

Australian Energy Market Commission

STAGE 2 FINAL REPORT: INFORMATION PROVISION

East Coast Wholesale Gas Market and Pipeline Frameworks Review

23 May 2016

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Reference: GPR0003

Citation

AEMC 2016, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 2 final report: information provision, 23 May 2016

About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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Summary

As part of the East Coast Wholesale Gas Market and Pipeline Framework Review (East Coast Gas Review), the Commission has made a number of recommendations to improve the operation and relevance of the Bulletin Board for participants in the east coast gas market. The recommendations reflect the Commission's recognition of the importance in providing publicly available information on the short- and long-term nature of the market to enable current and prospective gas market participants to make informed decisions.

The package of recommendations set out in this report includes changes to the current operation of the Bulletin Board as well as required amendments to the National Gas Law (NGL), National Gas (SA) Regulations (Regulations), National Gas Rules (NGR) and the Bulletin Board Procedures (Procedures).

The next phase for reform of the Bulletin Board is for the COAG Energy Council to initiate a process to make the relevant NGL and Regulations amendments and also submit a rule change request to the AEMC to amend Part 18 of the NGR.

Background

An important characteristic of a workably competitive market is that participants have ready access to the information they require to make informed decisions. In gas markets, such pricing expectations are not formed in relation to one specific data point but require a range of information about consumption, gas supply, transportation, storage, risk management, planning and investment in both the short- and long-run. If this characteristic is missing from a market and decisions have to be made on the basis of incomplete, inaccurate, dated or asymmetric information, it may result in an inefficient allocation of resources both in the market and the broader economy.

The east coast gas market has historically operated in an opaque manner with gas, transportation, storage and risk management services sold under bilateral contracts that have invariably been treated as confidential by the parties. Information on some key demand and supply fundamentals in the market has also tended to be opaque.

In response, the Natural Gas Services Bulletin Board was created in mid-2008 to provide a more level playing field by requiring certain information be provided to a central repository for use by all market participants and the public. Since its inception, the gas market has become more dynamic. As a result, timely and accurate information to inform operational and commercial decisions, as well as policy decisions, has become more important.

In Stage 1 of this review, stakeholders raised a number of concerns about the level of reliance that can be placed on the information reported on the Bulletin Board and the information gaps and asymmetries present in the market. The Commission formed a similar view in the Stage 1 Final Report, which noted that there are “some gaps and

asymmetries that may be affecting the efficiency with which gas and other resources are allocated in the market and across the economy”.¹

In Stage 2 of this review the Commission has focused on improvements that could be made to the Bulletin Board to instil a greater level of confidence in the reported information and address information gaps and asymmetries, in particular with the aim of establishing it as a 'one-stop-shop' for information on the east coast gas market.² In doing so, the Commission has had regard to the national gas objective (NGO). Relevant information will support gas use and allocation decisions over the short- and long-term, leading to the efficient use of and investment in gas for the long-term interests of consumers. This is consistent with the NGO.

The Commission has also had regard to:

- the Council of Australian Governments (COAG) Energy Council’s Australian Gas Market Vision (Vision);
- the findings and recommendations contained in the Australian Competition and Consumer Commission’s (ACCC) Inquiry into the east coast gas market; and
- submissions and other information received from stakeholders.

In the Stage 2 Final Report for the East Coast Gas Review Recommendation 9 outlines the broad changes required to the Bulletin Board in order to meet the COAG Energy Council Vision. This report provides the detailed sub-recommendations A-K that support Recommendation 9. The Commission's reasons for these recommendations are set out in the relevant chapters and all the final recommendations are set out in full in Appendix B of this report.

Bulletin Board reporting model

The confidence of market participants in the information reported on the Bulletin Board will depend on the extent to which the reporting model that underpins it provides for an accurate and timely picture of gas supply, pipeline flows, storage and demand. The Commission's assessment is that some elements of the reporting model are limiting the reliance that can be placed on information reported on the Bulletin Board. One of the more significant limitations with this model, is that it does not currently capture all of the facilities required to satisfy the Bulletin Board purpose and can result in delays in new facilities registering and reporting. The absence of a clear information standard and gaps in the compliance framework are also affecting the confidence that users can place on the Bulletin Board.

To address these limitations and instil a greater level of confidence in the Bulletin Board, the Commission's final recommendations are:

¹ AEMC, *East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Final Report*, 23 July 2015, p. 159.

² *ibid.*, p. 176.

- **Recommendation A:** Broaden the stated purpose of the Bulletin Board to recognise the important role that information plays in enabling informed and efficient decision making, as well as aiding price discovery and facilitating trade.
- **Recommendation B:** Improve the reporting framework by:
 - Removing the link that currently exists between the obligation to report and the zonal model.³
 - Simplifying the exemption criteria and reducing the minimum reporting threshold to 10TJ/day for transmission pipelines, production facilities, storage facilities, compression facilities used in the provision of hub services in the Gas Supply Hub (GSH compression facilities) and large user facilities.
 - Removing the existing distinction between facilities commissioned pre- and post-1 July 2008.
 - Redrafting the registration provisions to provide greater clarity about who is required to register, when registration is required and the interaction between registration and reporting.
 - Introducing an information standard for all facilities to employ and classifying the obligation to comply with this standard as both a civil penalty and conduct provision.
- **Recommendation C:** Strengthen the compliance framework by classifying the obligation to register as a civil penalty provision. Notes should also be added to the relevant rules to identify those that are civil penalty or conduct provisions.

Reporting requirements

Stakeholders, the COAG Energy Council and the ACCC have noted that there are a number of significant information gaps and asymmetries across the gas market. In part this arises from reporting obligations only applying to producers and certain transmission pipelines and storage facilities. These gaps can be expected to adversely affect the price discovery process and the way in which gas and other resources are allocated because trading and other decisions must be made on the basis of incomplete, inaccurate and/or asymmetric information.

To address the informational gaps and asymmetries, the Commission's final recommendations include the following improvements to the Bulletin Board:

- **Recommendation D:** The entities that are required to report Bulletin Board information to AEMO should be expanded to include:

³ The NGR requires AEMO to use a zonal model (with production and demand zones defined in the Procedures). This model determines the registration of parties and the reporting and publication of information. See section 2.2.3.

- The operators of gas fields with proved and probable (2P) reserves – to report 2P reserves on an annual basis (or more frequently if a revised estimate is subsequently reported to the ASX or a government agency).
- The operators of GSH compression facilities – to be subject to similar reporting obligations as operators of pipelines.
- Large users – The operators of large user facilities (including LNG facilities) are to report the nameplate capacity of their facilities and daily consumption. The operators of LNG facilities to also report on their facility’s short- and medium-term capacity outlook and material intra-day capacity changes.⁴
- **Recommendation E:** Exempt facilities that are not connected to the east coast market from registration and reporting requirements until such time as they are connected. The exempt facilities include those in the Northern Territory and those located in north Queensland near Moranbah and Townsville.
- **Recommendation F:** Amend the existing reporting requirements to:
 - Require those facilities that report on their medium-term capacity outlook to also report on planned expansions and asset retirements.
 - Improve the frequency with which information is reported and alerted to the market in regard to material intra-day changes to a facility’s capacity or nominations, with information to be reported as soon as practicable on the gas day.
 - Require pipeline operators to report nominations and forecasts on both a receipt point (injection) and delivery point (withdrawal) basis.
 - Require producers to report nominations and forecasts for production facilities.
 - Remove the obligation for AEMO to publish estimates of the total forecast demand on peak demand days.

Publication of information on the Bulletin Board

The existing Bulletin Board rules require the use of a zonal model to aggregate, report and publish pipeline flow information. This has resulted in some significant information gaps to emerge over time as the zonal model has not been sufficiently flexible to reflect changes in the market. To address these issues, the Commission recommends:

- **Recommendation G:** That AEMO be responsible for the aggregation of information to be published on the Bulletin Board and that:

⁴ A large user facility does not include a retail business.

- BB pipelines must report actual flows, nominations and forecast information on a disaggregated basis, by receipt and delivery point; and
- AEMO must publish its aggregation methodology in the Procedures.

Under this recommended approach different types of information would be published at different times:

- Pipeline nomination and forecast information would be aggregated and published without delay. This information would not be published in disaggregated form because aggregated information is sufficient to provide an overview of expected gas flows. In addition, it may have competitive impacts for gas fired generators in the NEM.
- Pipeline receipt and delivery point actual flows would be aggregated and published on the following day to provide an overview of actual flows around the market. It would also be published in a disaggregated form. The Commission has not identified any competitive impacts from the publication of actual gas flows on the following day.
- Large user actual gas use data would be published on the following day. The Commission has not identified any competitive impacts from the publication of actual gas flows on the following day. In addition, AEMO would aggregate large user gas use to provide an overview of different types of demand across the market (for example, by user type).

Throughout this report the Commission has identified a number of actions that could be undertaken by AEMO in its capacity as the Bulletin Board operator that go to addressing some of the concerns raised by stakeholders. These actions do not require any change to the NGL, Regulations or NGR.

- **Recommendation H:** That AEMO progress actions under the current framework to:
 - adopt a fixed and consistent standard for the assumed direction of bidirectional pipelines;
 - improve the information on the Bulletin Board related to pricing;
 - provide a notice board to allow market participants to notify each other of opportunities; and
 - add links to government and industry reports related to upstream activities and other gas market activities (as an interim measure until that information is provided directly by participants).

Funding arrangements and future development

Provisions in the NGR currently allow pipeline operators to recover the costs that they incur in providing 'aggregation and information services' to AEMO although these provisions have not been used to date. As a result of other recommendations in this report, pipeline operators will no longer be providing these services. In addition, the burden of providing information will increasingly be shared by more gas market participants. Given these changes, the Commission recommends that:

- **Recommendation I:** The pipeline operator cost recovery provisions be removed from the NGR.

The NGR also sets out the methodology that AEMO is to employ to recover its Bulletin Board costs. However, this is inconsistent with the arrangements in place for other AEMO activities. In addition, the level of prescription in the NGR has resulted in very little flexibility for AEMO to adjust its fee methodology to changing market circumstances. The Commission considers that the inconsistent governance approach is unwarranted and AEMO should be able to incorporate its Bulletin Board costs into its broader fee methodology process. This view has been supported by a number of stakeholders. Accordingly, the Commission recommends:

- **Recommendation J:** The cost recovery provisions for AEMO's Bulletin Board activities be removed from the NGR.

During this review a number of stakeholders have expressed concern that the Bulletin Board has had limited amendments made to maintain its relevance to the east coast gas market and to meet the needs of market participants. The Commission acknowledges this wide-spread concern. To address these concerns and to provide a framework to assist in the ongoing relevance of the Bulletin Board, the Commission considers a periodic report would aid in the identification of minor issues and potential procedure changes as well as potential rule change requests or more substantial concerns that may be considered by the COAG Energy Council. Consequently, the Commission recommends:

- **Recommendation K:** AEMO be required to publish a biennial report on the operation of the Bulletin Board and any potential changes required. The report is to be prepared in consultation with Bulletin Board users, the AER and the AEMC.

Alignment with the ACCC inquiry

The ACCC's inquiry into the east coast gas market was completed in late April 2016. The final report raised a number of concerns about the opaqueness of the east coast gas market and the quality of some information. The ACCC noted that the lack of

transparency and information surrounding gas reserves, the utilisation of regional pipelines, commodity and transportation prices is:⁵

“... hindering efficient market responses to the changing conditions and are not signalling expected supply problems effectively.”

To address these informational deficiencies, the ACCC recommended that:⁶

- all explorers and producers be required to report consistent 2P reserves and resources and for this information to be published on the Bulletin Board;
- information on the capacity and utilisation of regional pipelines be published on the Bulletin Board;
- the AEMC consult with gas users about the potential benefits of a periodic price series of actual commodity gas prices paid to producers, either for the east coast generally or for Victoria and Queensland; and
- the AEMC consider how the information disclosure provisions in the NGL could be expanded to require greater transparency around primary and secondary capacity trades and the costs incurred by pipeline operators in the provision of services.

The first two of these recommendations have been considered as part of this work stream, while the latter two as part of the broader review (see Stage 2 Final Report for the East Coast Wholesale Gas Market and Pipeline Frameworks Review).

As outlined above, the Commission also considers there is a need for greater transparency around 2P reserves and regional pipelines and its recommendations in this area are largely aligned with those of the ACCC. The only areas where the Commission has not gone as far as the ACCC recommended is the recommendation to require:

- common price assumptions to be used in the calculation of 2P reserves – this proposal was raised too late for consultation with stakeholders and so will be considered as part of the second rule change process that follows this review; and
- contingent or prospective resources⁷ to be published on the Bulletin Board – in this case the Commission suggests that the 2P reporting requirement be bedded down before requiring resources to be reported, given it is more speculative in nature than 2P reserves.

⁵ ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 19 and 154.

⁶ *ibid.* pp. 20-21 and 154.

⁷ Contingent resources are quantities of natural gas estimated to be potentially recoverable from known accumulations but are not yet considered able to be developed commercially due to one or more contingencies. Prospective resources are estimated quantities associated with undiscovered natural gas. These represent quantities of gas which are estimated, as of a given date, to be potentially recoverable from gas deposits identified on the basis of indirect evidence but which have not yet been drilled.

Next steps

This final report marks the conclusion of this stage of the Bulletin Board reform program.

To progress the reforms, the Commission has identified two phases of work to be initiated by the COAG Energy Council. It has provided detailed proposed changes to the NGR to implement the majority of the recommendations in the report⁸ and has also identified relevant changes to the NGL and Regulations.⁹ For those improvements not requiring changes to the legal framework, the Commission recommends that the COAG Energy Council request AEMO to progress these actions without delay.¹⁰

It should be noted that this implementation plan is not contingent upon other recommendations in the East Coast Gas Review or the recommendations arising from the Declared Wholesale Gas Market (DWGM) Review. Accordingly, the COAG Energy Council will be able to commence work on the next phase of Bulletin Board reform program immediately.

Phase 1: The first phase has two concurrent elements. One element is to make the necessary amendments to the NGL and Regulations to add new reporting entities to the Bulletin Board framework. These new parties are: the operators of gas fields with 2P reserves; GSH compression facility operators; LNG processing facility operators; and large users.

The second element can be carried out concurrently with the first. It is to make a set of initial amendments to the NGR that are not dependent on the changes to the NGL and Regulations. The purpose of this initial rule change process is to:

- clarify the purpose of the Bulletin Board;
- remove the current zonal model and establish a new reporting model;
- exempt remote pipelines from reporting obligations;
- include regional pipelines and facilities and facilities attached to distribution pipelines;
- establish a new registration framework and threshold;
- include a reporting standard;
- remove the market participant and AEMO cost recovery provisions; and
- add a new biennial reporting requirement for AEMO.

⁸ Recommendation 14 in the Final Stage 2 Report of the East Coast Gas Review.

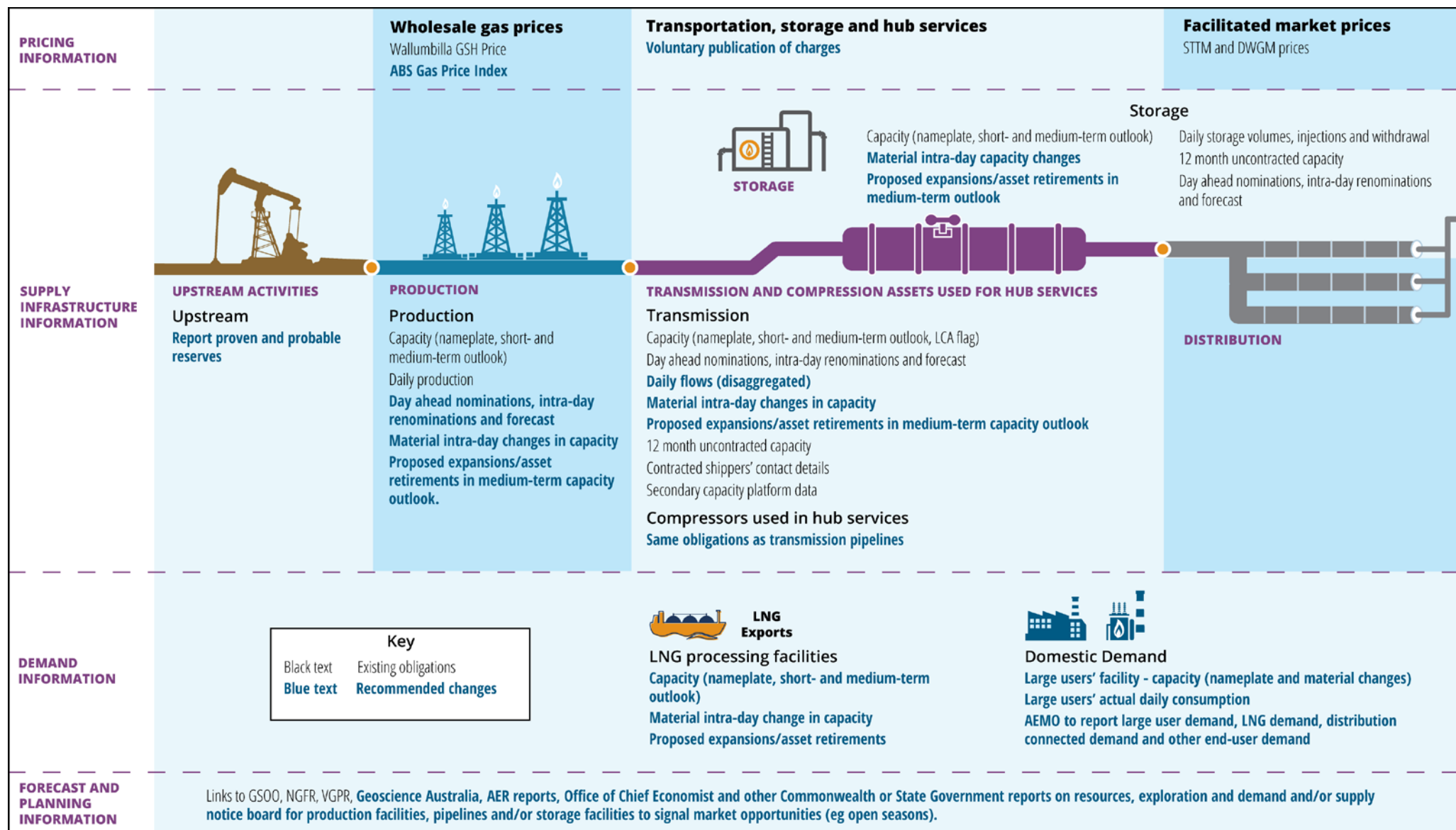
⁹ Recommendation 15 in the Final Stage 2 Report of the East Coast Gas Review.

¹⁰ Recommendation 15 in the Final Stage 2 Report of the East Coast Gas Review.

Phase 2: Following the NGL and Regulation changes noted above in phase 1, a second rule change process can be carried out. The purpose of this second set of NGR changes is to establish the relevant reporting requirements for the new parties created by the NGL and Regulation changes.

Following these processes, the new complete Bulletin Board framework as set out in this report will be in place. This framework is illustrated by Figure 1 which identifies the full range of information that will be available including both current (in black text) and proposed (in blue text) reporting requirements across the gas market.

Figure 1 Current and proposed reporting across the gas market



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1 Introduction

1.1 Context

In December 2014, the Council of Australian Governments (COAG) Energy Council published its Australian Gas Market Vision (the Vision), which sets out a gas market reform agenda for the continued development of Australia's gas market. Within the Vision statement, the COAG Energy Council outlines a desired outcome for gas market information:¹¹

“The provision of accurate and transparent market making information on pipeline and large storage facilities operations and capacity, upstream resources, and the actions of producers, export facilities, large consumers and traders.”

The COAG Energy Council has already made some progress in respect of this objective. Projects such as the COAG Energy Council's Gas Transmission Pipeline Capacity Trading process and the subsequent submission of the Enhanced Information for Gas Transmission Pipeline Capacity Trading rule change request (now completed by the AEMC), and AEMO's redevelopment of the Bulletin Board, have or will increase the amount of information available to the market. Taking a broader view of information, the COAG Energy Council's ongoing work aims to create a framework for providing and publishing information that will support the creation of a well-functioning market arising from informed decision making by participants.

The AEMC's East Coast Wholesale Gas Market and Pipeline Frameworks Review (East Coast Gas Review) has been undertaken at the request of the COAG Energy Council. The AEMC has reviewed the design, functions and roles of facilitated gas markets and gas transportation arrangements on the east coast of Australia. It has developed a clear path forward for gas market development in Australia that is consistent with the COAG Energy Council's Vision.

The Stage 1 Final Report of the East Coast Gas Review noted that there are “some gaps and asymmetries that may be affecting the efficiency with which gas and other resources are allocated in the market and across the economy”.¹² The report noted the growing call from stakeholders and policy makers for greater transparency and information to help adapt to structural change in the gas industry.

The gas market is becoming more dynamic, suggesting that timely and accurate information to inform operational and commercial decisions, as well as policy decisions, is becoming more important. Information will support gas use and allocation decisions over the short- and long-term, leading to the efficient use of and investment in gas infrastructure for the long-term interests of consumers – consistent

¹¹ COAG Energy Council, COAG Energy Council Vision, December 2014, p. 4.

¹² AEMC, *East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Final Report*, 23 July 2015, p. 159.

with the national gas objective (NGO). To pursue this goal, the Stage 1 Final Report stated that a closer examination of the specific informational needs of the market, and the means of providing that information, will be conducted within the Stage 2 East Coast Gas Review Information Provision work stream.

The Australian Competition and Consumer Commission (ACCC) also supports the need for reforms in the east coast gas market. Of particular relevance to this report is the need to improve market participants' insights into gas reserves and the utilisation of regional pipelines. The ACCC suggested that standardised reporting of gas reserves would be beneficial to producers, users, policy makers and potential new market entrants and that greater transparency of the utilisation of regional pipelines would aid users in these regions.¹³

The first phase of this work has now been completed. This report provides recommendations for the future development of the Bulletin Board that are consistent with the COAG Energy Council's Vision for the information needs of the east coast gas market.

1.2 The role of information and the Bulletin Board

An important characteristic of a workably competitive market is that participants have ready access to the information they require to make informed and efficient decisions about consumption, production, transportation, planning, investment and risk management in both the short- and long-run. If this characteristic is missing from a market and decisions have to be made on the basis of incomplete, inaccurate, dated or asymmetric information, it may result in an inefficient allocation of resources both in the market and the broader economy.

Information can be produced through the competitive process (for example, by businesses voluntarily providing information in order to attract customers, or through the publication of prices). Alternatively, information may be provided to a market through a legal framework, such as requiring businesses to provide a central information provider with information, who then makes this publicly available.

The east coast gas market has historically operated in quite an opaque manner with gas, transportation and risk management services sold under bilateral contracts that have invariably been treated as confidential by the parties. Information on some key demand and supply fundamentals in the market has also tended to be opaque. As a result, historically there have been information gaps in the gas market.

In response, a regulatory solution – in the form of the Natural Gas Services Bulletin Board – was implemented. The objective was to create a more level playing field by requiring information be provided to a central repository for use by all market participants and the public. The Bulletin Board has become an important, although not the only, source of market information. For this reason, Stage 2 of the East Coast Gas

¹³ ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 12-13.

Review has focused on improvements to the Bulletin Board, in particular with the aim of establishing it as a 'one-stop-shop' for information on the east coast gas market.¹⁴

While the Commission has focused on the Bulletin Board, it should be acknowledged that a number of steps have already been recently taken to improve upon the initial arrangements put in place in 2008 regarding the provision of information in the east coast gas market. These are:

- Improve the quality of planning and investment related information – In 2014 AEMO published its first National Gas Forecasting Report (NGFR) and has also made a number of improvements to the Gas Statement of Opportunities (GSOO).
- Improve the functionality and usability of the Bulletin Board – AEMO commenced work on this project in 2014 and the first phase of the redevelopment, which included redesigning the Bulletin Board interface and developing a capacity listing service, was completed in late 2014. More recent changes have included providing links to the facilitated market prices, the AER's weekly gas report and the GSOO and NGFR.
- Improve the quality of some of the information reported on the Bulletin Board – Over the last year the AER has worked with coal seam gas (CSG) producers to improve the quality of the information they provide to the Bulletin Board.
- Address some of the informational gaps on the Bulletin Board – In May 2014, the AEMC made a rule to amend the NGR to increase the level of short- and medium-term capacity outlook information to be published on the Bulletin Board. The AEMC also made a rule amending the Bulletin Board emergency information page in March 2015.
- Provide support for pipeline capacity trading – Over 2015 the AEMC has assessed a rule change request on the Bulletin Board information requirements for supporting gas transmission pipeline capacity trading. AEMO has also amended the Bulletin Board to link into its own transmission capacity trading listing service as well as providing users with the ability to connect to the transmission capacity trading listing services provided by APA Group and Jemena.

While these steps have been taken to reduce information barriers in the gas market, stakeholders have commented that there are still some significant informational gaps and asymmetries.¹⁵ These are becoming more apparent as market participants work to adjust to the changes underway in the market. For this reason, consideration of these gaps and asymmetries has been an important part of this stage of the Commission's East Coast Gas Review.

¹⁴ AEMC, *East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Final Report*, 23 July 2015, p. 176.

¹⁵ *ibid.*, pp. 172-180.

1.3 Assessment framework

The assessment framework for considering the information needs of the gas market, particularly in terms of the development of the Bulletin Board, is centred on the NGO, which is:¹⁶

“...to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

The NGO pertains to long-term efficiency, which would be achieved through a trade-off between cost and benefit over time.

Quantifying costs and benefits in information provision can be difficult. Nevertheless, qualitative assessments that are associated with efficiency can be appropriate, such as:

- the potential to reduce transaction costs, including search costs;
- reductions in information asymmetry that may otherwise impede efficient exchange;
- more informed decision making, enabling efficient operational and commercial decisions and appropriate risk management;
- efficiency in the production and use of information;
- an efficient allocation of tasks and responsibilities, allowing low cost compliance, enforcement, accountability and effective market development; and
- the balance between transparency and confidentiality.

In applying the assessment framework, there are a number of considerations that the Commission may take into account. For example, it may be necessary to incur costs in order to unlock gains from information provision, provided gains outweigh costs and a transparent and robust process is undertaken. The value of information provided on the Bulletin Board is ultimately determined by the value that participants and other users gain from it, and therefore it varies depending on their purpose and the availability and cost of alternatives.

The Commission is aware that compliance with the requirements of the Bulletin Board imposes costs on some market participants, including shippers, on whom fees have been levied to recover AEMO's costs of operating the Bulletin Board. It also notes that as the Bulletin Board is required to be publicly accessible it is free of charge to all that visit the website. This public good nature of the Bulletin Board could result in a tendency to promote inefficient levels of information provision by those that face little or no cost in complying with Bulletin Board requirements. For this reason, the specific

¹⁶ NGL, s. 23.

cost burdens of providing information must be weighed against the broadly disseminated benefits of providing that information.

The Commission must also consider the potential for some information to be of a confidential nature. However, it is critical that businesses with a claim of information confidentiality provide clear justification for such a claim. It is also important that information users articulate the value of such information. There is a need to determine the most appropriate trade-off between confidentiality, transparency and value.

The current considerations of the Commission regarding the provision of information in the east coast gas market have had regard to the NGO as articulated through the assessment framework above. However, it should be noted that the anticipated future rule change requests to amend the Bulletin Board provisions of the National Gas Rules (NGR) will be assessed through the AEMC's consultative rule change process under the National Gas Law (NGL) and against the NGO. Implementation of the Commission's recommendations will also require some changes to the NGL, National Gas (SA) Regulations (Regulations) and the Bulletin Board Procedures (Procedures). The balance between which provisions and requirements are to be located in the NGR and which in the Procedures is also a matter for consideration.

1.4 Assessment against the NGO

The new reporting model recommended in Chapter 2 of this report aims to provide a clear framework for reporting entities and AEMO to work within. This is reflected in the amended Bulletin Board purpose which identifies the important role of the Bulletin Board in decision making for all participants within the gas market. This includes end users of gas and policy makers.

The recommended registration framework clarifies and simplifies administrative processes for parties. This should significantly reduce any need for parties to seek legal or other advice on the registration requirements or its implications. Further, the recommended reporting standard and compliance arrangements should also, if implemented, provide clarity and greater certainty for reporting entities on the expectations for information quality and overall compliance with the Bulletin Board framework. For users of the Bulletin Board, improved clarity on these aspects of the reporting model should allow them to use Bulletin Board information with greater confidence that it is reliable information that can be used in their own decision making on their use of gas and gas services.

The Commission considers that implementation of the recommended reporting model will support a reliable Bulletin Board. It has also considered the types of information reported to, and available from, the Bulletin Board. A number of stakeholders have, over the course of the AEMC's review, identified and expressed concern regarding the current gaps in Bulletin Board information. The Commission's final recommendations in Chapter 3 of this report go to addressing these concerns. It is important that the identified information gaps be filled to allow the Bulletin Board to present a reliable and timely picture of gas supply, pipeline flows, storage and demand in the east coast gas market to market participants and Bulletin Board users generally, consistent with

achieving the purpose of the Bulletin Board. Implementation of these particular recommendations should result in Bulletin Board users being able to access relevant information, in the context of a total market view, to aid their decision making in relation to their use of gas and gas services. This should in turn support a well-functioning gas market in the short and long term.

The Commission has balanced the desire from some stakeholders for more information with the burden information reporting can place on parties. In doing so, it has sought to identify information that is relevant to market participants that can be readily provided. It has also considered what information parties may report to meet other legal requirements and whether this can address the objectives of this review to improve the Bulletin Board.

As discussed in Chapter 4, the Commission has also made recommendations to change the publication and presentation of information on the Bulletin Board. Under the recommended arrangements, AEMO would be responsible for the aggregation and timely publication of information. This more flexible approach, which would be set out in the Procedures, seeks to appropriately meet the objective of providing timely, relevant information on the Bulletin Board. It is balanced against administrative efficiency and flexibility so that AEMO is able to respond promptly to any market changes in a manner consistent with the purpose of the Bulletin Board. The Commission considers that such flexibility is important to allow AEMO to efficiently and promptly meet the needs of market participants and their investment and operational decisions in relation to their use of gas and gas services.

