

Quarterly Compliance Report:

National Electricity and Gas Laws

April - June 2016



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Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Tel: (03) 9290 1444 Fax: (03) 9290 1457

Email: <u>AERinquiry@aer.gov.au</u> AER Reference: 60342-D16/106252

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Executive summary

The Quarterly Compliance Report (QCR) outlines the Australian Energy Regulator's (AER) compliance monitoring and enforcement activity under the National Electricity Law (Electricity Law) and the National Gas Law (Gas Law)—including the rules and regulations which sit under those laws. It reflects the importance of compliance to the efficient operation of gas and electricity markets for the benefit of market participants and energy users. The AER reports compliance outcomes to provide transparency in these markets, while promoting good industry practice.

This QCR covers the period 1 April to 30 June 2016 (the June 2016 quarter) for gas and electricity markets.

Gas

The AER will be writing to a cross section of participants to ensure the gas industry is ready to meet new Bulletin Board reporting obligations commencing this October. Ensuring the transparency and accuracy of gas bulletin board data is an area of specific focus for the AER this year given the increasingly dynamic nature of east coast gas production and flows. We will report back in the next QCR.

This report also discusses trends in over forecasting of demand which we have identified in the Sydney Short Term Trading Market (STTM). This trend raises similar concerns to those identified in our inaccurate demand forecasting special compliance project which we finalised in 2014. We are reviewing this issue and will provide further updates in due course.

Electricity

This report sets out our activities this quarter in relation to a priority area for the AER, compliance with clause 4.9.8 of the National Electricity Rules (Electricity Rules). Clause 4.9.8 contains two key requirements – that participants comply with dispatch instructions issued by AEMO and participants' offers and bids represent the capability of their equipment. To assist participants understand these obligations and help them achieve compliance, we have issued an amended compliance bulletin to replace our 2006 bulletin on this area. The amended compliance bulletin does not represent a change in the AER's approach in this area, but instead has a broader focus covering all subclauses in clause 4.9.8 and incorporates both the Federal Court decision related to this provision and the AER's Compliance and Enforcement – Statement of Approach.

Additionally, in the area of compliance with dispatch instructions, this report sets out two enforcement matters which we resolved in this quarter and one identified instance of non-compliance by a participant. For the enforcement actions:

• four infringement notices were issued to CS Energy for contraventions of clause 4.9.8(a) and 4.9.8(b) by its generating units at Wivenhoe and Gladstone. A court enforceable undertaking has also been provided by CS Energy, and

• two infringement notices were issued to ERM Power for contraventions of clause 4.9.8(a) by an Oakey generating unit. ERM Power has also agreed to a monthly report of its compliance with dispatch instructions to the AER for six months.

The enforcement matters reinforce the importance of prompt attention to dispatch instructions and active monitoring of units' generation offers against actual capabilities and the need for good processes, systems and procedures to be in place to monitor and ensure compliance. These messages are also reiterated in our amended compliance bulletin on compliance with dispatch instructions.

In this quarter the AER also conducted a targeted compliance review of clause 4.3.4 and 4.3.5 of the Electricity Rules. The clauses deal with the obligation on Market Customers and Network Service Providers (NSPs) to provide interruptible loads to the Australian Energy Market Operator (AEMO). Automatic under-frequency load shedding is an essential part of AEMO's ability to manage the power system and system security.

This targeted compliance review was prompted by the increasing penetration of photovoltaic (PV) solar generation, and whether this would affect the composition of the mandated minimum 60% of expected demand. Given the differences in approach highlighted in the responses received, the AER has decided to coordinate a forum involving all relevant network service providers (NSPs) and AEMO to facilitate a consistent approach to compliance in this area.

Background

The AER is responsible for monitoring compliance and enforcement under legislation and rules governing Australia's wholesale energy markets, including those applying to NSPs. Section 15 of the Electricity Law and section 27 of the Gas Law set out our functions and powers, which include:

- monitoring compliance by energy industry participants¹ and other persons
- investigating breaches, or possible breaches, of provisions of the legislative instruments under our jurisdiction.

Consistent with our statement of approach,² we aim to promote high levels of compliance, and seek to build a culture of compliance in the energy industry. A culture of compliance will:

- reduce the risk of industry participants breaching their regulatory obligations
- assist in ensuring industry participants can engage confidently in efficient energy markets.

As part of this process, we undertake an ongoing compliance risk assessment of the Electricity and Gas Rules to identify appropriate focus areas and monitoring/compliance mechanisms. These mechanisms include our strategic compliance projects, audits, reporting requirements, market monitoring, and targeted compliance reviews.

