Quarterly Compliance Report:

National Electricity and Gas Laws

1 October – 31 December 2017

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: AERinquiry@aer.gov.au
AER Reference: 63547-D18/26392

Contents

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 emphasises the importance of compliance to the efficient operation of gas and electricity markets for the benefit of consumers, market participants and large energy users.

The AER reports on the outcomes of its monitoring, enforcement and investigation activities. Through the publication of this information we seek to educate and inform consumers, businesses and other stakeholders by highlighting compliance issues and/or raising awareness of market participant obligations. This reporting promotes energy market transparency and good industry practice.

This QCR covers the period 1 October 2017 to 31 December 2017 (the December 2017 quarter). It includes reporting on the following matters in gas and electricity markets.

Gas

Gas Bulletin Board

The AER monitors participant compliance with data reporting requirements for the Natural Gas Services Bulletin Board (the Bulletin Board). This QCR provides an overview of current Bulletin Board reporting arrangements and highlights the new arrangements that will take effect in September 2018. We emphasise that civil penalties will apply to all reporting arrangements and flag our intentions to consult with participants, ahead of the changes, to assess their preparedness.

We also provide an update on one Bulletin Board compliance matter. As we reported in our September 2017 QCR, Santos submitted a data restatement for Moomba LBD Storage, which revised the facility's storage level down by 10 petajoules. During the December 2017 quarter, we sought a restatement of historical data for Moomba LBD, such that storage data more accurately reflects activity prior to September 2017.

Sydney Demand Forecasting Errors

An update is provided on the AER's targeted compliance review of pronounced incidences of over forecast demand in the Sydney Short Term Trading Market (STTM) across 2016 and 2017. This was an AER undertaking in 2017 and we have concluded our review.

We report a diminishing over forecasting bias in Sydney, across the latter half of 2017, including a significant turnaround in the performance of AGL Energy, which, in recent years, exhibited the highest incidence of demand forecasting errors among Sydney hub retailers.

Longford Gas Plant scheduling

We have concluded our 2017 targeted compliance review of scheduling at Victoria's Longford Gas Plant. This followed our observations of increased frequency of constraints at the Longford injection point since 2015. The constraints relate to both planned and unplanned outages and are strategically important given substantial reliance on Longford for supply to the Victorian and Sydney markets.

We find there has been reduced incidences of constraints at Longford during the latter half of 2017 and highlight impending changes in 2018 to Gas Bulletin Board reporting requirements for gas production facilities. The Bulletin Board changes will add further transparency to gas production activity, including more timely market advice on the occurrence and duration of plant outages.

We also highlight that the AER investigated and published findings on one Significant Price Variation (SPV) in the Victorian market during the December quarter. The SPV pertained to high ancillary service payments following an outage at the Longford Gas Plant.

Retail Market Procedures

We have updated our standing item on non-compliances with the Retail Market Procedures. The Australian Energy Market Operator (AEMO) self-reported several immaterial breaches for the December quarter. There were no breaches by market participants reported.

Electricity

High price events in the NEM

We provide information tables on the AER's reporting on high price events in the National Electricity Market (NEM). During the 2017 December quarter, we published reports on high prices in South Australia's Frequency Control Ancillary Services (FCAS) market. The FCAS prices occurred on four days during the August to October 2017 period.

At 23 February 2018, the AER also had reports pending in relation to high wholesale market prices on three days in both South Australia and Victoria, during the 2018 January–February period.

AEMO no action requests

We outline three AEMO requests to the AER for no action. These were received in late 2017 and concern:

- The projected assessment of system adequacy (MT PASA) process. This is a forward planning tool that addresses expected availability of electricity supply. AEMO is currently redeveloping the MT PASA process to provide more accurate assessments of power system reliability. It has submitted to the AER a request for no action in relation to Electricity Rule obligations that it will be unable to meet under its redeveloped MT PASA processes, pending changes to the Electricity Rules.

- Wind farm applications to connect to the 220kV transmission network in northwest Victoria. Currently, there are limitations around the capacity of the communication system to accommodate new connections. AusNet Services and AEMO have proposed an interim solution to enable wind farms to connect.

- The Electricity Rules require AEMO to publish, each year, a 20-year strategic planning outlook known as the National Transmission Network Development Plan (NTNDP). Following the recommendations of the Finkel Review, the CoAG Energy Council has endorsed the development of an integrated system plan that will replace the NTNDP. This work has commenced and AEMO has submitted to the AER a no action request in relation to its current Electricity Rule requirement to publish the NTNDP.

Participant obligations regarding demand side participation

We remind participants that (following changes in 2015) the Electricity Rules require registered participants to provide demand side participation information to AEMO. AEMO has developed a new data portal to receive this information. We encourage participants to ensure they are ready to submit their demand side participation information to AEMO in April 2018.

Commencement of Power of Choice Rule Changes – 1 December 2017

Included is an update on metering contestability, which commenced in the Australian Capital Territory, New South Wales, Queensland, Tasmania and South Australia on

1 December 2017. We acknowledge that implementation issues have occurred but expect participants to resolve them as soon as possible. We advise that we will be requesting reports from AEMO to ensure that all Financially Responsible Market Participants (FRMPs) have achieved compliance in relation to the appointment of Metering Coordinators.

We also raise concerns relating to transitional arrangements that require electricity distributors (that are responsible for type 5 or 6 metering installations) to provide terms and conditions on which they agree to act as Metering Coordinator. We expect that where FRMPs seek amendments to those agreements, distributors will negotiate in good faith and come to a fair and reasonable outcome for both parties.

Further to our 2017 September QCR, we again remind participants that the transfer of responsibilities, under the ‘Power of Choice’ rule changes, from Responsible Persons (RPs) to Metering Coordinators, includes responsibility for instrument transformer testing. We stress that all outgoing RPs should use their best endeavours to ensure that Metering Coordinators receive comprehensive and up-to-date information in relation to sites for which they are responsible.

Targeted Compliance Review: MSATS Procedures

In the AER’s March 2017 QCR, we stated our intention to closely monitor compliance with the Market Settlement and Transfer Solution (MSATS) Procedures. In December 2017, we commenced a targeted compliance review. We outline our approach and area of focus in this QCR.

Generator Rebidding

We include an update to our standing item on generator rebidding in the National Electricity Market (NEM). We provide analysis on rebidding activity, including the notices that we have received from participants regarding rebidding errors.

Background

The AER is responsible for monitoring, investigating and enforcing compliance with the obligations under the National Electricity Law, National Gas Law, National Energy Retail Law and the respective rules and regulations governing Australia's wholesale energy markets, including those applying to network service providers (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 participants[1] and other persons; and
- 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; and
- 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 each obligation under the Electricity and Gas Rules to identify appropriate focus areas and monitoring/compliance mechanisms. The risk assessment involves the analysis and ranking of each obligation to determine its compliance risk, based on the probability of a breach and its impact on energy market participants. Our monitoring/compliance 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; and
- transparency (subject to confidentiality requirements).

In carrying out our enforcement actions we seek to demonstrate proportionality and procedural fairness (where required).

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

2 The Statement of Approach is published on the AER's website. 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.

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. Whilst businesses may not be required to have a compliance framework in place it is good governance to do so.