The Commission has also had regard to the administrative burden in managing a cost recovery process for reporting entities and AEMO. It has concluded that the operation of specific cost recovery processes for Bulletin Board costs are unlikely to be consistent with the efficient operation of the Bulletin Board, particularly as costs can be recovered through other means.

Chapter 5 of this report also sets out the Commission's final recommendation for AEMO to publish a biennial report on the operation of the Bulletin Board. If implemented, this new requirement would support the ongoing confidence of participants and users in the reliability of Bulletin Board information. The Commission anticipates that the biennial reports will alert market participants to any changes and developments needed to maintain the relevance of Bulletin Board information to the market and users. This should support the continuation of well informed decision making across the market.

Overall, the Commission has recommended a package of changes to the Bulletin Board with the purpose of supporting well informed decision making and the efficient use of and investment in gas and gas services. It considers the recommendations are consistent with the COAG Energy Council's Vision for the east coast gas market and the NGO and will support the Bulletin Board meeting its purpose.

1.5 Implementation

The implementation plan to reform the Bulletin Board is set out below. The next phase of the reforms is not contingent upon the adoption of other recommendations in the East Coast Gas Review or the recommendations arising from the Declared Wholesale Gas Market (DWGM) Review. Accordingly, the COAG Energy Council will be able to commence work on the next phase immediately. Following these processes, the new complete Bulletin Board framework as set out in this final report will be in place.

Legal framework changes

The next phase of this Bulletin Board reform program has two concurrent elements:

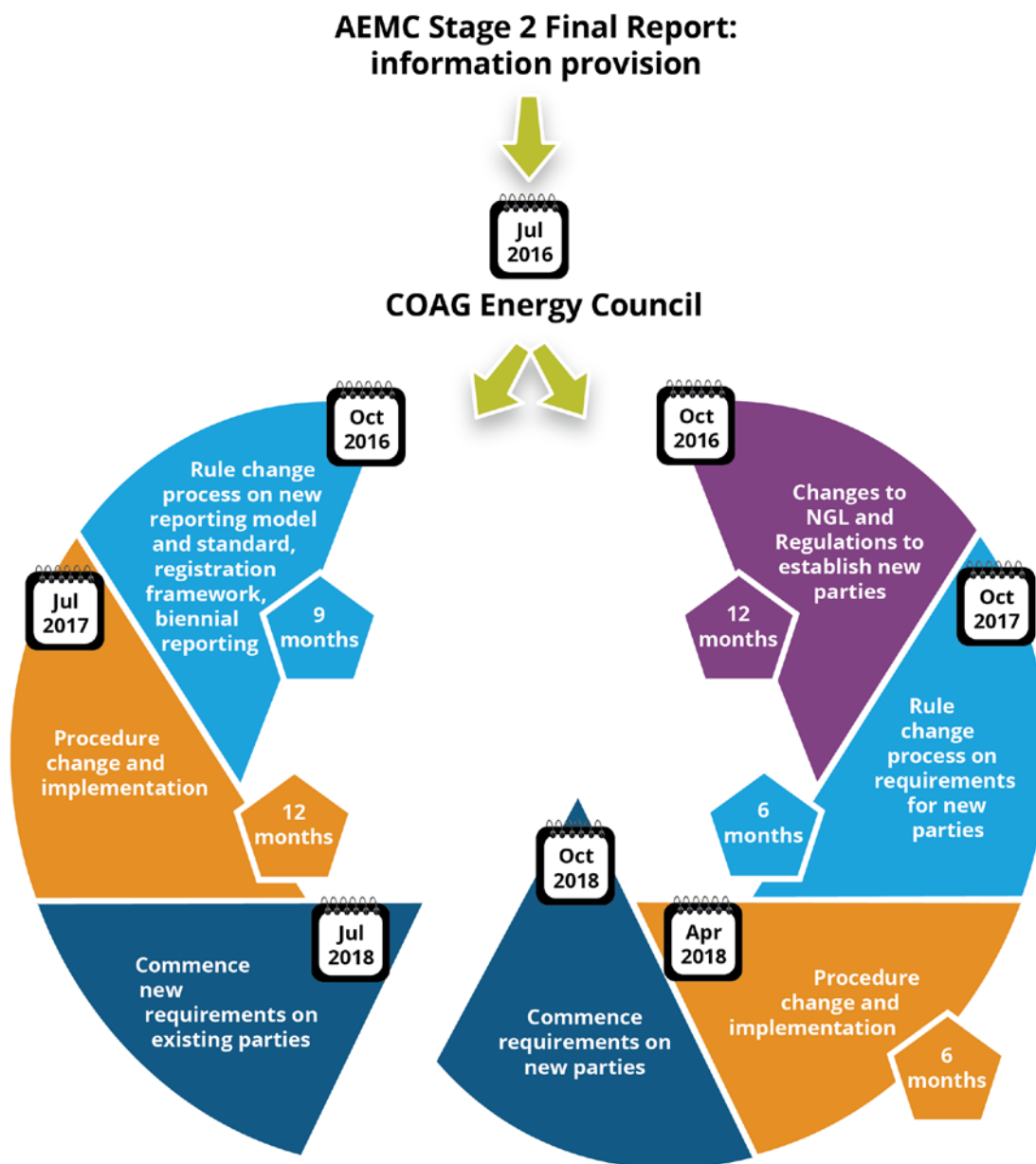
- a collection of NGL and Regulation changes; and
- the first set of NGR amendments.

On completion of the NGL and Regulation changes, a second rule change process will follow.

While amendments to the NGR will require two separate rule change processes to be implemented, this report is accompanied by a complete proposed Part 18 of the NGR that reflects all the recommended rule changes as a total package.

The required processes for the next phases to implement the reforms for the Bulletin Board are illustrated in Figure 1.1 below.

Figure 1.1 Implementation of Bulletin Board reforms



Phase 1: Changes to the NGL and Regulations

The first matter to be addressed by the COAG Energy Council is to initiate the making of the necessary amendments to the NGL and Regulations to add new reporting entities to the Bulletin Board framework. Specifically:

- amend s. 223 of the NGL to include the words “natural gas or” before the words “natural gas services”;

- amend s. 223(1) of the NGL to also include: compression facility operator at a gas trading exchange; field operator; large user; and LNG processing facility operator;¹⁷ and
- amend the definitions in the NGL to include the definitions for those persons to be listed in s. 223(1).

The Commission has also identified a number of proposed rules where the obligation to comply is recommended to be a civil penalty and conduct provision. These recommendations are included in the proposed rule document provided with this final report and can be brought into effect by changes to the Regulations.

Phase 1: Initial amendments to the NGR

While the NGL and Regulation changes noted above are progressed, the second element of Phase 1 of the Bulletin Board reform program is to make the first set of amendments to the NGR. These amendments can be carried out concurrently with the changes to the NGL and Regulations because they are not dependent on these changes being made. This initial set of rule changes to be submitted by the COAG Energy Council to the AEMC are to:

- clarify the purpose of the Bulletin Board;
- remove the current zonal model and establish a new reporting model;
- exempt remote pipelines from registration and reporting obligations;
- include regional pipelines and facilities and facilities attached to distribution pipelines;
- establish a new registration framework and threshold;
- include a reporting standard;
- remove the market participant and AEMO cost recovery provisions; and
- add a new biennial reporting requirement for AEMO.

Phase 2: Second amendments to the NGR

Making the changes to the NGL and Regulations as set out above in Phase 1 will allow a second rule change request to be submitted by the COAG Energy Council and carried out by the AEMC. The purpose of this Phase 2 rule change process is to establish the reporting obligations for the new reporting entities of compression facility operators at a gas trading exchange; field operators; large users; and LNG processing facility operators. The reporting obligations for these parties are as set out in detail in Chapter 3.

¹⁷ Alternatively, these parties could be included in the Bulletin Board framework through changes to the Regulations as provided by s. 223(1)(g) of the NGL.

Other changes

Throughout this report the Commission has identified a number of actions that can be undertaken by AEMO in its capacity as the Bulletin Board operator that go to addressing some of the concerns raised by stakeholders. These actions do not require any change to the legal framework (the NGL, Regulations or NGR). The Commission recommends that the COAG Energy Council request AEMO to progress these actions under the current framework immediately. These actions are discussed in section 4.3 and include AEMO to:

- adopt a fixed and consistent standard for the assumed direction of bidirectional pipelines;
- add pricing information to the Bulletin Board;
- create a notice board segment within the Bulletin Board to provide market participants with the ability to notify each other of opportunities; and
- add links to government and industry information on upstream activities and other gas market activities (as an interim measure until that information is provided directly by participants).

1.6 About this final report

This report sets out the Commission's assessment of gas market information provision in the context of the East Coast Gas Review. It focuses on the development of the Bulletin Board as a 'one-stop-shop' of gas market information and what changes could be made to achieve this.

This assessment has been conducted through both Stage 1 and Stage 2 of the East Coast Gas Review, with Stage 2 focusing on the development of a package of recommendations to address the information gaps identified in Stage 1.

As part of the Stage 2 process, the Commission established the Information Provision Working Group (working group) to assist it in its development of the draft recommendations set out in the Stage 2 Draft Report. Contributions from members, and the working group as a whole, provided relevant information and feedback on a range of issues and their potential solutions.

In addition, the Commission has also considered the issues discussed in submissions and other information provided during the course of the East Coast Gas Review to date. This includes submissions made in response to the Stage 2 Draft Report and numerous discussions with stakeholders since its publication in December 2015. A number of industry members as well as staff at AEMO and the AER have greatly assisted the Commission throughout its preparation of this report and the formation of its final recommendations.

The remaining chapters of this report set out the Commission's assessment of the issues and its final recommendations as follows:

- the Bulletin Board reporting model;
- new reporting requirements;
- publication of information on the Bulletin Board; and
- funding arrangements and future developments.

These chapters are followed by: Appendix A – abbreviations; Appendix B – a collation of the final recommendations; and Appendix C – a summary of issues raised in stakeholder submissions to the Stage 2 Draft Report.

This report is accompanied by a proposed Part 18 of the NGR that reflects the Commission's final recommendations. While implementation of the Bulletin Board reforms is required to be carried out in phases (see section 1.5), the proposed Part 18 of the NGR is provided in full. This is to provide stakeholders with an understanding of how the total recommendations can be reflected in rules. It may also assist the COAG Energy Council in considering its response to the Commission's final recommendations and preparing the rule change requests required for the next phases of Bulletin Board reforms.

2 The new reporting model

Box 2.1 Summary of findings and recommendations

The market's confidence in the information reported on the Bulletin Board will depend on the extent to which the reporting model that underpins it provides for an accurate and timely picture of gas supply, pipeline flows, storage and demand.

Through this review, concerns have been raised about some elements of the reporting model. The Commission's own analysis indicates that there is some uncertainty as to the Bulletin Board's purpose and that certain elements of the reporting and compliance frameworks are limiting the reliance that could be placed on the Bulletin Board. In addition, the Bulletin Board does not currently capture all the facilities it should to meet its purpose. The absence of a clear information standard and gaps in the compliance framework are also affecting the confidence that users can place on Bulletin Board information.

To address these limitations and instil a greater level of confidence in the information reported on the Bulletin Board, the Commission recommends that:

- **Recommendation A:** The stated purpose of the Bulletin Board is broadened to recognise the important role that information can play in enabling informed and efficient decision making, as well as facilitating trade.
- **Recommendation B:** The reporting framework be improved by:
 - Extending the list of facilities that can be subject to reporting obligations.
 - Removing the current link between the obligation to report and the zonal model.
 - Simplifying the exemption criteria and reducing the minimum reporting threshold for certain facilities to 10 TJ/day.
 - Removing the current distinction between facilities commissioned pre- and post-1 July 2008.
 - Providing greater clarity about the purpose of registration and how it interacts with the obligation to report and minimum reporting threshold.
 - Introducing an information standard that all facilities would be required to employ when collecting and submitting information to AEMO and classifying the obligation to comply with this standard as a civil penalty and conduct provision.
- **Recommendation C:** The compliance framework be strengthened by classifying the obligation to register as a civil penalty provision in the Regulations. Notes should also be added to Part 18 of the NGR to identify those provisions that are civil penalty or conduct provisions.

2.1 Introduction

This chapter explores the proposed improvements to the reporting model, which is structured as follows:

- section 2.2 provides an overview of the current reporting model;
- sections 2.3 to 2.7 focus on the proposed improvements to the stated purpose of the Bulletin Board, the reporting and compliance frameworks; and
- section 2.8 provides further detail on how all the elements of the new reporting model are intended to work together.

2.2 Overview of the current reporting model

The Bulletin Board was implemented in July 2008 following a recommendation by the Gas Market Leaders Group (GMLG) that a web-based system be developed to provide participants and observers ready access to up-to-date information on the demand-supply outlook for key pipelines, production and storage facilities in the east coast.¹⁸ The GMLG's expectation at the time was that the Bulletin Board would improve decision making and trade by providing:¹⁹

“...readily accessible and updated information to end-users, smaller or potential new market entrants, and market observers (including Governments), on the state of the market, system constraints and market opportunities.”

The GMLG's work on the Bulletin Board formed the basis for the development of the reporting model that currently underpins the Bulletin Board, including the stated purpose of the Bulletin Board, which is described in rule 142 of the NGR as being to:

- facilitate trade in natural gas and markets for natural gas services; and
- assist in emergency management.

In addition to serving these purposes, the Minister in his Second Reading Speech for the National Gas (South Australia) Bill 2008, stated that the Bulletin Board would also:²⁰

“provide a platform for future gas market transparency measures such as a gas market statement of opportunities.”

¹⁸ GMLG, *National Gas Market Development Plan*, June 2006, p. 4.

¹⁹ *ibid.*, p. 22. See also GMLG, *National Gas Market Development Plan – Scope of a National Gas Statement of Opportunities*, 12 August 2008, p. 12.

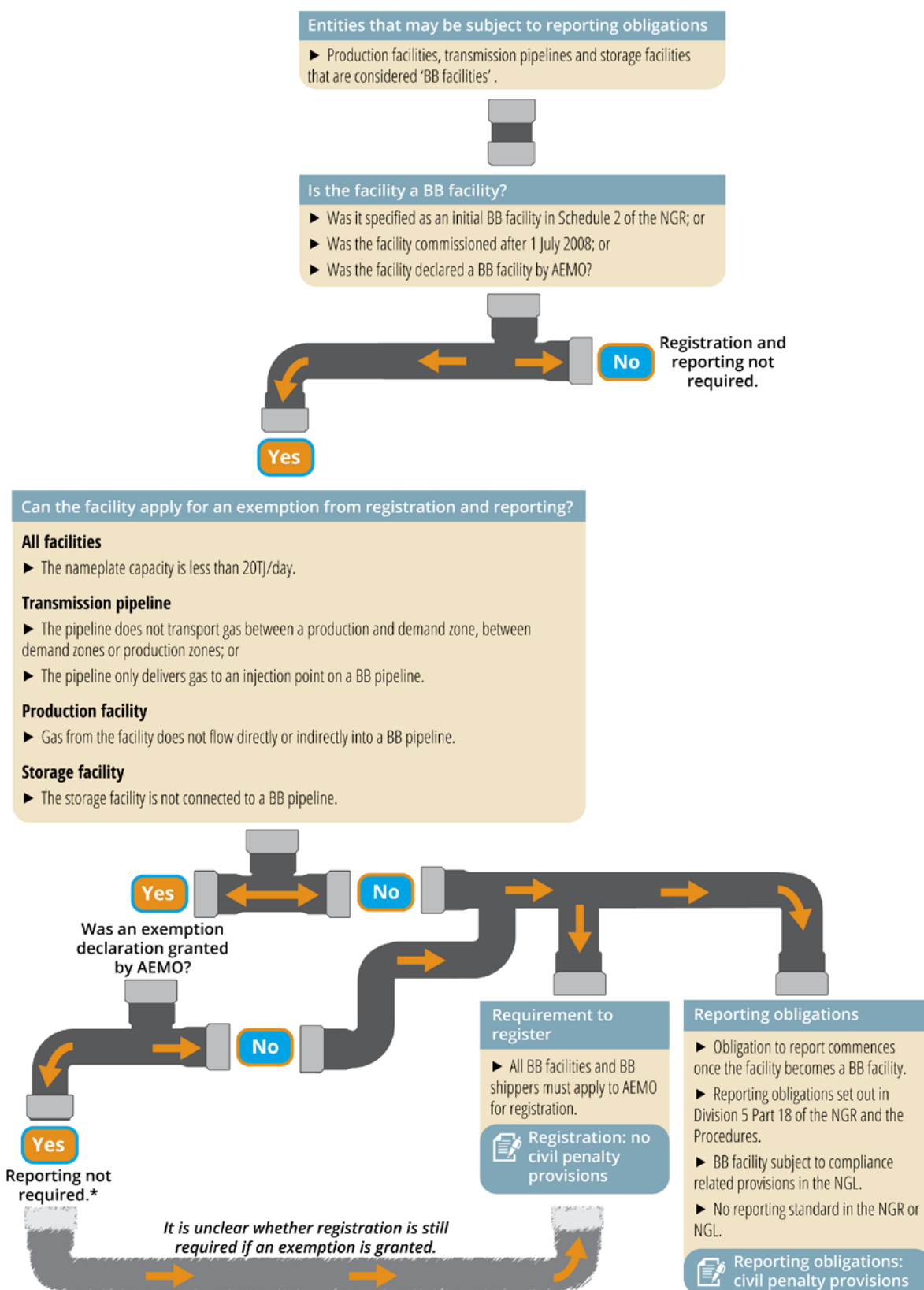
²⁰ South Australian Hansard 2008, National Gas (South Australia) Bill 2008, Legislative Assembly, 9 April 2008, p. 2892.

The legal architecture that gives effect to the reporting model is set out in Chapters 1, 2 and 7 of the NGL, Part 18 of the NGR and the Bulletin Board Procedures (Procedures). This architecture has largely been unchanged since it was implemented in July 2008 and applies to all states and territories except Western Australia.

Through a provision in Schedule 1 of the *National Gas Access (Western Australia) Act 2009*, the Western Australian Government has postponed the adoption of the Bulletin Board provisions in the NGL and NGR until a day fixed by the Western Australian Minister for Energy. While these provisions do not currently apply in Western Australia, the Western Australian Government has legislated for a Western Australian specific Gas Bulletin Board, which is established and operated under the *Gas Services Information Act 2012 (Western Australia)*.

Further detail on the key elements of the reporting and compliance frameworks is provided below. Figure 2.1 shows how these two components of the reporting model currently operate.

Figure 2.1 Current reporting and compliance frameworks



* The only exception to this is that rule 151(6) requires BB production facilities that have been granted an exemption to report on their nameplate capacity rating if requested by AEMO.

2.2.1 Facilities that can be subject to reporting obligations

Section 223 of the NGL states that a pipeline service provider, a user of a pipeline,²¹ producer, storage provider or another person prescribed by regulations that has possession or control of information in relation to natural gas services must give AEMO the information if required to do so under the NGR.

In its current form, the NGR only requires transmission pipelines, production and storage facilities that are defined as ‘BB facilities’ to comply with the reporting obligations in the NGR. A transmission pipeline, production or storage facility can become a BB facility in one of three ways under the current rules:

- the facility was specified as an initial BB facility in Schedule 2 of the NGR;
- the facility is commissioned after 1 July 2008; or
- the facility is declared a BB facility by AEMO under rule 153;

and the facility is not the subject of an exemption declaration.

2.2.2 Reporting threshold and exemption criteria

Under the current reporting framework, facilities with a nameplate rating less than 20 TJ/day can seek an exemption from reporting. An exemption can also be sought in the following circumstances:

- A transmission pipeline can seek an exemption if:
 - the pipeline does not transport gas between a production and demand zone, between demand zones or production zones; or
 - the pipeline only delivers gas to an injection point on the BB pipeline.
- A production facility can seek an exemption if gas from the facility does not flow directly or indirectly into a BB pipeline.
- A storage facility can seek an exemption if it is not connected to a BB pipeline.

2.2.3 Zonal model

By virtue of the operation of the exemption criteria, the obligation for transmission pipelines and, by extension, production and storage facilities, to report is currently linked to the zonal model. Under the zonal model, if a pipeline is not used to transport gas between one of the production zones and/or demand zones defined in the Procedures, it can obtain an exemption. A storage facility ‘connected to’ such a pipeline

²¹ The term ‘user’ is defined in the NGL as a person who is a party to a contract with a service provider of a scheme or non-scheme pipeline or has a right under an access determination to be provided with a pipeline service by means of a scheme or non-scheme pipeline.

can also obtain an exemption, as can a production facility if the gas it produces only flows into that pipeline.

In accordance with rule 135EA, AEMO is responsible for defining demand and production zones. Following a decision by AEMO in March 2016 to add a new demand zone at Wallumbilla, there are 16 demand zones²² and seven production zones listed in Schedule 2 of the Procedures.²³ The location of these zones is depicted in Figure 2.2.

As Figure 2.2 illustrates, the production zones cover all the basins that are currently producing gas in the east coast, including the Gippsland,²⁴ Otway, Cooper,²⁵ Sydney and Bowen/Surat basins, although the Bowen/Surat basin only extends to gas supplied into the QGP, RBP or SWQP.²⁶ The demand zones include major demand centres such as Adelaide, the ACT, Sydney, Curtis Island, Ballera and Wallumbilla, as well as the demand supplied by the major transmission pipelines.

The current delineation of these production and demand zones means that facilities in the Northern Territory, parts of north Queensland and regional areas in New South Wales, Victoria and South Australia are not currently required to comply with reporting obligations.

In addition to determining what facilities are required to report, the zonal model is used as an aggregation tool for actual and forecast flows on BB transmission pipelines. Specifically, rules 173 and 174 require pipelines to report actual and forecast usage for the demand and/or production zones it services. For example, the Moomba to Adelaide Pipeline System is currently only required to report nominations and actual flows to Adelaide, the total pipeline and Moomba (as a production zone). It is not possible therefore to determine from this information how much gas flows into the Whyalla or Angaston laterals for onward supply to the regional areas supplied by these laterals. This aggregation function of the zonal model is examined in further detail in Chapter 4.

²² The Wallumbilla Demand Zone will take effect from 1 June 2016.

²³ Natural Gas Services Bulletin Board Procedures, V6.0.

²⁴ The Bass Basin is included in the Gippsland Basin production zone.

²⁵ Two production zones have been defined for the Cooper Basin: the Ballera and Moomba zones.

²⁶ The Victorian Declared Transmission System has also been declared a production zone to capture the Dandenong LNG facility.

Figure 2.2 Current demand and production zones



2.2.4 Registration requirements

The Bulletin Board registration provisions are set out in Division 3 Part 18 of the NGR but are closely linked to the definitions set out in rule 141. In accordance with rules 148 and 154, AEMO is required to maintain up-to-date registers of BB participants, BB facilities and BB facilities that have been declared exempt and to publish these registers on the Bulletin Board. To enable AEMO to maintain this register, rule 147 currently requires operators of BB facilities and BB shippers to apply to AEMO for registration. The way in which AEMO is to deal with these applications is set out in rule 148.

2.2.5 Reporting obligations

BB facilities that are not subject to an exemption are required by ss. 223 and 228A of the NGL to comply with the reporting obligations in Division 5 Part 18 of the NGR and the Procedures. Section 224 further provides that a person cannot rely upon a duty of confidence to avoid compliance with these obligations. The information BB facilities are currently required to report to AEMO is set out in Table 3.1.

2.2.6 Compliance framework

Section 27 of the NGL requires the AER to monitor, investigate and enforce compliance with the NGL, NGR and Procedures. The AER has a range of tools it can employ in its enforcement capacity, including:

- Instituting civil proceedings in the Federal Court and seeking:
 - an injunction or an order that the BB facility cease or remedy the conduct; and/or
 - an order that a penalty be paid if a civil penalty provision has been breached.²⁷
- Issuing an infringement notice if the AER has reason to believe the facility has breached a civil penalty provision.²⁸
- Seeking an administrative resolution, which may include a voluntary commitment by a BB facility to rectify non-compliance.

As this list highlights, additional enforcement tools and remedies are available to the AER if a BB facility has breached a civil penalty provision. The only provisions where a breach may attract a civil penalty are:

- Section 223, which states that a person defined in this section²⁹ or the Regulations that is in possession or control of information relating to natural gas

²⁷ The civil penalty provisions are set out in s. 3 of the NGL. The maximum civil penalty is \$20,000 for individuals (\$100,000 for body corporates), plus \$2,000 (\$10,000) for every day it continues.

²⁸ The maximum infringement notice is \$4,000 for individuals (\$20,000 for body corporates).

services that is required by the NGR to provide AEMO with information, must do so in accordance with the NGR.

- Section 225 of the NGL, which states that Bulletin Board information provided to AEMO must not be knowingly false or misleading.

Although no provisions in Part 18 of the NGR or the Procedures are classified as civil penalty provisions in the Regulations, breaches of the Bulletin Board reporting obligations in the NGR would fall within the scope of s. 223(2) of the NGL because they would constitute a failure to provide information in accordance with the NGR. Breaches of the Procedures would also fall within the scope of s. 223(2) if the NGR requires they be complied with. Breaches of the registration and exemption provisions in Division 3 Part 18 of the NGR, on the other hand, would not fall within the scope of s. 223(2) because they do not require the provision of information of the nature contemplated by s. 223.

In addition to the remedies outlined above, BB facilities can also be subject to a civil monetary liability for an act or omission that is made in bad faith or through negligence under s. 226 of the NGL.³⁰ A civil monetary liability means a liability for damages, compensation or any other monetary amount that can be recovered by way of civil proceedings.

Section 229(2) of the NGL provides that a person other than the AER may institute proceedings in respect of a breach of a provision that is a conduct provision. A person other than the AER who suffers loss or damage by conduct of another person that was done in breach of a conduct provision may recover the amount of the loss or damage by action against that person in court.

However, in contrast to some other parts of the NGR, Part 18 of the NGR does not currently contain any conduct provisions. As stated above, these provisions allow persons other than the AER to institute proceedings if a person is in breach of a conduct provision. If a person is found to be in breach of such a provision, then s. 232 of the NGL states that the court may:

- make an order that the person in breach cease the act, activity or practice within a specified period, remedy the breach, prevent the recurrence of the breach or implement a specified program; and
- grant an injunction to restrain the person from engaging in the conduct.

If the person that institutes proceedings suffers loss or damage as a result of the conduct by the person in breach of the conduct provision, then s. 233 of the NGL enables them to recover the amount through an action in a court of competent

29 The only persons that are currently defined in this section of the NGL and the Regulations are pipeline service providers, users of scheme or non-scheme pipelines, producers and storage providers.

30 The maximum civil monetary liability that a court can order is currently \$400,000 for each person who suffers loss as a result (capped at \$20 million for a prescribed 12 month period).

jurisdiction. The amount of damages that could be claimed would be limited by s. 226 of the NGL.

Finally, it is worth noting that while the AER is responsible for enforcing compliance with the Bulletin Board provisions, under s. 91A of the NGL, AEMO has a statutory function to investigate breaches or possible breaches of the procedures it makes under the NGR, including the Bulletin Board Procedures. Section 228A of the NGL also empowers AEMO to direct a person to comply with the Procedures if it has reason to believe they are not complying. If the person does not comply with such a direction, then this would constitute a breach of the NGR and AEMO can refer it to the AER. AEMO has no other function or power in relation to enforcing the Procedures or the NGL or NGR.

2.3 Recognising the broader purpose of the Bulletin Board

2.3.1 Background and impetus for change

The purpose of the Bulletin Board is currently defined in rule 142 of the NGR as being to:

- (a) facilitate trade in natural gas and markets for natural gas services through the provision of system and market information which is readily available to all interested parties, including the general public; and
- (b) assist in emergency management through the provision of system and market information.

Under the current reporting model, decisions about the type of information to be reported on the Bulletin Board and other aspects of the reporting and compliance framework do not have to be made by reference to the purpose of the Bulletin Board. These decisions are instead made by reference to the NGR.

In the consultation carried out in the lead up to the Stage 2 Draft Report, there was broad agreement that rule 142(b) should be removed given the Bulletin Board is no longer used for emergency management. Mixed views were, however, expressed about whether rule 142(a) accurately characterises the purpose of the Bulletin Board. For example, some stakeholders claimed the emphasis placed on facilitating trade is appropriate, while others claimed the Bulletin Board is used for other purposes, including informing operational and investment decisions.

2.3.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission recommended that rule 142 be amended to provide greater clarity about the purpose of the Bulletin Board. Specifically, the Commission recommended that:

- rule 142(a) be broadened to reflect the role that information can play in enabling informed and efficient decision making by a wide range of stakeholders (including policy makers), as well as aiding the price discovery process and facilitating trade; and
- rule 142(b) be removed because the Bulletin Board is no longer used in emergency management.³¹

Submissions on this draft recommendation were received from APA, ERM, the EUAA, Esso, Origin, Stanwell and Santos. While there was broad support for the removal of rule 142(b),³² differing views were expressed about the proposed changes to rule 142(a). For example, APA, Origin, ERM and the EUAA³³ supported the proposed change, while Stanwell, Esso and Santos expressed some reservations.

Stanwell's main concern with the proposed change appears to be that it could result in greater emphasis being placed on 'analytics' than the provision of data.³⁴ Esso, on the other hand, claimed the proposed amendment went beyond what was necessary to achieve the COAG Energy Council's Vision of a liquid wholesale gas market.³⁵ Santos commented on the potential for the proposed change to make the purpose more specific than it currently is and to give rise to unintended consequences. Santos added that the COAG Energy Council's Vision should act as the guiding principle for the Bulletin Board, with the focus on information that will assist participants make informed decisions that will facilitate trade.³⁶

2.3.3 Final recommendations

Given the diversity of views that have been expressed about the purpose of the Bulletin Board it is relevant to consider whether the current drafting of rule 142 accurately characterises the purpose of the Bulletin Board.

As noted in the Stage 2 Draft Report, the Bulletin Board no longer has a formal role to play in emergency management. The emergency management limb of rule 142 therefore needs to be removed.

As to rule 142(a), the Commission remains of the view that the drafting should be amended to recognise the important role that information can play in enabling market participants and policy makers to make informed and efficient decisions about matters

³¹ AEMC, *Removal of Gas Bulletin Board emergency information page rule change: Final determination*, 23 April 2015.