In selecting the areas for review, we adopt the following principles:

- consideration of risk (the greater the risk, the higher the priority)
- a commitment to ensuring that both systemic issues and those with the potential for isolated but significant impact are addressed.

In carrying out our monitoring functions, we aim for:

- cost effectiveness for energy industry participants and the AER
- transparency (subject to confidentiality requirements).

While most obligations under the Electricity and Gas Rules do not require registered participants to establish specific compliance programs, we take into account a participant's compliance framework when determining our response to potential breaches. In assessing compliance culture, we consider whether compliance programs and processes are effectively applied, up-to-date and tested regularly.

Entities registered by AEMO under Chapter 2 of the Electricity Rules or in accordance with Part 15A of the Gas Rules.

The Statement of Approach is published on the <u>AER's website</u>. In April 2014, the AER released a combined Enforcement and Compliance Statement of Approach covering our functions under the Gas Law, Electricity Law and National Energy Retail Law. The document reflects the consistent approach taken by the AER to enforcing the energy laws across all markets.

1 Gas

We are responsible for monitoring, investigating and enforcing compliance with the Gas Law and Rules, including but not limited to, the STTM, the Bulletin Board, the Victorian gas market and the Gas Supply Hub (GSH).

This part of the report provides an update on investigations, compliance matters and projects in the gas markets.

1.1 Short Term Trading Market

Part 20 of the Gas Rules sets out participants' responsibilities for trading in the STTM, which has trading hubs in Adelaide, Sydney and Brisbane. The Gas Rules govern how wholesale gas is traded and include requirements for pipeline operators to submit pipeline capacity and allocation (gas flow) data. There were no substantive compliance issues in the STTM wholesale markets this quarter. However as part of a significant price variation (SPV) report for the 13 and 23 January gas days, we identified a trend which indicates a bias in Sydney STTM demand forecasting which we will be investigating further.

Part of the SPV report highlighted that, on aggregate, participants have been over forecasting demand in the Sydney STTM on around 70–80 per cent of days each month since August 2015. Figure 1 below provides the same 'hub forecasting performance metric' from the SPV report taking into account more recent actual usage data. It shows the proportion of days over forecast each month (including the rolling average) and the average monthly over forecast error (in terrajoules). We note that the proportion of days where participants have been over forecasting demand in Sydney has declined significantly from around April this year.

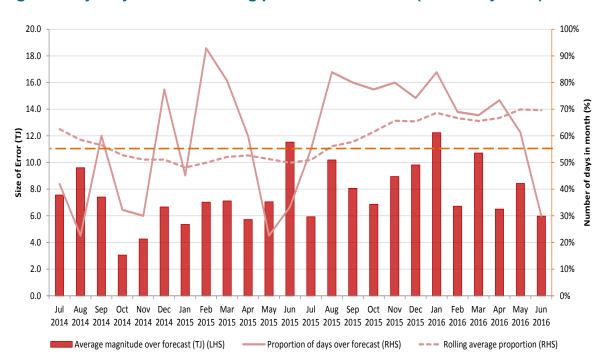


Figure 1: Sydney Hub forecasting performance metric (since July 2014)

In 2012 we conducted a special compliance project to review ongoing inaccurate demand forecasting. Throughout 2013 and 2014 we used metrics to help identify patterns in demand forecasting errors in each hub and contacted those participants with persistent large forecast errors. During the project we identified a long term bias towards over forecasting in the Sydney hub. We engaged with Sydney hub participants about the issue which resulted in overall improvements. On this basis, we finalised the project at the end of 2014.

Notwithstanding the decline in the proportion of days of over forecast demand in Sydney from around April this year, we will investigate the issue closely and contact individual participants. We will provide updates on this matter in future QCRs.

1.2 Natural Gas Services Bulletin Board

Chapter 7 of the Gas Law and Part 18 of the Gas Rules set out participants' responsibilities regarding the Bulletin Board. These obligations aim to facilitate greater transparency in gas production and gas pipeline flows to assist gas trading. The obligations also require participants to identify and report any potential conditions where curtailment of gas use might be necessary. It requires Bulletin Board production facility operators to take account of short term trends in gas field performance (which are constraining or will constrain overall production capability) in their 7-day outlook.

With the development of Liquefied Natural Gas (LNG) trains in Queensland and the need for greater transparency regarding gas production and flows, it is increasingly important that participants provide accurate, complete and timely Bulletin Board information. In some circumstances, failures to comply with Bulletin Board obligations set out in the Gas Law and Rules can attract civil penalties under the Gas Law.³

On 1 June 2016, a number of changes affecting Bulletin Board data publication were implemented by AEMO following the declaration of the Wallumbilla (WAL) demand zone and the amendment to the South West Queensland Pipeline (SWQP). The commencement of the new demand zone introduced new reporting responsibilities for connected pipelines and a change in reporting of data representing flows on the SWQP for different zones.