1 Gas

We are responsible for monitoring, investigating and enforcing compliance with the Gas Law and Rules, including but not limited to the Short Term Trading Market (STTM), the Bulletin Board, Victoria's Declared Wholesale Gas Market (DWGM) and the Gas Supply Hubs (GSH).

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

1.1 Natural Gas Services Bulletin Board

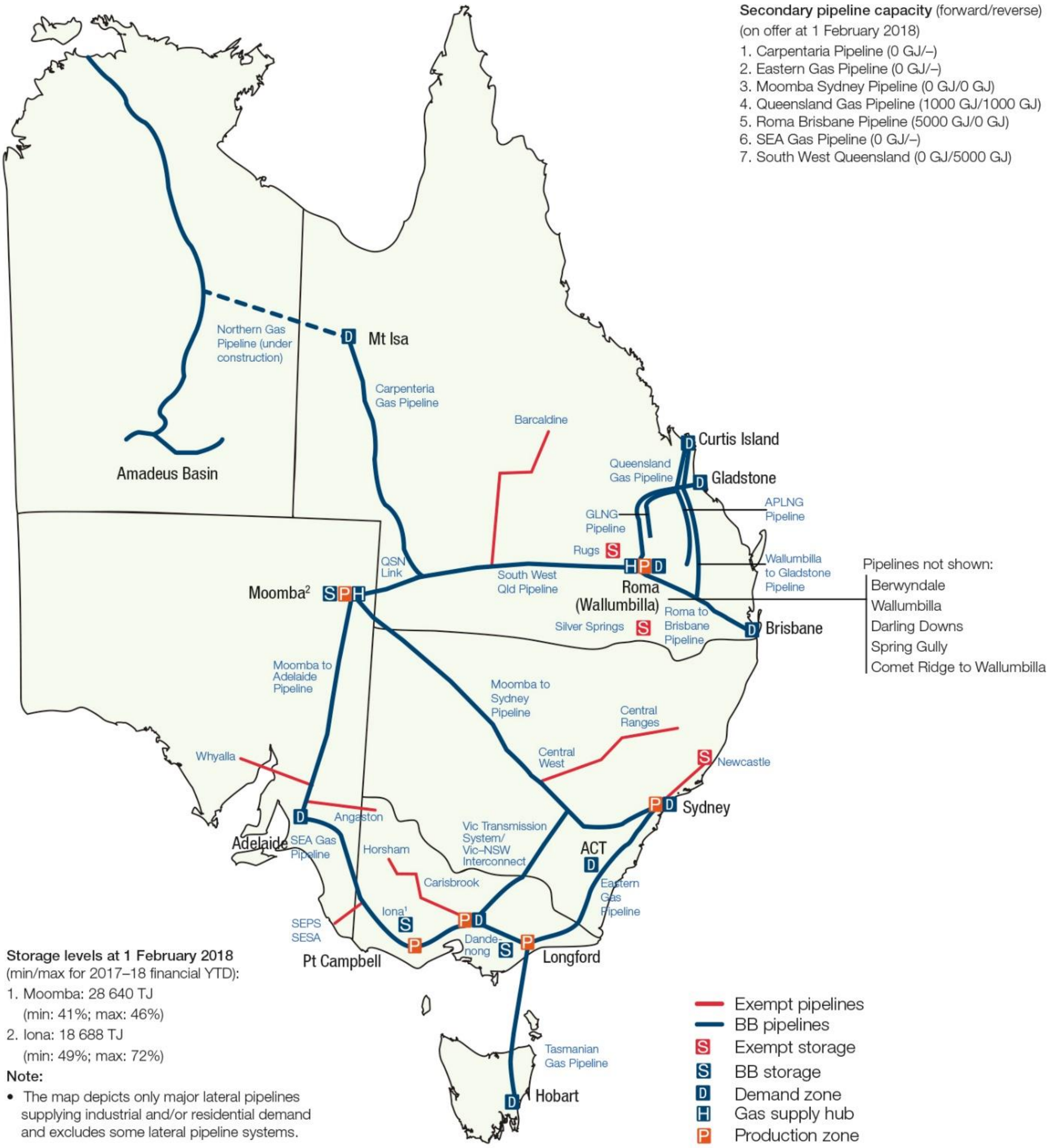
1.1.1 Bulletin Board Reporting Arrangements

The Natural Gas Services Bulletin Board (Bulletin Board) website depicts the daily operation of Australia's interconnected east coast gas markets. Under the National Gas Law, AEMO is responsible for collecting and collating information in relation to natural gas services and for publishing information on the Bulletin Board. Persons responsible for that information must report it to AEMO in accordance with the National Gas Rules.

The AER is responsible for monitoring compliance with Bulletin Board requirements under the Gas Law and Gas Rules (and Regulations). This includes monitoring the reporting of information by Bulletin Board facility operators.

Figure 1 below depicts some key data reported on the Bulletin Board as at 1 February 2018. Current reporting requirements are based on a zonal model that shows gas flows between production and demand zones. Under this model, exemptions may apply to pipelines that do not transport gas between zones and to storage facilities and production facilities that are not directly connected to these pipelines. This arrangement will cease to apply from 30 September 2018. Amendments to Part 18 of the Gas Rules will take effect at this time, removing the zonal model and requiring east coast gas producers, pipelines and storage providers to submit information on the basis of a reporting threshold (a greater than 10 TJ nameplate rating instead of 20 TJ).

Figure 1: Natural Gas Services Bulletin Board (1 February 2018)



1.1.2 Bulletin Board reform

Bulletin Board reforms are set to improve market transparency

Amendments to Part 18 of the Gas Rules were published in September 2017 and are scheduled to take effect from 30 September 2018.[3]

3 CoAG Energy Council Australian Gas Market Vision (December 2014): http://www.coagenergycouncil.gov.au/publications/coag-energy-council-australian-gas-market-vision
National Gas Rule Change Request and Proposal, Improvements to the Natural Gas Bulletin Board, April 2017.p.6:

Under the new arrangements, reporting will be based on:

- gas receipts and deliveries by injection point and receipt point, which will capture more flows than exist under current "zonal" reporting whilst also capturing production facilities and storage facilities that were previously located outside zones.
- a reduced minimum reporting threshold, from 20 TJ/d to 10 TJ/d for pipeline flows, production and storage

Examples of facilities that are currently exempt from reporting on the Bulletin Board include two large underground storage facilities in South East Queensland (Roma Underground Gas Storage and Silver Springs Gas Storage). Exempted lateral pipelines include the Whyalla Gas Pipeline, which is part of the Moomba Adelaide Pipeline System and draws significant gas volumes from the Moomba Adelaide Pipeline partway along its length. All these facilities will soon report, aiding transparency.

Pipeline developments and Bulletin Board reforms extend coverage to the Northern Territory

An important 2018 Bulletin Board development is the inclusion of gas facilities in the Northern Territory. The Northern Gas Pipeline (linking Tennant Creek to Mt Isa) is under construction and is scheduled to commence shipping to east coast markets in late 2018. The connection of the Northern Territory gas pipeline system to the east coast gas grid will impose Bulletin Board reporting requirements on NT gas facilities from this date.