³² See for example submissions to Stage 2 Draft Report on information provision: Stanwell, p. 4; Santos, p. 8.

³³ Submissions to Stage 2 Draft Report on information provision: APA, p. 18; ERM, p. 6; EUAA, p. 12; Origin, p. 3.

³⁴ Stanwell, Submission to Stage 2 Draft Report on information provision, p. 4.

³⁵ Esso, Submission to Stage 2 Draft Report on information provision, p. 2.

³⁶ Santos, Submission to Stage 2 Draft Report on information provision, pp. 7-8.

that may not be directly attributable to facilitating trade, such as operational, planning, investment and policy decisions.

In the Commission's view, expanding the purpose in this way is consistent with the NGO, which is to promote efficient investment in, efficient operation and use of natural gas services for the long term interests of consumers. It is also consistent with the original intentions of the GMLG who, as noted in section 2.2, saw the primary purpose of the Bulletin Board as being to both improve decision making and facilitate trade.

While Esso has suggested that broadening the scope of rule 142(a) would go beyond what is required to achieve the COAG Energy Council's Vision, the Commission disagrees. Fostering the development of a liquid wholesale gas market will require steps to be taken on a number of fronts. This includes addressing the information gaps and asymmetries that are affecting the efficiency with which market participants and policy makers make decisions that affect operational, planning, investment and policy decisions.

The Commission's final recommendation on how the purpose of the Bulletin Board should be characterised in the NGR is set out below:³⁷

The purpose of the Bulletin Board is to make information available to BB users to facilitate:

- (a) trade in natural gas and natural gas services; and
- (b) informed and efficient decisions in relation to the provision and use of natural gas and natural gas services.

Contrary to the view expressed by Stanwell, the Commission does not expect this revised drafting to result in any greater emphasis being placed on analytics than would be the case under the current drafting. Nor does it expect the revised drafting to have any unintended consequences as posited by Santos.

2.4 Extending the list of facilities that can be subject to reporting

2.4.1 Background and impetus for change

As outlined in section 2.2.1, the NGR currently only provides for reporting obligations to be imposed on the operators of transmission pipelines, production and storage providers. Extending the coverage of the Bulletin Board to include operators of other types of facilities therefore requires changes to be made to the reporting framework in

³⁷ See proposed rule 145.

Part 18 of the NGR and, to the extent they are not already listed in s. 223 of the NGL, to the NGL or the Regulations.³⁸

2.4.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission recommended that the coverage of the Bulletin Board be extended to include:

- gas fields with proved and probable (2P) reserves (gas field);
- compression facilities used in the provision of hub services in a Gas Supply Hub (GSH compression facility);
- LNG processing facilities; and
- large user facilities.³⁹

It therefore recommended changes to the reporting framework to enable reporting obligations to be imposed on the operators of these facilities and fields.

While some concerns were raised by stakeholders about the draft recommendation to extend the coverage of the Bulletin Board to include these new entities (see Chapter 3), no specific concerns were raised about the proposal to amend the reporting model to give effect to this change.

2.4.3 Final recommendations

For the reasons set out in Chapter 3, the Commission remains of the view that the coverage of the Bulletin Board should be extended to include gas fields, large user facilities, LNG processing facilities and GSH compression facilities. The Commission therefore recommends the following changes to the reporting framework to give effect to this recommendation:

- Section 223 of the NGL (or the Regulations) should be amended because the operators of these fields and facilities are not necessarily captured by the current list of persons that can be required to provide information in s. 223 of the NGL.⁴⁰

³⁸ Section 223 of the NGL recognises the potential for reporting obligations to be imposed on pipeline service providers, users, producers, storage providers or other persons prescribed by Regulation. The term ‘user’ is defined in the NGL as a person who is a party to a contract with a service provider of a scheme pipeline or has a right under an access determination to be provided with a pipeline service by means of a scheme pipeline.

³⁹ A large user facility does not include a retail business.

⁴⁰ While it may be possible in some cases to use the existing list of parties identified in s. 223 of the NGL to impose the new reporting obligations on parties, this may not capture all the potential holders of that information. For example, in the case of gas fields with 2P reserves the Commission could rely on the specification of producers in s. 223 to capture some of the parties that would be in possession or control of this information, but this definition may not capture explorers or parties that are not currently producing gas but that hold 2P reserves. Similarly, the Commission could

- Part 18 of the NGR should be amended to recognise the new entities that can be subject to reporting obligations and the specific reporting obligations that these entities will be subject to.⁴¹

Before any change can be made to the NGR to extend the reporting obligations to these new facilities, s. 223 of the NGL or the Regulations will need to be amended by the South Australian Minister. It is for this reason that some changes to the reporting framework in Part 18 of the NGR and many of the changes outlined in Chapter 3 will need to be made as part of the second phase of the Bulletin Board reforms.

2.5 Addressing the gaps that have arisen under the zonal model and other exemption criteria and provisions in the NGR

2.5.1 Background and impetus for change

One of the more significant issues with the reporting framework that stakeholders raised in stages 1 and 2 of this review is that there are a number of pipelines, production and storage facilities that are not currently reporting that should be given the size of these facilities.⁴² A number of reasons were cited for these reporting gaps, including:

- a lack of awareness among new entrants about reporting obligations in the NGR;
- the link that currently exists between the obligation to report and the zonal model, which stakeholders claim is problematic because zones have not kept pace with the market's development and may not be sufficiently flexible to capture some facilities;
- the storage facility exemption criteria, which currently allow an exemption to be obtained if the facility is not physically 'connected to' a BB pipeline even though gas flows from (to) the facility to (from) a BB pipeline; and
- the exclusion of facilities that were operational prior to 1 July 2008 that were not originally identified as BB facilities from the registration and reporting obligations.⁴³

rely on the specification of users in s. 223 to capture some of the large users that would be in possession or control of large user consumption information, but the definition of user in the NGL does not necessarily extend to large users that are supplied by a retailer.

⁴¹ See proposed rule 141 and Division 5.

⁴² See for example, Stanwell, Submission to Stage 1 Draft Report, p. 4; ERM Power, Submission to Wholesale Gas Market Discussion Paper, p. 4; and APA, Submission to Information Provision Working Group Discussion Papers, 30 September 2015, p. 2.

⁴³ For example, the Tipton West and Daandine production facilities.

2.5.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission noted that the reporting framework in its current form does not capture all the facilities it should and recommended that the reporting gaps be addressed by:

- Removing the link that currently exists in rule 149(5)(b) between the obligation to report and the zonal model.
- Simplifying the exemption criteria by:
 - removing the exemption criteria in rules 149, 150 and 151;
 - implementing a minimum reporting threshold for certain facilities; and
 - allowing large user facilities to obtain an annual reporting exemption in certain circumstances.
- Reducing the reporting threshold from 20 TJ/day to 10 TJ/day.
- Requiring facilities commissioned pre-1 July 2008 that were not identified as BB facilities at this time to be treated in the same manner as other facilities and to be required to register and report if they satisfy the minimum reporting threshold.

Submissions on these draft recommendations were received from a number of stakeholders. In general, stakeholders were supportive of the recommendation to remove the link between the obligation to report and the zonal model.⁴⁴ There was also some support for simplifying the exemption criteria by just adopting a minimum reporting threshold⁴⁵ and removing the requirement for a production or storage facility to be connected to a BB transmission pipeline.⁴⁶ Mixed views were, however, expressed about the level of the reporting threshold.

For example, Stanwell supported the adoption of a 10 TJ/day threshold,⁴⁷ while Santos suggested that the existing threshold should either be retained or increased to reflect the size of the east coast market.⁴⁸ Esso and APGA also questioned the utility of reducing the reporting threshold to 10 TJ/day given the number of additional facilities it could capture and the additional costs that it could give rise to.⁴⁹ The MEU also raised some concerns about the limited consideration that had been given to the impact

⁴⁴ See for example, Submissions to Stage 2 Draft Report on information provision: Jemena, p. 17; EnergyAustralia, p. 7; Stanwell, p. 6.

⁴⁵ See for example, Submissions to Stage 2 Draft Report on information provision: Australian Energy Council, p. 2; AER, p. 6; Stanwell, p. 6.

⁴⁶ Submissions to Stage 2 Draft Report on information provision: AEMO, Attachment B, p. 4; ERM, p. 7; Stanwell, p. 10.

⁴⁷ Stanwell, Submission to Stage 2 Draft Report on information provision, p. 6.

⁴⁸ Santos, Submission to Stage 2 Draft Report on information provision, p. 10.

⁴⁹ Submissions to Stage 2 Draft Report on information provision: Esso, p. 3; APGA, p. 15; Stanwell, p. 6.

of the reduction on the number of large users that would be required to report and the benefit of reducing the threshold. The MEU also questioned the basis for the 10 TJ/day threshold.⁵⁰

No specific comments were made by stakeholders about the draft recommendation to require facilities commissioned pre- and post-1 July 2008 facilities to be treated in the same manner.

2.5.3 Final recommendations

As noted in the draft report, the reporting framework does not currently capture all the transmission pipelines, production and storage facilities necessary to meet the Bulletin Board purpose and, as a consequence, there are a number of significant gaps in the information reported on the Bulletin Board. Having considered the submissions that were made in response to the Stage 2 Draft Report the Commission remains of the view that these gaps should be addressed by:

- removing the link between the obligation to report and the zonal model;
- simplifying the exemption criteria;
- reducing the minimum reporting threshold to 10 TJ/day; and
- removing the distinction that currently exists between facilities commissioned pre- and post-1 July 2008.

Further detail on the Commission's recommendations in each of these areas is provided below.

Removing the link between the obligation to report and the zonal model

As the east coast gas market moves away from the traditional point-to-point transportation framework that underlies the zonal model, to a more dynamic model with gas flowing bi-directionally on numerous pipelines, it is becoming increasingly clear that the zonal model is giving rise to significant reporting gaps. These gaps are emerging because:

- pipelines (and, by extension, the connected production and storage facilities) that are not connected to a defined production or demand zone are not currently captured by the zonal model and are not therefore required to report even though the pipelines may be an important part of the market;
- pipelines that are used to transport gas within a zone are not required to report;

⁵⁰ MEU, Submission to Stage 2 Draft Report on information provision, p. 15.

- the restriction of the zonal model to production and demand zones has meant gas flows between pipelines or through transit locations are not well captured; and
- the boundaries of existing zones do not capture all the gas flows and, in the case of demand zones, are not necessarily:
 - aligned with the boundaries of the STTM locations; or
 - capturing the recent interconnections that have occurred between the Eastern Gas Pipeline and the Moomba to Sydney Pipeline, and between the SEA Gas Pipeline and the Moomba to Adelaide Pipeline System.

Information gaps are also arising because pipeline flows reported on a zonal basis do not accurately reflect the utilisation of the pipeline or the direction in which gas flows. This issue is considered in further detail in Chapter 4.

The effect of the first three reporting gaps listed above has been particularly pronounced around Wallumbilla, with at least four pipelines and two storage facilities in this area not being captured by the reporting framework to date because it has not been designated as a production or demand zone.⁵¹ While AEMO has recently amended the Procedures to recognise Wallumbilla as a demand zone, this change will not address some of the more fundamental gaps that have emerged under the zonal model. Nor will it prevent similar gaps emerging in other areas that are more akin to a transit zone than a demand or production zone. It is for this reason that the Procedure change was only viewed by its proponent, the COAG Energy Council Secretariat, as an interim solution while a more holistic assessment of the zonal model is carried out as part of this review.⁵²

While it may be possible to amend the NGR and Procedures to address some of the limitations that have arisen under the zonal model (for example, by introducing the concept of a transit zone), this would not prevent other gaps emerging in the future, particularly as the market becomes more dynamic. Reliance on rule changes to manage future developments is also not ideal. The Commission is therefore of the view that the link between the zonal model and the obligation to report that is currently enshrined in rule 149(5)(b) should be removed.

The implications that this change will have for facilities in the Northern Territory, northern Queensland and regional areas is considered in further detail in Chapter 3.

⁵¹ These facilities include the Berwyndale to Wallumbilla Pipeline, the Darling Downs Pipeline, the Comet Ridge to Wallumbilla Pipeline and the Spring Gully Pipeline and the Silver Springs and Roma Underground storage facilities.

⁵² COAG Energy Council Secretariat, Proposed Procedure Change Wallumbilla Demand Zone, October 2015, p. 3.

Simplifying the exemption criteria by adopting a minimum reporting threshold

As noted in section 2.2.2 the exemption criteria in the NGR currently allow facilities to seek an exemption from some of the reporting obligations if the facility's nameplate rating is less than 20 TJ/day, or if the facility satisfies one of the following criteria:

- Transmission pipeline: the pipeline does not transport natural gas between zones (rule 149(5)(b)), or only delivers gas to an injection point on the BB pipeline (rule 149(5)(c)).
- Production facility: gas from the production facility does not flow directly or indirectly into a BB pipeline (rule 151(7)(a)).
- Storage facility: the storage facility is not connected to a BB pipeline (rule 150(5)(c)).

For the reasons set out above, the Commission recommends that the link between reporting and the zonal model in rule 149(5)(b) be removed.

In relation to the remaining criteria, the following observations can be made:

- The exemption criteria in rules 150(5)(c) and 151(7)(a) currently allow an exemption to be obtained if the production or storage facility is not connected to a BB transmission pipeline. This restriction has resulted in facilities located in distribution systems being treated differently from those connected to a transmission pipeline. It has resulted in facilities, such as the Camden Production Facility and the Newcastle Gas Storage Facility, being exempt from reporting.
- The exemption criterion in rule 150(5)(c) currently allows an exemption to be obtained if the storage facility is not physically connected to a BB pipeline even though gas flows from (to) the facility to (from) a BB pipeline. To date, two storage facilities have been excluded on this basis (Silver Springs Storage Facility and Newcastle Gas Storage Facility), both of which have a sizable storage.⁵³
- The exemption criterion in rule 149(5)(c) currently allows a BB pipeline that just delivers gas to an injection point on the BB pipeline to obtain an exemption. The circumstances in which this criterion would apply, and the rationale for its inclusion is unclear and, as far as the Commission can tell, it has not been used to justify an exemption to date.

Given the information gaps and asymmetries that have arisen under rules 150(5)(c) and 151(7)(a) and the lack of a clear rationale for rule 149(5)(c), the Commission recommends that the exemption provisions be simplified by replacing these exemption

⁵³ The storage (withdrawal) capacity of the Silver Springs Gas Storage Facility is 35 PJ (30 TJ/day) while the capacity of the Newcastle Gas Storage Facility is 1.5 PJ (120 TJ/day). Core Energy Group, *Gas Participant Information on Gas Production, Processing, Transmission, LNG and Storage Facilities*, March 2016.

criteria from the NGR with a minimum reporting threshold based on nameplate capacity ratings that will allow:

- the operators of transmission pipelines, production facilities, storage facilities and GSH compression facilities to be exempt from registration and reporting if they fail to satisfy the minimum reporting threshold; and
- large users to be exempt from registration and reporting if their facility fails to satisfy the minimum nameplate based reporting threshold and to obtain an annual exemption from reporting daily consumption data if the facility can demonstrate to AEMO that:
 - it has not been delivered the minimum volume implied by the reporting threshold on a single day in the last 12 months; and
 - it will not be delivered an equivalent volume in the next 12 months (that is, the period in which the exemption will apply).

The rationale for the latter of these exemptions is explained in section 3.6.

To give effect to this recommendation, changes will need to be made to Part 18 of the NGR.⁵⁴

Under these proposed rules, a transmission pipeline, production facility, storage facility, GSH compression facility and large user facility will only be required to register and therefore become a BB reporting entity if it satisfies the reporting threshold. In contrast to the current rules, the operators of these types of facilities that do not meet the minimum reporting threshold will not be required to apply to AEMO for a formal exemption. Large user facilities that meet the annual reporting exemption criteria will, however, be required to apply to AEMO for an annual reporting exemption.

Simplifying the exemption criteria in this manner will mean that all transmission pipelines, production, storage, compression and large user facilities that exceed the minimum reporting threshold will be captured by the reporting framework, regardless of whether they are connected to a transmission or distribution pipeline, or to a production or demand zone.

In relation to LNG processing facilities, a minimum reporting threshold has not been provided for in the proposed rules because the scale of these facilities is such that they will always satisfy the threshold.

As to gas fields, the concept of a minimum nameplate capacity rating makes little if any sense, particularly for gas fields that are not actually producing gas. While it may be possible to adopt an alternative reporting threshold for these projects, any such threshold is likely to be arbitrary and result in gaps in 2P reserves reporting. When coupled with the measures the Commission has put in place to minimise the reporting

⁵⁴ See proposed rules 141 and 189.

burden (see section 3.4) and the fact that a reporting threshold has not been adopted under the Queensland Government's reporting regime, the Commission has decided not to recommend a minimum reporting threshold for gas fields. The proposed rules instead require the following BB field criteria to be satisfied:

- there must be a right to explore for or extract petroleum under one or more petroleum tenements in the field; and
- the field has been determined to contain proved reserves or probable reserves of gas (or both).

Minimum reporting threshold

The minimum reporting threshold in rules 149-151 is currently 20 TJ/day.⁵⁵ In the Stage 2 Draft Report, the Commission recommended the threshold be reduced to 10 TJ/day. In doing so, the Commission noted that a 10 TJ/day threshold would provide a more accurate picture of gas production, storage, pipeline flows and consumption in the east coast and observed that it was also consistent with both:

- the reporting threshold used in Western Australia; and
- the 30 MW dispatch threshold used in the NEM.

Following the release of the draft report, the Commission has carried out analysis to establish how many facilities could be affected by the change. Publicly available information and information provided by pipeline operators regarding facilities that are not currently reporting is limited. Nevertheless, indications are that the reduction to 10 TJ/day is only likely to affect one production facility (at Camden)⁵⁶ and three transmission pipelines (the Central West, Central Ranges and Cheepie to Barcaldine pipelines).⁵⁷ As to large users, the information provided by transmission and distribution pipeline operators suggests that a 20 TJ/day threshold would capture approximately 30 large users while a 10 TJ/day threshold would capture approximately 40 large users.⁵⁸

⁵⁵ For pipelines, production facilities and storage facilities this is based on the nameplate capacity rating of the facility. For large users it will be based on the maximum quantity of gas that can be delivered to the facility on a gas day (that is, the connection to the facility is capable of allowing that quantity of gas).

⁵⁶ While Camden did not satisfy the exemption criteria it had, until recently, been reporting to AEMO. It can therefore be expected to already have the systems in place to report

⁵⁷ Information contained in Core Energy Group, *Gas Participant Information on Gas Production, Processing, Transmission, LNG and Storage Facilities*, March 2016, suggests that no storage facilities will be affected by the change in the threshold from 20 TJ/day to 10 TJ/day.

⁵⁸ This estimate is based on information provided by APA, Jemena, Epic, Palisade, AEMO, AGNL and Multinet. While the Commission also asked Ausnet and Allgas Energy to provide estimates of the number of large users on their distribution pipelines, it did not obtain a response. The estimate therefore excludes any large users that may be utilising these distribution pipelines.

Although a greater number of large users will be affected by the 10 TJ/day threshold, the Commission has put in place a number of measures to minimise the regulatory burden that will be placed on these facilities (see section 3.6). The Commission does not therefore expect the reporting obligation to impose a significant impost on most large users.

On balance, and having regard to the purpose of the Bulletin Board and the broader benefits to the market of having a more accurate picture of demand and supply in the east coast, the Commission's final recommendation is that the reporting threshold for transmission pipelines, production facilities, storage facilities, GSH compression facilities and large user facilities be set at 10 TJ/day. For gas fields and LNG processing facilities there will be no minimum reporting threshold.

With the exception of large user facilities, the 10TJ/day reporting threshold will be based on the facility's nameplate capacity rating. For large user facilities the minimum reporting threshold will be assessed by reference to the maximum quantity of gas that can be delivered to the facility on a gas day.⁵⁹

Facilities commissioned prior to 1 July 2008

Facilities that were operational before Part 18 of the NGR came into effect, but were not identified in the original list of BB facilities, are not currently required to apply to AEMO for registration under rule 147. It is unclear why rule 147 was drafted in this manner. However, it appears to be a genuine gap in the reporting framework that has given rise to at least two facilities not having to report (the Tipton West and Daandine production facilities). The Commission's final recommendation is that this limitation be removed and that all facilities, regardless of when they were commissioned, be required to register and report if they satisfy the minimum reporting threshold.

The Commission also recommends that the power AEMO has to declare BB facilities under rule 153 be removed. This rule currently allows AEMO to declare a facility a BB facility if it has reasonable grounds to believe that it is not currently a BB facility, is not the subject of an exemption, and is unlikely to satisfy the exemption criteria. However, because rule 141, in effect, deems any new facility to be a BB facility when it is commissioned, AEMO can only use this power to declare facilities that were in existence prior to the NGR coming into effect that were not originally identified as BB facilities. Given the recommendation that the distinction between facilities commissioned pre- and post-1 July 2008 be removed, there is little value in retaining this power in the NGR.

Revised nomenclature

To provide greater clarity in the proposed rules about the facilities that will be subject to Bulletin Board reporting obligations under the NGR (BB reporting entities), the

⁵⁹ See proposed rules 141 and 189(5).

proposed rules use the following nomenclature for facilities that are required to report:⁶⁰

- The term BB reporting entity is used to refer to a facility operator or field operator registered as the BB reporting entity for one or more BB facilities or BB fields.
- The term BB facility is used to refer to transmission pipelines, production facilities, storage facilities, GSH compression facilities and large user facilities that satisfy the minimum reporting threshold. It also refers to LNG processing facilities.
- On an individual basis, a transmission pipeline, production facility, storage facility, GSH compression facility or large user facility that satisfies the minimum reporting threshold are referred to as a BB pipeline, BB production facility, BB storage facility, BB compression facility or BB large user. If a facility does not satisfy the reporting threshold, then it is just a facility.

The term BB field is used to refer to a gas field that satisfies the following criteria:

- there is a right to explore for or extract petroleum under one or more petroleum tenements in the field; and
- the field has been determined to contain proved reserves or probable reserves of gas (or both).

2.6 Clarifying and simplifying the registration requirements

2.6.1 Background and impetus for change

Under the current reporting model, BB facilities and BB shippers are required to apply to AEMO for registration under Part 18 of the NGR and AEMO is required to maintain up-to-date registers of BB facilities and BB facilities that have been declared exempt.

In the working group meetings held in the lead up to the Stage 2 Draft Report, some participants noted that it was unclear what the purpose of registration is. A number of participants also noted that the drafting of these provisions had caused confusion among new facility operators and resulted in lengthy delays in some new facilities registering and reporting, because it is unclear from these provisions whether:

- a facility has to register before the reporting obligations commence; and
- a facility has to register if it is likely to satisfy the exemption criteria.

⁶⁰ See proposed rule 141.

2.6.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission noted that the Bulletin Board registration provisions are ambiguous and that there is a degree of circularity between these provisions and the definitions set out in rule 141.⁶¹ The Commission therefore recommended that the registration provisions be completely redrafted to provide facility operators with greater clarity about who is required to register, when registration is required and the interaction between the registration, exemption and reporting provisions.

Jemena, Santos, Stanwell and the AER were the only stakeholders to comment on this aspect of the draft report, all of whom supported the proposal to simplify and clarify the registration requirements.⁶²

2.6.3 Final recommendations

As noted in the Stage 2 Draft Report, the registration provisions in their current form are both ambiguous and circular. It is also unclear from these provisions:

- what the purpose of registration is;
- when a new facility should become registered and if registration attaches to the facility operator or the facility; and
- how the registration provisions interact with the reporting obligations and exemption provisions.

It is not surprising therefore that the provisions have caused confusion and delays in some new facilities registering and reporting.

To address these shortcomings, the Commission recommends that the registration provisions in Division 3 Part 18 of the NGR be replaced in their entirety with rules that clearly specify:⁶³

- **Who is required to apply to AEMO for registration:** The proposed registration provisions require: facilities and fields that satisfy the definition of a BB facility or BB field to apply for registration. In effect, this means that transmission pipelines,

⁶¹ For example, rule 147(2) states that if a person becomes a pipeline operator after the commencement of the NGR then it must apply for registration as soon as practicable. The definition of a pipeline operator in rule 147, however, presumes that the pipeline is already a BB pipeline. In addition, rule 153 allows AEMO to declare a pipeline or facility to be a BB facility but the definitions in rule 141, in effect, deems any facility commissioned after 1 July 2008 a BB facility.

⁶² Submissions to Stage 2 Draft Report on information provision: Jemena, p. 17; Stanwell, p. 7; Santos, p. 10; AER, p. 6.

⁶³ See Division 3 (rules 150-163) of the proposed rule.

storage, production, GSH compression and large user facilities that do not satisfy the minimum reporting threshold do not have to register.⁶⁴

- **Who and what are to be registered:** The proposed registration provisions require:
 - the operators of BB facilities to apply for registration as the facility operator and to register their BB facilities; and
 - the operators of BB fields to apply for registration as the field operator and to register their BB fields.
- **What is to occur if there are multiple owners of a BB facility or BB field:** The proposed registration provisions provide for the following to occur if a facility is owned by more than one facility or field operator:
 - BB facilities: The proposed rules allow the joint owners of a BB facility (referred to as a facility operator group) to appoint one member of the group to be the responsible facility operator for that facility. The responsible facility operator can then apply, on behalf of itself and all other members of the group, to:
 - register itself and other members of the group and the facility; and
 - register the responsible facility operator as the BB reporting entity for the BB facility, which means it will then be responsible for complying with the reporting obligations in Division 5 Part 18 of the NGR.
 - BB fields: Equivalent provisions have been included in the proposed rules for BB fields that are owned by more than one field operator.
- **When a BB facility and BB field will be required to register:** Table 2.1 sets out when a facility will be required to register under the proposed registration provisions.
- **Changes to information:** The proposed registration provisions require facility operators to notify AEMO of any changes to the identity of the field and facility operators, or the field or facility operator group.
- **Revocation of registration:** Provision has also been made in the proposed registration provisions for registered facility or field operators to apply to revoke the registration of a BB facility or BB field if circumstances change such that they no longer meet the definition of a BB facility or BB field. This could occur, for example, if a BB pipeline no longer met the reporting threshold, or if the reserves in a BB field were written down to zero.

⁶⁴ Note that retail businesses are not included in 'large user facilities' and are not required to register as BB participants.

Table 2.1 When a BB facility or BB field will be required to register

Facility	Registration required?	When registration will be required		
		Facilities and shippers that are already registered	Facilities in existence when new rules come into effect that are not already registered	New facilities (or existing facilities that later meet the reporting threshold due to expansion)
Transmission pipelines	Registration only required if the facility satisfies the minimum reporting threshold.	These facilities will remain registered.	Facilities will have 20 business days after the commencement of the new rules to apply for registration.	Facilities to register 20 days prior to the facility or expansion being commissioned.
Production facilities				
Storage facilities				
Compressors in gas supply hubs		n.a.		
Large user facilities		n.a.		
LNG processing facilities	All facilities to register.	n.a.		
Gas fields	All fields with 2P reserves to register.	n.a.		Field to be registered within 20 business days of the estimate of 2P reserves having first been made.

Under this proposed registration framework, registration will act as a trigger for BB facilities and BB fields (BB reporting entities) to commence reporting in accordance with the obligations set out in Division 5 of the proposed rule. The clarity of these requirements will support the provision of relevant information to AEMO and meeting the purpose of the Bulletin Board.

One other substantive change that the Commission has made to the current registration provisions is to remove the formal requirement for BB shippers to register. The original rationale for requiring BB shippers to register is not clear, but it is likely to have reflected the need for AEMO to be able to identify BB shippers for the purposes of:

- recovering the costs AEMO incurs in operating and maintaining the Bulletin Board as required by rule 191 of the NGR; and
- the emergency management functions that used to be performed by the Bulletin Board.

Given the Bulletin Board is no longer playing an emergency management function and the proposed changes to the funding arrangements (see Chapter 5), the rationale for requiring shippers to register is less clear. This is particularly the case given the proposal for breaches of the registration provisions to be classified as civil penalty provisions (see section 2.2.6) and as a trigger for reporting.

While the proposed rules will not require BB shippers to register, they will allow BB shippers to register on a voluntary basis. Those BB shippers that decide to voluntarily register will become BB participants for the purpose of the Bulletin Board, which means they will be able to access those parts of the Bulletin Board that are limited to use by BB participants (such as the facility to upload data to AEMO).⁶⁵ Two examples of this type of provision are current rules 176-177, which only allows BB participants to advertise any spare capacity or spare gas they have available for sale.

In addition to the requirements set out above, registered BB facilities, BB fields and BB shippers will be required to provide their contact details to AEMO for publication on the Bulletin Board and to inform AEMO as soon as reasonably practicable of any changes to these details. Users that are party to a contract with a service provider of a transmission pipeline will also be required to provide their contact details to AEMO and inform AEMO of any changes, if they have elected not to become a registered BB shipper. The Commission has decided to extend the contact detail provisions to these users so that parties seeking access to secondary capacity on pipelines can readily access the relevant contact details.⁶⁶

2.7 Implementing an information standard to improve information quality

2.7.1 Background and impetus for change

In contrast to some other parts of the NGR, the information that reporting entities provide to AEMO under Division 5 Part 18 of the NGR does not currently have to comply with a particular information standard. Provisions in the NGL and NGR just provide that:

- the information provided to AEMO not be knowingly false or misleading (s. 225 of the NGL);
- immunity from any civil monetary liability for acts or omissions in giving AEMO Bulletin Board information will not be available if the act or omission was made in bad faith or through negligence (s. 226 of the NGL); and
- estimates of daily production, storage and the short term capacity outlook be made in “good faith” (rule 141).

⁶⁵ See proposed rule 162.

⁶⁶ See proposed rule 163.

In the working group meetings held in the lead up to the Stage 2 Draft Report, stakeholders were asked about the value of introducing an information standard into Part 18 of the NGR to address the concerns that had been raised by some stakeholders about the quality and timeliness with which some information has been reported.⁶⁷ Existing operators of facilities responded by stating that they already apply a relatively high standard when providing information to AEMO and that a new standard was unlikely to affect the way they report. The broader group did, however, acknowledge that an information standard could provide new facilities with some guidance as to what standard of information is expected.