Pipelines reporting data for the new zone include the SWQP, Roma to Brisbane Pipeline (RBP), Queensland Gas Pipeline (QGP), Berwyndale to Wallumbilla Pipeline (BWP), Darling Downs Pipeline (DDP), Comet Ridge to Wallumbilla Pipeline including Fairview (CRWP), and Spring Gully Pipeline (SGP). Those pipelines not already reporting information on the Bulletin Board were required to be registered following publication of the notice declaring the commencement of the new zone. Accordingly, effective 1 June 2016, the BWP, DDP, CRWP and SGP pipelines each registered.

Given our focus on Bulletin Board obligations in 2016, we will again target participants' compliance processes over the third quarter of 2016. In particular, our focus for Quarter 3 will be changes to the Bulletin Board requiring the reporting of new information from 6 October 2016. Notably, transmission pipeline operators must meet a number of new requirements from October 2016, including the publication of uncontracted primary capacity outlooks and providing more detailed receipt and delivery point information. New obligations will also be imposed on production facility and storage facility operators. All facility operators

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For more information, see the September 2015 QCR.

will be required to produce medium term capacity outlooks using a new standard format which includes the expected daily capacity of the facility during the outlook period.

We will accordingly be making inquiries of a cross-section of participants with Bulletin Board reporting obligations from mid-August.

1.3 Victorian Gas Market

Part 19 of the Gas Rules sets out participants' responsibilities for trading in the Victorian gas market. There were no substantive compliance outcomes for the Victorian gas market this quarter.

1.4 Gas Supply Hub

Under Part 22 of the Gas Rules, the AER is responsible for monitoring GSH members' compliance with obligations specified in the Gas Rules for the gas trading exchange. This includes market conduct rules.

The market conduct rules require GSH members to trade on the basis of gas they intend to physically deliver or receive. They also prohibit activities which are fraudulent, dishonest or in bad faith as well as activities designed to manipulate prices. There were no substantive compliance outcomes for the GSH this quarter.

However, following the introduction of the GSH at Wallumbilla in March 2014, operation of a new trading location at Moomba commenced from 1 June 2016. Products listed on the exchange are for the sale and purchase of gas delivered at the two major connecting pipelines at Moomba—the Moomba to Adelaide Pipeline and the Moomba to Sydney Pipeline—with a spread product (representing the price differential) which allows for trading between the Moomba and Wallumbilla markets. There are separate products for each pipeline (each pipeline is considered a trading location, and each has a number of delivery points) and delivery period (daily, day-ahead, balance-of-day, weekly and monthly). There have been no trades to date at the new trading locations.

We will monitor the Moomba GSH in line with our existing market monitoring mechanisms and report trades undertaken through our weekly gas reports.

1.5 Retail Market Procedures

Under the Gas Law, AEMO has the ability to make procedures regulating a retail gas market (Retail Market Procedures).⁴ There are four sets of Retail Market Procedures covering Queensland, Victoria, New South Wales and the ACT and South Australia respectively. The procedures impose a number of obligations on participants including in relation to the provision of metering data, the Gas Interface Protocol, customer transfer processes and settlements. Section 91MB of the Gas Law requires compliance with the Retail Market Procedures.

In the event that AEMO suspects a breach of the Retail Market Procedures, it is required under the Gas Law to determine if the breach is material. If AEMO decides the breach is material, it must publish the decision and the reasons for it on its website. AEMO may direct

⁴ Sections 91M and 91MB of the National Gas Law.

the person suspected of the breach to rectify it or to take specified measures to ensure future compliance (or both). AEMO may also decide to refer the breach to the AER. The obligation to comply with AEMO's direction is a civil penalty provision.

This quarter, AEMO reported seven immaterial breaches of the Retail Market Procedures:

- delay of provision of the network allocation data file for the NSW and ACT gas retail markets on several occasions by AEMO, due to IT and file processing issues
- on one occasion in April STTM distribution allocations for the QLD gas retail market were not determined by AEMO in a timely manner due to incorrect information relating to GoEnergy (as a result of its suspension from the market)
- Origin nominated incorrect user reconciliation adjustment amounts in between March and April due to a system rounding error, and
- delays in delivering files and reports by AEMO, Jemena Gas Network (Jemena) and ActewAGL Distribution on five occasions after the new NSW and ACT retail market arrangements went live on 2 May 2016.