Civil penalty provisions

Market participants should also be aware of the strengthening of the compliance framework through expanded civil penalty provisions in the Gas Rules. Obligations requiring facility operators to register for the Bulletin Board will be subject to civil penalty. Information reporting obligations will also be subject to civil penalty through the introduction of a Bulletin Board information standard.

The Bulletin Board information standard promotes compliance with the information reporting obligations in Part 18 of the Gas Rules and AEMO's Bulletin Board Procedures. Registered facilities will be required to submit information and updates to that information, and to maintain equipment from which that information is derived, in accordance with the information standard. That is, in accordance with:

> …the practices, methods and acts that would reasonably be expected from an experienced and competent person engaged in the ownership, operation or control of a BB facility in Australia of that type acting with all the due skill, diligence, prudence and foresight and in compliance with all applicable legislation (including these rules), authorisations and industry codes of practice[4].

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http://www.aemc.gov.au/Rule-Changes/Improvements-to-Natural-Gas-Bulletin-Board

4 Gas Rule 165(2), National Gas Amendment (Improvements to Natural Gas Bulletin Board, Rule 2017 No.3: http://www.aemc.gov.au/Rule-Changes/Improvements-to-Natural-Gas-Bulletin-Board

The Bulletin Board information standard will apply to the accuracy and timeliness of data submission. The requirement to comply with the standard will be both a conduct and civil penalty provision.

AER upcoming engagement with new and current bulletin board participants

Gas market participants should be aware of the impending changes to their reporting obligations. They should also be aware of AEMO's redrafting of the Bulletin Board Procedures and will have opportunity to engage with AEMO in early 2018, as part of its consultation processes.

The AER will be writing to Bulletin Board participants well in advance of the commencement of the new reporting arrangements to ensure readiness to report. Our focus will be on reporting thresholds and industry awareness of the new reporting requirements, which include:

- a reduced reporting threshold for transmission pipelines, productions facilities and storage facilities to a minimum of 10 TJ/day (reduced from the current 20TJ/day);
- more detailed reporting from production and compression facilities, including daily nominations, intra-day renominations and short term forecast nominations (D+1 to D+6 daily);
- a requirement on pipeline operators to submit daily disaggregated receipt/delivery point data; and
- reporting obligations for regional pipelines and facilities attached to distribution pipelines.

1.1.3 Bulletin Board compliance matters

Moomba LDB Storage

In our September 2017 Quarterly Compliance Report, we reported that, on 18 September 2017, Santos restated the storage volume at its Moomba Lower Daralingie Beds (LBD). Santos submitted revised data to the Bulletin Board, reducing the volume from 39 887 TJ to 29 850 TJ.

The AER contacted both Santos and AEMO to establish the reasons for the data anomaly. We also investigated the potential for revising the historical data, such that the timeline of Moomba storage volumes, prior to 18 September 2017, more accurately reflects receipts and withdrawals leading up to the storage volume restatement.

Santos subsequently committed to submitting revised historical storage data to the Bulletin Board for Moomba LDB. On 8 December 2017, AEMO informed participants of the revision.

We again stress that the Bulletin Board informs commercial, regulatory and policy decisions and observers should be able to consult the Bulletin Board with confidence that its data is reliable. From 30 September 2018, reporting will be subject to civil penalties under the new Bulletin Board information standard.

1.2 Short Term Trading Market

1.2.1 Sydney demand forecasting errors

Demand forecasts submitted by trading participants are the primary input for AEMO scheduling and form the basis for calculating ex-ante prices in the STTM. Poor demand forecasting leads to inefficiencies in dispatch whereby the ex-ante price is set on the basis of a higher or lower quantity of gas than is required. It can lead to higher market operator service (MOS) payments in the STTM. Large amounts of gas are required to address the imbalance, adding to participant business costs. These costs are, ultimately, passed to consumers.

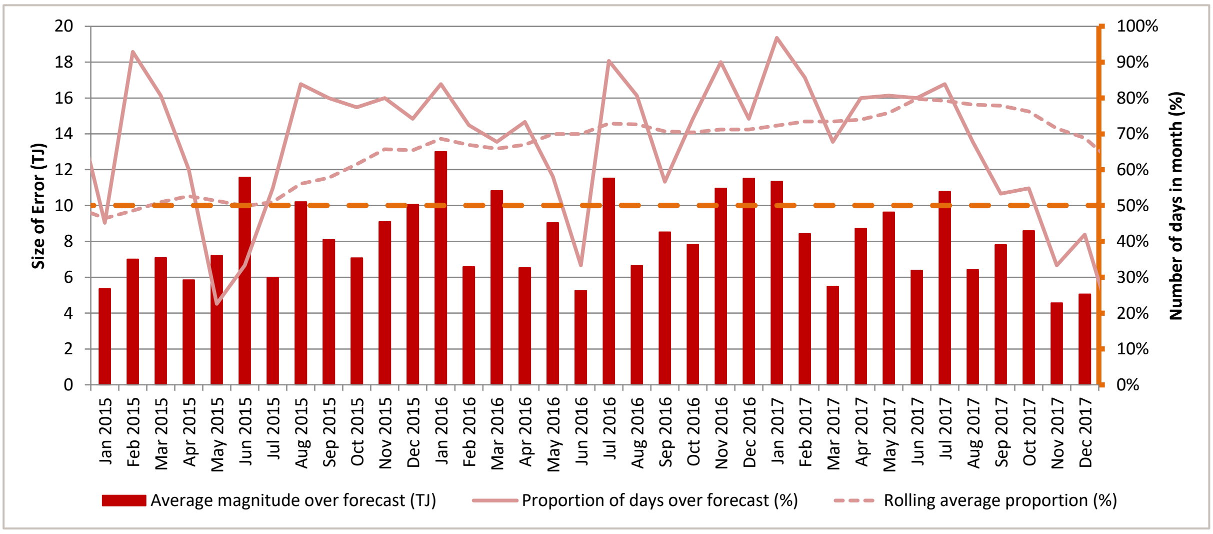
Gas Rule 410 requires each STTM trading participant who expects to withdraw quantities of natural gas from a hub on a gas day to submit, in good faith, ex ante bids or price taker bids (and any revisions to those bids) that reflect the participant's best estimate of the volume it expects to withdraw that day. These bids, in effect, reflect each participant's demand forecast.

While deviations between forecast and actual demand are expected, the AER monitors gas wholesale markets for persistent forecasting bias. We also monitor MOS gas volumes and offers, noting that the costs associated with any bias will be influenced by the size of the deviation and the offer price.

Over forecasting at the Sydney hub

The AER has been monitoring a clear trend in high incidences of over forecast demand in the Sydney hub since late 2014. **Figure 2** shows the persistence of this trend across the years 2015 - 2017. The incidence of over forecast demand was particularly high during the 2016/17 summer period, nearing 100 per cent of days in January 2017.

Figure 2: Sydney Hub forecasting performance metric (since January 2015)



During the 2017 calendar year, the AER undertook a targeted compliance review of demand forecasting in the Sydney hub. We met with Sydney hub participants to better understand their forecasting methodologies and the causes of demand forecasting errors. Sydney hub participants communicated their efforts to improve the accuracy of their forecasting by employing new models and improving their understanding of the usage patterns of their customers. This included AGL Energy, the largest contributor to the period of over forecasting identified at **Figure 2**.