During these working group meetings AEMO and the AER also noted that they had taken a number of steps to limit the opportunities for inaccurate information to be reported on the Bulletin Board and to monitor and deal with accuracy and timeliness issues on a more timely basis.⁶⁸ AEMO did, however, note that there may be value in it conducting a more detailed periodic review of Bulletin Board information and to liaise with reporting entities to correct any errors identified.

2.7.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission noted the concerns that had been raised about the quality and timeliness with which some information has been reported on the Bulletin Board and recommended that an information standard be adopted. It also noted the value of AEMO's proposal to conduct periodic reviews of the information published on the Bulletin Board and to work with reporting entities and, where relevant, the AER to resolve any issues it identified.

AGL, PIAC, Stanwell and the AER were the only stakeholders to comment on the draft recommendation to introduce an information standard, all of whom supported this proposal.⁶⁹ In terms of the form that the standard should take, AGL and Stanwell supported the adoption of the good gas industry practice standard that currently applies in the STTM.⁷⁰ The AER, on the other hand, noted that it may not be as simple as reproducing the standard that applies in the STTM in Part 18 of the NGR. Elaborating on this further, AER staff noted that the good gas industry practice standard may need to be amended to recognise that persons other than those engaged

⁶⁷ See for example, Stanwell, Stage 1 Discussion Paper Submission, p. 7 and Stage 1 Draft Report Submission, p. 6. Concerns were also raised by some stakeholders during the working group meetings.

⁶⁸ For example, AEMO has implemented the following measures to limit the opportunity for inaccurate and incomplete information to be submitted to the Bulletin Board: (a) building in some minimum acceptance criteria (for example, file completeness, valid facility codes, dates) into the web upload process; and (b) developing an automated process that draws on a number of rules of thumb to test the quality, consistency and completeness of the information submitted by each BB facility. The AER has also taken steps to help improve the accuracy and timeliness of information, by conducting targeted compliance reviews and making improvements to internal systems to enable it to monitor the timeliness and accuracy issues on more of a real time basis and respond accordingly.

⁶⁹ Submissions to Stage 2 Draft Report on information provision: AGL, p. 5; AER, p. 6; PIAC, p. 7.

⁷⁰ AGL, Submission to Stage 2 Draft Report on information provision, p. 5.

in the business of providing natural gas services would be required to provide information under the proposed rules.

PIAC also noted in its submission that it supported AEMO's proposal to carry out a more detailed periodic review of the information reported on the Bulletin Board.⁷¹

2.7.3 Final recommendation

Like a number of stakeholders, the Commission is concerned by the inaccuracies that have appeared on the Bulletin Board and the failure of some facility operators to submit information on time. It is of the view that more needs to be done to:

- monitor the accuracy and timeliness of the information reported by BB reporting entities and address any issues that arise on a timely basis; and
- clearly define the information standard that reporting entities should comply with when providing information.

On the first of these matters, the Commission notes that while the AER and AEMO have taken a number of steps to improve the quality of information reported on the Bulletin Board, it is still possible that erroneous information will be published. The Commission therefore welcomes AEMO's proposal to conduct periodic reviews of the information published on the Bulletin Board and work with reporting entities and, where relevant, the AER to resolve any issues it identifies.

On the second matter, the Commission notes that the problem with the standards implied by ss. 225 and 226 of the NGL and the 'good faith' reference in rule 141 is that they establish too low a standard for reporting and could adversely affect the market's confidence in the information reported on the Bulletin Board. The Commission therefore remains of the view that an information standard should be adopted in Part 18 of the NGR and, in a similar manner to the STTM standard, the obligation to comply with it be classified as both a civil penalty and a conduct provision.

As the AER pointed out, if the standard is to be based on the good gas industry practice standard that currently applies in the STTM then some refinements will need to be made to ensure that it can apply to the Bulletin Board. For example, if the coverage of the Bulletin Board is to be extended to large user facilities then the definition of competent person in the 'good gas industry practice' standard will need to be measured by reference to persons operating these types of facilities, rather than persons providing natural gas services. The Commission's final recommendation on the form the information standard should take is:⁷²

"The **BB information standard** for information or data relating to a:

⁷¹ PIAC, Submission to Stage 2 Draft Report on information provision, p. 7.

⁷² See proposed rule 164.

(a) BB facility means 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;

(b) BB field means 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 field in Australia (including the offshore waters of Australia)

in each case acting with all due skill, diligence, prudence and foresight and in compliance with all applicable legislation (including these rules), authorisations, industry codes of practice and (in the case of information or data about proved and probable reserves), SPE-PRMS.”

This definition of BB information standard refers to SPE-PRMS for the reporting of 2P reserves. This is the existing reporting methodology as set out in the Society of Petroleum Engineers' *Petroleum Resources Management Systems* documentation.

The information standard will apply to information provided by reporting entities under Part 18 of the NGR and the Procedures. The standard will also apply to any updates of information provided to AEMO.

2.8 Strengthening and clarifying the compliance framework

2.8.1 Background and impetus for change

The AER is, as noted in section 2.2.6, responsible for monitoring, investigating and enforcing compliance with the NGL, NGR and Procedures and has a range of tools that it can use to encourage compliance. The AER can, however, only issue an infringement notice or seek a court issued civil penalty if a reporting entity has breached a civil penalty provision. The only Bulletin Board provisions that are currently defined as civil penalty provisions are ss. 223 and 225 of the NGL, with breaches of s. 223 capturing breaches of the reporting obligations in Division 5 Part 18 of the NGR,⁷³ but not the registration provisions in Division 3.

In Stage 1 of the review, the Commission noted the potential for changes to the compliance framework to provide the market with greater confidence in the information reported on the Bulletin Board. Working group participants expressed mixed views on this proposal, with some calling for the current framework to be strengthened by classifying the registration provisions as civil penalty provisions. Others thought the current balance was appropriate and claimed that the extension of civil penalties to registration was unlikely to help in those cases where a facility is unaware of the obligations to report.

Notwithstanding the diversity of views, there was broad agreement among the group that it would be beneficial for the NGR to clearly identify any civil penalty provisions,

⁷³ The civil penalty provisions are set out in s. 3 of the NGL. The civil penalty provisions also extend to the Procedures where the NGR require they be complied with.

particularly given a number of participants who were unaware that a breach of Division 5 Part 18 of the NGR could constitute a breach of s. 223 of the NGL.

2.8.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission recommended that:

- new facilities be accorded greater incentive to register by classifying the registration provisions in the NGR as civil penalty provisions; and
- notes be added to the relevant areas of Part 18 of the NGR to identify those provisions that are already civil penalty provisions by virtue of the operation of s. 223 of the NGL.

Submissions on these draft recommendations were received from Stanwell, APA, the AER and Santos. Stanwell, APA and the AER were broadly supportive of both recommendations.⁷⁴ Santos, on the other hand, questioned the classification of reporting obligations as civil penalty provisions and claimed that this classification would impose additional compliance costs on industry.⁷⁵

2.8.3 Final recommendations

The market's confidence in the information reported on the Bulletin Board will depend on:

- the strength of the compliance framework that underpins it and the incentives it provides facilities to register and comply with reporting obligations; and
- the level of awareness reporting entities have of the consequences of any breach of the Bulletin Board provisions in the NGL, NGR and Procedures.

The primary concern the Commission has with the current compliance framework is that registration provisions are not currently classified as civil penalty provisions. While this may not have been a significant issue to date, it can be expected to become more of an issue if the registration provisions are amended in the manner proposed in section 2.6.3. This is because under the new reporting model registration will act as a trigger for reporting by BB facilities and BB fields. The operators of new facilities or fields may therefore have an incentive to delay registration for as long as they can because they will avoid the reporting obligations during this period. This will, in turn, give rise to information asymmetries and could have broader reaching implications for other market participants. It is for this reason that the Commission is recommending that the obligation for facility and field operators to register themselves and their

⁷⁴ Submissions to Stage 2 Draft Report on information provision: APA, p. 18; AER, p. 6; Stanwell, p. 7.

⁷⁵ Santos, Submission to Stage 2 Draft Report on information provision, p. 10

facilities and to advise AEMO of any changes, be classified as civil penalty provisions.⁷⁶

Making this change can be expected to counter the incentive a facility may otherwise have to delay registration because it will allow the AER to issue infringement notices to facilities that are aware of their obligation to register but delay the process and, if appropriate, to seek civil penalties through the Federal Court.⁷⁷ To give effect to this change, the Regulations will need to be amended to specify these provisions as civil penalty provisions.

The other concern the Commission has with the current arrangements is that the level of awareness among reporting entities of the consequences of any breach of the Bulletin Board provisions is quite low. One reason that was cited for this in the working group meetings is that, unlike other parts of the NGR, notes have not been included at the end of the relevant provisions in the NGR to identify those provisions that could attract a civil penalty. To remedy this issue, and raise the level of awareness among reporting entities, the Commission remains of the view that notes should be added to those rules in Part 18 of the NGR that constitute a civil penalty or conduct provision.

As to the concerns that Santos raised about the reporting obligations being classified as civil penalty provisions, it is important to note that the obligations set out in Division 5 Part 18 of the NGR have always been civil penalty provisions by virtue of the operation of s. 223(2) of the NGL. In the Commission's view this classification is appropriate given the reliance that market participants and policy makers may place on the information that is reported when making decisions. It is also critical to instilling confidence in the information reported on the Bulletin Board and achieving the purpose of the Bulletin Board.

2.9 The new reporting model

For the reasons set out above, the Commission recommends that a number of changes be made to the reporting model to instil a greater level of confidence in the information reported on the Bulletin Board. Specifically, the Commission recommends that:

- The stated purpose of the Bulletin Board in the NGR be broadened to recognise the important role that information can play in enabling informed and efficient decision making, as well as facilitating trade.⁷⁸
- The reporting framework be improved by:

⁷⁶ See proposed rules 150-151 and 153-154.

⁷⁷ In Western Australia breaches of the Gas Bulletin Board registration provisions are considered more egregious than breaches of reporting obligations, with higher penalties payable for breaches of the registration provisions.

⁷⁸ See proposed rule 145.

- Extending the list of entities that can be subject to reporting obligations in both the NGL and Part 18 of the NGR to include large users, LNG processing facility operators, GSH compression facility operators and field operators.⁷⁹
- Removing the link that currently exists in Part 18 of the NGR between the obligation to report and the zonal model.
- Simplifying the exemption criteria in Part 18 of the NGR by:
 - removing the existing exemption criteria;
 - introducing a minimum reporting threshold for transmission pipelines, production facilities, storage facilities, GSH compression facilities and large users and reducing the current threshold from 20 TJ/day to 10 TJ/day;⁸⁰ and
 - only allowing large users to seek an exemption from reporting, with an annual exemption from reporting daily consumption available if the large user can demonstrate to AEMO that it satisfies the annual reporting exemption criteria.⁸¹
- Removing the distinction that currently exists in Part 18 of the NGR between facilities commissioned pre- and post-1 July 2008.
- Providing greater clarity in Part 18 of the NGR about who is required to register and that registration acts as a trigger for reporting by BB facilities and BB fields.⁸²
- Introducing an information standard into Part 18 of the NGR that all reporting entities would be required to employ when collecting and submitting information to AEMO, to which compliance would be classified as a civil penalty and conduct provision.⁸³
- The compliance framework be strengthened and clarified by:
 - classifying the obligation for BB facilities, BB fields and their operators to register as a civil penalty provision in the Regulations; and
 - adding notes to the relevant areas of Part 18 of the NGR to identify those provisions that are conduct provisions and those provisions that could, if

⁷⁹ See proposed rule 147.

⁸⁰ The only facilities that won't be subject to the reporting threshold are gas fields and the LNG processing facilities. This proposed change can be found in the definition of BB facilities and reporting threshold in proposed rule 141.

⁸¹ See proposed rule 189.

⁸² See Division 3 (rules 150-163) of the proposed rule.

⁸³ See Division 4 (rules 164- 167) of the proposed rule.

breached, also lead to a breach of s. 223 of the NGL, which is a civil penalty provision.

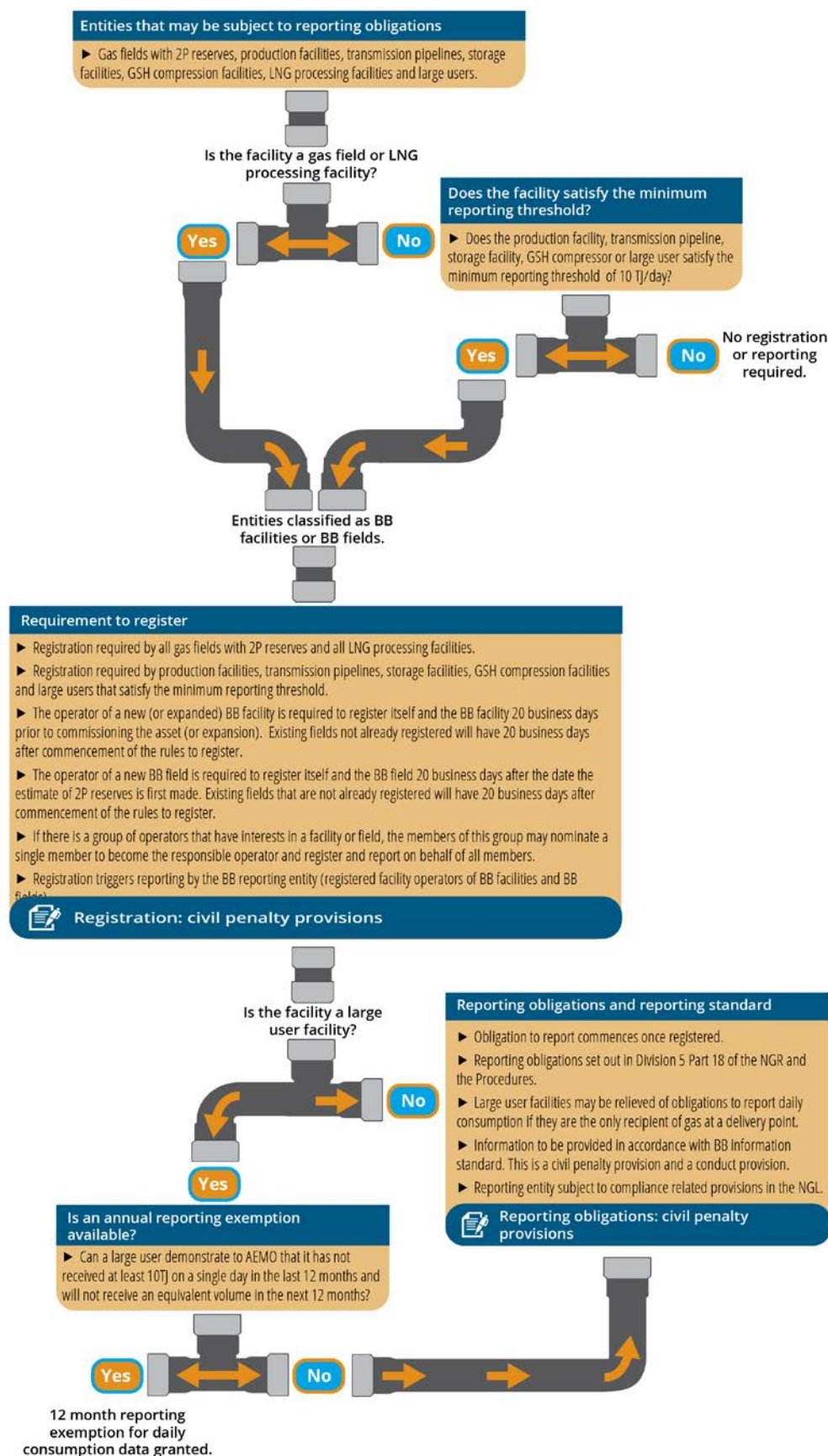
Figure 2.3 shows how the reporting and compliance framework related recommendations fit together under the proposed reporting model.

To give effect to the recommendations outlined above:

- the NGL and/or the Regulations will need to be amended to identify the additional facilities that the Commission recommends be subject to reporting obligations, which are not currently identified in s. 223 of the NGL; and
- the Regulations may need to be amended to classify the provisions in Part 18 of the NGR that require facilities to register as civil penalty provisions.

Rule changes will also be required to implement all of the recommendations that affect Part 18 of the NGR. Consequential changes can then be made to the Procedures to reflect the changes to the NGR. The proposed rules that implement these recommendations have been published with this report.

Figure 2.3 Proposed reporting and compliance frameworks



* Sections 223-226 and 228A of the NGL.

3 New reporting requirements and new reporting entities

Box 3.1 Summary of findings and recommendations

The Commission has identified a number of information gaps across the supply chain – upstream activities, production, transportation, hub services, storage, gas distribution pipelines and demand information. These gaps in market information can affect the price discovery process and the way in which gas and other resources are allocated. Market participants have to make decisions on the basis of incomplete, inaccurate, dated and/or asymmetric information. As the demand-supply balance in the market continues to tighten and the trade and flow of gas becomes more dynamic, these effects are likely to become more acute and have longer lasting consequences for market participants. They may also affect related markets, such as the NEM, and the broader economy.

To address these information gaps, the Commission recommends **(Recommendation D)** that new information across the supply chain be published on the Bulletin Board:

- Information on 2P gas reserves to be reported at least once every 12 months by gas field operators.
- GSH compression facilities to be subject to similar reporting obligations as BB transmission pipelines.
- Demand information to be reported by: large gas users (actual gas use); LNG facilities (actual gas use and forecast capacity); and AEMO (other demand across the gas network).

A consequence of removing the link between the zonal model and the requirement for pipelines and facilities to report to the Bulletin Board is that the reporting framework would by default extend to pipelines and facilities in regional areas, the Northern Territory and north Queensland. While the Commission considers it appropriate for regional pipelines to report, it recommends **(Recommendation E)** that remote pipelines and facilities in the Northern Territory and north Queensland be exempt from registration and reporting requirements until they are connected to the east coast gas system.

In addition, the Commission recommends **(Recommendation F)** changes to certain parts of the existing reporting requirements including: changes to the information reported under medium term capacity outlooks; reporting of intra-day capacity changes; requiring pipeline operators to report nominations and forecasts on both a receipt point (injection) and delivery point (withdrawal) basis; reporting of nominations and forecasts for production facilities; and removing the obligation for AEMO to publish estimates of the total forecast demand on peak demand days.

3.1 Introduction

This chapter examines the information gaps across the market (including those arising from the proposed changes to the reporting model outlined in Chapter 2) and sets out the Commission's recommendations on how these gaps should be addressed, which is structured as follows:

- section 3.2 provides an overview of information currently reported on the Bulletin Board and the reporting gaps that have been identified;
- section 3.3 considers reporting by pipelines and facilities in regions that are not currently required to report, as a consequence of moving away from a zonal reporting model;
- sections 3.4 to 3.6 consider the reporting of information by new types of facilities: upstream activities by gas producers and explorers; compression facilities used in the provision of hub services; and demand information by large users and LNG facilities;
- section 3.7 outlines other changes to the existing reporting requirements; and
- section 3.8 provides a summary of the new reporting obligations across the market.

3.2 Overview of existing reporting requirements

There is no single source that currently captures all of the information that market participants require to make informed and efficient decisions. Participants must currently source information from the Bulletin Board, various publications and reports by AEMO, the AER, state and Commonwealth governments and other public announcements.⁸⁴

Gas market information is not only fragmented across multiple platforms, but the information available does not provide sufficient information to support the price discovery process and enable participants to make informed and timely decisions. This deficiency has been clearly recognised by industry, as articulated by GDF Suez Australian Energy (GDFSAE):⁸⁵

“Presently, information arrangements are fragmented across multiple platforms and are incomplete which creates concerns for market

⁸⁴ For example, the AER provides the Weekly Gas Market Report, the Quarterly Compliance Report and regulatory decisions for pipelines subject to full regulation. Government reports include state and Commonwealth reports on gas resources and major projects and the Upstream Petroleum Resources Working Group's annual report on unconventional reserves and resources production.

⁸⁵ GDFSAE, Submission to Stage 1 discussion paper, p. 4. Similar views were expressed in submissions to the Stage 1 discussion paper: GLECMU, p. 2; ERM Power, p. 11; Alinta, pp. 3-4; Arrow Energy, p. 5; APLNG, p. 1.

participants, especially those not across the breadth of the supply chain, and interested stakeholders...

Information is critical to enable participants to make decisions on how to respond to and manage risk. In this regard, as information asymmetries are genuine impediments to fully functioning markets GDFSAE has some support for the view that the market would be better served by more centralised and complete reporting arrangements.”

Some steps are being taken to reduce the degree of fragmentation by making the Bulletin Board more of a one-stop-shop for market related information, as highlighted by the recent addition of the following information to the Bulletin Board:

- a market pricing tab, which contains links to the facilitated markets pricing information on AEMO's website and the AER's weekly gas report;⁸⁶ and
- a planning tab, which contains links to the GSOO and NGRF.

While steps have been taken to increase transparency in this market, there are still a number of significant informational gaps and asymmetries. Table 3.1 sets out the information that is currently published on the Bulletin Board, including new requirements introduced under the Enhanced Information for Gas Transmission Pipeline Capacity Trading final rule.⁸⁷

⁸⁶ The Commission understands that AEMO has included links as a transitional measure and that it intends to include actual price and volume information on the Bulletin Board when the next redevelopment occurs.

⁸⁷ The Enhanced Information for Gas Transmission Pipeline Capacity Trading rule commences operation on 6 October 2016.

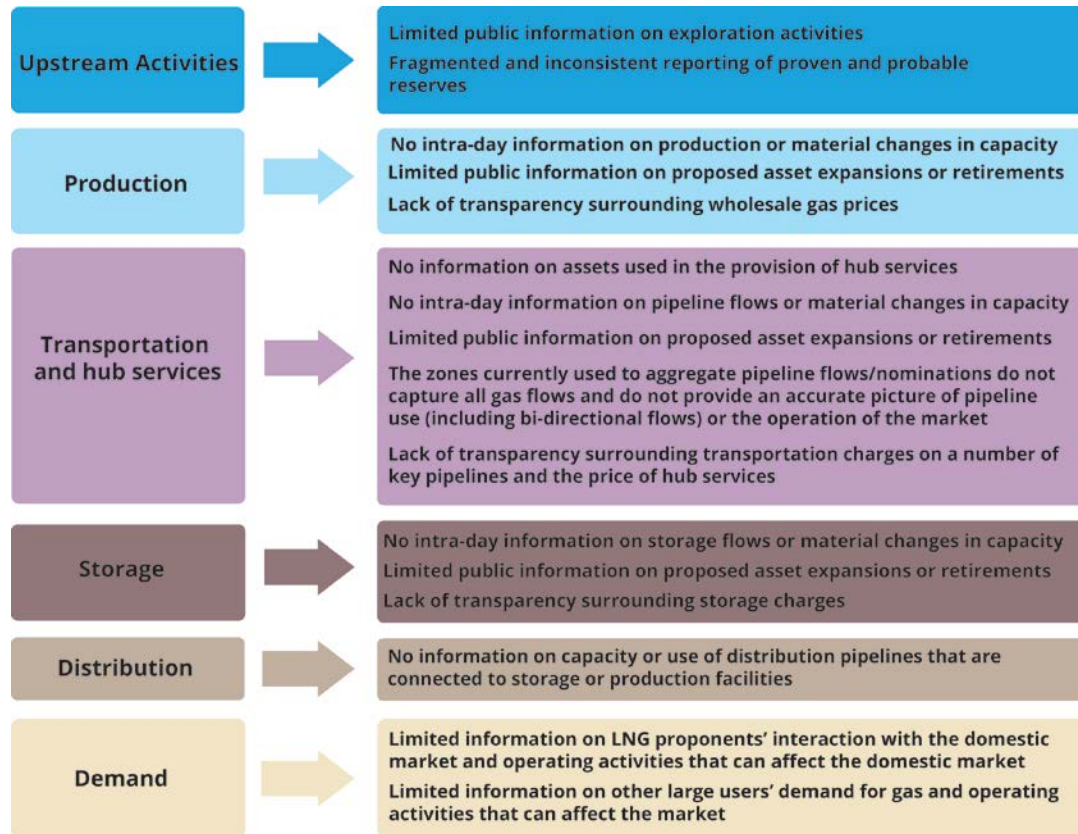
Table 3.1 Information currently reported to the Bulletin Board

Information		Frequency	BB transmission pipelines	BB storage facilities	BB production facilities
Capacity related information	Nameplate capacity	Annual (or as soon as reasonably practicable if changes)	✓	✓	✓
	7-day capacity outlook	Daily	✓	✓	✓
	Medium-term capacity outlook	As issued	✓	✓	✓
	3-day linepack capacity adequacy (LCA) outlook flag	Daily	✓	x	x
Actual pipeline deliveries, storage flows, production		Daily	Aggregated by demand and production zone	Net flows out of storage facility	✓
7-day forecast for pipeline flows (supply nominations for current gas day and material intra-day renominations)		Daily (or as soon as practicable if material intra-day changes)	Aggregated delivery nominations by zone	n.a.	n.a.
Contact details		As soon as practicable if changes	✓	✓	✓
Other information	Standing peak day demand forecasts				
	Listing service for spare gas and pipeline capacity and links to APA's and Jemena's capacity listing service				
	Registration and exemption related notices				
	Emergency protocols				
	Bulletin Board Procedures and guides				
Reporting requirements introduced in the Enhanced information for gas transmission pipeline capacity trading final rule (from 6 October 2016)					
Secondary capacity trading information	12 month outlook for uncontracted capacity	Monthly	✓	✓	x
	Contact details of shippers with contracted capacity	Updates as applicable	✓	x	x
	Data from secondary capacity trading platforms	Week after	✓	x	x
Detailed facility data		As applicable	✓	✓	✓
Aggregated and disaggregated receipt/delivery point flow data by zone		Aggregated day after Disaggregated monthly	✓	x	x
More detailed and standardised medium-term capacity outlook		As issued	✓	✓	✓
Actual storage volumes, aggregated injections and withdrawals and 7-day forecast		Daily	x	✓	x

Source: AEMC analysis

Figure 3.1 provides an overview of the various gaps that have been identified by stakeholders and in prior reviews.⁸⁸

Figure 3.1 Information gaps across the supply chain



Source: AEMC analysis.

The effect of these information gaps and asymmetries can be difficult to quantify. However, in broad terms they can be expected to adversely affect the price discovery process and the way in which gas and other resources are allocated. This is because decisions have to be made on the basis of incomplete, inaccurate, dated and/or asymmetric information. As the demand-supply balance in the market continues to tighten and the trade and flow of gas becomes more dynamic, these effects are likely to become more acute and have longer lasting consequences for market participants. They may also affect related markets, such as the NEM, and the broader economy.

⁸⁸ For example, Submissions to Stage 1 discussion paper: GDFSEA, p. 4; Group of Leading Energy Companies and Major Users, p. 2; ERM Power, p. 11; Alinta, pp. 3-4. Earlier reviews include: Department of Industry, *Eastern Australian Domestic Gas Market Study*, 2014, pp. 15-16, 64 and 89-90; K Lowe Consulting, *Gas Market Scoping Study, a report for the AEMC*, July 2013, p. 128.

3.3 Facilities in new locations

3.3.1 Background and impetus for change

In section 2.5 the Commission recommended that the obligation for gas pipelines and facilities to report to the Bulletin Board should be based on minimum reporting thresholds instead of whether those pipelines carry gas into or out of particular zones and the facilities attached to those pipelines.

As a consequence of this recommendation, unless exemptions are applied the reporting framework would capture pipelines and facilities that are located in:⁸⁹

- regional areas;
- the Northern Territory; and
- north Queensland.

The Commission has also recommended the removal of rules 151(7)(a) and 150(5)(c) which exempt production and storage facilities from reporting requirements where they are not connected to a BB pipeline. Instead, production and storage facilities would be required to register and report to the Bulletin Board if they exceed the minimum reporting threshold regardless of whether they are connected to a transmission or distribution pipeline.

3.3.2 Draft report and stakeholder submissions

The Stage 2 Draft Report noted that removing the link between reporting obligations and the zonal model in the NGR would result in a greater number of pipelines and facilities being captured, including regional pipelines and facilities not currently connected to the east coast system. The Commission sought stakeholder views on the costs and benefits of extending reporting obligations to pipelines and facilities in regional areas, Northern Territory and north Queensland to determine whether such pipelines and facilities should be excluded from the reporting requirements.⁹⁰

Some stakeholders considered pipelines and facilities in Northern Territory and north Queensland should begin reporting once they are connected to the east coast market, as participants should be aware of new demand, supply and transportation opportunities. They proposed that there be a trigger in the NGR to accommodate this, instead of requiring a future rule change.⁹¹

⁸⁹ The Bulletin Board does not currently contain any information on gas flows in these locations because the Procedures do not include any zones defined for those regions. Pipelines and facilities in those locations could be included under the current framework by amending the Procedures.

⁹⁰ AEMC, *Stage 2 Draft Report on information provision*, 4 December 2015, p. 51.

⁹¹ Submissions to Stage 2 Draft Report on information provision: AEMO, p. 3; ERM, p. 7; Jemena, p. 17.