In the last QCR we reported that AEMO determined that Jemena's failure to provide metering data within timeframes specified under clause 21.1 of the NSW and ACT Retail Market Procedures between January to July 2015 and September 2015 to January 2016 was material. On this basis AEMO decided to refer this matter to the AER. Jemena subsequently entered into a reporting arrangement with the AER and outlined steps it has taken to improve compliance focused on resourcing, optimising its meter reading routes and prioritising the resolution of meter read issues.

The reporting arrangement will continue until August 2016. The AER considers this will assist to ensure Jemena's remedial steps are leading to improvements, including in achieving compliance with the new Retail Market Procedures which became effective on 2 May 2016. The AER and AEMO will continue to monitor Jemena's compliance level and assess whether the measures Jemena implemented are effective.

2 Electricity

We are responsible for monitoring, investigating and enforcing compliance under the Electricity Law and Rules. This part of the report provides an update on investigations, compliance matters and projects in the electricity market.

2.1 Compliance with dispatch instructions, offers and bids

Clause 4.9.8 contains two key requirements: that participants comply with dispatch instructions issued by AEMO⁵ and participants' offers and bids represent the capability of their equipment, such that it can be complied with at all times.⁶ Pricing, system security and the overall market integrity of central dispatch relies on market participants accurately representing their capabilities and following dispatch instructions as they are issued.

Compliance with the requirements of clause 4.9.8 of the Electricity Rules has been a priority area for the AER. To assist participants understand these obligations and help them achieve compliance, we have recently released an amended compliance bulletin on our approach to monitoring and enforcing compliance in this area. In addition, in this guarter we also:

- resolved two enforcement actions in relation to compliance with dispatch instructions, offers and bids, and
- addressed identified instances of non-compliance by one participant.

Further detail on the amended compliance bulletin and these matters is set out below.

2.1.1 Amended compliance bulletin

On 18 July 2016, we published an amended compliance bulletin (Compliance Bulletin No 1), replacing our 2006 compliance bulletin⁷ regarding following dispatch instructions issued by AEMO.

The amended compliance bulletin has a broader focus than the 2006 compliance bulletin, informing market participants of our approach when monitoring and enforcing compliance with subclauses 4.9.8(a)-(e) of the Electricity Rules. It also takes into account the AER's Compliance and Enforcement — Statement of Approach (Statement of Approach)⁸ and incorporates the outcomes of the Federal Court decision related to this provision.⁹

Despite its broader focus, the amended compliance bulletin does not represent a change in the AER's approach to enforcement of clause 4.9.8 of the Rules.

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National Electricity Rules, clause 4.9.8(a).

National Electricity Rules, clause 4.9.8(b)-(e).

AER, Compliance Bulletin No 1 – Complying with dispatch instructions (SUPERSEDED), December 2006: http://www.aer.gov.au/wholesale-markets/compliance-reporting/compliance-bulletin-no-1-superseded-complying-with-dispatch-instructions.

AER, Compliance and Enforcement — Statement of Approach, April 2014: https://www.aer.gov.au/publications/corporate-documents/aer-compliance-and-enforcement-statement-of-approach.

Australian Energy Regulator v Snowy Hydro Ltd (No 2) [2015] FCA 58.

The amended compliance bulletin reiterates a key message from the 2006 compliance bulletin as some industry participants are still under the misapprehension that they have sufficiently complied with clause 4.9.8(a) unless they are flagged as non-conforming by AEMO. This is incorrect. A participant's obligation to follow dispatch instructions in accordance with clause 4.9.8(a) is a separate and distinct obligation to that of clause 3.8.23 which requires AEMO to act to ensure it can realign pricing and dispatch outcomes within a tolerable time and accuracy.

The amended bulletin also provides further detail on our approach to participants' compliance with, and enforcement of, clause 4.9.8 of the Electricity Rules. Key messages regarding our approach include:

- We do not consider that there is a conflict between achieving compliance with dispatch instructions where the participant has been issued with instructions for different services, such as energy and frequency control ancillary services (FCAS). When assessing compliance with 4.9.8(a), we will take into consideration whether the relevant generating unit was providing FCAS when assessing deviations from energy targets.
- Attempts to manage a generating unit's ability to comply with an expected dispatch instruction for a <u>future</u> dispatch interval do not relieve a registered participant of its obligation to comply with a <u>current</u> dispatch instruction issued by AEMO.
- It is the AER's view that wear and tear on a plant as a result of its operation does not amount to a material risk of damaging equipment for the purposes of clause 4.9.8(a).
 Registered participants have the ability to limit their exposure to rapid shut-down and start-up cycles through the structure of dispatch offers and by rebidding.
- Subclauses 4.9.8(a)-(e) are separate and distinct obligations which are separately enforceable. However, the subclauses of clause 4.9.8 are designed to work together: subclauses 4.9.8(b)-(e) require a market participant to provide an offer with which it can comply, thereby promoting compliance with subclause 4.9.8(a).
- An offer or bid must not be submitted in respect of a generator, load or network service provider that cannot be complied with due to the technical and physical limitations of the unit. If the physical or technical limitations of a unit, load or facility change as a result of a change in conditions, the relevant participant should rebid to avoid its latest offer resulting in a dispatch instruction that the unit, load or facility is unable to follow.

A number of these messages relate to issues that continue to arise when the AER is assessing compliance, including the recent ERM Power and CS Energy matters set out below. We encourage all participants to closely review the amended compliance bulletin. Participants are encouraged to contact us to discuss specific compliance matters regarding clause 4.9.8 or to discuss our approach to participants' compliance with and enforcement of the clause more generally.

2.1.2 CS Energy operation of Wivenhoe and Gladstone

In 2014, our market monitoring processes identified a number of dispatch intervals between February and April when CS Energy's Wivenhoe and Gladstone generating units failed to

follow dispatch instructions.¹⁰ During the relevant intervals, the units generated energy in excess of the five-minute dispatch targets issued by AEMO. A number of these instances coincided with high price events.

During the AER investigation, CS Energy identified a number of contributing factors including:

- the Gladstone units automatically adjusting output in response to frequency deviations (also referred to as the droop characteristic), notwithstanding that the units were not instructed by AEMO to provide regulation FCAS;
- delay by CS Energy in responding to dispatch instructions, including by failure to sufficiently promptly initiate the stop sequence for a Wivenhoe unit or delaying a request for a mill change from the Gladstone operator;
- failure by CS Energy to take appropriate action, including by:
 - choosing to rebid a Wivenhoe unit to ensure the unit would be dispatched in the next dispatch interval rather than initiating the stop sequence in response to a dispatch target to cease generation,
 - electing not to take action on the basis of anticipated future dispatch targets in relation to certain dispatch instructions issued for Gladstone units which required a reduction in the number of mills in service, and
- plant related issues, including that the ramp rate capability of the Gladstone units changes as a function of output.

After CS Energy identified ramp rate capability change as a contributing factor for Gladstone's departures from target on 13 February 2014, we reviewed how CS Energy had offered the Gladstone units into the market. For multiple trading intervals on the day, CS Energy had offered a 12 MW/minute ramp rate for the five online Gladstone units; a ramp rate which could only be achieved when the units were generating above 190 MW. During the relevant trading intervals, CS Energy had rebid each Gladstone unit by moving at least 70 MW of low priced capacity close to the price cap. As a result these rebids coming into effect, Gladstone units received instructions to reduce output below 190 MW at the offered ramp rate. The units could not achieve the target because their actual ramp rate capability declined as output reduced. Notwithstanding that the actual ramp rate capability of the units had reduced below 12 MW/minute, which was telemetered to CS Energy's trading room, CS Energy did not amend the Gladstone units' offer to reflect actual capabilities. Accordingly, we were concerned that the units were not at all times capable of complying with their latest generation dispatch offer as required under clause 4.9.8(b).

In response to our concerns that CS Energy breached clause 4.9.8(a) and (b), and associated concerns that CS Energy's spot trading compliance program did not adequately address clause 4.9.8(b), CS Energy offered court enforceable undertakings to us.¹¹

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CS Energy is the nominated generator with respect to the Gladstone Power Station in accordance with clause 9.34.6 of the Electricity Rules, and, as such, the Registered Participant for the Gladstone Power Station.

Further details of the AER's concerns with CS Energy's conduct and remedial action to be performed by CS Energy is set out in the Enforceable Undertaking and is available on the AER website at http://www.aer.gov.au/wholesale-markets/enforcement-matters/infringement-notices-issued-to-cs-energy-and-enforceable-undertaking-failure-to-follow-dispatch-instructions-and-offer-obligations.

Among other things, the undertakings given include:

- maintaining a daily procedure to ensure appropriate plant settings are in place to deal with the droop characteristics of the Gladstone generating system
- revising procedures and introducing new alert mechanisms for particular plant specifications and conditions, designed to improve responsiveness to dispatch instructions and consideration of whether generation offers adequately reflect unit capabilities
- an independent compliance expert reviewing relevant CS Energy compliance material and CS Energy implementing any recommendations, and
- regular training for relevant staff, which was commenced during the investigation.