Our September 2017 QCR reported that demand over forecasting persisted at high levels through the first six months of 2017, before reducing to 53 per cent of days (based on all hub participants) in September. This decline continued through the December quarter, shifting to a greater incidence of under forecast demand. As **Figure 2** shows, the December quarter was a period of bias toward under forecast demand at the Sydney hub (based on preliminary allocations data). Demand was over forecast on 43 per cent of days across the period, with under forecasts occurring on 67 per cent of days

This recent shift toward an under forecasting bias will elicit the AER's concern if it persists over a longer period. In the context of the long over forecasting history identified at **Figure 2**, the reduced incidence of over forecasting, during the latter half of 2017, is encouraging. The 12 month rolling average indicator of over-forecasting continues to trend down towards a less biased result.

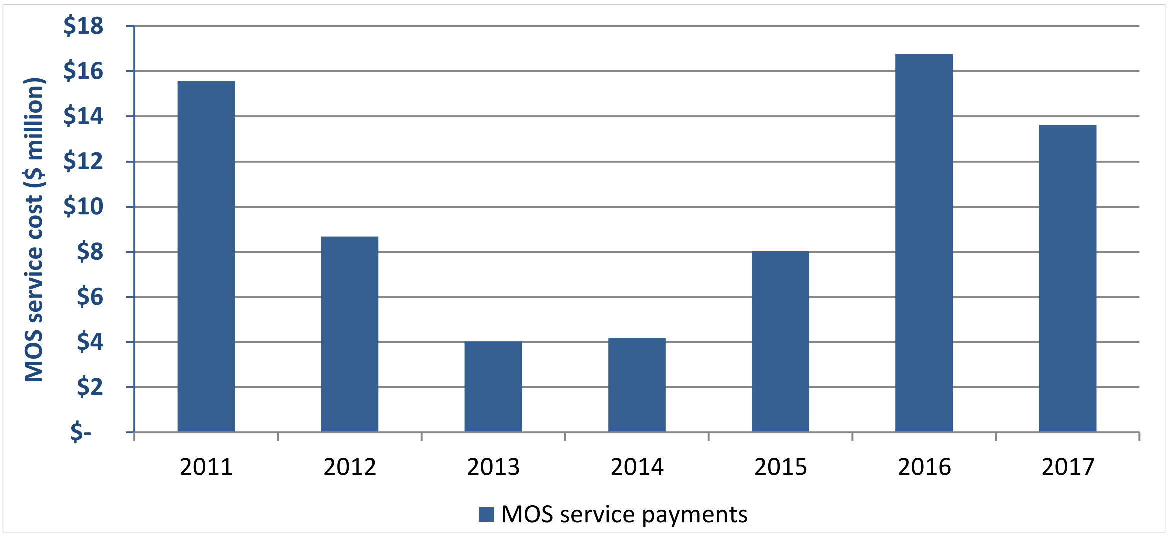
A key factor in this change is the improved performance of AGL Energy. After over forecasting demand on 86 per cent of days during the first six months of 2017, AGL's incidence of over forecast demand dropped to 53 per cent of days during the September quarter and 27 per cent of days during the December quarter. Preliminary data, for the month of January 2018, shows this trending lower at 19 per cent of days. The AER will be monitoring AGL's performance to ensure that this does not reflect a transition from an over forecasting to an under forecasting bias.

Given the recent correction to the long term over forecasting trend at the Sydney hub, the AER has concluded its targeted compliance review of demand forecasting at the Sydney hub. We will continue our monitoring of the STTM to ensure that bids by retailers accurately reflect their demand forecasts. We will report on any new or re-emerging demand forecasting bias in future QCRs, if it arises.

Sydney MOS service costs

In our September QCR, we reported on the 2017 trend toward record MOS service costs at the Sydney hub. We also reported that, along with improved demand forecasting accuracy, the rate of month-to-month growth in MOS service costs had slowed. This trend continued through the December quarter. After $4.4 million was added to Sydney MOS service costs for the September quarter, a much lower $1.7 million in MOS service costs were added for the December quarter. This has ensured that MOS service costs were lower in 2017 than 2016, arresting the recent year-on-year growth in service costs shown at **Figure 3**.

Figure 3: Sydney MOS service costs since 2010



In our September QCR, we also reported on a high incidence of counteracting MOS at the Sydney hub across the 2015–17 winter periods. This type of MOS results from a requirement for balancing gas, regardless of the accuracy of demand forecasts. In such cases, hub demand is not met by pipelines that individually flow at their scheduled volumes. Instead, pipeline flows collectively match forecast hub demand, with some pipelines injecting either more or less than expected. The balancing gas required on each pipeline adds to MOS service costs.

Our analysis of the second half of 2017 shows that, together with the improved demand forecasting performance, the incidence of counteracting MOS in the Sydney STTM declined significantly. This has, to some extent, alleviated concerns that counteracting MOS was an emerging problem in the Sydney hub.

1.3 Victorian Declared Wholesale Market

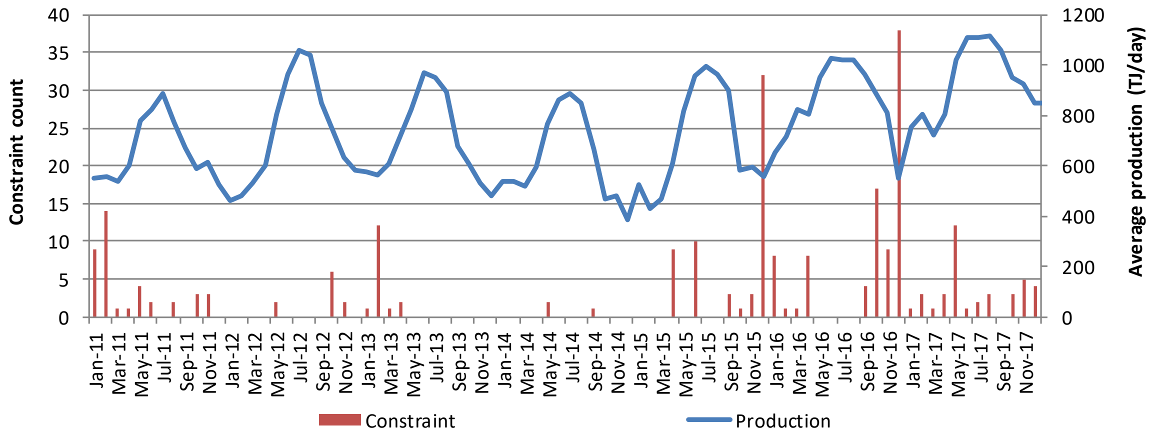
1.3.1 Longford Gas Plant

During the December quarter, we concluded our targeted compliance review of gas market scheduling at the Longford injection point. The AER commenced this review in early 2017, noting that Longford injections can impact significantly on East Coast Gas Markets. The Longford Gas Plant is the majority supplier of gas to Victoria's DWGM and is an important supply source for Sydney's STTM.

In the AER's September 2017 QCR, we highlighted the increased incidence of constraints, called Supply Demand Point Constraints (SDPCs), in the Victorian Transmission System at the Longford Injection point. As shown by the red columns (number of constraints) in **Figure 4**, we identified this as a growing trend, noting the higher incidence of SDPCs since the beginning of 2015[5].