Santos and Stanwell were less supportive of reporting by regional and non-connected pipelines, and noted that reporting is likely to result in significantly more information being provided to the market. They considered that this additional data may be overwhelming for participants and an administrative burden for those required to report, with little benefit from providing that information. Santos queried whether this type of information is necessary to meet the COAG Energy Council's Vision, while Stanwell noted that this information could be added in the future if the network becomes more connected and the information more useful.⁹²

The draft report recommended removing the reporting exemption for production and storage facilities that are not connected to a BB pipeline, which would result in new reporting requirements for production and storage facilities connected to a distribution pipeline. There are currently only two facilities that are connected to a distribution pipeline: the Camden production facility and the Newcastle gas storage facility. Both of these facilities are connected to Jemena's Wilton to Newcastle distribution trunk line. The Commission sought views on whether a distribution pipeline connected to a production or storage facility should be required to report similar information as transmission pipelines. This would provide those facilities with information about pipeline constraints that may affect their ability to inject or withdraw gas from the market.⁹³

Stakeholders generally agreed that production and storage facilities located within a distribution pipeline system that meet the minimum reporting threshold should be required to report to the Bulletin Board. This was because these facilities are connected to the market and have the ability to materially affect downstream prices and other market activities.⁹⁴

In contrast, there was little stakeholder support for reporting by distribution pipelines that are connected to production or storage facilities. AEMO considered that if facilities on a distribution pipeline are reporting certain information, there may be little additional benefit from requiring the distribution trunk pipeline to report similar information to transmission pipelines. Stanwell did not consider it would benefit from information by trunk pipelines. Jemena also considered this type of information would not be beneficial to the market and noted some practical difficulties in reporting such information. It noted that the trunk pipelines in Sydney are not commercially operated as a point-to-point pipelines and do not have their own shippers, GTAs or delivery and receipt point nominations, which would make reporting the same information as required for a transmission pipeline very complex.⁹⁵

⁹² Submissions to Stage 2 Draft Report on information provision: Stanwell, pp. 6, 10; Santos, p. 10.

⁹³ AEMC, Stage 2 Draft Report on information provision, 4 December 2015, p. 56.

⁹⁴ Submissions to Stage 2 Draft Report on information provision: AEMO, Attachment B, p. 4; Stanwell, p. 10; ERM, p. 7.

⁹⁵ Submissions to Stage 2 Draft Report on information provision: AEMO, Attachment B, p. 4; Stanwell, p. 10; Jemena, pp. 18-19.

3.3.3 Final recommendations

Regional pipelines and facilities

The Commission is recommending changes to the reporting framework that removes the link between reporting and a zonal model (see section 2.5). As a consequence, regional pipelines and facilities attached to those pipelines would be required to report Bulletin Board information to AEMO.

The Commission considers it appropriate that these pipelines and facilities be included in the Bulletin Board reporting framework. Pipelines and facilities that meet the minimum reporting threshold are able to impact trading decisions and flows across the east coast gas system, in particular on the pipelines connected to those regional pipelines and facilities. Publishing information about regional pipelines and facilities is expected to help industry participants understand the wider east coast gas market dynamics and make the most efficient decisions.⁹⁶

This recommendation could capture up to capture five regional pipelines in NSW, SA, Victoria and Queensland:⁹⁷

- Central West Pipeline (Marsden to Dubbo);
- Central Ranges Pipeline (Dubbo to Tamworth);
- Cheepie to Barcaldine Gas Pipeline;
- South East South Australia Pipeline; and
- the South East Pipeline System.

Four of these pipelines are owned by service providers that are already subject to reporting obligations (APA and Epic) and two are owned by service providers that would be new to the reporting framework (Ergon and Multinet).

This recommendation would also capture any large user facilities and, where relevant, production and storage facilities that are attached to these pipelines that meet the minimum reporting threshold. The inclusion of these facilities is consistent with the purpose of the Bulletin Board.

No further changes are required to the NGR to give effect to this recommendation as it is consequential to removing the link between reporting and the zonal model and the exemption criteria for production and storage facilities outlined in section 2.5.

⁹⁶ This finding is supported by the ACCC. ACCC, *Inquiry into the east coast gas market*, April 2016, p. 154.

⁹⁷ It is difficult to determine the pipelines that would be captured by this recommendation as nameplate capacity information is not currently publicly available.

Pipelines and facilities not connected to the east coast gas system

Like regional pipelines and facilities, non-connected pipelines and facilities are not required to report to the Bulletin Board because there are currently no zones defined in the Procedures for those regions.

The Commission's recommendation to remove the link between reporting and the zonal model would result in pipelines and facilities in the Northern Territory and north Queensland being required to begin reporting to the Bulletin Board.⁹⁸

The pipelines in the Northern Territory and north Queensland that could be captured, to the extent they satisfy the minimum reporting threshold, include:

- the North Queensland Gas Pipeline;
- Amadeus Gas Pipeline;
- Palm Valley to Alice Springs Pipeline;
- Daly Waters to McArthur River Pipeline;
- the Bonaparte Pipeline; and
- Wickham Point Pipeline.

Reporting requirements would also extend to facilities that are connected to these pipelines. Given the recommendations in sections 2.4 and 2.6 to extend reporting requirements to holders of 2P reserves and large users (including LNG facility operators), extending reporting requirements to pipelines and facilities in the Northern Territory and other 'remote' locations could capture a significant number of production facilities, storage facilities, large gas users, LNG facilities and gas field operators.

The Commission understands that currently there may be little natural gas and natural gas service trading activity in the Northern Territory and north Queensland. However, including these areas in the Bulletin Board reporting framework would improve transparency and may encourage more efficient trading activity at these areas. For example:

- information about the location, nameplate capacity and capacity changes of pipelines and facilities would provide local participants with key information that may affect them; and
- utilisation and demand information would inform planning and investment decisions in those areas.

⁹⁸ Pipelines and facilities in Western Australia are not captured by the Bulletin Board framework because, as noted in section 2.2, Western Australia is explicitly excluded from the operation of Part 18 of the NGR.

When remote pipelines and facilities become connected to the east coast gas system it is more clear that the benefits of reporting outweigh the costs. At this point in time the activity on the pipelines and by the facilities could impact the rest of the gas market.

For the purposes of this report and given the uncertainty around the benefits of reporting for remote pipelines, the Commission is recommending that pipelines and facilities in these locations be exempt from registration and reporting requirements until they become connected to the wider east coast gas system. This is given effect through exemptions for:⁹⁹

- pipelines and facilities (including gas field operators) in the Northern Territory;
- pipelines and facilities (but not gas field operators) in other jurisdictions that are remote.¹⁰⁰

However, the Commission acknowledges that there may be benefits from imposing reporting obligations before these areas are connected to the east coast system that have not been identified during this review process.¹⁰¹ The rule change process through which these recommendations are implemented could further investigate these costs and benefits in closer consultation with participants in these areas who would be affected by such a requirement.

Facilities connected to a distribution pipeline

Currently the Camden production facility and the Newcastle gas storage facility are connected to a distribution pipeline and are therefore not required to report to the Bulletin Board. This is currently due to the exemption criteria in rules 150(5)(c) and 151(7)(a) where the production or storage facility is not connected to a BB transmission pipeline.¹⁰² Section 2.5 of this report recommends the removal of this exemption and as a result these facilities would be required to report to the Bulletin Board.

The activity of facilities located within a distribution pipeline system that meet the minimum reporting threshold are able to impact local markets in the same way as facilities located on a transmission pipeline. The Commission considers that reporting obligations should be applied consistently and these activities should be reported regardless of location on the east coast gas system. This would go to achieving a fuller view of the overall east coast gas market.

⁹⁹ See proposed rules 141, 143 and 144.

¹⁰⁰ Under proposed rule 141, a pipeline or facility is remote if it is not directly or indirectly connected to an STTM or DWGM pipeline or is a pipeline at which gas is sold through a gas trading exchange. An example of a remote pipeline is the North Queensland Pipeline. The use of the term 'indirectly' in the proposed rule means that, for example, the GLNG and APLNG pipelines would not be considered remote pipelines because they are connected to the Queensland Gas Pipeline, which is connected to the Roma to Brisbane Pipeline (an STTM pipeline).

¹⁰¹ For example, there may be benefits from requiring a reduced set of reporting requirements such as detailed facility information, nameplate capacity and changes in capacity.

¹⁰² The term BB pipeline is currently defined in the NGR as a BB transmission pipeline and therefore explicitly excludes distribution pipelines.

This requirement would also apply to large users connected to a distribution pipeline, as discussed in section 3.5 below.

No further changes are required to the NGR to give effect to this recommendation as it is consequential to removing the link between reporting and the zonal model and the exemption criteria for production and storage facilities outlined in section 2.5.

Distribution pipelines

Information related to gas flows on distribution pipelines is not currently reported on the Bulletin Board. Given the recommendation above that facilities within a distribution pipeline system should begin reporting to the Bulletin Board, the Commission has also considered whether there is value in requiring reporting by distribution pipelines that are connected to these facilities.

Consideration of this issue has stemmed primarily from discussion in the Stage 2 Draft Report, which identified that the Camden production facility and the Newcastle gas storage facility are both connected to Jemena's Wilton to Newcastle trunk line. While not considered in the draft report, another question may be whether such a requirement should be considered for distribution pipelines connected to large users.

However, there may be some practical difficulties with distribution trunk lines reporting in the same manner as transmission pipelines that requires further thought on this issue:

- distribution pipeline systems are not necessarily operated commercially as point-to-point pipelines and individual pipelines within the system do not have shippers, transportation agreements or delivery and receipt point nominations that can be reported; and
- the Wilton to Newcastle trunk line, according to Jemena, does not currently experience congestion and so additional reporting by the distribution pipeline may provide little additional value at this point in time.

If distribution pipelines connected to all large user facilities were also included within this requirement, these technical difficulties may be exacerbated. This is because large users may be spread out around an interconnected distribution system and it may be unclear which portion of the distribution pipeline system is required to report information.

The Commission is not recommending that certain distribution pipelines be required to report the same information as transmission pipelines at this time.

However, a future rule change process could consider whether there are any alternative mechanisms¹⁰³ that could provide useful information to the market that would indicate constraints within certain sections of a distribution pipeline system.

Constraints can affect gas availability and price and publishing this information enables participants to manage their exposure to congestion charges. It would also inform production and storage facilities of any constraints that would prevent them from injecting gas into the market.

3.4 Gas field operators

3.4.1 Background and impetus for change

The Bulletin Board does not currently contain any information on 2P reserves or other upstream activities in the east coast. While some of this information can be found in the public domain (see Box 3.2), it is fragmented and incomplete because a number of producers either do not report on their activities, or do not report their activities at a sufficiently disaggregated level to be meaningful.¹⁰⁴ Collating and analysing this information can therefore be time consuming and may not yield an accurate picture of the medium- to longer-term supply outlook on the east coast.¹⁰⁵

The fragmented and incomplete nature of upstream information was identified in the COAG Energy Council's Vision as an area for further reform:¹⁰⁶

"Previous information and transparency improvement efforts by the COAG Energy Council have generally focused on providing greater information on the downstream components of Australian gas markets. The Council recognises the need to place equal emphasis on information relating to upstream gas resources. An important contributor to informed decision making about the future value of gas is transparent information on reserves, resources production, forecasts and well drilling rates. The COAG Energy Council expects that timely and improved reporting of this type of information to the market will help inform the market."

A number of stakeholders also called for greater transparency on upstream activities and, in particular 2P reserves, in Stage 1 of this review and in the lead up to the Stage 2 Draft Report.¹⁰⁷ The Department of Industry also noted the value in having greater

¹⁰³ For example, information about pressure changes along distribution pipelines (above a certain size) could provide a proxy to gas flows and indicate potential constraints that would affect gas availability and prices.

¹⁰⁴ For example, the ASX requires annual reserves reporting but allows the companies to determine the geographic areas on which they report.

¹⁰⁵ Although there are information aggregators that publish reserve estimates, they face similar obstacles to collating this information and must also make a number of assumptions when developing their estimates.

¹⁰⁶ COAG Energy Council Vision, December 2014, p. 3.

¹⁰⁷ GDFSAE, Submission to Discussion Paper, p. 5. Submissions to ACCC Gas Inquiry: ENA, p. 8; Hydro Tasmania, p. 4. EnergyAustralia, Submission to Information Provision Working Group Discussion Papers, 5 October 2015, p. 2.

transparency in this area in the Eastern Australian Domestic Gas Market Study that was completed in 2014.¹⁰⁸

Box 3.2 Public sources of information on 2P reserves

Reporting by state, territory and Commonwealth government agencies

State, territory and Commonwealth government legislation and regulations currently require the holders of reserves and resources in their respective jurisdictions to report this information to the relevant government agency. The basis on which this information is collected differs, however, across jurisdictions.¹⁰⁹ In the east coast, Queensland is currently the only jurisdiction that requires this information to be published.

ASX disclosures

ASX listed entities are required to publish an annual reserves statement (prepared and approved by a qualified evaluator and measured using the Petroleum Resource Management System (PRMS) of the Society of Petroleum Engineers). The listing rules require this statement to set out the entity level proved (1P) and 2P reserves (split between developed and undeveloped reserves and by product) and total aggregated 1P and 2P reserves by product and geographical area.¹¹⁰

Of the 26 entities that currently have an interest in 2P reserves in the east coast, nine are ASX listed entities¹¹¹ and the remainder are either foreign entities or unlisted.¹¹² Of the nine listed entities, one reports aggregated reserves across Western Australia and the east coast, five report basin level estimates, and three report project level estimates.

AEMO's Gas Statement of Opportunities (GSOO)

As part of the GSOO process AEMO conducts an annual survey of producers and requests information on 2P project reserves. Completing this survey is not compulsory and according to AEMO the survey responses are often incomplete and inconsistent with other information.¹¹³ AEMO therefore usually retains a consultant to estimate reserves. These estimates are published annually as part of the GSOO.

¹⁰⁸ Department of Industry, *Eastern Australian Domestic Gas Market Study*, 2014, p. 90.

¹⁰⁹ For example, the Commonwealth Government requires annual reporting by basin, while the Queensland Government requires information to be reported on a six-monthly basis by permit.

¹¹⁰ ASX, Listing Rules – Guidance Note 32, 1 December 2013, p. 12.

¹¹¹ Santos, Origin, AGL, BHP, Beach-Drillsearch, Blue Energy, Senex, Armour Energy, Comet Ridge.

¹¹² ExxonMobil, Shell, Petrochina, Sinopec, CNOOC, Petronas, Total, Kogas, Mitsui, Toyota Tsusho, Stanwell, Tokyo Gas Co, AWE, Benaris, Landbridge, Prize Petroleum.

¹¹³ AEMO, Submission to Stage 2 Draft Report on information provision, Attachment B, p. 1.

Oil Gas Resources (Geoscience Australia)

Geoscience Australia publishes reserves estimates by basin using information provided by state, territory and Commonwealth government agencies. Before this information can be provided to Geoscience Australia, the government agencies usually have to obtain permission from field operators because the information is usually provided on a 'commercial in confidence' basis. The last time Geoscience Australia published this information was in 2012 (for 2010 reserves data).¹¹⁴ Geoscience Australia is reportedly in the process of preparing a new report for the 2011-2014 period.

Upstream Petroleum Resources Working Group

The Upstream Petroleum Resources Working Group is required to provide the COAG Energy Council with an annual report on unconventional gas reserves, resources and production. According to the ACCC, this report has contained significant information gaps because states and territories have been unable to provide the information to Geoscience Australia, who compiles the report.¹¹⁵

3.4.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission noted that the current reporting of 2P reserves is fragmented and incomplete and greater transparency in this area would provide the market with a better understanding of the medium- to longer-term supply outlook. The Commission therefore recommended that a new reporting obligation be imposed under Part 18 of the NGR that would require producers and explorers to report their 2P reserves by field in a consistent manner on a six monthly basis for publication on the Bulletin Board.

The Commission also sought feedback on the following options to minimise the reporting burden:

- annual reporting rather than six-monthly reporting; and
- placing the obligation to report on the operators of joint ventures to report rather than all joint venture participants.

Feedback was also sought on whether there was any value in requiring uncontracted reserves to be reported.

In relation to exploration activities, the Commission noted that the case for imposing a reporting obligation was not as great because this information was more speculative in nature. The Commission therefore recommended that AEMO add links to the Bulletin Board to publicly available information on these activities.

¹¹⁴ Geoscience Australia, *Oil and Gas Resources of Australia 2010*, 10 February 2012.

¹¹⁵ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 85.

The responses to the recommendation that 2P reserves be reported on the Bulletin Board were mixed. For example, AGL, AEMO, ERM, EUAA, Jemena and PIAC supported the publication of 2P reserves on the Bulletin Board.¹¹⁶ APLNG, APPEA, Origin and QGC also supported the publication of this information on the proviso that reserves holders are not subject to any additional reporting obligations (that is, over and above what is required to be reported to state, territory and Commonwealth government agencies).¹¹⁷ Santos and Esso, on the other hand, opposed the reporting obligation because they claimed this information is already reported to government agencies and, for listed entities, to the ASX.¹¹⁸

Esso also had particular concerns about information being reported on a field basis and suggested that information be reported at a basin level, or at a 'project' basis if the Commission sees value in more detailed reserves reporting. Elaborating further on its concerns about field level reporting, Esso noted that there is inherent uncertainty in field estimates and that reporting at this level could be misleading, have competitive consequences and impose additional regulatory burdens on companies that do not currently estimate reserves at a field level.¹¹⁹

A number of stakeholders with upstream interests suggested that if 2P reserves were to be published on the Bulletin Board then the reporting burden could be reduced by:

- requiring AEMO to source the information reported to state, territory and Commonwealth government agencies directly from these agencies;¹²⁰
- requiring reporting on an annual basis because most companies only carry out an annual reserve calculation;¹²¹
- requiring the information to be obtained from the operator of a joint venture rather than individual parties;¹²² and/or
- aligning the reporting timeframes with the state, territory and Commonwealth government agencies' timeframes.¹²³

In relation to uncontracted reserves, PIAC and the EUAA were of the view that there would be value in requiring this information to be reported.¹²⁴ APLNG, QGC and Santos, in contrast, thought there was little value in reporting this information and

¹¹⁶ Submissions to Stage 2 Draft Report on information provision: AGL, p. 4; AEMO, Attachment B, p. 1; ERM, p. 6; EUAA, p. 11; Jemena, p. 17; PIAC, p. 7.

¹¹⁷ Submissions to Stage 2 Draft Report on information provision: APLNG, p. 4; APPEA, p. 2; Origin, p. 3; QGC, p. 7.

¹¹⁸ Submissions to Stage 2 Draft Report on information provision: Santos, p.8; Esso, pp. 2-3.

¹¹⁹ Esso, Submission to Stage 2 Draft Report, 6 May 2016, pp. 1-2.

¹²⁰ Submissions to Stage 2 Draft Report on information provision: APLNG, p. 4; Esso, p. 3; QGC, p. 7.

¹²¹ QGC, Submission to Stage 2 Draft Report on information provision, p. 7.

¹²² Santos, Submission to Stage 2 Draft Report on information provision, p. 8.

¹²³ QGC, Submission to Stage 2 Draft Report on information provision, p. 7.

¹²⁴ Submissions to Stage 2 Draft Report on information provision: EUAA, p. 11 and PIAC, p. 7.

pointed to some of the complexities associated with measuring and interpreting uncontracted reserves information.¹²⁵ Santos also noted that an uncontracted reserve estimate is no guarantee that a producer has uncontracted reserves for the years the buyer is interested in.¹²⁶ Esso also opposed the publication of this information and noted that if the intent was to assist buyers in identifying producers that have gas available for sale, then an alternative mechanism would be to allow sellers to publish marketing notices on the Bulletin Board on a voluntary basis.¹²⁷

As to other forms of upstream information, AEMO noted that requiring producers and explorers to report proved, probable and possible (3P) reserves, contingent resources and prospective resources would be useful for GSOO purposes.¹²⁸

Other developments since the Stage 2 Draft Report

Following the release of the Stage 2 Draft Report, the COAG Energy Council published its Gas Supply Strategy. The strategy referred to the opportunity for greater cooperation among state, territory and Commonwealth governments to improve certainty around supply availability by reporting on reserves, resources and production potential.¹²⁹ Further detail on this opportunity was contained in the Gas Supply Strategy Implementation Plan Consultation Paper, which was published in April 2016. While the Consultation Paper refers to information on unconventional gas resources, reserves, production, well performance and drilling being published, there appear to be no plans for equivalent information to be published for conventional gas.

Another important development that has occurred since the release of the Stage 2 Draft Report, is that the ACCC published the findings of its inquiry into the east coast gas market (Inquiry). The final report set out the issues the ACCC had identified with the reporting of reserves and resources. In short, the ACCC found that:¹³⁰

“Information on gas reserves and resources is inconsistent, unreliable or unavailable, hindering the market’s ability to respond to supply tightness and current and predicted higher prices.”

Some of the consequences of this information gap that the ACCC identified included:¹³¹

- producers (including new entrants) not being able to respond efficiently to potential supply issues, which the ACCC noted is hindering efficient market responses to the changing conditions;

¹²⁵ Submissions to Stage 2 Draft Report on information provision: APLNG, p. 4; QGC, p. 8; Santos, p. 8.

¹²⁶ Santos, Submission to Stage 2 Draft Report on information provision, p. 8.

¹²⁷ Esso, Submission to Stage 2 Draft Report on information provision, p. 3.

¹²⁸ AEMO, Submission to Stage 2 Draft Report on information provision, Attachment B, p. 1.

¹²⁹ COAG Energy Council, Gas Supply Strategy, December 2015, p. 5.

¹³⁰ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 82.

¹³¹ *ibid.*, pp. 12-13, 19 and 83.

- users being unable to make informed decisions about their future use of gas, forward planning and investment and potentially being at a disadvantage when negotiating with producers and retailers who may have better information about expected future supply conditions;
- pipeline, storage and processing facility operators being unable to make informed and timely planning and investment decisions in response to supply related risks; and
- governments and regulators having to make decisions on the basis of incomplete, inconsistent and inadequate information and data, which the ACCC noted could have unintended consequences and poor market outcomes.

Elaborating on this information gap further, the ACCC noted that:¹³²

- ASX reporting requirements only apply to listed companies and companies can report at different times and different levels of geographical aggregation;
- while there are private providers of reserves estimates they have to rely on incomplete and imperfect information, supplemented by assumptions;
- the reserves and resources reporting obligations imposed by the states, territories and the Commonwealth are inconsistent; and
- reserves calculations are based on a number of assumptions, including financial and oil price assumptions, which are often undisclosed and can vary markedly across producers and explorers.¹³³

To address this information gap, the ACCC recommended that all explorers and producers be required to report consistent reserve and resource information, with reporting based on common price assumptions. The ACCC also recommended that this information be displayed on the Bulletin Board, consistent with the COAG Energy Council's Gas Market Development Plan to enhance the upstream market information available to Bulletin Board users.¹³⁴

3.4.3 Final recommendations

Reporting 2P reserves

Like the COAG Energy Council, the ACCC and a number of market participants, the Commission is concerned by the lack of transparency surrounding 2P reserves in the east coast and the fragmented and incomplete nature of the information that is publicly available, which is not measured on a consistent basis. In the Commission's view, this

¹³² *ibid.*, pp. 12-13.

¹³³ This issue was also noted by QGC in its submission to Stage 2 Draft Report on information provision, p. 7.

¹³⁴ *ibid.*

is a significant information gap and can be expected to give rise to information asymmetries in the market. It can also be expected to have broader reaching consequences for the market because decisions by market participants and policy makers that require some level of understanding about the medium- to longer-term supply outlook are having to be made on the basis of incomplete and inconsistent information.

To address this information gap consistent with the Bulletin Board purpose, the Commission recommends that the operators of gas fields that satisfy the following criteria (field operator) be subject to a new reporting obligation under Part 18 of the NGR that requires information on 2P reserves to be reported to AEMO for publication on the Bulletin Board:¹³⁵

- there is a right to explore for or extract petroleum under one or more petroleum tenements in the field; and
- the field has been determined to contain proved reserves or probable reserves of gas (or both).

Apart from providing market participants and policy makers with a better understanding of the medium- to longer-term supply outlook, the publication of this information on the Bulletin Board is expected to enable:

- gas users to make more informed and efficient decisions about their future use of gas and investment in their downstream facilities, and should also enable them to negotiate with producers when entering into gas supply agreements;
- producers and explorers to respond more efficiently and effectively to the signals this information would provide (for example, by increasing their exploration activities if it is clear that reserves are falling);
- pipeline and storage facility operators to make more informed planning investment decisions; and
- state, territory and Commonwealth governments to make more informed policy decisions.

The proposed reporting obligation will require field operators to report the following information for its BB fields at least once every calendar year:¹³⁶

- the tenements in each field and the identity of each party with an ownership interest in the tenement and percentage ownership interest of each; and
- the 2P reserves of natural gas in each field.

¹³⁵ See proposed rule 141.

¹³⁶ See proposed rule 171.

Field operators will also be required to provide AEMO with updated information if a revised estimate of 2P reserves is subsequently reported to the ASX, or in accordance with reporting obligations under the laws of a participating jurisdiction. This requirement has been included in the proposed rules to capture any changes in reserves that occur during the year as a result of impairments or new discoveries, but will only be triggered if the information is also reported to the ASX or a state, territory or Commonwealth government agency.¹³⁷

To minimise the reporting burden, the Commission recommends the following:

- **Frequency of reporting:** The information outlined above should be required to be reported annually (or earlier in the circumstances outlined above), rather than a six-monthly basis. Rather than adopting a fixed date for reporting, the proposed rules allow the date for the annual submission to be determined by the facility operator, subject to the caveat that it reports at least once every 12 months.
- **Reporting responsibility:** If there are a number of parties that have an interest in a field, then they will be able to appoint a responsible field operator, who will be responsible for reporting to AEMO.
- **Reporting framework:** Reserves will be required to be estimated using the Society of Petroleum Engineers' PRMS, which is the same reporting framework that the ASX and Queensland Government utilise.¹³⁸

The Commission understands that some stakeholders would have preferred that AEMO be required to obtain the information from state, territory and Commonwealth government agencies rather than imposing a reporting obligation on field operators. However, in the Commission's view imposing a direct obligation on field operators to report this information to AEMO is a more direct, cost effective and efficient approach than the alternative. The hurdles and delays that Geoscience Australia has faced when trying to obtain equivalent information for its publications (see Box 3.2) is indicative of the problems AEMO would face if this approach is implemented. This is why the Commission has recommended obtaining this information directly from field operators.¹³⁹ When coupled with the fact that most field operators are already reporting production data to the Bulletin Board on a daily basis, the Commission does not consider this to be an onerous obligation.

As to the concerns Esso raised about reporting at a field level, the Commission understands that reporting on this basis is less onerous than the reporting obligations

¹³⁷ This requirement is not intended to capture changes in reserves that occur as a result of gas being produced.

¹³⁸ Petroleum and Gas (Production and Safety) Regulation 2004 (Qld), Schedule 12 and section 152.

¹³⁹ The Commission is aware that one of the main hurdles Geoscience Australia has faced in the past is that the information reported by producers and explorers is often provided on a commercial in confidence basis. So before the information can be provided to Geoscience Australia the jurisdictional agencies must obtain the permission of the reporting entities. This may, in part, explain why the reserves information has in the past been published with up to a two-year delay.

that currently apply in Queensland, where reserves are reported on a permit basis.¹⁴⁰ It is also interesting to note that none of the producers that are currently subject to the Queensland reporting regime raised concerns in their submissions about information reported at this level being misleading or having competitive consequences. While the Commission is of the view that reporting at a field level is appropriate, it proposes to consider the issue further as part of the rule change process.

Finally, it is worth noting that the reporting framework that has been adopted in the proposed rules does not go as far as the ACCC proposed in terms of requiring reserve estimates to be based on common price assumptions. It is instead just based on the Society of Petroleum Engineers' PRMS. While the Commission can see value in the ACCC's proposal, there was insufficient time between the release of the ACCC's final report and this report to consult with stakeholders on this proposal and how it could be implemented in practice. The Commission intends therefore to consult on the ACCC's proposal as part of any rule change process that follows this review, along with QGC's suggestion that the reserve calculation methodology be published along with the reserve data.¹⁴¹ In the interim, there may be value in the COAG Energy Council considering the ACCC's proposal as part of the Gas Supply Strategy Implementation Plan, along with the ACCC's more general recommendation that information collected by the states, territories and Commonwealth governments is reported on a consistent basis.¹⁴²

To give effect to the recommendations outlined above, changes will need to be made to:

- section 223 of the NGL or the Regulations to identify field operators because they are not necessarily captured by the list of persons in s. 223 of the NGL;¹⁴³
- Part 18 of the NGR to recognise gas fields and field operators as BB reporting entities;¹⁴⁴
- Divisions 3 and 5 of Part 18 of the NGR to include the new registration and reporting obligations;¹⁴⁵ and
- the Procedures to reflect the changes to the NGR.

¹⁴⁰ See APPEA, Submission to Stage 2 Draft Report on information provision, Appendix 1 and <https://data.qld.gov.au/dataset/petroleum-gas-production-and-reserve-statistics/resource/f464062e-9693-4dbb-8394-aa9fdc8c590d>

¹⁴¹ QGC, Submission to Stage 2 Draft Report on information provision, p. 7.

¹⁴² ACCC, *Inquiry into the east coast gas market*, April 2016, p. 20.

¹⁴³ While s. 223 refers to producers, it is not clear whether the term 'producers' would capture explorers or parties that are not currently producing gas but that have an interest in 2P reserves.

¹⁴⁴ See proposed rule 141.

¹⁴⁵ See proposed rules 153-155 and 171.

Uncontracted reserves

The feedback received in response to the Commission's question in the Stage 2 Draft Report about whether there would be any value in requiring field operators to report their uncontracted reserves, suggests that there may be some value to buyers. However, as a number of producers pointed out there are some technical hurdles that would have to be overcome before such a reporting obligation could be introduced into the NGR. Careful consideration would also need to be given to whether other alternatives may be more appropriate (for example, reporting contingent resources). Provision has not therefore been made in the proposed rules for this information to be reported.

Rather than consulting further on this through the rule change process, the Commission is of the view that there would be value in bedding down the 2P reserve reporting first and then having AEMO consult with stakeholders on these issues through the biennial review process (see section 5.4). If this review reveals that there would be value in reporting uncontracted reserves and the technical hurdles can be overcome, then a rule change request could be submitted to the AEMC.

Other upstream information

In a similar manner to 2P reserves, there is little publicly available information on 3P reserves and resources. AEMO and the ACCC have both suggested that this type of information could be reported on the Bulletin Board. However, in the Commission's view, the case for imposing an obligation on parties to report this information under the NGR is not currently as great as it is for 2P reserves.

That is not to say there may not be value in requiring this information to be reported in the future. However, in the Commission's view there would be value in bedding down the 2P reserve reporting requirement before looking to the reporting of this information on the Bulletin Board. The proposed rules do not therefore make any provision for this information to be reported. AEMO will, however, have an opportunity to consult with stakeholders on the value of requiring this information to be reported on the Bulletin Board as part of its biennial review once the 2P reserve reporting is in place.