In light of CS Energy's cooperation throughout the investigation and provision of court enforceable undertakings, the AER decided to issue a total of four infringement notices for two alleged contraventions each of clause 4.9.8(a) and (b) in relation to:

- a Wivenhoe unit over generating by over 200 MW on two occasions due to a failure to promptly initiate a stop sequence and a decision to rebid the unit rather than to follow a target to cease generating respectively, and
- Gladstone units being unable to comply with the ramp rate specified in their latest offer at all times.

CS Energy paid penalties of \$80,000 in June 2016.

This matter highlights the importance of prompt attention to dispatch instructions and the active monitoring of units' generation offers against actual capabilities. While many participants focus on the obligation to follow dispatch instructions in their compliance material, we consider it is crucial that equal attention is paid to the related obligations to ensure offers and bids reflect plant capabilities.

2.1.3 ERM Power's operation of Oakey power station

In late 2015, we identified several instances where ERM Power's Oakey scheduled generating units did not comply with dispatch instructions issued by AEMO. This coincided with ERM Power ceasing to specify a fast start inflexibility profile (FSIP) as part of the Oakey units' dispatch offers. 12

The FSIP mechanism allows market participants with fast start plant (such as gas turbine generators) to provide AEMO with additional dispatch limitation information. 13 This mechanism is used to inform the dispatch process of minimum start, stop and run times, and of minimum safe operating levels. 14 If provided, AEMO must endeavour to dispatch the generator within these technical capabilities. Where no FSIP is provided, then AEMO will assume that a generator can be dispatched in accordance with its dispatch offer.

ERM Power advised the AER that they ceased to specify a FSIP due to inconsistent outcomes with regard to Oakey's dispatch targets during periods of high prices.

See National Electricity Rules, clause 3.8.19(e).

The FSIP parameters are: time to synchronise (T1), time to come to minimum load (T2), minimum time at which the plant has to operate at minimum load (T3) and minimum load level (T4).

Following the initial findings, we undertook a detailed assessment of the Oakey units' compliance with dispatch instructions over a nine month period. We identified a number of concerns, categorised into four broad categories:

- 1. **failure to generate in response to a start target.** Out of around 200 start targets received by Oakey units, the units had a non-response rate in a majority of occasions.
- 2. failure to come offline in response to a stop target in a timely manner. Numerous instances were identified in the nine month period where the Oakey units did not shut down in the same dispatch interval as they were given a stop target (an instruction to stop generating by AEMO).
- 3. starting without a dispatch target (usually in anticipation of a start target). Instances were identified where the Oakey units started to generate despite a 0 MW dispatch target.
- 4. **generating through a stop target while rebidding to ensure future targets.** Instances were identified where one of the Oakey units was generating and given an instruction to stop generating by AEMO. Instead of shutting down, the unit continued to generate and ERM Power made a rebid to ensure the unit would be receive a positive dispatch instruction later in the trading interval.

ERM Power acknowledged that it had focused its compliance approach on AEMO's non-conformance process and did not have in place adequate procedures or processes. ERM Power proactively implemented revised processes, systems and procedures to improve compliance by:

- implementing new automated systems for Oakey to reduce response times to AEMO dispatch instructions to start generating
- changing alert systems notifying traders of targets and reinforcing with traders the importance of following dispatch instructions and prompt attention to dispatch instructions,
- improved internal monitoring and reporting of compliance with dispatch instructions.

In determining our enforcement approach we took into account ERM Power's cooperation and the actions it had undertaken in response to our compliance review. This was considered against the numerous instances of non-compliance identified during the nine month period. On balance, we considered it was appropriate to issue two infringement notices for the two instances of non-compliance:

- one dispatch interval where an Oakey generating unit came online and started to generate one dispatch interval earlier than instructed by AEMO, and
- two dispatch intervals where an Oakey generating unit continued to generate despite receiving instructions to stop from AEMO. The trader chose not to comply, keeping the unit on in anticipation of future instructions to generate once a rebid came into effect.

-

A start target refers to a dispatch instruction to generate a specified MW value when the unit had not generated in the previous dispatch interval.

ERM Power paid penalties of \$40,000 in May 2016.

Additionally, ERM Power also agreed to provide monthly reports of its compliance with dispatch instructions for a six month period. Since ERM Power has begun to implement revised processes, systems and procedures there has been a substantial improvement in its compliance with dispatch instructions. This reinforces the importance of having good processes, systems and procedures to monitor and ensure compliance with dispatch instructions.