5 The constraint count represents the total number of significant constraints, for the month, that limit injections from the facility.

Figure 4: Longford SDPCs and production



As also shown at **Figure 4**, this trend did not continue during the last two quarters of 2017, with the daily SDPC count remaining comparatively low across the six months. Notably, the high incidence count for the months of December 2015 and December 2016 was not repeated in December 2017. This may relate to greater summer reliance on gas from Longford for electricity generation following the March 2017 closure of Hazelwood Power Station. SDPCs can result from planned or unplanned maintenance and, historically, the Longford plant undergoes maintenance outside of Victoria's winter demand peak. Victoria's increased summer reliance on Longford gas for electricity generation may reduce the flexibility of timing options for planned Longford maintenance outside of winter.

Despite concluding this targeted compliance review, the AER routinely monitors the activity of the Longford Gas Plant and will continue to do so. This includes analysing the market impacts of scheduling changes at Longford and the manner in which these changes are communicated to the market. On 29 January 2018, we published a report into high ancillary payments in the DWGM. The payments were associated with a supply outage at Longford and our report is highlighted at 1.3.3.

Further to the communication of Longford scheduling changes, market participants have noted, to the AER, inconsistencies in approaches to rebidding. This occurs on days when SDPCs are imposed at Longford, with some participants rebidding volumes in line with SDPCs and others leaving volumes unchanged. This suggests a lack of transparency for participants and we again emphasise the improvements to Gas Bulletin Board reporting that will be implemented in 2018. As outlined below, these improvements will impose new reporting requirements on production facilities, including the reporting of material intra-day changes to production capacity.

New Bulletin Board reporting obligations for production facilities

A new amendment to Part 18 of the Gas Rules will take effect from 30 September 2018. An important component of this reform is the requirement for more detailed Bulletin Board reporting from production facilities. This includes reporting:

- daily nominations;

- intra-day renominations;
- forecast nominations (D+1 to D+6); and
- material intra-day changes to capacity.

This new Bulletin Board information should bring added transparency to the activity of the Longford Gas Plant and other east coast gas production facilities. The new arrangements will require production facilities to report aggregated injection nominations for the gas day (to be published after the start of the gas day) and forecast injections (nominations) for the week ahead (D+1 to D+6).

Importantly, this will provide publicly-available information on changes to injection activity. Production facilities will be required to submit updated data where there is material change to the information previously provided. This includes updates to daily and forecast nominations and updates to short term (6-day) capacity outlooks. Production facilities are already required to provide capacity outlooks but will be required to submit updates if there is a material change to those outlooks.

These measures should increase transparency around planned and unplanned outages at production facilities, including around the frequency of changes to nominated and forecast injection activity. Where there is material change to this activity, production facilities will be required to update this information as soon as is practicable, in accordance with a new information standard in the Gas Rules. Requirements to report to the Bulletin Board, in accordance with the information standard, will be civil penalty provisions.

1.3.3 Significant price variation on 30 November 2017

On 30 November 2017, there was an unplanned outage at the Longford Gas Plant. Higher priced gas was required to fill potential shortfalls, leading to $265 929 in ancillary payments. This exceeded the AER's reporting threshold of $250 000 for ancillary service payments, triggering an investigation and publication of a Significant Price Variation (SPV) report. The report is published on the AER's website[6].

1.4 Retail Market Procedures

Under the Gas Law, AEMO has the ability to make procedures regulating a retail gas market (Retail Market Procedures).[7] Queensland, Victoria, New South Wales, ACT and South Australia each have their own Retail Market Procedures. The procedures impose a number of obligations on participants including in relation to the provision of metering data, the Gas Interface Protocol[8], customer transfer processes and settlements. Section 91MB of the Gas Law provides that AEMO and each person to whom the Retail Market Procedures (Procedures) are applicable must comply with the Procedures.

6 See https://www.aer.gov.au/wholesale-markets/market-performance/significant-price-variation-report-30-november-2017-victorian-gas-market

7 See sections 91M and 91MB of the National Gas Law.

8 The Gas Interface Protocol governs the manner and form in which information is to be provided, notice given, notices or documents delivered and requests made as contemplated by the Retail Market Procedures (NSW/ACT).

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

If AEMO decides that the breach is immaterial, it must publish the reasons for its decision on its website. It must also provide a copy of its decision to the AER.

AEMO has published its compliance process for the Retail Market Procedures[9]. The publication outlines the criteria that AEMO uses to determine if apparent breaches of the Retail Market Procedures have occurred and whether these breaches are material or immaterial.

During the 2017 December quarter, AEMO did not report any breaches of the Retail Market Procedures by market participants. AEMO did, however, self-report immaterial breaches and provided the details of these breaches to the AER as required. AEMO also provided details of the corrective measures taken to address these breaches. The AER is satisfied with the materiality classification of the breaches and the corrective measures taken by AEMO in relation to the breaches.

AEMO reported the following immaterial breaches of the Retail Market Procedures during the 2017 December quarter:

- AEMO's non-compliance with the requirement to meet timely provision of Network Allocation Data (NAD) for the Queensland Gas Retail Market for the Short Term Trading Market (STTM) on 19 October and 12 November. On 19 October, the data was delayed by two hours and 6 minutes due to a system-related technical issue. On 19 October, data was delayed by 54 minutes when attempting to reset an account password while the account was locked out.

- AEMO's 23 November non-compliance with the South Australian Retail Market Procedures relating to the requirement to immediately notifying relevant parties of a pending transfer request. The 342 Transfer Confirmation Notification (TFR-CONF-NOTIF) transactions did not meet the transaction acknowledgement time of 270 minutes for medium priority transactions due to a number of services in the Gas Retail Market System (GRMS) not being activated when returning the South Australian GRMS to production after the completion of the South Australian GRMS industry disaster recovery test on 22 November 2017. Following this incident, AEMO has implemented an additional alert in South Australia's GRMS to proactively check if any of the services have been suspended as well as remind relevant team members of the appropriate procedures and processes to follow to ensure compliance.

- AEMO's 26 November non-compliance with the requirement to meet timely provision of the NAD for the Queensland Gas Retail Market for the STTM. The data was delayed by two minutes due to a process that was not sufficiently terminated during a scheduled Gas FRC

9 http://www.aemo.com.au/-/media/Files/PDF/0090-0014-pdf.pdf

site transfer[10]. AEMO noted that it will include additional validation to the site transfer procedure document to ensure that the process is terminated properly.

- AEMO's 27 November non-compliance with the requirement to meet timely provision of the NAD file for the NSW-ACT Gas Retail Market for the STTM. The data was delayed by two hours and 37 minutes due to missing configuration data required for the daily calculation run that generates the NAD file in the Gas Retail Market Business System (GRMBS).
- AEMO's 29 November non-compliance with the requirement to meet timely provision of the NAD file for the Queensland Gas Retail Market for the STTM. The data was delayed by 15 minutes due to a system-related technical issue.

10 The Full Retail Contestability Hub (FRC) is communication infrastructure operated by AEMO.

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 High Price Events

The AER must publish a report whenever the spot price for electricity exceeds $5000 per megawatt hour (MWh) and whenever the ancillary service price exceeds $5000 per megawatt for a sustained period.[11] These reports are available on our website.[12]

2.1.1 Reports published since 1 October 2017

Since 1 October 2017, we have reported on the following extreme price events. Each event involved sustained ancillary service prices in excess of $5000 per megawatt, namely high prices in South Australia's Frequency Control Ancillary Services (FCAS) market.