As an interim measure, the Commission suggests that AEMO add links to the Bulletin Board to the following types of public information on resources and upstream activities:

- APPEA industry statistics, which, among other things includes statistics on CSG wells and drilling activities;¹⁴⁶
- the Upstream Petroleum Resources Working Group's annual report on unconventional gas reserves, resources, production, forecasts and drilling rates;¹⁴⁷ and

¹⁴⁶ <http://www.appea.com.au/industry-in-depth/industry-statistics/>

- other reports prepared by the Office of the Chief Economist, Geoscience Australia,¹⁴⁸ and other Commonwealth, state or territory government departments on upstream activities.

3.5 Compression facilities used in the provision of hub services

3.5.1 Background and impetus for change

There are currently three compression facilities that are used to transfer gas from low-medium pressure headers to high pressure headers in the Wallumbilla GSH.¹⁴⁹ These facilities are not currently subject to any Bulletin Board reporting obligations. It is not possible therefore to determine from the information currently reported on the Bulletin Board what the capacity of these facilities is, the actual and forecast use of the facilities or whether these facilities are being fully utilised by primary capacity holders. Nor is it possible to determine the short- and medium-term capacity outlook for these facilities and whether there is any planned maintenance or outages on these facilities.

In its final report on Hub Services for a Single Wallumbilla Market, AEMO recommended that this information gap be addressed by requiring information on the maintenance and outage schedules for these facilities, and forecast and actual use of the facilities to be reported on the Bulletin Board. In doing so, AEMO noted this information would aid market participants' trading decisions in the GSH and allow parties to make alternative arrangements for commodity and hub services in the event of congestion.¹⁵⁰

3.5.2 Draft report and stakeholder submissions

In the Stage 2 Draft Report, the Commission noted that the absence of any information on the Bulletin Board about the Wallumbilla compression facilities was a significant information gap that could be giving rise to information asymmetries in the Wallumbilla GSH. The Commission therefore recommended that compression facilities used in the provision of hub services be subject to similar reporting obligations as BB transmission pipelines.

Rather than limiting the reporting obligation to facilities located in the Wallumbilla GSH, the draft report recommended that the obligation apply to any compression facility used in the provision of hub services in a GSH. This definition was adopted to accommodate the future evolution of the northern and southern hubs proposed in the broader review and would also apply to the Moomba GSH.

¹⁴⁷ <http://www.scer.gov.au/workstreams/upstream-petroleum-and-offshore-minerals/unconventional-gas-reserves/>

¹⁴⁸ For example, the Australian Energy Resource Assessment, Second Edition, 2014.

¹⁴⁹ These facilities are all owned by APA. Santos also owns a compressor station but this sits outside the Wallumbilla compound and is not used to provide hub services.

¹⁵⁰ AEMO, *Hub Services for a Single Wallumbilla Market*, November 2015, pp. 23-24.

The submissions received in response to the draft report were broadly supportive of this draft recommendation,¹⁵¹ with the only exception being Santos who claimed that it would give rise to “significant additional” costs with “limited benefits to the industry”.¹⁵² The view expressed by Santos in this context is at odds with the view expressed by APLNG, who noted that the draft recommendation would provide “important information required to trade at Wallumbilla”. APLNG also noted that as liquidity develops there would be value in reporting the previous day’s flows of gas through the hub, including all “gas exchanges and net-outs”.¹⁵³

3.5.3 Final recommendations

Consistent with the position taken in the Stage 2 Draft Report, the Commission recommends that compression facilities that are used in the provision of hub services and that satisfy the minimum reporting threshold (BB compression facilities) be subject to the same reporting obligations as BB transmission pipelines.

The Commission expects that the publication of this information on the Bulletin Board, will, among other things:

- inform market participants’ price expectations, trading and risk-management decisions;
- allow market participants to respond to any compressor related constraints in a GSH by making alternative arrangements for purchasing gas or hub services and, in so doing, avoid further congestion; or
- enable market participants make use of ‘as available’ compression services, or enter into secondary trades with primary capacity holders if the compressors are not expected to be fully utilised.

It can also be expected to inform planning and investment decisions in GSH locations.

The specific information that the Commission recommends be reported by BB compression facilities includes:¹⁵⁴

- the compression facility’s nameplate capacity rating (or the range for the nameplate capacity rating) and detailed facility information;
- the short- and medium-term capacity outlooks for the compressor station;
- a capacity adequacy indicator for the compressor station, which will flag any deliverability issues in a similar manner to the LCA flag for pipelines;

¹⁵¹ Submissions to Stage 2 Draft Report on information provision: AGL, p. 7; APLNG, p. 4; EUAA, p. 12; GDF, p. 4; PIAC, p. 7; Stanwell, p. 4.

¹⁵² Santos, Submission to Stage 2 Draft Report on information provision, p. 9.

¹⁵³ APLNG, Submission to Stage 2 Draft Report on information provision, pp. 4-5.

¹⁵⁴ See proposed rules 168-169, 173-174, 176, 178, 180, 181, 184, 188.

- the actual volume of gas compressed on the prior gas day;
- the nominations for gas day D and forecast volumes for subsequent days;
- the shippers that have contracted primary capacity and the 12-month outlook of uncontracted primary capacity; and
- information on any secondary trades of capacity that occur via a secondary capacity trading platform operated by the compressor station's operator.

In relation to the latter of these reporting obligations, the Commission is aware that AEMO is working on developing hub service products that can be traded on the GSH and that this is expected to be completed later this year. To the extent that any trades of compression capacity occur through the GSH, then it would be appropriate for the GSH to be subject to the same reporting requirements as a capacity trading platform operated by a facility operator so that BB users can find all this information in one location. Because these products are not currently being traded on the GSH, the proposed rule does not provide for this additional reporting obligation. The Commission does, however, intend to consider this issue further through the rule change process, which may result in further changes to the NGR to extend the obligation to report information on secondary trades of compression capacity to the GSH.

In relation to APLNG's suggestion that all gas exchanges and net-outs should also be reported, the Commission acknowledges there may be value in requiring this type of information to be reported as liquidity develops in the GSH locations. Rather than building this into the NGR now, the Commission suggests that AEMO consider this as part of its first biennial review of the Bulletin Board (see section 5.4).

To give effect to the recommendations outlined above the changes will need to be made to:

- section 223 of the NGL or the Regulations to identify the operators of these facilities because they are not currently captured by s. 223 of the NGL;
- Part 18 of the NGR to recognise the operators of GSH compression facilities as BB reporting entities;¹⁵⁵
- Division 5 Part 18 of the NGR to include the new reporting obligations; and
- the Procedures to reflect the changes to the NGR.

Changes to the NGL or Regulations will need to occur before the NGR are changed. It may therefore take some time for this proposed reporting obligation to take effect. While the formal obligation may take some time to come into effect, APA may voluntarily report this information to AEMO for publication on the Bulletin Board. Whether or not APA would be prepared to do this is a matter for it to determine.

¹⁵⁵ See proposed rule 141.

The Commission does, however, understand that APA and AEMO have been working together to further develop the Wallumbilla GSH and that as part of this APA is taking steps to try and improve transparency in this area, including by considering reporting net flows into and out of Wallumbilla and separate east and west flows on the SWQP. It may therefore be amenable to reporting this information on a voluntary basis until such time as the formal obligation takes effect.¹⁵⁶

Finally, it is worth noting that the proposed rule is only intended to capture compression facilities that are not directly attached to a pipeline and that are used in the provision of hub services. Other compression facilities that are not directly attached to transmission pipelines and do not provide hub services will not therefore be caught by this reporting obligation. The Commission is aware that this may be perceived as a gap in the reporting obligations and that there may be value in extending the reporting obligation to these facilities. However, consultation to date has only focussed on compressors used in the provision of hub services. The Commission proposes therefore to consider this further as part of the rule change process.

3.6 Large users and LNG facilities

3.6.1 Background and impetus for change

Unlike their counterparts in Western Australia, large gas user facilities in the east coast are not currently subject to any Bulletin Board reporting requirements under the NGR. Gas fired generators, LNG processing facilities, manufacturing plants, minerals processing facilities and other large industrial facilities are therefore not currently required to report on the actual volume of gas they have consumed, the nameplate capacity of their facilities or any changes to the capacity of their facilities. While some information on large user facility demand can be pieced together from information on the Bulletin Board (for example through pipeline flows or production data for dedicated facilities) and other public sources, most large users are not required to make this information publicly available.

This is a significant limitation that could be affecting both:

- the efficiency with which trade occurs and a range of other decisions that are being made across the supply chain, because market participants do not have a good understanding of the nature of the demand for gas or large users' operational activities that can have a bearing on the market; and
- competition in the gas market and other related markets, such as the NEM, because of the information asymmetries that these informational gaps may be giving rise to.

Of particular note is the demand of the three LNG processing facilities that have come online in Queensland over the last 12 months. These are typically very large –

¹⁵⁶ If APA were to provide this information on a voluntary basis, then it would not be subject to the civil penalty provisions.

depending on the size and number of trains, an LNG facility can consume 700 to 1,500 TJ of gas per day. To put this volume in perspective, in 2014-15 the demand for gas by all consumers in NSW and the ACT ranged from 225 TJ to 585 TJ per day.

While the LNG processing facilities are directly supplied from gas fields in the Surat Bowen basin, the transmission pipelines that transport this gas are connected to the domestic market. Even minor changes in gas use or capacity at the LNG facilities has the potential to impact local gas markets should it be necessary to inject or withdraw large amounts of gas from the domestic market.¹⁵⁷

3.6.2 Draft report and stakeholder submissions

To address these concerns the draft report recommended that large gas users that meet the minimum reporting threshold and LNG facilities be required to report certain information to the Bulletin Board, summarised in Table 3.2 below.

Table 3.2 Reporting by large users and LNG facilities in the draft report

Large gas users	LNG facilities
Nameplate capacity	Nameplate capacity
Changes in capacity where more than 10% is affected for more than 3 months	Short and medium term capacity outlooks
	Material intra-day changes in capacity
Delivery points (locations)	Delivery points (locations)
Daily actual gas consumption	Daily actual gas consumption

In doing so, the Commission noted that making this information available through the Bulletin Board would allow market participants to gain a better understanding of the potential demand (capacity) and the nature of the demand for gas in a particular location and therefore be in a better position to anticipate changes in demand.

The draft report also proposed exemptions from the requirement to report daily actual gas consumption where:

- the large user (excluding LNG) demand falls below 10 TJ/day;¹⁵⁸ or
- the large user or LNG facility is the only party at the delivery point and the pipeline operator is responsible for reporting the daily gas consumption at that delivery point.¹⁵⁹

¹⁵⁷ For example, an LNG facility may inject gas into the domestic market as a result of a capacity outage. Or when an LNG capacity outage is over, an LNG facility may need to draw gas from the market during ramp-up.

Stakeholder comments on reporting by large users (excluding LNG)

With regard to reporting by large gas users, some stakeholders were concerned that the publication of certain information may impact the competitive position of that gas user. Some stakeholders held the firm view that all large user consumption information is sensitive, even after the gas day. Orica noted that such information can reveal certain information such as the efficiency of the facility to competitors.¹⁶⁰ Other stakeholders acknowledged that only certain information may be sensitive and have competitive impacts. For example, forecasts of consumption at a gas fired generator may have impacts on bidding activity in the NEM.¹⁶¹

Stakeholder comments on reporting by LNG facilities

There was a clear divergence in submissions regarding reporting by LNG facilities. Pipeline operators and some shippers strongly supported reporting by LNG facilities given the potential impact from planned and unplanned outages on local gas and electricity markets.¹⁶² As articulated by Stanwell:¹⁶³

“The timing of both planned and unplanned maintenance activities is market sensitive information for the domestic gas market and the National Electricity Market (NEM). This is because during a LNG shutdown, excess gas is often sold through the wholesale gas market affecting the wholesale market price. In addition, Stanwell understands that the facilities have certain contractual arrangements with specific QLD gas fired power stations which impacts the QLD wholesale electricity market price.”

Stakeholders that are involved in LNG export activities made a number of points about the proposed additional reporting requirements for LNG facilities (short and medium term capacity and intra-day changes in capacity):

- **Ability to regulate gas flows:** stakeholders considered that LNG facilities are able to regulate gas production from fields through turning down gas wells, linepack, storage and existing arrangements with third parties. As this would potentially prevent impacts from injecting or withdrawing large amounts of gas

158 The large user would have to satisfy AEMO that it has not used more than 10 TJ/day for the last year and is not expected to use more than 10 TJ/day for the next year. This requirement is consistent with the test applied in Western Australia.

159 The draft report also discussed delaying the publication of data from single shipper pipelines, where competition in another market is affected. This is discussed in section 5.2.

160 Submissions to Stage 2 Draft Report on information provision: AGL, p. 4; Orica, pp. 1-2; MEU, p. 14.

161 Submissions to Stage 2 Draft Report on information provision: ERM, p. 7; Stanwell, p. 5; EUAA, p. 12.

162 Submissions to Stage 2 Draft Report on information provision: Stanwell, p. 5; ERM, p. 6; APA, p. 18; Jemena, p. 18.

163 Stanwell, Submission to ACCC, Australia Pacific LNG Pty Ltd & Ors - Authorisations - A91516 & A91517, 20 November 2015, p. 1.

from the domestic market, reporting should be consistent with other large gas users.¹⁶⁴

- **Information is misleading:** stakeholders noted that material changes in intra-day capacity may not result in additional gas being available to the domestic market. Publishing this information could mislead market participants into thinking that gas was available for purchase and reduce confidence in the usefulness of the Bulletin Board.¹⁶⁵
- **Competitive position affected:** stakeholders were concerned that publishing outages and intra-day capacity changes may impact the competitive position of Australian LNG companies in the international market. They contended that such reporting requirements do not exist in other countries.¹⁶⁶
- **Duplicative:** stakeholders considered the additional reporting obligations are not necessary because pipeline nominations reported by the transmission pipelines connected to LNG facilities already signal changes in capacity. They noted that information about outages is provided through a condition attached to an ACCC authorisation for the Gladstone LNG facilities to share certain information. The ACCC authorisation is currently granted for five years – APLNG suggested that an alternative would be to apply the ACCC authorisation and condition permanently.¹⁶⁷

3.6.3 Final recommendations

Large user facilities (excluding LNG)

As mentioned above, large users in the east coast are not currently subject to reporting requirements for the Bulletin Board. In comparison, large users in Western Australia are required to report their actual gas consumption for publication on the Western Australian Gas Bulletin Board.¹⁶⁸

Providing certain information about large user activity through the Bulletin Board allows market participants to gain a better understanding of the nature and of the demand and the potential demand (capacity) for gas in a particular location and therefore be in a better position to anticipate changes in demand. This would be consistent with the Bulletin Board's purpose as it could, in turn, help to inform:

¹⁶⁴ Submissions to Stage 2 Draft Report on information provision: Santos, p. 9; GLNG, p. 2.

¹⁶⁵ Submissions to Stage 2 Draft Report on information provision: Santos, p. 9; APLNG, p. 5.

¹⁶⁶ Submissions to Stage 2 Draft Report on information provision: QGC, p. 6; APLNG, p. 5; Santos, p. 9.

¹⁶⁷ APLNG, Submission to Stage 2 Draft Report on information provision, p. 5. The ACCC authorisation allows the LNG facilities to share certain information to coordinate planned outages. As a condition of the ACCC authorisation, the LNG facilities must publish certain information related to the planned outages. This is further discussed in section 3.6.3 below.

¹⁶⁸ Aggregated large users data (by region) is published after two days and disaggregated facility data is published after seven days. See the Western Australian gas Bulletin Board at gbb.imowa.com.au.

- price expectations in any of the facilitated markets that are located in close proximity to the facility;
- other market participants of any opportunities that may exist to trade secondary capacity or use an 'as available' service if large users are not utilising their capacity; and
- medium to longer term planning and investment decisions across the supply chain.

The Commission has been cognisant of the need for large user reporting obligations to be fit for purpose, proportionate to the detriment they are intended to address and, where possible, minimise the regulatory burden imposed on large users. The final recommendations are that:¹⁶⁹

- Large user facilities must comply with reporting obligations if they satisfy the minimum nameplate capacity reporting threshold. There will be an annual exemption from reporting if actual consumption falls below this threshold.
- If a large user facility is the only recipient of gas at a delivery point on a BB transmission pipeline, it is not required to provide the daily consumption data if the information can be obtained from the pipeline operator.

Specifically, the final recommendations are that large user facilities report:

- nameplate capacity (on registration and then annually) and changes to nameplate capacity (where more than 10 per cent is affected for more than three months);
- delivery points (on registration and then when the information is no longer accurate); and
- actual gas consumption (daily).

As discussed in section 4.2, the Commission is recommending that disaggregated large user information (actual consumption) will be published one day later. While confidentiality concerns were raised by some stakeholder submissions, further discussions with individual large users have indicated that the publication of actual gas flows would not impact competition in other markets. In addition, several large users stated that they were not concerned with the publication of actual gas flows and are more concerned with minimising any reporting burden.

On the other hand, forecast information provided by pipeline operators could reveal the intended gas use of gas fired generators where they are the only party at a delivery point. As this information could impact bidding activity and prices in the NEM, the Commission is proposing that it should only be published in aggregated form. Aggregation and timing for publishing information on the Bulletin Board is discussed in Chapter 4.

¹⁶⁹ See proposed rules 141, 168-169, 189.

It is estimated that around 40 large user facilities may be affected by this recommendation.¹⁷⁰

Table 3.3 Large user facilities that may be affected by the final recommendations

Location	Qld	NSW	Vic	SA	Tas
Estimated number of large user facilities	13	12	8	6	1

Source: AEMC analysis

Similar to the arrangements in Western Australia, AEMO will be required to use the pipeline flow information and large user information to derive an overview of different types of demand around the gas network and publish this information on the Bulletin Board. For example, in different areas, estimates of the: large user demand; LNG facility demand; demand from distribution pipeline systems (minus any large users); and other demand (transmission connected demand minus any large users). This requirement is discussed further in section 4.2.

Table 3.4 Recommended reporting by large user facilities (excluding LNG)

Issue	Recommendation
Who will be required to register (see section 2.6)	Large user facilities that are connected to a transmission pipeline or distribution system that satisfy the minimum reporting threshold will be required to register. These facilities include gas fired generators, manufacturing plants, minerals processing facilities and other large industrial facilities. The registration will attach to the facility rather than the owner of that facility. A large user that receives gas across multiple locations will therefore only have to register if a particular facility meets the reporting threshold.
Minimum reporting threshold for large users (see section 2.5)	The minimum reporting threshold for large user facilities will be set at 10 TJ/day. The nameplate capacity that will be used to assess the minimum reporting threshold will be defined as the maximum quantity of gas that can be delivered to the facility on a gas day under normal operating conditions (ie the quantity that can be delivered through the connection to the facility).
Circumstances in which an exemption from reporting will be available	An annual exemption from reporting (but not registration) will be available if the minimum reporting threshold is met but the large user can demonstrate to AEMO that: the facility has not, on any single gas day during the last 12 months, been delivered 10 TJ or more of gas; and the facility will not be delivered 10 TJ/day or more in the coming 12 months. If this position changes during the year, then the large user will be required to advise AEMO as soon as practicable and will then be required to comply with the reporting obligations.

¹⁷⁰ This estimate is based on information provided by APA, Jemena, Epic, Palisades, AEMO, AGN and Multinet. While the Commission also asked Ausnet and Allgas Energy to provide estimates of the number of large users on their distribution networks, it did not obtain a response. The estimate therefore excludes any large users that may be utilising these distribution networks.

Issue	Recommendation
Reporting obligation	Commentary
Nameplate capacity rating and delivery points	This includes the delivery points through which large users are supplied gas and the facility's nameplate capacity (ie the maximum quantity of gas that can be delivered to the facility on a gas day) to be reported annually.
Capacity outlook	Changes to nameplate capacity to be reported as soon as reasonably practicable if capacity changes by more than 10% and is expected to affect the facility for more than 3 months.
Actual consumption data	Actual consumption data to be reported each day for the previous gas day. If a large user is the only party taking gas at a delivery point on a BB transmission pipeline it may be relieved of its reporting obligation if the information will also be reported by the BB pipeline when it supplies disaggregated receipt and delivery point information to AEMO.

Large users are not currently included in the NGL or Regulations as parties that may be subject to Bulletin Board requirements. This would need to be amended prior to imposing obligations on them in the NGR.¹⁷¹

To give effect to the recommendations outlined above, changes will need to be made to:

- section 223 of the NGL or the Regulations to identify operators of user facilities as they are not currently captured by s. 223 of the NGL;
- Part 18 of the NGR to recognise operators of user facilities as BB reporting entities;
- Division 5 Part 18 of the NGR to include new reporting obligations; and
- the Procedures to reflect changes to the NGR.

LNG facilities

Like other large gas users, LNG facilities are not currently required to report to the Bulletin Board. The Commission has considered whether it is necessary to apply different or additional reporting requirements to LNG facilities because they are significantly larger than other large gas users and therefore have a greater potential to impact the market.

An example of the impact LNG facilities can have on local trading markets was seen on 14 August 2015. An unplanned outage at the QCLNG facility resulted in excess gas being sold in the Brisbane STTM and the Wallumbilla GSH. On 15 August 2015, spot

¹⁷¹ Some large users may be captured by the definition of 'user' in s. 223 of the NGL. However, there are some users that do not have direct contracts with pipeline operators and would not be captured by the current definition. As such, a change to the NGL or Regulations is required.

prices dropped to \$0.55/GJ in the Brisbane STTM and \$1.50/GJ at Wallumbilla.¹⁷² This outage also resulted in the Oakley gas fired power station being run consistently for two days following the outage¹⁷³ and slightly lower prices in the NEM for several days.¹⁷⁴ The Commission acknowledges that this event occurred while the LNG project was ramping-up gas production and there may have been less ability to manage the gas flows compared to a fully operational LNG facility.¹⁷⁵ However, it illustrates the potential outcomes in both electricity and gas markets should large volumes of gas be injected into the domestic gas market. As the LNG facilities are integrated with the domestic gas market, it is possible that such an event may occur again.

There is strong support from market participants in south-east Queensland for additional reporting by LNG facilities, given their concern with the potential impacts on the local market (including the impacts on the NEM, Wallumbilla GSH and Brisbane STTM). These parties support increased transparency to give them notice to manage market disruptions.

Duplication of information

Several recent market developments have improved the information available on LNG facility activities:

- On 14 July 2015 a new Curtis Island LNG demand zone was introduced into the Procedures. As a result, each of the transmission pipelines that transport gas to the LNG facilities began reporting to the Bulletin Board. This includes actual gas flows, pipeline nominations and forecasts, as required by other transmission pipelines and provides an indication of the actual and expected gas flows to the LNG facilities.¹⁷⁶
- On 14 April 2016 the ACCC authorised the Queensland LNG facilities (APLNG, QCLNG and QGC) to discuss and coordinate their maintenance schedules (planned outages). As a condition to this authorisation, the facilities are also required to publish certain information that is shared between them, to avoid information asymmetries.¹⁷⁷ This provides some information to the market on planned outages for the LNG facilities.

¹⁷² Historical gas prices available on the AEMO website.

¹⁷³ Stanwell, Submission to ACCC, Australia Pacific LNG Pty Ltd & Ors - Authorisations - A91516 & A91517, 20 November 2015, p. 2.

¹⁷⁴ Historical electricity prices available on the AEMO website.

¹⁷⁵ The Commission understands that LNG facilities have some ability to regulate gas flows by turning down gas well heads and using linepack in the transmission pipelines.

¹⁷⁶ <http://www.aemo.com.au/Consultations/Gas-Consultations/General/BB-Procedures-Curtis-Island-LNG-Zone>.

¹⁷⁷ Where an LNG producer plans an outage for more than one day and this is discussed with the other LNG producers, it must publish: the dates of the outage; and the volume of the outage (in half train increments up to one and a half trains). This does not include preliminary discussions for determining possible outage dates. See ACCC, Australia Pacific LNG Pty Ltd & Ors - Authorisations - A91516 & A91517, final determination, 14 April 2016, Attachment A.

While this goes some of the way to providing information on relevant LNG facility activity that may impact the domestic market, the information is still incomplete and asymmetries remain.

Pipeline nominations in the transmission pipelines attached to the LNG facilities are an imperfect indicator for potential gas flows into the domestic market. Information from an LNG facility on its capacity outlook and intra-day changes in capacity would complement the flow and forecast data provided from transmission pipelines and provide a level playing field for access to that information. For example, if flows along a transmission pipeline remain high, but the market knows the capacity of an LNG facility has been reduced, market participants may conclude that the gas is likely to flow into the domestic market and have implications for the NEM, Wallumbilla GSH and Brisbane STTM.

Information on the capacity of LNG facilities would also complement the ACCC authorisation and condition described above. The ACCC condition is somewhat limited in its scope because its focus is to mitigate the information asymmetries that the authorised conduct gives rise to. As such, the condition for the LNG producers to publish certain information is limited in scope. It requires publication only of certain information that is shared among the LNG producers. The condition does not include a requirement to notify the market of unplanned outages or planned outages that are not coordinated between the LNG producers. These scenarios could potentially have a significant effect on the domestic gas market. In addition, the information to be published is not very specific – for example, LNG producers are to identify the volume of the outage in half train increments. This is quite a large volume large and participants would only have a general idea of the outage size.

The recommendations in this report consider more broadly what information is required from the LNG facilities. As noted by the ACCC, these are complementary requirements:¹⁷⁸

“[the AEMC's] recommendations would require the Applicants to disclose any maintenance events scheduled... which means they would be able to identify overlaps with one another. However... [without the ACCC authorisation] the Applicants would not be authorised to discuss their schedules in order to resolve overlaps.”

The ACCC has granted the authorisation and condition for five years and will reassess the market conditions after this time. However, if the recommendations in this report were implemented, there would not be duplicative reporting requirements for LNG producers because the ACCC condition would not apply to the extent that the requirements are adopted in another obligation (such as a requirement in the NGR).¹⁷⁹

¹⁷⁸ ACCC, Australia Pacific LNG Pty Ltd & Ors - Authorisations - A91516 & A91517, final determination, 14 April 2016, p. 15.

¹⁷⁹ *ibid*, p. 35.

Competitive position in the international LNG market

One of the primary concerns raised by stakeholders was that publishing certain information about LNG facilities may affect their competitive position in the international LNG market. Specifically, the LNG producers were concerned that publishing information about planned and unplanned outages could reveal their position and affect any negotiations to obtain LNG from other sources to meet their supply contracts. If an unplanned outage means they need to urgently source LNG, there was concern that sellers may take advantage of the situation and demand higher prices.

LNG producers have some ability to manage their long term gas contracts through their relationships with other companies within international portfolios and joint ventures. They may not need to approach the market to arrange an LNG contract, or they could approach the market using another company within the portfolio or joint venture. The Commission acknowledges that some of the LNG producers would be in a better position than others. For example, QGC is part of a large international portfolio. Should an LNG producer need to approach the market to organise a spot LNG contract, it would have several buyers to approach. While market conditions can change, the current market conditions indicate that LNG is expected to be oversupplied over the medium term, which would make it easier for LNG buyers to secure competitively priced LNG.¹⁸⁰

Unplanned outages by an LNG facility are more difficult for it to manage and it may have to quickly source LNG from another source to meet contracted LNG deliveries. While this may place time pressures on LNG producers to secure alternative LNG sources, for the reasons outlined above the Commission does not consider it likely that competition in the international LNG market will be affected by publishing capacity information.

LNG producers have raised concerns that requirements for them to report gas consumption and capacity outages would be unique internationally. While the Commission understands that there may be few information disclosure requirements in many LNG exporting countries, requirements do exist where LNG facilities are integrated into domestic markets in developed economies.

Internationally, LNG facilities are subject to reporting requirements and certain information is published:

- In the United Kingdom, National Grid publishes for LNG facilities:¹⁸¹
 - contact details;
 - daily gas flows into or out of the facility for the previous gas day;

¹⁸⁰ Office of the Chief Economist, *Gas Market Report 2015*, p. 79.

¹⁸¹ See the National Grid website: <http://www2.nationalgrid.com/instantaneous-flows/> and <http://www2.nationalgrid.com/UK/Industry-information/Gas-transmission-operational-data/Supplementary-Reports/>.

- capacity availability for the current gas day; and
- instantaneous flows into the national transmission system, including from the LNG terminals;
- In the United States, the Energy Information Administration publishes:¹⁸²
 - monthly LNG export data by exit point; and
 - monthly LNG import data by exit point.
- In Europe:
 - Gas Infrastructure Europe publishes detailed information on LNG import and export facilities, including under construction LNG terminals¹⁸³
 - Individual LNG facilities must publish (among other things) daily information on the amount of LNG in each facility, inflows and outflows, and available capacity.¹⁸⁴

While the recommendations in this report are different to the reporting requirements in other countries, the Commission considers the recommendations to be appropriate to the Australian context. Other countries have imposed requirements such as information on countries of destination and real time pipeline information that are not considered necessary. However, the LNG export facilities in Queensland are highly integrated with the domestic market and it is appropriate that certain information is made available because their activities can impact the domestic market. Providing this information is consistent with the aim for the Bulletin Board to provide an accurate view of the east coast gas market consistent with the Bulletin Board purpose. The Commission is of the view that the potential benefits to the domestic market from providing this information outweigh the potential detriments to LNG producers.

Recommendation

For the reasons set out above, it is recommended that LNG facilities be required to provide the following information:¹⁸⁵

- nameplate capacity (on registration and then annually);
- delivery points (on registration and then when the information is no longer accurate);

¹⁸² See <http://www.eia.gov/naturalgas/data.cfm#imports>.

¹⁸³ <http://www.gie.eu/index.php/maps-data/lng-map>.

¹⁸⁴ Regulation (EC) No 715/2009 of the European Parliament and of the Council, Article 19. Under Article 9 of Regulation No 1348/2014, LNG facilities must provide certain information to the Agency for the Cooperation of Energy Regulators, including information about planned and unplanned outages. However, it is unclear whether these outages are published.

¹⁸⁵ See proposed rules 141, 168-169, 178, 181, 190.

