 5.3.5 of the NER complements the framework established under clause 5.3.3 of the NER, by relating to the process of connection offers, following an initial enquiry dealt with under the latter NER provision.

In this instance also, each of the targeted Registered Participants have referred to various systems and procedures. On the basis of the responses received, it appears that these systems and procedures are appropriate in enabling these NSPs to comply with requirements of clause 5.3.5 of the NER.

2.3.8 Testing by Registered Participants of their own plant requiring changes to normal operation

Under clause 5.7.5(a), Registered Participants proposing to conduct a test on equipment related to a connection point, which requires a change to the normal operation of that equipment, must give at least 15 business days written notice to the relevant NSP, except in an emergency.

Clause 5.7.5(b) requires that this notice must include the nature of the proposed test, the estimated start and finish times, the identity of the equipment to be tested, the power system conditions required, details of any potential adverse consequences of the proposed test on the equipment or power system and the name of the person responsible for the co-ordination of the proposed test.

Clause 5.7.5(c) requires that the NSP must review the proposed test described in a notice under clause 5.7.5 (a) to determine whether the test:

- could adversely affect the normal operation of the power system;
- could cause a threat to power system security;
- requires the power system to be operated in a particular way which differs from the way in which the power system is normally operated; or
- could affect the normal metering of energy at a connection point.

Furthermore, if the NSP determines that the proposed test does fulfil one of the conditions specified above, the Registered Participant and NSP must seek the prior approval of NEMMCO before undertaking the test.

As part of the compliance review relating to clause 5.7.5 of the NER, the AER requested information from Delta Electricity, Eraring Energy, Macquarie Generation and Redbank Project, which included:

- details of how this process is practically managed
- confirmation that the targeted Participants give the required written notice to the relevant NSPs when proposing to conduct a test on equipment related to a connection point
- details of any instances where the targeted Participants have failed to give the required written notice of at least 15 business days when proposing to conduct a test on equipment related to a connection point as well as reasons for the failure
- whether the targeted Participants routinely provide the relevant NSPs with a report in relation to the test including test results in accordance with clause 5.7.5(j) and if not why not.

Response summary

Delta Electricity

Delta Electricity advises that it has developed and implemented a number of internal arrangements to manage its obligations under the NER and other relevant legislation. These arrangements comprise “Energy Market Risk Management” policies and procedures and compliance manual, and are supported by relevant committees and an IT compliance system, for internal reporting and escalation purposes.

Delta Electricity also advises that it has coordination and communication mechanisms in place with the relevant NSP, TransGrid, to ensure that, where testing of equipment may require a change to the normal operation of that equipment:

- TransGrid is fully aware about all proposed testing, including specific matter listed in clause 5.7.5(b)
- potential adverse effects on equipment, metering and power systems are taken into consideration
- necessary mitigation and avoidance measures are adopted
- NEMMCO is notified where required under the NER.

In practice, the requirements set out in clause 5.7.5 are managed through Delta Electricity and TransGrid’s existing channels and compliance mechanisms, including compliance officers, reporting and quarterly meetings.

Delta Electricity states that it provides TransGrid with details of advice of testing will be provided well in advance of the minimum 15 business days required.

Delta Electricity advises that it is not aware of any instance where it has failed to provide the required written notice to TransGrid when proposing to conduct a test on

equipment related to a connection. It is not aware of any instance where it has failed to provide adequate notice of proposed testing as required by clause 5.7.5(a).

Eraring Energy

Eraring Energy has an internal communication protocol that sets out the types of tests on generating plant that need to be advised to the relevant NSP, TransGrid, under clause 5.7.5 of the NER. The protocol also sets out details of the advance notice that needs to be provided to TransGrid and the provision of a report of the test including test results where appropriate. Eraring Energy has reviewed this protocol and believes that it adequately covers the requirements of the clause.

To date, there has been no testing of equipment covered by the clause other than system restart tests. There have been a number of system restart tests at various sites and, in respect of all of these tests, the appropriate written notice and test details have been provided. TransGrid has been provided with a brief report of the test and NEMMCO have been provided with the full report and test results of all of the tests conducted to date.