Figure 4: Reports published since 1 October 2017

	Event Date	High Price Period	Region	Market	Highest Price
1	28/08/2017	10:30 – 19:00	SA	FCAS	11 602
2	14/09/2017	9:00 – 16:30	SA	FCAS	11 509
3	13/10/2017	7:30 – 13:30	SA	FCAS	10 700
4	14/10/2017	6:30 – 9:00	SA	FCAS	9 500
5	24/10/2017	19:00 – 20:30	SA	FCAS	13 272

2.1.2 Reports pending

Currently, we are preparing reports in relation to high price events in the energy markets on the following days.

Figure 5: Reports to be published

	Event Date	High Price Period	Region	Market	Highest Price
1	18/01/2018	4:30 – 6:00	SA	Energy	14 167
2	18/01/2018	4:30 – 6:00	Vic	Energy	12 931

11 Under 3.13.7(d) of the Electricity Rules the AER must publish its report within 40 business days of the end of the week in which the spot price exceeded $5000/MWh in a trading interval or trading intervals. Whilst the AER must also publish a report whenever the ancillary service price exceeds $5000 per megawatt, there is no legislated timing on the publication of the ancillary service reports. However, we do endeavour to conduct our investigations as expeditiously as possible.

12 http://www.aer.gov.au/wholesale-markets/market-performance

	Event Date	High Price Period	Region	Market	Highest Price
3	19/01/2018	2:30, 3:00, 5:00, 6:00	SA	Energy	13 408
4	19/01/2018	2:30	Vic	Energy	10 152
5	7/02/2018	4:00	SA	Energy	8 001
6	7/02/2018	4:00	Vic	Energy	6 847

The AER endeavours to publish its $5000 per megawatt hour reports for electricity in a timely manner and in accordance with timeframes required by the Electricity Rules. We sometimes make full use of these timeframes to ensure that these reports are accurate, comprehensive and reflective of consultations with market participants.

2.2 AEMO requests for no action

The AER received three requests for no action from AEMO in late 2017.

2.2.1 Medium Term Projected Assessment of System Adequacy

The AER received a request for no action from AEMO on 28 September 2017 regarding the medium term projected assessment of system adequacy (MT PASA) process. A letter containing additional information was received on 15 January 2018 from AEMO.

MT PASA is used to assess supply and demand in the NEM in respect of periods up to 2 years in advance. It is a tool that assists Registered Participants in forward planning and making operational decisions and enables AEMO to identify and notify the market of potential reserve shortfalls; AEMO uses PASA outcomes to inform its decisions on whether it needs to intervene in the market to maintain reliability and/or power system security. AEMO currently has obligations under clauses 3.7.2(f)(5A) and 3.7.2(f)(5B) of the Electricity Rules relating to publishing the aggregate capacity and energy constraints relating to scheduled generating units in a region after allowing for the impact of network constraints

AEMO is close to finalising a two-year redevelopment project for MT PASA which will enable it to more accurately assess power system reliability against the Reliability Standard. AEMO advised us that, during the project to redevelop MT PASA, they utilised external expertise to recommend options for a more accurate assessment of supply reliability; published material based on the recommended options; and undertook stakeholder consultation. The new process utilises a probabilistic approach to accommodate the variations in intermittent generation and demand as a result of meteorological variations.

The probabilistic approach adopted in the redeveloped MT PASA process is largely compliant with the Electricity Rules. However, AEMO advised that it will not be possible to continue reporting all the information required under clauses 3.7.2(f)(5A) and 3.7.2(f)(5B) of the Electricity Rules, as it will no longer be possible to calculate an aggregate capacity for each region after allowing for network constraints. AEMO has submitted a rule change proposal to the Australian Energy Market Commission to amend the requirement to report information in the form currently required by clauses 3.7.2(f)(5A) and (5B) by removing the requirement to consider the impact of network constraints from these clauses.

On the basis of the information provided, we decided to take no further action in relation to this matter at this time.

2.2.2 Connection arrangements for wind farms in Northwest Victoria

On 22 November 2017, AEMO requested a no action letter from the AER in respect of communication systems that impact on line protection requirements of clause S5.1.9(d) of the Electricity Rules.

AEMO has received multiple connection applications to connect to the 220kV transmission network in northwest Victoria. A Regulatory Investment Test for Transmission (RIT-T)[13] is being undertaken by AEMO to investigate potential solutions to network limitations in the region, however several wind farm projects are scheduled to be commissioned in advance of any solution identified in the RIT-T being implemented.

An interim communication system arrangement has been proposed to enable the proposed wind farm projects to connect to the NEM. AEMO advised that the interim communication solution will be implemented if two or more of the proposed wind farm projects proceed, and a fully compliant solution will be completed by January 2020.

We consider that deferring the commissioning dates of the new entrant wind farms until after arrangements that are fully compliant with the Electricity Rules are in service would not be the best outcome in terms of the national electricity objective. On the basis of the information provided, we decided to take no further action in relation to this matter.

2.2.3 Decision not to publish the National Transmission Network Development Plan during the transition to an Integrated System Plan

On 23 November 2017, AEMO requested a no action letter from the AER regarding its requirement to publish a National Transmission Network Development Plan (NTNDP). AEMO is required under clause 5.20 of the Electricity Rules to publish an NTNDP by 31 December each year, for the following year.

The purpose of the NTNDP is to provide an independent, strategic transmission planning assessment for the NEM, with a 20-year outlook. It also serves as an input for Transmission Network Service Providers (TNSPs) on transmission investment required for inclusion in their Annual Planning Reports, assisting them to meet the requirements of the Electricity Rules to:

- conduct an annual planning review taking into account the most recent NTNDP and power system frequency risk review[14] and

[13] The purpose of a RIT-T is to identify the credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the market. Refer to clause 5.16 of the National Electricity Rules.

[14] Clause 5.12.1(b)(3) of the Electricity Rules.

- prepare their Annual Planning Reports which must, among other things, set out the manner in which the proposed augmentations and replacements of network assets relate to the most recent NTNDP, and the development strategies for current or potential national transmission flow paths that are specified in the NTNDP.[15]

However, the final report of the Finkel Review[16] recommended an alternative approach for the coordination of generation and transmission investment in the National Electricity Market (NEM). Recommendation 5.1 of the final report states that AEMO, supported by transmission network service providers (TNSPs) and relevant stakeholders, should develop an integrated grid plan to facilitate the efficient development and connection of renewable energy zones across the NEM and that the first integrated grid plan should be developed by mid-2018. This recommendation has been accepted by the COAG Energy Council.

AEMO advised that it has commenced work on the integrated system plan[17], with a view to publishing the plan by mid-2018. AEMO released a discussion paper in December 2017[18], which will form the basis for stakeholder feedback for the integrated system plan. The main area of an NTNDP not covered by the discussion paper is the detailed modelling and transmission outlook, although AEMO advised that it will be consulting on the scenarios that will form the basis for the modelling in the integrated system plan.