- short and medium-term capacity outlooks;
- material intra-day changes in capacity (as required); and
- actual gas consumption (daily).¹⁸⁶

While publishing information on capacity changes does not necessarily indicate that additional gas will be provided to the market during outage periods, together with information from pipelines, it can assist certain market participants manage the risks that may occur during those outage periods. Table 3.5 below provides an overview of the recommendations related to LNG facilities.

Table 3.5 Recommended reporting by LNG facilities

Issue	Recommendation
Who will be required to register (see section 3.6)	LNG facilities will be required to register. There is no minimum reporting threshold. The registration will attach to the facility rather than the owner of that facility.
Circumstances in which an exemption from reporting will be available	No exemptions from registration are available.
Reporting obligation	Commentary
Nameplate capacity rating and delivery points	This includes the delivery points through which large users are supplied gas and the facility's nameplate capacity (ie the maximum quantity of gas that can be delivered to the facility on a gas day) to be reported annually.
Capacity outlook	Short- and medium-term capacity outlooks and material intra-day changes in capacity to be reported in the same manner as pipelines, production and storage facilities. LNG processing facilities will be required to provide more detailed and frequent information than other large users, because the scale of these facilities is such that any change in their capacity could have a significant effect on the market. In the Commission's view this is appropriate because the value to the market of having more timely information on the capacity outlook of these facilities is far greater than what it is for other types of large users.
Actual consumption data	Actual consumption data to be reported each day for the previous gas day. If an LNG facility is the only party taking gas at a delivery point on a BB transmission pipeline it may be relieved of its reporting obligation if the information will also be reported by the BB pipeline when it supplies disaggregated receipt and delivery point information to AEMO.

¹⁸⁶ LNG facilities may be exempt from this reporting requirement if it is the only recipient of gas at the delivery point and the daily consumption data is provided by the pipeline facility operator. See proposed rule 190.

To give effect to the recommendations above, changes will need to be made to:

- section 223 of the NGL or the Regulations to identify the operators of LNG facilities as they are not currently captured by s. 223 of the NGL;
- Part 18 of the NGR to recognise the operators of LNG facilities as BB reporting entities;
- Division 5 of Part 18 of the NGR to include the new reporting requirements; and
- the Procedures to reflect the changes to the NGR.

3.7 Other changes to existing reporting requirements

Through Stages 1 and 2 of this review and the Enhanced Information for Gas Transmission Pipeline Capacity Trading rule change process a number of potential improvements to the existing Bulletin Board reporting obligations have been identified, including:

1. Requiring BB facilities to report on planned expansions and asset retirements.
2. Improving the frequency with which information is reported and alerted to the market and potentially moving to a real time or intra-day reporting model, or as an interim measure, conducting a trial of such a model.
3. Requiring pipeline operators to report nominations and forecasts on both a receipt point (injection) and delivery point (withdrawal) basis, rather than just a delivery point basis as is currently provided for in Part 18 of the NGR.
4. Requiring producers to report aggregated supply nominations and forecasts.
5. Removing the obligation in rule 180 for AEMO to publish estimates of the total forecast demand on peak demand days from May to September and from November to March for each demand zone.

The Commission's views on each of these proposals are set out below.

3.7.1 Planned expansions and asset retirements

In the Stage 2 Draft Report the Commission recommended that facility operators be required to report on planned expansions and asset retirements that will affect the facility's capacity. In doing so, the Commission noted that this type of information would enable market participants to make more informed decisions about the use of these assets over the medium-term and investments in their own facilities. There were few stakeholder comments on this draft recommendation but the proposal was generally supported.¹⁸⁷

¹⁸⁷ Submissions to Stage 2 Draft Report on information provision: Stanwell, p. 5; Jemena, p. 17.

For the reasons set out in the draft report, the Commission remains of the view that this information should be reported by those facility operators that are required to provide AEMO with information on the medium-term capacity outlook.¹⁸⁸ Specifically, the Commission recommends that these facility operators be required to:

- report on any planned expansions or asset retirements that will affect the facility's capacity on an annual basis at the same time the facility operator reports to AEMO on the nameplate capacity rating; and
- report on any changes that occur during the year as soon as reasonably practicable after the facility operator becomes aware of any planned expansions or asset retirements that will affect the facility's capacity.

To give effect to this recommendation, Division 5 Part 18 of the NGR will need to be amended.¹⁸⁹

3.7.2 Frequency of information provision

In the Stage 2 Draft Report the Commission recommended that the frequency with which information is reported on the Bulletin Board be improved by requiring:

- any material changes to a reporting entity's nominations and capacity during a gas day to be reported to AEMO as soon as practicable on that day; and
- any material changes to capacity and nominations to be displayed prominently on the Bulletin Board.

The Commission also sought stakeholders' views on whether there would be value in:

- conducting a trial of real time reporting on major pipelines in Queensland; and
- implementing an alert system to notify market participants of any material intra-day changes to nominations or capacity.

The submissions received in response to the Stage 2 Draft Report, primarily focused on the value of conducting a real time reporting trial and introducing an alert system, although there was some support for the proposal to require material intra-day changes to capacity and nominations to be reported.¹⁹⁰

In relation to the trial of real time reporting, AGL noted that there may be some value in conducting such a trial.¹⁹¹ Stanwell, on the other hand, noted that the extra data provided by an intra-day feed was unlikely to be of any benefit and that at this stage in

¹⁸⁸ These facilities include BB transmission pipelines, BB production facilities, BB storage facilities, BB compression facilities and BB LNG processing facilities.

¹⁸⁹ See proposed rules 141 and 181.

¹⁹⁰ Submissions to Stage 2 Draft Report on information provision: Stanwell, pp. 5-6; AGL, p. 5; ERM, p. 7; Jemena, p. 17.

¹⁹¹ AGL, Submission to Stage 2 Draft Report on information provision, p. 4.

the evolution of the market daily forecasts and actual flows are sufficient.¹⁹² AEMO noted that while it supports the consideration of real-time reporting, a trial would be costly to implement. AEMO noted though that if the recommendations from other areas of this review were implemented (for example, the proposed changes to the balancing arrangements in the Declared Wholesale Gas Market) then this may necessitate a movement to real-time reporting.¹⁹³ QGC noted that this is done internationally, and supported a trial (for example on the Moomba to Sydney Pipeline or Moomba to Adelaide Pipeline System) to get a better idea of the costs and benefits.¹⁹⁴

As to the alert system, AEMO, Stanwell and Santos claimed that the costs of such a system were likely to outweigh the benefits. AEMO added that another alternative may be to add a 'last updated' field to the Bulletin Board, so users can readily identify material changes.¹⁹⁵

The lukewarm response to conducting a trial of real-time reporting is consistent with the feedback that was received in the lead up to the Stage 2 Draft Report, which suggested that real time information is currently only being sought by a small number of market participants and that the costs are likely to be significant. Given this response, the Commission has decided not to recommend that a trial of real time reporting be conducted at this stage. That is not to say that there may not be value in conducting a trial in the future. However, there appears to be little value in conducting such a trial at this point in time given the limited demand for this information at present. As AEMO pointed out, this could change in the future if some of the recommendations from other areas of this review are implemented, or as trading of gas and pipeline becomes more dynamic.

While the benefits of real time reporting may not be sufficiently large at this stage, there are a number of improvements that can be made to the existing reporting obligations to reduce the information gaps that arise during the day when actual outcomes deviate from expectations. For example, when renominations result in a facility's expected use changing, or an outage, or some other event results in a facility's short-term capacity outlook changing.

Although these issues are dealt with to some extent in the Procedures, the coverage of these provisions is not as extensive as they need to be under the new reporting model.¹⁹⁶ In the case of short-term capacity outlooks, the Procedures also provide facility operators too much discretion to determine whether they will report changes during the gas day. This is a limitation in the current reporting obligations that could

¹⁹² Stanwell, Submission to Stage 2 Draft Report on information provision, p. 6.

¹⁹³ AEMO, Submission to Stage 2 Draft Report on information provision, Attachment B, p. 2.

¹⁹⁴ QGC, Submission to Stage 2 Draft Report on information provision, p. 7.

¹⁹⁵ Submissions to Stage 2 Draft Report on information provision: Stanwell, p. 9; Santos, p. 10; AEMO, Attachment B, p. 3.

¹⁹⁶ For example, the Procedures currently only require BB pipelines to revise their nominations if there has been a material change during the gas day.

have broader reaching consequences in the market, particularly if some participants become aware of the change in capacity while others do not.

To overcome these limitations, the Commission recommends that BB pipelines, BB storage facilities, BB production facilities and BB compression facilities be required to report any material intra-day changes in nominations and short-term capacity outlooks, where 'material' is defined as the greater of 10% nameplate rating or 30 TJ. To give effect to this recommendation, amendments will need to be made to Division 5 Part 18 of the NGR.¹⁹⁷

The Commission also suggests that AEMO prominently display any intra-day updates on the front page of the Bulletin Board (for example, either as some type of flag or as a news feed), so that users are made aware of changes through the gas day.

In relation to the proposed alert system, the Commission notes the comments that have been made by stakeholders about the costs of implementing such a system and so has decided not to recommend that this be pursued at this time. This may be something that AEMO can consider, however, as part of the biennial reviews if there is greater demand for such a service in the future (see section 5.4).

3.7.3 Reporting of pipeline nominations and forecasts by receipt point

Through the Enhanced Information for Gas Transmission Pipeline Capacity Trading rule change process, the NGR were amended to require pipeline operators to report actual gas flows by both receipt and delivery point. Pipeline nominations and forecasts are, however, still only reported on a delivery point basis. It is not possible therefore to determine how much gas is forecast to be supplied into the pipeline from the information currently reported on the Bulletin Board.

This is a gap in the current reporting obligations that could have broader reaching consequences for trade in both gas and pipeline capacity. The Commission therefore recommends that the gap be addressed by requiring pipeline operators to report nominations and forecasts on both a receipt and delivery point basis. Apart from providing greater visibility about expected supply side flows, this information will provide market participants with greater insights into pipeline linepack and the direction of pipeline flows. It is also consistent with the approach used in Western Australia, where pipeline operators are required to report nominations and forecasts by both receipt and delivery point.¹⁹⁸

To give effect to this recommendation, the reporting obligations in Division 5 Part 18 of the NGR will need to be amended.¹⁹⁹

¹⁹⁷ See proposed rules 178 and 182-185.

¹⁹⁸ See: <https://gbb.imowa.com.au/#reports/forecastFlow>

¹⁹⁹ See proposed rule 183.

3.7.4 Reporting of producer nominations and forecasts

Another reporting gap that was identified in Stage 1 of this review but was not commented on specifically in the Stage 2 Draft Report is that the NGR does not currently require producers to report their aggregated nominations or forecasts. This is in direct contrast to pipeline operators who are currently required to report this information and storage providers, who will be required by the Enhanced Information for Gas Transmission Pipeline Capacity Trading rule change, to report this information.

In those cases where a production facility is the only one supplying gas into a pipeline receipt point, this information should be captured by the nomination and forecast information reported by the pipeline operator. However, there may be locations in the east coast where producers are supplying gas into a receipt point that is also used to supply gas from other pipelines or storage facilities. There may also be locations where gas can be supplied into a pipeline from a production facility and from a pipeline into a production facility with this position potentially changing during the course of the day. The nominations and forecasts reported for these types of receipt points will not provide a clear indication of how much gas is expected to be supplied from the production facility relative to supply from other facilities.

In the Commission's view this is a gap in the current reporting obligations because if an incident was to occur at the production facility, it may take some time for the market to determine what the implications for supply into the market actually are, which could, in turn, affect trade in gas and pipeline capacity. To address this gap, the Commission recommends that the operators of production facilities, like their pipeline and storage counterparts, be required to report:

- the aggregated nominations for gas day D that will be supplied into a particular receipt point; and
- the aggregated forecast supplies for gas day D+1 to D+6, if it has been provided with forecast supplies by its customers.

To give effect to this recommendation a new reporting obligation will need to be introduced into Division 5 Part 18 of the NGR.²⁰⁰

Given this recommendation did not appear in the Stage 2 Draft Report, the Commission intends to consult on this further through the rule change process.

3.7.5 Peak demand forecasts

Following the release of the Stage 2 Draft Report, AEMO suggested that the current requirement in rule 180 for peak demand forecasts to be published for each Bulletin Board demand zone be removed from the NGR. In doing so, AEMO noted that:

²⁰⁰ See proposed rule 185.

- more comprehensive peak day demand forecasts are developed as part of the National Gas Forecasting Report (NGFR) and GSOO; and
- the forecasts developed under this rule can be confusing and of limited value because the delineation of the Bulletin Board demand zones differs from the zones used in the NGFR and GSOO, and in some cases the forecast represents peak demand while in other cases it represents peak flow or peak net flows.²⁰¹

The Commission has examined the issues raised by AEMO and agrees that the NGFR and GSOO are better vehicles to deal with any peak day demand forecasting. The Commission therefore recommends this provision be deleted from the NGR. Given this issue was raised after the Stage 2 Draft Report, the Commission intends to consult on this further through the rule change process.

3.8 Summary of proposed reporting requirements across the supply chain

Figure 3.2 below summarises the existing and proposed reporting requirements across the supply chain. The current reporting requirements include obligations being introduced under the Enhanced information for gas transmission pipeline capacity trading final rule, which commences on 6 October 2016.

²⁰¹ For example, the peak day demand forecast for the Sydney demand zone represents peak demand, while for the Carpentaria Gas Pipeline demand zone it represents peak flow and for the South West Queensland Pipeline demand zone it represents peak net flow.

Figure 3.2 Existing and proposed reporting requirements

	Pipeline	Hub compression	Production	Storage	Integrated storage	Large users	LNG	Reserves
General information								
Nameplate rating	✓	...	✓	✓	✓	—
Planned asset retirements and expansions	✗	...	—
Detailed facility data (location)	✓	...	✓	✓	✓	—
Details of contracted shippers	✓	...	✗	✗	✗	—	—	—
Previous day data								
Daily disaggregated receipt/delivery point ¹	...	—	—	—	—	—	—	—
Daily production/consumption	—	—	✓	—	—	—
Daily storage volume	—	—	—	✓	✓	—	—	—
Daily injections and withdrawals	—	—	—	✓	✓	—	—	—
Daily compression volume	—	...	—	—	—	—	—	—
Forecast and nominations								
Nominations (D)	✓★	✓	✗	✗	✗	—
Intra-day renominations (D)	✓★	✓	✗	✗	✗	—
Forecast nominations (D+1 to D+6)	✓★	✓	✗	✗	✗	—
Capacity outlooks								
Short term capacity outlook (daily)	✓	...	✓	✓	✓	✗	...	—
Medium term capacity outlook	✓	...	✓	✓	✓	✗	...	—
12 month outlook for uncontracted capacity ²	✓	...	✗	✓	✓	—	—	—
Material intra-day changes to capacity	✗	✗	...	—
LCA flag (D to D+2)	✓	...	—	—	—	—	—	—
Other								
Secondary platform capacity data ³	✓	...	—	—	—	—	—	—
2P reserves (annual) ⁴	—	—	—	—	—	—	—	...

1 Currently pipeline operators must provide daily aggregated receipt and delivery point data and monthly disaggregated receipt and delivery point data.

2 Provided monthly for the next 12 months.

3 Reported weekly for the previous week.

4 2P reserves must be updated if an update is reported to the ASX or a government within the year.

★ Currently these are reported by delivery point only. It is recommended that these be expanded to include receipt points. Also, pipeline nominations and forecasts are to be aggregated before publication.

KEY

✓ Existing
... Proposed

✗ Not required
— N/A

4 Publication of information on the Bulletin Board

Box 4.1 Summary of findings and recommendations

Pipeline flow information, which includes nominations, forecasts and actual flows, is currently aggregated by pipeline operators using the zonal model and published on the Bulletin Board. The existing rigidities in the zonal model have resulted in some significant gaps in the information reported by pipelines.

To address these issues, the Commission recommends AEMO be responsible for the aggregation of information to be published on the Bulletin Board (**Recommendation G**). The rules would include supporting requirements:

- BB pipelines must report actual flows, nominations and forecast information on a disaggregated basis, by receipt and delivery point.
- AEMO must publish the aggregation methodology in the Procedures, in consultation with stakeholders.

The rules would also specify certain publication requirements:

- Pipeline nomination and forecast information would be aggregated and published on the Bulletin Board without a delay.
- Pipeline actual receipt and delivery point flows would be aggregated and published each day for the previous day to provide an overview of actual flows around the market. It would also be published in a disaggregated form.
- Large user actual gas use would be published each day for the previous day. In addition, AEMO would aggregate large user gas use to provide an overview of different types of demand across the market.

Throughout this report the Commission has identified a number of actions that could be undertaken by AEMO that go to addressing some of the concerns raised by stakeholders. **Recommendation H** is that AEMO progress actions under the current framework to:

- adopt a fixed and consistent standard for the assumed direction of bidirectional pipelines;
- improve the information on the Bulletin Board related to pricing;
- provide a notice board to allow market participants to notify each other of opportunities; and
- add links to government and industry reports related to upstream activities and other gas market activities.

4.1 Introduction

This chapter examines how information reported to AEMO under the Bulletin Board framework would be published and presented on the Bulletin Board and is structured as follows:

- section 4.2 focuses on the aggregation and timing of publication of information on pipeline nominations, forecasts and actual gas flows (collectively pipeline flows) and actual gas use of large users including LNG facilities; and
- section 4.3 sets out some of the other information that could be published on the Bulletin Board without a rule change.

4.2 Aggregation and publication timing

4.2.1 Background and impetus for change

Under the current reporting framework, pipeline flow information is aggregated by pipeline operators based on the zonal model and reported to AEMO for publication on the Bulletin Board.²⁰² The NGR does not contain any timing requirements for AEMO to publish the data it has received. However, information is typically published shortly after it is received. Nomination and forecast information is provided to AEMO by 7pm each day, typically with a rolling seven day outlook.

The use of the zonal model to determine how flows are aggregated and reported on the Bulletin Board has resulted in some significant gaps in the information reported by pipelines because, as noted in Chapter 2:

- the bounds of the existing zones do not capture all of the gas flows; and
- the model requires flows to be reported on a net basis, which when coupled with the fact that zones extend across such large geographic areas, means that it does not accurately reflect the utilisation of the pipeline or the direction in which gas flows.

AEMO, APA and the Gas Bulletin Board reference group carried out some work in the last year to address these deficiencies in the zonal model. This included developing alternative zonal designs (for example, the transit zone design and pipeline-to-pipeline zone design).²⁰³ However, AEMO's ability to successfully address these deficiencies has been limited by the fact that the NGR currently restricts the scope of the zonal

²⁰² Rules 173(1) and 174(1) of the NGR.

²⁰³ The alternative zonal designs included: (a) a pure demand and production zone design, which is based on the existing framework but with new zones added as required; (b) a pipeline-to-pipeline zone design, which amends the existing demand and production zone framework by introducing pipeline-to-pipeline zones to capture the movement of gas between pipelines; and (c) a gas transit zone design, which amends the existing demand and production zone framework by introducing gas transit zones at locations where gas is exchanged but not consumed.

model to production and demand zones. This limitation is of concern given the gaps that have emerged under this model and its apparent inability to respond to changes in the market.

4.2.2 Draft report and stakeholder submissions

The Stage 2 Draft Report recommended that the requirement in the NGR for pipeline flow information to be aggregated using the zonal model be removed and that AEMO be given greater flexibility to determine the aggregation method through the Procedures. Instead, BB pipelines would be required to provide AEMO with actual and forecast flow information, by receipt and delivery point. AEMO would then publish the information:

- in aggregated form shortly after receiving it; and
- in disaggregated form with a five day lag.

The draft report also sought stakeholder views on:

- Whether there was value in including some guiding principles in the NGR that AEMO can have regard to when carrying out this aggregation task, for example:
 - the matters AEMO is to have regard to when determining how to treat the publication of large user information;
 - that the aggregation method should provide for the minimum number of facilities necessary;
 - that the geographical area over which the aggregation zone is created should be as small as possible; and
 - that the aggregation method should be assessed periodically for relevance and change in circumstance.
- Short term measures that could be used to improve the way in which pipeline flows on bidirectional pipelines are currently reported, such as:
 - Amending the Procedures to require BB pipelines that operate bidirectional pipelines to provide a directional breakdown of actual deliveries and nominations. On a pipeline such as the South West Queensland Pipeline (SWQP) this would mean separately reporting the actual deliveries and nominations in as easterly direction and a westerly direction. Making this change should address some of the anomalies that are currently appearing on the Bulletin Board, such as nominations on the SWQP far exceeding capacity on some days.
 - Adopting a fixed standard for the assumed direction of bidirectional pipelines and making it clear on the Bulletin Board (ideally on the front

page) so that participants understand what a positive or negative flow on a pipeline represents.²⁰⁴

Stakeholders generally supported the draft recommendation to remove the requirement for BB pipelines to aggregate information using the zonal model. As noted by EnergyAustralia, the supply and demand zones are not intuitive and an alternative aggregation methodology would be more effective.²⁰⁵

A number of stakeholders considered that pipeline flow information should be aggregated to protect the confidentiality of gas users. Stanwell was particularly concerned about the release of gas fired generators' pipeline nominations and forecasts (but not actual gas use) because of the potential for this information to indicate their intention to generate and supply electricity into the NEM.²⁰⁶ Jemena considered any disaggregated gas user data to be confidential and that it should not be published, even with a time lag. It noted that a competitor that does not use gas in its processes, or is located in another country, may be able to determine certain information from the published gas use. Instead, Jemena suggested that delivery points could be grouped together to protect the confidentiality of users.²⁰⁷

Some stakeholders considered that previous day, disaggregated flows data should be published as soon as possible after the gas day. They claimed that this information is no longer commercially sensitive and would not damage a user's competitive position because much of this information can already be deduced from reported gas flows into and out of the facilitated gas markets. They also noted that publication of disaggregated pipeline flows would facilitate gas market analysis by third parties, forecasting and trading.²⁰⁸

Some stakeholders considered that any guiding principles included in the NGR should define the purpose of the new aggregation zones and enable some flexibility for the zones to change over time. They considered that an aggregation methodology should be developed through a consultative process.²⁰⁹

There were few comments on the options to improve information about bidirectional flows. Santos considered it was not necessary to require a breakdown of deliveries and nominations in each direction as market participants are more interested in net flow.²¹⁰

²⁰⁴ For example, the Roma to Brisbane Pipeline could, for the purposes of establishing a standard, be assumed to run from Roma to Brisbane. A negative flow in this case would mean gas is flowing towards Roma.

²⁰⁵ Submissions to Stage 2 Draft Report on information provision: AEMO, p. 2; Stanwell, p. 6; EnergyAustralia, p. 7; Jemena, p. 17.

²⁰⁶ Stanwell, Submission to Stage 2 Draft Report on information provision, p. 2.

²⁰⁷ Jemena, Submission to Stage 2 Draft Report on information provision, p. 13.

²⁰⁸ Submissions to Stage 2 Draft Report on information provision: EnergyAustralia, p. 7; Stanwell, p. 2; ERM, p. 7; Australian Energy Council, p. 2.

²⁰⁹ Submissions to Stage 2 Draft Report on information provision: AEMO, p. 2; Stanwell, p. 6.

²¹⁰ Santos, Submission to Stage 2 Draft Report on information provision, p. 10.

4.2.3 Final recommendations

Aggregation model

The current requirement that pipeline flows are aggregated and presented on the Bulletin Board using the zonal model has resulted in some significant gaps. Certain gas flows are not captured because they do not flow across the current boundaries of the existing zones. Flows are also reported on a net basis, meaning the flows presented on the Bulletin Board do not accurately reflect the utilisation of the pipeline or the direction in which gas is flowing. This deficiency is preventing market participants from making efficient and informed decisions. The ability to address these deficiencies within the current framework is limited by the fact that the NGR restricts the scope of the zonal model to production and demand zones.

While the current zonal model does not provide a complete representation of gas flows around the market, zones may be useful for providing an overview and broad understanding of flows on the Bulletin Board. However, gas markets change over time and it is important that any aggregation methodology is flexible enough to maintain the relevance of information for the market.

For these reasons, the Commission recommends that the requirement in the NGR for pipeline flow information to be aggregated using the zonal model should be removed and that AEMO be given greater flexibility to determine the aggregation method through the Procedures. To support this recommendation, the NGR would include requirements for:²¹¹

- BB pipelines to provide AEMO with actual and forecast flow information, disaggregated by receipt and delivery point; and
- AEMO to publish this information (in aggregated and disaggregated forms) on the Bulletin Board shortly after receiving it (see timing requirements below).

Under this approach, the responsibility for aggregating pipeline flows would transfer from the BB pipelines to AEMO. This is consistent with the approach used in Western Australia and has the added benefit of allowing Bulletin Board users to access and analyse the data. It also allows AEMO to recut the data at a later point in time if the aggregation method changes so historic trends can still be examined.

Aggregation by AEMO would enable the receipt and delivery point actual and forecast flow information to be presented in a more manageable form on the Bulletin Board. The information would provide a more accurate and complete picture of gas flows in the east coast market and be more useful to Bulletin Board users. It will allow them to be more confident in the market and make informed decisions on the use of and investment in gas.

²¹¹ See proposed rules 183, 187, 193-196.

Confidential information

Under the proposed changes, BB pipelines will report pipeline forecasts, nominations and actual gas flows for each receipt and delivery point. In addition, large users will report actual gas use regardless of their location (see section 3.6).

Where a gas user (including a small gas user) is the only party at a delivery point or located on a single user pipeline,²¹² any receipt and delivery point data reported by the BB pipeline can be linked to that gas user. This means that the impacts on gas users must be taken into account when considering the publication of disaggregated information from pipelines on the Bulletin Board. There are several options for managing the publication of information that will have competitive impacts:

- information can be aggregated such that it cannot be connected to an individual;
- information can be published with a time lag.

The Stage 2 Draft Report noted that there may be competitive impacts from publishing information related to large users and sought stakeholder feedback on the particular information that could affect their position in other markets.

In light of stakeholder submissions and further consultation with individual gas users, the greatest concern appears to be that the publication of disaggregated nomination and forecast information could reveal a gas-fired generator's intended electricity generation. If the generator is bidding into the NEM this could affect competition in the NEM as the forecast indicates how much electricity the gas fired generator is intending to bid into the market. This may then affect the bidding activity of other participants in the NEM and the market price of electricity. This outcome is not desirable and for these reasons the Commission's recommendation is that nomination and forecast information from pipelines is only published in aggregated form. In the Commission's view, aggregated flow information is sufficient for providing the market with an overview of the expected gas flows.

It is not necessary to publish disaggregated nomination and forecast information with a time lag because once actual pipeline flows are published (see below) the forecast information for that day is supplanted by that information, which is more relevant to market participants.

It is less clear whether there are any competitive risks associated with publication of actual gas flow information. To be clear, the Commission is concerned with impacts on competition in other markets. While some stakeholders were concerned that the publication of gas use might reveal the efficiency of their facility or their activities, this becomes an issue only where it affects activity and prices in other markets.

²¹² A gas user may be located within a distribution pipeline system, it may be one of several parties at a delivery point, it may be the only party at a delivery point, or it could be located on a single user pipeline.

The Commission has closely engaged with a number of large users in different industries and LNG producers to investigate whether the publication of actual gas use would affect competition in other markets. It has found:

- Gas fired generators are typically not concerned with the publication of actual gas use data. The NEM would not be affected by the publication of gas used by gas fired generators on the previous day because the NEM bidding activity would have concluded by that time. In addition, the daily output of electricity generators is published by AEMO.
- Large industrials that rely on gas as a feedstock or for heating, such as ammonia production, glass manufacturing and paper manufacturing, operate in markets in which market activity and price would not be affected by the publication of actual gas use. In Western Australia, the consumption of large gas users is published, albeit with a short time lag. Several stakeholders stated that their business is not concerned with the publication of actual gas use data.²¹³ However, one stakeholder remained concerned that its competitors would learn about the efficiency of its facility.
- LNG producers are concerned that the publication of gas information will reveal when the facility is experiencing an outage and that this would affect negotiations to obtain competitively priced gas from other sources. For the reasons set out in section 3.6.3, the Commission does not consider that competition in the international LNG market would be likely to be affected by the provision of this information.

Based on the submissions received and subsequent consultation with individual stakeholders, the Commission considers that the publication of actual gas use would not be likely to affect competition in other markets. In addition, publishing the information with a short time lag (for example, five days) is not likely to offer any benefits or affect the position of large users any more than the immediate publication of actual gas use. Delaying the publication of certain information would also result in some practical difficulties, which are discussed further below.

Timing for the publication of information

Given the conclusions above, the Commission does not consider it necessary to delay the publication of actual pipeline receipt and delivery point information, or large user consumption, to avoid competitive impacts. Each day, this information should be published for the previous gas day.

In addition to publishing disaggregated actual pipeline flows, AEMO should publish an aggregated form of the information. These serve different purposes – the aggregated data will provide a useful and understandable representation of gas flows around the

²¹³ Large users were more concerned with the rising cost of gas, and requested that the administrative costs of complying with any new reporting requirements be minimised.

market, while the disaggregated data will enable more detailed assessment and analytics by interested parties.²¹⁴

Table 4.1 Proposed timing for publication of gas information

Information type	Aggregated information	Disaggregated information
Pipeline nominations for the gas day and week ahead forecasts	Day before the gas day	Not published
Pipeline actual daily receipt and delivery point gas flows for the gas day	Next day	Next day
Large user (including LNG) actual daily gas use for the gas day	Next day	Next day

The Commission has not recommended that the publication of actual daily gas use by large users be delayed to address potential confidentiality concerns as suggested in the Stage 2 Draft Report. There are some practical issues with delaying the publication of large user data that make this an undesirable option:

- Even if the large user consumption information is delayed, the gas use of some large users may be revealed by data provided by pipeline operators. For example, if the large user is the only party at a delivery point or the only user on a pipeline. This results in unequal treatment of large users;
- Simply not reporting gas flows at that delivery point would not be sufficient because flows at that point may be calculable based on data for other points on the pipeline. This would also create gaps and reduce the reliability of information on the Bulletin Board.
- To protect large user information equally, certain pipeline information would need to be aggregated to prevent the publication of large user information.
- Delaying the publication of disaggregated information would include delaying data relating to the LNG facilities and transmission pipelines servicing those facilities, as they are single user pipelines. The Commission does not consider this to be appropriate, given the potentially significant impact changes in gas flow to LNG facilities could have on the east coast market.²¹⁵
- As a result of delaying publication of disaggregated data, the data on the Bulletin Board would be less meaningful and useful for participants. There would also be information asymmetries – for example a large user on a single user pipeline would know about activity on that pipeline that would affect the wider market, but that information would not be published. This would not be consistent with

²¹⁴ See proposed rules 193-195.