2.1.4 Identified non-compliance with dispatch instructions

Consistent with our Statement of Approach, we encourage participants to monitor their compliance with dispatch instructions and to raise any concerns with the AER. One participant experienced several instances of non-compliance with dispatch instructions by two units during March, April and May 2016. These deviations were of varying magnitude and were typically over a single or two consecutive dispatch intervals.

The participant identified that several of the deviations related to communication issues between it, the registered participant responsible for compliance with the Electricity Rules and bidding the power station into the market, and the third party operating the power station. Effective communication is critical as:

- the unit operator does not have access to dispatch targets and relies on the registered participant to communicate when each unit should be started; and
- the units are required to operate in certain circumstances.

As highlighted above, clear and timely communication between traders and unit operators, underpinned by proper systems and processes, can be key in achieving compliance. It is even more crucial in the situation where third parties are involved. Regardless of the trading arrangements in place, it is the ultimately the responsibility of participants to ensure that they have systems and processes to achieve compliance.

In response to the AER's initial enquiries, the registered participant proactively implemented several measures:

- re-evaluating how the participant structured and monitored the units' offers
- recalibrating internal alert systems monitoring deviations from targets
- improvement of the quality and frequency of the communication with the unit operator, and
- the commencement of an upgrade of the unit operator's systems to allow the operator to access and immediately respond to a dispatch instruction to start a generating unit.

The registered participant also agreed to monthly reporting over six months from 1 June 2016. As part of this arrangement, the participant will report on the causes of instances of non-compliance and any remedial action undertaken in response. We expect compliance to improve over the course of the six month reporting obligation. If we continue to have concerns after that time, we will consider extending or refining the reporting obligation, or if warranted, consider other enforcement options.

2.2 Rebidding

Scheduled generators and market participants operating in the NEM submit offers and bids for each half hour trading interval. The offers and bids include available capacity for up to 10 price bands, and can be varied through rebidding.¹⁶

According to the 'three stage process' introduced in late 2010 (updated in 2012),¹⁷ we will consider issuing an infringement notice if we issue three notifications within a six month period to generators who submit offer, bid and/or rebid information that does not meet the requirements of the Electricity Rules. The warning count for a participant is set to zero after six months of the first warning being issued.

As shown below in Figure 2, the number of rebids automatically triggered as requiring initial examination (indicated by the blue area) has fallen markedly since 2011.

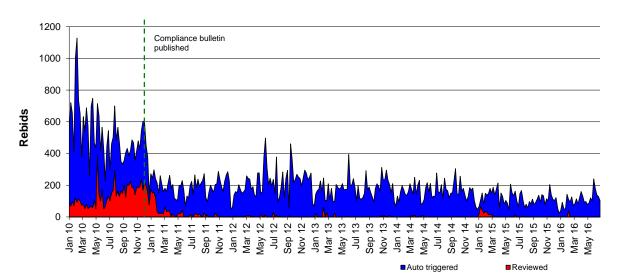


Figure 2: Rebids auto-triggered and reviewed per week (adjusted¹⁸)

This quarter we issued one initial warning in relation to a participant making a rebid without providing a time adduced in the rebid reason and one participant had their warning count reset to zero. We received 13 self-reporting notices from participants regarding errors in their rebids during the quarter which we took no further action on.

Market participants must provide to AEMO, at the same time as a rebid is made, a brief, verifiable and specific reason for the rebid, plus the time at which the reason for the rebid occurred. Equivalent requirements apply where AEMO is advised, under clause 3.8.19 of the Electricity Rules, that a unit, service or load is inflexible. Clause 3.8.22A of the Electricity Rules requires that dispatch offers, dispatch bids and rebids are made in 'good faith'.

In June 2012, we published an updated Compliance Bulletin No. 3 to make it clear that, for the purposes of administering the three stage process and issuing warnings, we will rely on the cumulative count of non-compliant bids for all generating units under the same portfolio. In other words, where a parent company employs a common trading team for the bidding of multiple generating units in its portfolio, irrespective of whether these generators are different registered participants, we will count any non-compliant bids by that trading team together.

There was a significant increase in automatically triggered rebids from August to November 2014 when one participant's automated bidding system submitted rebids without including a time adduced which was subsequently corrected. This has been detailed in a previous QCR. Figure 2 has been adjusted by removing the erroneous rebids.

2.3 Targeted compliance review - interruptible load

Targeted compliance reviews form an important part of our monitoring program. The reviews explore participants' compliance practices and aim to improve stakeholder understanding of obligations. We will generally choose the obligation based on our risk assessment of the Electricity Rules, whereby obligations identified as having a medium to high risk and impact will be selected for review. We also take into account previous industry performance with respect to the obligation.