AEMO advised that the proposal to focus on developing the integrated system plan and forego publishing of the NTNDP had been discussed with TNSPs and that it had received their support. The AER expects that AEMO will continue to liaise with TNSPs to provide them with the information that they would have received if the 2017 NTNDP were to be published, to enable TNSPs to meet their annual planning obligations.

On the basis of the information provided, we decided to take no further action in relation to this matter at this time. This is conditional upon AEMO advising the AER if it will not be in a position to publish the inaugural integrated system plan by 30 June 2018.

2.3 NEM Demand Side Participation Guidelines

Following rule changes in 2015, a new requirement was included in the Electricity Rules to require registered participants to provide demand side participation information to AEMO. Clause 3.7D(b) of the Electricity Rules requires participants to provide this information to AEMO in accordance with AEMO's Demand Side Participation Information Guidelines, which took effect from 19 July 2017. The Guidelines require all registered participants to complete an annual data request in the format set out in Appendix A of the Guidelines[19]. Each registered participant must provide the required information current as at 31 March through a data portal managed by AEMO. This portal was available for testing from 18 December

15 Clause 5.12.2(c)(6) of the Electricity Rules.

16 Independent review into the future security of the National Electricity Market: Blueprint for the future, 9 June 2017, https://www.energy.gov.au/publications/independent-review-future-security-national-electricity-market-blueprint-future

17 AEMO has renamed the Integrated Grid Plan as the Integrated System Plan

18 http://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/ISP/2017/Integrated-System-Plan-Consultation.pdf

19 http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/Demand-Side-Participation-Information-Guidelines

2017 to 31 January 2018. AEMO is holding a meeting with stakeholders on 6 March to showcase the new portal and provide user guidance.

On 31 March 2018, AEMO's data portal will go live for participant submissions to begin. Submissions to the portal for 2018 will close at 5:00pm on 30 April 2018. The AER encourages all participants to ensure their own readiness to submit comprehensive demand side participation information.

The AER will monitor participants' provision of demand side participation information via the portal, to ensure the new obligations are met and will report on this in our next Quarterly Compliance Report.

2.4 Commencement of 'Power of Choice' Rule Changes on 1 December 2017

Under the 'Power of Choice' rule changes, metering contestability commenced in the Australian Capital Territory, New South Wales, Queensland, Tasmania and South Australia on 1 December 2017. A transitional metering framework will apply in the Northern Territory from 1 July 2019 until the metering rules in the Electricity Rules take effect in that jurisdiction. The arrangements in Victoria, which is not implementing metering contestability at this point, were discussed in our September 2017 Quarterly Compliance Report.

A key change under the new rules is the implementation of the new role of Metering Coordinator. Financially Responsible Market Participants (FRMPs) are required to appoint a Metering Coordinator for their customers, with large customers having the option of appointing their own Metering Coordinator. The Metering Coordinator takes on the role that was performed by the 'Responsible Person' under the old Chapter 7 of the Electricity Rules.

Civil penalty provisions applying to the new rules in Chapter 7 and Chapter 11 came into effect on 19 December 2017.

While we appreciate that there may be some implementation issues that have occurred as a result of the introduction of these rule changes, we expect that all parties involved in the transition to metering contestability will use their best endeavours to resolve them.

Participants should ensure that they have compliant Metering Coordinator arrangements in place and that the market settlement and transfer solution (MSATS) has been updated to reflect those arrangements by 30 March 2018. From this date, we will be requesting Power of Choice related compliance reports from AEMO to ensure that all participants have achieved compliance in this area.

Distributors who are still specified in AEMO's MSATS as being responsible for a Type 1-4 metering installation may also be in breach of the AER's Distribution Ring-fencing Guideline which came into effect on 1 January 2018.

Metering Coordinators should also ensure they are complying with clause 7.8.10 of the Electricity Rules for the management of metering installation malfunctions and engaging with AEMO as required.

2.5 Compliance Bulletins

The AER sometimes publishes compliance bulletins to help National Energy Market (NEM) participants understand their obligations under the national energy framework and achieve high levels of compliance.

In December 2017, the AER withdrew Compliance Bulletin no. 8. This bulletin highlighted two compliance issues relating to disclosure of confidential information by participants in the NEM. The first was retailers providing agents undertaking customer acquisition activities on their behalf with access to National Metering Identifier (NMI) standing data. The second was distributors providing direct access to energy or metering data to consumers with smart meters. Since Compliance Bulletin no. 8 was published, the Electricity Rules have been changed to allow access in both circumstances. This bulletin is therefore no longer required.

At the same time, the AER clarified the status of Compliance Bulletin No 6 (which relates to instrument transformer testing) following changes to the Electricity Rules which came into effect on 1 December 2017. Under these changes, Responsible Persons have been replaced by a new type of registered participant, a Metering Coordinator. Metering Coordinators now need to ensure that the testing, components[20] (including current transformers and voltage transformers), accuracy and testing of each of their metering installations comply with the requirements of the Electricity Rules and the metrology procedures authorised under the Electricity Rules.

The guidance in Compliance Bulletin No. 6 continues to be relevant to Metering Coordinators. References in the compliance bulletin to obligations of the Responsible Person should now be read as references to obligations of the Metering Coordinator. Metering Coordinators need to ensure that they test instrument transformers every 10 years for accuracy, unless an alternate test plan has been approved by AEMO. These obligations are also discussed in section 2.7 below.

The AER will review Compliance Bulletin No. 6 once metering contestability has been in place for sufficient time for us to assess whether the bulletin remains relevant under metering contestability, and whether new compliance issues are emerging. Metering Coordinators that require clarification of their instrument transformer testing obligations should contact AEMO's metering team in the first instance.

2.6 Distributor Deemed Metering Coordinator Agreements

As noted in our June 2017 Quarterly Compliance Report, the transitional arrangements in Chapter 11 of the Electricity Rules require electricity distributors that were the responsible person for a type 5 or type 6 metering installation, and are deemed to be the Metering Coordinator for those meters, to provide each Financially Responsible Market Participant (FRMP) with a standard set of terms and conditions on which they will agree to act as the Metering Coordinator. Unless the FRMP and the distributor agree to other terms and conditions, under clause 11.86.7 of the Electricity Rules the distributor is deemed to be

20 Metering installation components are defined by Rule 7.8.2 of the Electricity Rules.

appointed as the Metering Coordinator on the standard terms and conditions of appointment provided to each FRMP.

In December 2017, the AER reviewed several deemed agreements from distributor websites. The AER subsequently raised concerns with the Energy Networks Association about aspects of those agreements. While the AER has not conducted a detailed compliance review of those agreements for consistency with distributors' regulatory determinations and chapter 7 and 11 of the Electricity Rules, we may seek up-to-date information on the content of deemed agreements where FRMPs raise concerns. We expect that, where FRMPs seek amendments to these agreements, distributors will negotiate in good faith and come to a fair and reasonable outcome for both parties.

2.7 Instrument Transformer Testing

In our September 2017 Quarterly Compliance Report, we discussed our expectations regarding instrument transformer testing. Instrument transformers are designed to lower voltages or current in the high voltage transmission and distribution network to levels for use by metering devices. Inaccurate instrument transformers can affect the overall accuracy of the metering installation.