There have been no instances where the required written notice has not been provided at least 15 business days before the test was conducted

Macquarie Generation

Macquarie Generation advises that, to date, none of the testing undertaken has been of a nature where it has been likely to have had any impact on the operation of the connection point. No notification has been required and thus no action required to comply with clause 5.7.5 of the NER.

However, as a result of discussions with the relevant NSP, TransGrid, it has been agreed that this may not always be the case in the future and that communication required by clause 5.7.5 would occur in accordance with existing procedures that deal with communication required for coordination of operation and maintenance of high voltage equipment where there are shared responsibilities between TransGrid and Macquarie Generation. Both parties have agreed to review the above procedures.

Redbank Project

Redbank advises that it has an agreed protocol with the relevant NSP, EnergyAustralia, which details the communication methodology, terms and forms. Redbank has communicated with EnergyAustralia in accordance with this document with respect to all maintenance and testing work.

Any testing of equipment that requires a change to normal operation has been carried out either using EnergyAustralia as the test group or by involving them in the testing. Tests have been documented using emails and its “High Voltage Operating Agreement” form.

Notification of outage dates has been communicated via email and verbally in excess of 15 days ahead of the outage. Redbank informs that written notification to EnergyAustralia is given within the specified timeframes relating to changes to normal operation of plant. Test reports are either written by or provided to EnergyAustralia as required after the tests are carried out.

Review outcomes

Overall, the AER is satisfied that the targeted Participants' various types of systems and processes, if applied as described, appear appropriate for ensuring compliance with clause 5.7.5 of the NER.

The AER notes that Macquarie Generation has recognised the need to review procedures dealing with clause 5.7.5 with TransGrid. The AER emphasises the need for ongoing review of existing arrangements so as to take account of potential changes.

2.3.9 Upcoming targeted compliance reviews

In the next quarter the AER proposes to continue its review of power system security requirements of Chapter 4 of the NER focusing on the provision and performance monitoring of ancillary services by relevant providers. The AER will also review Generator obligations to provide generation forecast and testing information to NSPs. Obligations related to metering installations and accuracy of data will also be reviewed. In addition, the AER intends to clarify the relationship between NEMMCO and DNSPs in the context of clause 4.10 and continue its review of the network connection process in Chapter 5.

2.4 Review of jurisdictional derogations

Chapter 9 of the NER preserves certain jurisdiction-specific arrangements. These are known as jurisdictional derogations and exempt particular Participants from compliance with specified provisions in the NER. Each quarter, the AER must prepare an assessment of the effect that any act or omission would have on the efficient operation of the market, arising from the operations of Participants to whom the derogations in question apply. This section outlines relevant outcomes as well as any regulatory developments during the quarter.

2.4.1 Derogations relating to Smelter Traders, Power Traders and Exempted Generator Agreements

A series of Chapter 9 derogations provide exemptions for Victorian Smelter Traders, New South Wales Power Traders and Nominated Generators in Queensland (for the purposes of Exempted Generator Agreements) from complying with the NER:

- to the extent that there is any inconsistency between the NER and a contractual requirement under the relevant agreement
- any other specified exemption the jurisdictional derogations.

These Participants must give notice to the AER of any act or omission which partly or wholly constitutes non-compliance with the NER, within the terms of clauses 9.4.3 (Smelter Trader), 9.12.3 (Power Traders) and 9.34.6 (Nominated Generators) of the NER.

During the December quarter, no matters of non-compliance were notified to the AER by the Participants in question.

Following its sale in December 2007 by the State government-owned, Enertrade, to a privately owned business (in this instance, an AGL subsidiary), the Townsville Power Station is no longer covered by any derogation.

Based on the responses received, the AER is satisfied that there were no instances where the actions of a Participant classified as a Smelter Trader, Power Trader or Nominated Generator materially affected the efficient operation of the market during the quarter, in so far as clauses 9.4.4, 9.12.3 and 9.34.6 of the NER are concerned.