This quarter, we conducted a review of clause 4.3.5 of the Electricity Rules (which interests Market Customers, such as AGL, EnergyAustralia and Origin Energy) and a parallel review of clause 4.3.4 of the Electricity Rules (which instead interests Network Service Providers (NSPs) such as Ausgrid, CitiPower/Powercor, Energex, Ergon Energy, SA Power Networks and TasNetworks).

Clause 4.3.4(b) requires NSPs to use reasonable endeavours to ensure that interruptible loads are provided as specified in clause 4.3.5 and clause S5.1.10 of schedule 5.1 (including without limitation, through the inclusion of appropriate provisions in connection agreements). Schedule 5.1.10 requires sufficient load to be available to AEMO to enable the maintenance of power system security (including frequency deviations and voltage collapse associated with multiple contingency events), provision of loading shedding facilities, application of equipment settings and the existence of loading shedding agreements between transmission and distribution businesses.

Clause 4.3.5(a) requires all Market Customers with expected peak demands at connection points in excess of 10 MW, to provide automatic interruptible load of the type described in clause S5.1.10 of schedule 5.1. The automatic interruptible load must be a minimum of 60% of their expected demand, or such other minimum interruptible load level as may be periodically determined by the Reliability Panel, to be progressively automatically disconnected following the occurrence of a power system under-frequency condition described in the power system security standards."

The prompt for this review was the increasing penetration of, especially, widely distributed photovoltaic (PV) solar generation across Australia, and whether this phenomenon was affecting the composition of the mandated minimum 60% of expected demand (or such other mandated minimum) to be provided as automatic interruptible load.

The responses received in relation to clause 4.3.5, suggest that large retailers (in their capacity as Market Customers) manage their compliance obligation by stipulating, in their supply contracts with their customers, that it is the customers and relevant NSPs that are responsible for provision of interruptible loads pursuant to their network connection agreements.

In so far as NSPs are concerned, firstly, all of the participants advised that they were unaware of any instances in the last 3 years or in the coming 3 years, where their obligations were not or would not be met. The responses received otherwise highlighted various jurisdictional coordination, review practices (e.g. every three years involving the Queensland transmission and distribution businesses), particular network characteristics (i.e. Tasmania because of its lower voltage levels at the boundary between transmission and distribution,

relative to other NEM regions), as well as differing operational arrangements and compliance understanding.

Automatic under-frequency load shedding is part of AEMO managing the power system and system security and could adversely impact NEM businesses and consumers financially if poorly implemented. Given the importance of this in the current environment where technology is changing and the compliance observations, the AER has decided to coordinate a forum involving all relevant NSPs and AEMO to facilitate a consistent approach to compliance in this area and to enable AEMO to highlight its current and upcoming reviews of regional load shedding arrangements.

2.4 Demand side participation information guidelines delay

In March 2015, the Australian Energy Market Commission (AEMC) released a determination to introduce new obligations for participants to provide AEMO with information on demand side participation for the purposes of informing AEMO's electricity load forecasts. As part of the transitional arrangements, AEMO is obligated to have in place the first demand side participation information guidelines by 26 September 2016. These guidelines are to be developed in consultation with stakeholders and to include a minimum three month transition period between publication and the date when the guidelines commence.

In June, AEMO notified the AER that it would be unable to publish the required guidelines by 26 September on the basis of other competing high profile projects. Results of AEMO consultation with participants indicated no concern with AEMO's proposed delay nor negative impact on individual businesses. Given current AEMO processes to request relevant information are labour and time intensive, and will require participants to devise new internal processes in order to provide information on annual basis, AEMO considers thorough consultation on the guidelines is required. In light of this, we exercised our discretion not to take action against AEMO for non-compliance with its obligation to publish the first demand side participation information guidelines in September. This was conditional on AEMO advising the AER of any material deviations from its consultation timeframe. AEMO has advised it will commence pre-consultation on the guidelines in quarter three and publish the guidelines by no later than 31 May 2017.

2.5 Jurisdictional derogations

Chapter 9 derogations exempt Victorian smelter traders, New South Wales power traders and Queensland nominated generators (for the purposes of exempted generator agreements) from complying with the Electricity Rules to the extent there exists:

- any inconsistency between the Rules and a contractual requirement under the relevant agreement between the government and other entities
- any other specified exemption in the jurisdictional derogations.

Relevant participants must notify the AER at <u>AERinquiry@aer.gov.au</u> of any act or omission which partly or wholly constitutes non-compliance with the Electricity Rules.

No non-compliances were reported this quarter.