Before the 'Power of Choice' rule changes took effect on 1 December 2017, the Electricity Rules required the Responsible Person (RP) to test instrument transformers (either current transformers (CTs) or voltage transformers (VTs)) for accuracy every 10 years (unless an alternate test plan had been approved by AEMO). From 1 December 2017, this obligation transferred to Metering Coordinators.

To assist in enabling a smooth transition from 1 December 2017, the AER and AEMO jointly developed guidance to incoming Metering Coordinators and outgoing RPs in relation to metering installation compliance. This guidance was also published in our September 2017 Quarterly Compliance Report.

In line with this guidance, our expectation continues to be that all RPs will pass on information on the compliance status of metering installations (including those with instrument transformer testing obligations) to incoming Metering Coordinators. We expect all outgoing RPs to use their best endeavours to ensure that Metering Coordinators receive comprehensive and up-to-date information in relation to sites for which they are responsible. Should past non-compliance with instrument transformer testing obligations by an RP come to light, a factor the AER will take into account when deciding whether to take enforcement action, is whether the RP has provided timely and sufficient disclosure to the incoming Metering Coordinator and to the AER.

Metering Coordinators are encouraged to highlight to AEMO and the AER any gaps or anomalies that are identified as a result of this transition of data, particularly where the Metering Coordinator identifies that it has become responsible for metering installations that are non-compliant with the Electricity Rules or where no records of testing and inspection have been made available by the RP. The AER will contact Metering Coordinators over the coming months, to obtain evidence that all Type 1, 2, 3 and 4 metering installations for which they are responsible are compliant with the requirements of the Electricity Rules. Where a former RP has not provided information on the compliance status of a metering installation to the Metering Coordinator, the AER may infer that the RP has not met their testing obligations.

Financially Responsible Market Participants (FRMPs) also need to ensure that ongoing testing and inspecting compliance activity is progressing, particularly for large customer connections where testing and inspection work is more frequent and the consequences of non-compliance more severe.

Metering Coordinators must ensure that they are testing and inspecting in accordance with the Electricity Rules or an alternative strategy approved by AEMO. Distributor Metering Coordinators should provide forward notice of testing plans and progress to AEMO and FRMPs – ideally providing indicative projections of asset family replacements.

2.8 Targeted Compliance Review: Compliance with Market Settlement and Transfer Procedures under Chapter 7 of the National Electricity Rules

Chapter 7 of the Electricity Rules sets out provisions relating to market settlement and transfer solution procedures (MSATS procedures).

All Registered Participants, Metering Providers and Metering Data Providers must comply with the MSATs Procedures. Failure to comply may attract civil penalties.

In the AER's March 2017 Quarterly Compliance Report, we stated our intention to closely monitor compliance with the MSATS Procedures, with a particular focus on the Consumer Administration and Transfer Solution (CATS) Procedures.

We noted that, as part of the AER's monitoring and compliance activities, we were requesting AEMO to provide us its confidential comparative monthly reports on compliance with the CATS procedures.

We also encouraged businesses identified in AEMO's reports as underperforming to develop a rectification plan acceptable to AEMO prior to 30 June 2017, and ensure that their rectification plan commits to addressing outstanding compliance issues within a timeframe that is satisfactory to AEMO.

In December 2017, the AER commenced a targeted review which is initially focussing on local network service providers (LNSPs) that are underperforming in one or more categories of standing data and transfer processes in AEMO's comparative compliance reports.

We have requested that relevant businesses provide information about the measures they are implementing to improve their performance to at least a satisfactory (and preferably a high) level, including the associated timeframes. We will review the information provided and report on it in future reports.

The initial focus is on six LNSPs, however, the AER has advised a further three LNSPs that while their performance is acceptable in most areas of CATS compliance they should continue to review their systems to ensure that performance reaches a consistently high level. Additional LNSPs may be subject to a review by the AER in the future if AEMO's reports indicate any deterioration with respect to their performance in this area.

2.9 Generator Bidding

Scheduled generators and market participants operating in the National Electricity Market (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.[21]

According to the 'three stage process' introduced in late 2010 and updated in 2012,[22] 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.

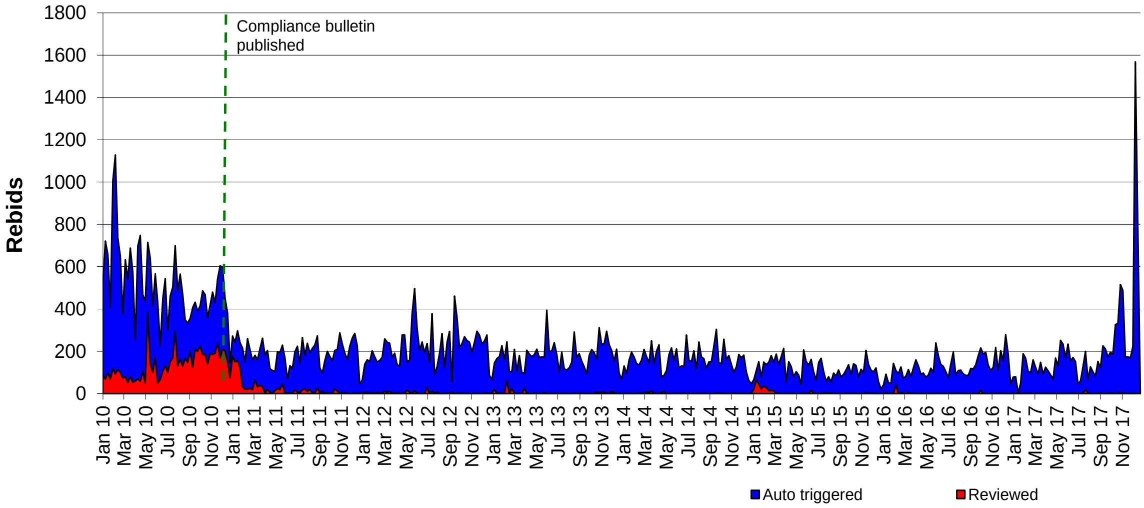
Frequent submission of offers, bids and rebids which do not meet the relevant requirements of the Electricity Rules can seriously and adversely impact the NEM. In particular, the quality of information available to relevant participants and other persons is reduced, which in turn reduces market efficiency. Poor quality information also affects the AER's ability to monitor and enforce compliance with the Electricity Rules.

As shown below in **Figure 6**, the number of rebids automatically triggered as requiring initial examination (indicated by the blue area) has fallen markedly since 2011.

[21] 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'.

[22] 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.

Figure 6: Rebids auto-triggered and reviewed per week (adjusted[23])



This quarter we received 22 self-reporting notices from participants regarding errors in their rebids. The spike in rebids during December 2017 (shown at **Figure 6**) is predominantly associated with data errors by one participant. These data errors do not coincide with high priced periods and were self-reported, reflecting a culture of compliance.

We have not taken action on the errors reported during the 2017 December quarter. Two warnings were issued to participants for not providing a time adduced in their rebid reasons and no participants had their warning count reset to zero.

2.10 Jurisdictional Derogations

Chapter 9 derogations exempt 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 AERinquiry@aer.gov.au of any act or omission which partly or wholly constitutes non-compliance with the Electricity Rules. No non-compliances were reported this quarter.

[23] 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 6** has been adjusted by removing the erroneous rebids.