2.4.2 Removal of technical performance standards derogations

The events of 16 January 2007, which have been the subject of an investigation by the AER, highlight the need for generating units to be able to ride through disturbances to the power system.

A number of Generators operate under jurisdictional derogations in Chapter 9 of the NER. These derogations apply less onerous technical performance standards, including in cases when a power system disturbance has occurred. The application of less exacting technical standards to some Generators through Chapter 9 derogations has the potential to compromise system security.

Now that all Generators have registered the actual technical capability of their plant and equipment with NEMMCO, the derogations related to those standards appear to have become redundant. The AER has written to the Ministers in both Victoria and Queensland recommending the removal of the Chapter 9 derogations relating to Generator technical standards.

2.5 Market monitoring

The AER monitors the performance of the NEM on an ongoing basis. The purpose of this monitoring as a compliance mechanism is to screen for indicators of any non-compliance with obligations under the NEL, the NER or associated Regulations using publicly available data and information provided to the AER by Participants and NEMMCO.

The AER's role and responsibilities extend to the verification and substantiation of market information provided by Participants and/or available to the AER. Market monitoring is used primarily to identify cases where non-compliance with a particular obligation is readily apparent from data to which the AER has access, such as the rebidding and the obligations to provide information contained in Chapters 3 and 4 of the NER.

2.5.1 Rebidding inquiries

Scheduled Generators and Market Participants submit bids for each of the 48 trading intervals in the trading day. The bids cover prices and volumes in up to 10 price bands. These volumes can be changed right up to the time of dispatch, via rebidding.

Clause 3.8.22A of the NER require Scheduled Generators and Market Participants to make dispatch offers, dispatch bids and rebids in good faith – that is, with the genuine intention of honouring that offer or bid.

Under clause 3.8.22 of the NER, Market Participants are required to provide to NEMMCO, at the same time as a rebid is made:

- a brief, verifiable and specific reason for the rebid; and
- the time at which the event(s) or other occurrence(s) adduced by the Market Participant as the reason for the rebid occurred.

Equivalent requirements apply where a Market Participant advises NEMMCO that a scheduled generating unit, scheduled network service or scheduled load is inflexible, under clause 3.8.19 of the NER.

Compliance with the information requirements in clause 3.8.22 is required to enable the AER to determine whether Scheduled Generators and Market Participants operate in good faith.

For the quarter ending 31 December 2007, the AER identified the following issues relating to the quality of the rebid reasons provided in accordance with clauses 3.8.19 (inflexibility) and 3.8.22 (rebidding) of the NER.

NER Clause	Compliance issue	No. of Participants under review
3.8.19(b)(1)	The rebid submitted does not provide a brief, verifiable and specific reason why the scheduled generating unit, scheduled network service or scheduled load is inflexible	5
3.8.22(c)(2)(i)	The rebid submitted does not provide a brief, verifiable and specific reason for the rebid	5
3.8.22(c)(2)(ii)	The rebid submitted does not include the time at which the event(s) or other occurrence(s) adduced by the Scheduled Generator or market Participant as the reason for the rebid occurred	13

The AER has also completed a rebidding review which has identified all Registered Participants that appear to have not met applicable rebidding requirements during the 2007 calendar year (see table below). The AER has discussed rebidding issues with some of these Registered Participants and, where appropriate, will seek additional information in accordance with clauses 3.8.19(b)(2) and 3.8.22(c)(3).

Registered Participant	NER Clause 3.8.19(b)(1)	NER Clause 3.8.22(c)(2)(i)	NER Clause 3.8.22(c)(2)(ii)
AGL Hydro Partnership Pty Ltd			◆
Alinta EATM Pty Ltd		◆	◆
Alinta Sales Pty Ltd		◆	
Bell Bay Power Pty Ltd			◆
Braemar Power Projects Pty Ltd		◆	

Registered Participant	NER Clause 3.8.19(b)(1)	NER Clause 3.8.22(c)(2)(i)	NER Clause 3.8.22(c)(2)(ii)
Callide Power Trading Pty Ltd	◆		
CS Energy Ltd	◆		
Delta Electricity			◆
Eraring Energy			◆
Ergon Energy Queensland			◆
Flinders Power			◆
Hazelwood Power			◆
IPM Australia		◆	
Loy Yang Marketing Management Company Pty Ltd	◆		◆
Macquarie Generation			◆
Origin Energy Electricity Ltd			◆
Snowy Hydro Ltd			◆
Stanwell Corporation Ltd	◆	◆	◆
Tarong Energy Corporation Ltd	◆		
TRUenergy Pty Ltd			◆
TRUenergy Yallourn Pty Ltd			◆

Appendix A: AER investigations and reporting summary

This is a summary table of the AER's investigations and \$5,000/MWh Reports during the previous 12 months.

Date of event	Description	Status
20 July 2006	\$5,000/MWh Report	Issued
11 January 2007	\$5,000/MWh Report	Issued
16 January 2007	\$5,000/MWh Report	Issued
	Investigation into power system incident (Victoria)	Review completed
23 January 2007	\$5,000/MWh Report	Issued
24 January 2007	\$5,000/MWh Report	Issued
12-28 June 2007	\$5,000/MWh Report	Issued
8 October 2007	Investigation following reclassifications (Queensland)	Review underway
10 October 2007	Investigation following reclassifications (Queensland)	Review underway
22 October 2007	\$5,000/MWh Report	Issued
29 October 2007	Investigation following reclassifications (Queensland)	Review underway
4 November 2007	\$5,000/MWh Report	Issued
	Investigation into Generator compliance (Queensland)	Review underway
31 December 2007	\$5,000/MWh Report	Issued

Appendix B: Targeted provisions summary

This is a summary table of the targeted provisions subject to compliance reviews by the AER during the previous 12 months.

Quarter ending	NER clause	Description	No. of Participants targeted	Status ⁷
December 2006	3.8.7A(k)	Market ancillary services offers	3	Review completed
	4.9.9B	Ancillary service plant changes	3	Review completed
	5.2.3	Obligations of NSPs	2	Review completed
	5.7.4	Routine testing of equipment by NSPs	1	Review ongoing
March 2007	3.8.19	Dispatch inflexibilities	3	Review completed
	3.15.16	Settlements payment by Market Participants	2	Review completed
	5.7.4	Routine testing of equipment by NSPs	1	Review ongoing
June 2007	3.6.3	Distribution loss factors – calculation and alignment of connection points	1	Review completed
	4.3.5	Market Customer obligations – provision of interruptible load	2	Review completed
	5.7.4	Routine testing of protection equipment	1	Review completed

⁷ “Review ongoing” refers to a targeted provision’s review conducted over more than one quarter and involving different Registered Participants in each of the quarters.

Quarter ending	NER clause	Description	No. of Participants targeted	Status⁷
	7.6.1	Responsibility for testing – metering installations	1	Review completed
	8.2.3	Dispute management systems of Registered Participants and NEMMCO	6	Review completed
September 2007	4.8.1	Power system security operations – Registered Participants’ advice	2	Review completed
	5.2.1	Obligations of Registered Participants – network connections	2	Review completed
	7.2A.4	Local retailers’ compliance with B2B Procedures	2	Review completed
	7.5.2	Metering register discrepancy	1	Review completed
	7.9.4	Metering data validation and substitution	1	Review completed
	8.6.1	Confidentiality of information	3	Review completed
December 2007	4.8.2	Protection or control system abnormality	4	Review completed
	4.9.3	Instructions to Registered Participants	3	Review completed
	4.9.4	Dispatch related limitations on Scheduled Generators	3	Review completed
	4.9.8	General responsibilities of Registered Participants	1	Review completed
	4.11.4	Records of power system operational communication	1	Review completed
	5.3.3	Response to connection enquiry	3	Review completed
	5.3.5	Preparation of offer to connect	6	Review completed

Quarter ending	NER clause	Description	No. of Participants targeted	Status ⁷
	5.7.5	Testing by Registered Participants of their own plant requiring changes to normal operation	4	Review completed