²¹⁵ In addition, this is inconsistent with the clear policy view of the COAG Energy Council.

the objective of reforming the Bulletin Board to provide useful and meaningful gas market information.

It is preferable that there is equal treatment among gas users and a consistent approach to the publication of gas information. This provides a level playing field for participants reporting to the Bulletin Board. It also supports the publication of reliable market information and improves confidence in the Bulletin Board. The proposed framework is administratively more simple than developing a complex exemption framework. The impact of the reporting obligation will be minimised if all gas users have equal exposure and reporting requirements, compared to some being subject to publication delays.

The Commission supports options to minimise the administrative reporting burden for individual companies. These may be investigated further in the rule change process.

Aggregation methodology

To support the requirements above, the proposed rule requires AEMO to aggregate information from BB pipelines for the following purposes:²¹⁶

- **Actual flow information** from pipelines should be aggregated and published in a way that provides BB users with a meaningful representation of the direction and quantity of gas flows.
- **Nomination and forecast information** from pipelines should be aggregated and published in a way that provides BB users with a meaningful representation of the expected direction and quantity of gas flows. It must also prevent any competitive impacts in the NEM from the publication of forecast gas use by gas-fired generators.²¹⁷

The proposed rule also requires AEMO to aggregate and publish a summary of different types of demand in different locations.²¹⁸ AEMO could use the actual gas consumption information provided by large users and LNG facilities together with pipeline flow information to derive an estimate of distribution connected demand (excluding large user facilities located on distribution pipelines) and other end user demand (other demand connected to transmission), which could also be published on the Bulletin Board.²¹⁹

²¹⁶ See proposed rules 193-195.

²¹⁷ Aggregation should prevent the publication of information related to the forecast gas use of gas fired generators that are bidding into the NEM.

²¹⁸ See proposed rule 195.

²¹⁹ This was supported by Stanwell in its Submission to Stage 2 Draft Report on information provision, p. 5.

AEMO would have discretion to determine an appropriate breakdown of the categories, locations or any other factors to present the demand information on the Bulletin Board.²²⁰ For example, this may include:

- LNG demand;
- other large users – this could include sub-categories such as minerals, mining (including electricity generation within those facilities), other electricity generation and manufacturing;
- distribution connected users (excluding large users); and
- other users not falling within any of these classes.

AEMO would be required to set out the aggregation methodology developed under these requirements in the Procedures. To do this, AEMO would consult with stakeholders as part of the procedure change process. This also enables the aggregation methodology to be amended as necessary over time to maintain its relevance in consultation with stakeholders.

However, it may take AEMO time to develop the systems that will be required to carry out this aggregation task. As a result, there may be a need for a transition period during which time the BB pipelines continue to carry out this task. Implementation issues such as this will be considered further during the rule change process.

Bidirectional pipelines

Under the current reporting model pipeline flows are reported on a net basis. For example, if gas nominations are 50 TJ in one direction and 30 TJ in the other direction, it is reported as 20 TJ. As a consequence the Bulletin Board does not accurately reflect the utilisation of these pipelines.

Another issue is that the Bulletin Board could be more clear about the meaning of positive and negative pipeline flows. While AEMO publishes a schedule of default pipeline flow direction on the Bulletin Board,²²¹ this information is not in a prominent position and when historical data is downloaded, it is unclear whether the default direction has changed over time.

While the proposed rule does not directly address these issues, AEMO would have a wide scope to present information on the Bulletin Board to provide a meaningful representation of the direction and quantity of gas flows.²²² On bidirectional pipelines, AEMO may consider:

²²⁰ Similar information is published on the WA Gas Bulletin Board. However, the Gas Services Information Rules specify the categories of users and zones for aggregation.

²²¹ Rule 173(4) of the NGR allows for the Procedures to specify default directions for nomination and forecast information.

²²² In addition, the publication of actual pipeline receipt and delivery point information would enable third parties to provide additional analysis of pipeline flows.

- providing a breakdown of pipeline flows in each direction; and
- adopting a fixed standard for the assumed direction of bidirectional pipelines.²²³

This clarity will greatly assist participants to understand what a positive or negative flow on a pipeline represents, as well as a better understanding of gas demand in each direction instead of a net flow.

4.3 Publication of other information on the Bulletin Board

4.3.1 Background and impetus for change

Throughout the review process the Commission has identified other improvements to the Bulletin Board that could be beneficial to market participants.

4.3.2 Draft report and stakeholder submissions

The draft report identified a number of low cost improvements to the Bulletin Board that would not require a rule change, including:

- **Publishing prices from facilitated markets:** AEMO to continue current work on including this information on the Bulletin Board.
- **ABS price index:** ABS to develop a wholesale gas price index and AEMO to publish this on the Bulletin Board.
- **Voluntary publication of pipelines, storage facility and hub service charges:** Create a page on the Bulletin Board so parties may voluntarily publish this information.
- **General notice board:** Create a page on the Bulletin Board for parties to notify each other of opportunities to buy or sell gas and gas services.

There were few stakeholder comments on these suggestions, although most of the comments were supportive.²²⁴ However, EUAA queried why the publication of pipelines, storage facility and hub service charges should be voluntary, given this information would allow consumers to more effectively assess trading opportunities.²²⁵

²²³ AEMO could adopt a fixed standard for the assumed direction of bidirectional pipelines immediately, as this would not require a rule change.

²²⁴ Submissions to Stage 2 Draft Report on information provision: Stanwell, p. 5; EUAA, p. 12; Jemena, p. 17.

²²⁵ EUAA, Submission to Stage 2 Draft Report on information provision, p. 12.

4.3.3 Final recommendations

Table 4.2 sets out a number of relatively low cost improvements that could be made to the Bulletin Board. These improvements could be progressed immediately as they are not dependent on a rule change process or any other changes to the Bulletin Board. These could be achieved quickly to make the Bulletin Board more of a 'one-stop-shop' for gas information. The Commission recommends that the COAG Energy Council request that AEMO progress these improvements.

Table 4.2 Other improvements to the coverage of the Bulletin Board

Improvement		Detail
Pricing	Publication of facilitated markets prices	AEMO has recently included a Market Prices tab on the Bulletin Board, which contains links to the market data pages on its website and the AER's Weekly Gas Market Report. The Commission understands this is an interim measure and that AEMO intends to publish actual price and volume data for the Gas Supply Hub, STTM and DWGM when the next redevelopment occurs. The Commission welcomes the proposal to report actual prices on the Bulletin Board and notes that it will complement existing system information and provide a more complete set of relevant information on the Bulletin Board.
	ABS Price Index	The Commission has been working closely with the ABS to develop a wholesale gas price index as a way of improving transparency around price movements in confidential bilateral gas contracts. If the ABS decides to proceed with the publication of this index then there would be value in publishing this information on the Bulletin Board.
	Voluntary publication of pipeline, storage facility and hub service charges	<p>While APA and Jemena currently publish their tariffs on their respective websites, there is limited publicly available information on the charges levied by other pipelines, storage facility operators or hub service providers. It can be difficult therefore for users considering upstream supply options to understand what other costs they may incur in obtaining the gas for their relevant location.</p> <p>To encourage greater transparency in this area and reduce search costs, the Commission recommends that a page be created on the Bulletin Board that would allow the owners of pipelines, storage facilities and hub service to publish, on a voluntary basis, information on their firm and as available charges. This information could take the form of a link to the owner's website, or a document or spreadsheet. Because this information would be provided on a voluntary basis, a rule change is not required. In the spirit of transparency, the Commission would encourage the owners of these facilities to use this page and to keep the information up to date.</p> <p>As to the EUAA's suggestion that the NGR should require this information to be published, the Commission intends to consider this as part of the proposed review of the Gas Access Regime.</p>

Improvement	Detail
Notice Board	<p>There is currently no place on the Bulletin Board that market participants can use to notify each other of opportunities, such as an open season for a pipeline expansion or an auction of pipeline capacity. In the Commission's view, there would be merit in allowing this information to be voluntarily published on the Bulletin Board so that all market participants are aware of such opportunities. Because this information would be provided on a voluntary basis, a rule change is not required.</p>
Links	<p>AEMO has introduced a planning tab to the Bulletin Board that includes links to the GSOO, NGFR and VGPR. This should include links to:</p> <ol style="list-style-type: none"> 1 APPEA reports on relevant industry activities and statistics; 2 Geoscience Australia reports on reserves (as an interim measure until holders of 2P reserves are required to report); 3 Ad hoc state and territory government reports on reserves and exploration; 4 Office of Chief Economist reports on gas markets and statistics; and 5 AER's quarterly compliance report and regulatory decisions for pipelines subject to full regulation. <p>Links to these external sources will help to make the Bulletin Board a 'one-stop-shop' for gas information.</p>

5 Funding arrangements and future development

Box 5.1 Summary of findings and recommendations

The NGR currently allow pipeline operators to recover the costs that they incur in providing 'aggregation and information services' to AEMO although these provisions have not been used to date. As a result of other recommendations in this report, pipeline operators will no longer be providing these services. In addition, the burden of providing information will increasingly be shared by more gas market participants. Given these changes, the Commission recommends that:

- **Recommendation I:** The pipeline operator cost recovery provisions be removed from the NGR.

The NGR also sets out the methodology that AEMO is to employ to recover its Bulletin Board costs. However, this governance framework is inconsistent with those in place for other AEMO activities. In addition, the level of prescription in the NGR has resulted in very little flexibility for AEMO to adjust its fee methodology to changing market circumstances. The Commission considers that the inconsistent governance approach is unwarranted and AEMO should be able to incorporate its Bulletin Board costs into its broader fee methodology process. This view has been supported by a number of stakeholders. Accordingly, the Commission recommends:

- **Recommendation J:** The cost recovery provisions for AEMO's Bulletin Board activities be removed from the NGR.

During this review a number of stakeholders have expressed concern that the Bulletin Board has had limited amendments made to maintain its relevance to the east coast gas market and to meet the needs of market participants. The Commission acknowledges this wide-spread concern. To address these concerns and to provide a framework to assist in the ongoing relevance of the Bulletin Board, the Commission considers a periodic report would aid in the identification of minor issues and potential procedure changes as well as potential rule change requests or more substantial concerns that may be considered by the COAG Energy Council. Consequently, the Commission recommends:

- **Recommendation K:** AEMO be required to publish a biennial report on the operation of the Bulletin Board and any potential changes required. The report is to be prepared in consultation with Bulletin Board users, the AER and the AEMC.

5.1 Introduction

In light of the recommendations set out in the previous chapters, it is relevant to consider whether the Bulletin Board funding arrangements are appropriate, and how the Bulletin Board may remain current, useful and relevant into the future. The chapter is structured as follows:

- section 5.2 examines whether the cost recovery provisions for market participants remain appropriate;
- section 5.3 examines whether the cost recovery provisions for AEMO remain appropriate; and
- section 5.4 discusses a framework to support the ongoing maintenance and relevance of the Bulletin Board as the gas market develops over time.

5.2 Cost recovery - market participants

5.2.1 Background and impetus for change

Pipeline operators are currently permitted to recover the costs of providing 'aggregation and information services'. This allows for recovery of costs incurred in aggregating information from shippers and providing it to AEMO, as required by rules 173 and 196. The information aggregated by pipeline operators for each Bulletin Board pipeline is:²²⁶

“(a) in respect of each gas day and for each demand zone or production zone (if applicable), the aggregated delivery nominations for the BB pipeline for the gas day; and

(b) in respect of each demand zone or production zone (if applicable), the aggregated forecast deliveries for the BB pipeline for subsequent gas days if it has been provided with forecast deliveries by BB shippers on the BB pipeline under contract or applicable market rules.”

It also includes information provided to AEMO by a pipeline operator in a declared transmission system (that is, the Victorian DTS) the aggregated scheduled injections less the aggregated withdrawals in each production zone as well as the Interconnect at Culcairn.²²⁷

Pipeline operators may also recover costs of providing AEMO information that allows it to determine each Bulletin Board shipper's share of estimated Bulletin Board costs for an invoice period.²²⁸

²²⁶ Rule 173(1) of the NGR.

²²⁷ Rule 173(2) of the NGR.

²²⁸ Rule 196(1) of the NGR.

Prior to the Stage 2 Draft Report, stakeholder submissions and working group participants commented on these provisions specifically and also generally noted a 'mismatch' between those parties that provide information to the AEMO for the Bulletin Board and those parties that use the Bulletin Board. Some pipeline operators suggested that full cost recovery for providing Bulletin Board information should be available to them.²²⁹ APA acknowledged that it had not used the cost recovery provisions in the NGR. Both APA and Jemena have also commented that the cost of providing Bulletin Board information had been growing over time and they would look to use the provisions if there were material information requirements in the future.²³⁰

Santos, the ESAA and Lumo Energy all considered that cost recovery for the provision of information on the Bulletin Board should be allowed for all market participants.²³¹ However, noting that the provisions have not been used to date, Origin stated that the cost recovery provisions should be removed from the NGR as pipeline operators have other means to recover these costs.²³² Similar views were expressed by some working group participants.

5.2.2 Draft report and stakeholder submissions

The Commission's draft recommendation was that:

- cost recovery provisions should not be introduced in relation to the provision of any information to be published on the Bulletin Board; and
- the existing cost recovery provisions (as set out in rules 197 and 198) for pipeline operators for performing 'aggregation and information services' should be removed from the NGR.

Only a few stakeholders responded to this recommendation. Stanwell and PIAC agreed. PIAC noted that providing Bulletin Board information is a general cost of business and complying with regulations.²³³

However, APA expressed concern with the potential compliance costs for pipeline operators. Even though others will also provide data to AEMO, it noted that pipeline operators will be required to provide more data. It suggested that the current NGR

²²⁹ APGA, Submission to Information Provision Working Group Discussion Papers, 30 September 2015, p. 2.

²³⁰ APA, Submission to Enhanced Pipeline Capacity Information Discussion Paper, 18 July 2014, p. 5; Jemena, Submission to Enhanced Information for Gas Transmission Pipeline Capacity Trading Draft rule determination, 13 November 2015, p. 2.

²³¹ Submissions to Enhanced Pipeline Capacity Information Discussion Paper: Santos, pp. 10-11; ESAA, p. 4; Lumo Energy, p. 9.

²³² Origin, Submission to Enhanced Pipeline Capacity Information Discussion Paper, 18 July 2014.

²³³ Submissions to Stage 2 Draft Report on information provision: PIAC, p. 7; Stanwell, p. 7.

provisions should be modified to better reflect the parties providing information and their cost recovery.²³⁴

5.2.3 Final recommendations

With these comments in mind, the Commission has considered the role and relevance of the existing cost recovery provisions for the future Bulletin Board. In particular, with reference to the recommendation that removes the requirement for pipeline operators to carry out the task of aggregating data for AEMO. It has also considered whether more reporting entities should be able to access cost recovery provisions in reference to providing Bulletin Board information to AEMO generally.

The Commission's final recommendations in regard to cost recovery for market participants are consistent with its draft recommendations. That is:

- new cost recovery provisions should not be introduced to allow any market participant to recover the cost of providing any information to AEMO for publication on the Bulletin Board; and
- the existing cost recovery provisions for pipeline operators (rules 197 and 198) in regard to providing 'aggregation and information services' for AEMO should be removed from the NGR.

With regard to the first of these, extending the current NGR provisions to provide a general cost recovery mechanism appears inconsistent with the policy approach reflected in the NGR. It is clear from the current provisions, that generally, the cost of providing Bulletin Board information should not be recompensed but the cost of providing the specific aggregation and information services provided to AEMO may be recovered.

The implementation of some of the final recommendations in this report will result in more parties being required to provide information to AEMO for the Bulletin Board. These parties will incur some costs to comply with their new Bulletin Board requirements. In other cases, the final recommendations would result in some current participants providing more information than they are now required to do. This may result in some higher compliance costs for these participants.

Nevertheless, it does not follow that the NGR should be amended so that all reporting entities are able to recover all the costs of providing information to AEMO for the Bulletin Board. Information provision aims to improve the function and decision making across the market. This purpose ultimately benefits consumers of gas by enhancing the ability of market participants to make efficient and well informed decisions. The value of this information is enhanced if the coverage of information reporting is broad and relevant to participants. If implemented, the final recommendations will result in the burden of information provision being increasingly

²³⁴ APA, Submission to Stage 2 Draft Report on information provision, p. 19.

shared by market participants along the supply chain and providing information will become a 'cost of doing business' in the east coast gas market.

Further, it should also be noted that a cost recovery mechanism comes at some cost to administer and would consume some resources of market participants, the AER and AEMO. Given the expansion of the number of reporting entities that would arise from implementation of the final recommendations, the administrative costs, which would also need to be recovered from market participants, may exceed the benefits arising from the ability to recoup costs.

For these reasons, the Commission is not recommending that the NGR include cost recovery provisions to cover the provision of Bulletin Board information generally or be available to a wider group of Bulletin Board reporting entities.

The second recommendation is that the current pipeline operator cost recovery provisions be removed from the NGR. As previously noted, these rules relate to pipeline operators providing 'aggregation and information services' to AEMO. In general, information provision is a cost of doing business. However, as noted by APA, the provision of aggregation and information services to AEMO is different, and in addition, to the information provided by other facility operators. The aggregation and information services benefit AEMO in conducting its role as operator of the Bulletin Board. However, the Commission notes:

- a final recommendation in this report is that pipeline operators will no longer be required to carry out the aggregation service for AEMO;
- that advice indicates that the cost of providing the aggregation and information services is relatively minor; and
- the available cost recovery provisions have not yet been used.

Accordingly, and consistent with its draft recommendation, the Commission's final recommendation is that the current cost recovery provisions for pipeline operators be removed from the NGR.

In making these recommendations, the Commission has balanced the operation of cost recovery mechanisms with the efficient operation of the Bulletin Board. The Commission has concluded that these recommendations support the purpose of the Bulletin Board and are consistent with the NGR.

5.3 Cost recovery - AEMO

5.3.1 Background and impetus for change

AEMO recovers the costs for operating and maintaining the Bulletin Board from shippers that use Bulletin Board pipelines. The cost allocation is based on the share of the gas transported by individual shippers on BB pipelines as a proportion of total gas transported on these pipelines in accordance with rule 191 of the NGR. AEMO must

notify each shipper of estimated and actual Bulletin Board costs and issue each shipper with a tax invoice showing the amount that the Bulletin Board shipper is being charged.²³⁵

These detailed requirements for the recovery of AEMO's Bulletin Board costs are in contrast to the provisions relating to the recovery of AEMO's costs for the facilitated gas markets. For these markets, the NGR specifies that AEMO must "develop, review and publish" the structure of participant fees for time periods AEMO considers appropriate.²³⁶ The participant fees should be sufficient to cover AEMO's budgeted revenue requirements, and must be consulted on in accordance with the extended consultative procedures. In determining the structure of market participant fees, AEMO must have regard to the NGR and three principles. These are: that the fee structure be simple; that the fee components reflect the extent of involvement of a registered participant; and that the fee structure should not unreasonably discriminate against a category of register participant.²³⁷

Prior to the release of the Stage 2 Draft Report, a number of stakeholders commented on the difference between the approaches. For example, Santos noted:²³⁸

"... other gas market fees fall within the remit of AEMO governance processes, with the GBB cost allocation being the anomaly, requiring a formal rule change to the NGR. This rule change process also hampers any flexibility that may be required to keep pace with the evolving market ..."

In the working group, several participants suggested that the current arrangements are inappropriate due to the division between those that provide information and those that value it. Another participant stated that the process to verify and question AEMO's costs is inadequate. Other means of recovering the costs of the Bulletin Board were discussed in the working group such as a user pays service for providing detailed data. Another option that was discussed by working group participants was to incorporate Bulletin Board costs into gas market fees. However, it was noted by one participant that this may concentrate the cost burden to a greater extent than currently exists. Esso also commented that it did not consider it appropriate for producers to incur AEMO's Bulletin Board costs.²³⁹

5.3.2 Draft report and stakeholder submissions

The Commission's draft recommendation was that the current rules (rules 188-196) on the recovery of the costs of AEMO's Bulletin Board activities should be removed from the NGR. The draft report noted that implementing this change would allow AEMO to

²³⁵ Rule 193 of the NGR.

²³⁶ Rule 135CA(1) of the NGR.

²³⁷ Rule 135CA(4) of the NGR.

²³⁸ Santos, Submission to Information Provision Working Group Discussion Papers, 6 November 2015, p. 1.

²³⁹ Esso, Submission to Information Provision Working Group Discussion Papers, 5 October 2015, p. 2.

appropriately incorporate its Bulletin Board costs into its broader fee methodology process. It would also provide AEMO with flexibility to adjust its methodology as needed over time.

While PIAC considered that AEMO should recover its costs through general cost recovery mechanisms, it noted that the Bulletin Board should nevertheless be sufficiently funded to enable it to be effective.²⁴⁰ Other stakeholders also agreed that Bulletin Board costs and fees should be managed in line with AEMO's other cost and fee arrangements.²⁴¹

Esso submitted that production facility operators should not have to pay for the development or maintenance of the Bulletin Board as they already incur costs of providing information and are not the beneficiaries of that information. In its view, Bulletin Board costs should be paid by shippers or trading market participants.²⁴²

5.3.3 Final recommendations

Consistent with its draft recommendation, the Commission's final recommendation is that rules 188-196 be removed from the NGR. This change would allow AEMO to include consideration of the Bulletin Board fees within its broader fee methodology and setting process.

The current approach has to date provided a clear method for the levying of fees to fund a public good type of service such as the Bulletin Board. It has been a relatively low cost method – Bulletin Board shippers are readily identifiable and the formulas for determining the fees are clearly set out in the NGR. Shippers may be able to pass on the costs of the fees to end users, who ultimately benefit from the Bulletin Board.

In practice, this mechanism has resulted in the Bulletin Board being funded mainly by the major pipeline shippers (and ultimately their users). The major shippers have been entities such as AGL, EnergyAustralia and Origin. However, now the LNG pipelines are commissioned, the relatively large throughput of the shippers on those pipelines will result in them becoming the major contributors to the cost of the Bulletin Board under the current framework.

The Bulletin Board is only one component of AEMO's functions and services across the electricity and gas sectors, and the approach used to provide for the recovery of Bulletin Board costs is at odds with other AEMO activities. In general, the governance framework provides for AEMO to have the responsibility for determining its fee methodology. A consultative review process is used to assist it in the development of an appropriate methodology. These reviews have tended to be carried out in three yearly intervals. This process is the most appropriate forum to consider views such as those from Esso as noted above on the incidence of Bulletin Board costs.

²⁴⁰ PIAC, Submission to Stage 2 Draft Report on information provision, p. 7.

²⁴¹ Submissions to Stage 2 Draft Report on information provision: Stanwell, p. 7; APA, p. 18; Santos, p. 11; QGC, p. 7; GDF, p. 5.

²⁴² Esso, Submission to Stage 2 Draft Report on information provision, p. 3.

The Commission is not aware of any policy reason, formed at the time of commencing the Bulletin Board or more recently, for why the AEMO Bulletin Board cost recovery arrangements are specified in the NGR as they are. Nor does there appear to be any reason why the generally applicable AEMO methodology could not also apply to the recovery of Bulletin Board costs. In addition, the use of one cost methodology and process for all gas activities would be practical and administratively efficient for AEMO to apply and for stakeholders to participate in.

On this basis, and in light of the support from stakeholder submissions, the Commission has concluded that the general AEMO cost recovery framework should also include its Bulletin Board costs. If implemented, this change would provide the benefit of a single, flexible governance framework for AEMO's gas market related costs to be recovered. As a result, the Commission recommends that the current AEMO Bulletin Board cost recovery framework in rules 188-196 be removed from the NGR.

5.4 Maintaining the relevance of the Bulletin Board

5.4.1 Background and impetus for change

According to s. 91A(1)(h) of the NGL one of AEMO's statutory functions is to “operate and maintain” the Bulletin Board. Section 217 of the NGL states that AEMO is to be the Bulletin Board operator and s. 218 states that AEMO must maintain the Bulletin Board, in the form of a website, and that the information contained on the Bulletin Board is that which is specified in the NGR in relation to natural gas services.

As set out in s. 219 of the NGL, AEMO has the following Bulletin Board functions:

- “(a) to collect and collate Bulletin Board information;
- (b) to collect and collate other information in relation to the natural gas services for inclusion on the Bulletin Board;
- (c) to derive from information of the type mentioned in (a) and (b) information for inclusion on the Bulletin Board;
- (d) to publish information on the Bulletin Board of the kinds that may or must be included on the Bulletin Board under the rules;
- (e) to manage information of the type mentioned in (a), (b), and (c); and
- (f) other functions conferred on AEMO in its capacity as the operator of the Bulletin Board by the NGL, NGR or any other law prescribed by the Regulations for the purposes of this paragraph.”

AEMO may make Bulletin Board Procedures, as provided for by ss. 227 and 228 of the NGL.

In addition to the above NGL provisions, the NGR also states that AEMO must “maintain the Bulletin Board” in accordance with the NGL, NGR and the Procedures (rule 144).

In contrast to other parts of the NGR which provide for periodic reviews of things such as key market parameters in the facilitated markets, Part 18 of the NGR does not currently provide for a periodic review of the Bulletin Board.²⁴³

In the submissions made prior to the Stage 2 Draft Report, stakeholders expressed concern to the AEMC that the NGR did not sufficiently encourage the ongoing development and maintenance of the Bulletin Board to meet changing market expectations. Some working group participants considered that periodic reviews may be helpful in facilitating the Bulletin Board's continuing relevance. There was substantial discussion on this concept resulting in broad agreement that an annual report produced by AEMO would be beneficial to stakeholders and the ongoing development of the Bulletin Board. This would allow the Bulletin Board to be considered every year and provide transparency regarding its operation. A formal report would be made available for consideration by interested stakeholders including the COAG Energy Council and the AEMC.

5.4.2 Draft report and stakeholder submissions

The Commission's draft recommendations in relation to maintaining the relevance of the Bulletin Board into the future were that AEMO:

- be provided with clearer and more direct responsibility to maintain the relevance of the Bulletin Board over time by making amendments to the NGL and NGR to require AEMO to 'update' the Bulletin Board. This would involve making amendments to s. 91A of the NGL. It may also require amendments to s. 219 of the NGL and rule 144 of the NGR; and
- publish a biennial report on the Bulletin Board, including relevant information such as a summary of the Bulletin Board work program, performance and usage statistics, compliance and enforcement activities and also identifying any aspects that potentially require amendment. The report is to be prepared in consultation with market participants, Bulletin Board users and the AER and AEMC.

In response to the first of these draft recommendations, Stanwell noted that any requirement for AEMO to continually update the Bulletin Board should be constrained so that updates are efficient and relate to data. Stanwell considered that changes to the Bulletin Board to include data analysis or other 'unnecessary features' could be costly

²⁴³ For example, in the STTM, reviews of market parameters such as the administered price cap and the cumulative price threshold must occur no later than five years after the last review of these parameters was completed. If a corresponding value in another Australian gas market or the NEM is reviewed and the review finds that the value should be changed, AEMO must, in consultation with interested parties, determine whether to conduct a review of the market parameter. The DWGM does not feature similar provisions.

to implement and will be paid for by shippers and gas users.²⁴⁴ It noted that analytical information could be provided by other service providers for those parties that require it.²⁴⁵ Similarly, Esso and Santos commented that while AEMO should maintain the relevance of the Bulletin Board, any decisions to make changes should include an explicit cost-benefit analysis. Esso also noted that consideration should be had to whether information should be removed from, and not just added to, the Bulletin Board.²⁴⁶

Some stakeholders expressed support for the second draft recommendation for AEMO to produce and publish a biennial report on the Bulletin Board. APA commented that maintaining relevance is essential for the Bulletin Board to serve its intended purpose.²⁴⁷ PIAC suggested that AEMO also consult with advocacy groups as part of the report preparation process.²⁴⁸ Stanwell commented that while "a biennial publication is probably about right", it is likely to be a burden for AEMO and so it may be preferable for AEMO to determine the reporting frequency in consultation with stakeholders.²⁴⁹

5.4.3 Final recommendations

As noted above, a draft recommendation of the Commission was to amend s. 91A of the NGL (and also possibly s. 219 and rule 144 of the NGR). While no submissions were received on this issue, it has been considered further in the preparation of this final report.

The purpose of this draft recommendation was to clarify and highlight the importance of the ongoing responsibility of AEMO to maintain the relevance of the Bulletin Board to the market and its users. However, further consideration indicates that this purpose can be achieved without making changes to the NGL. Instead, proposed rule 146 requires AEMO to 'maintain' the Bulletin Board in accordance with the NGL, NGR and the Procedures.

The Commission is satisfied that this approach addresses its own concerns, and those of stakeholders, about the future management of the Bulletin Board. 'Maintaining' the Bulletin Board would be carried out in reference to the purpose of the Bulletin Board in proposed rule 145.

The second draft recommendation regarding the future of the Bulletin Board was that AEMO publish a report on the Bulletin Board's performance and potential future developments every two years. This draft recommendation also arose from stakeholder

²⁴⁴ Stanwell, Submission to Stage 2 Draft Report on information provision, p. 2.

²⁴⁵ *ibid.*, p. 7.

²⁴⁶ Submissions to Stage 2 Draft Report on information provision: Esso, p. 3; Santos, p. 11.

²⁴⁷ APA, Submission to Stage 2 Draft Report on information provision, p. 18.

²⁴⁸ PIAC, Submission to Stage 2 Draft Report on information provision, p. 7.

²⁴⁹ Stanwell, Submission to Stage 2 Draft Report on information provision, p. 8.

concern that the Bulletin Board had not been maintained to a level of relevance that could be reasonably expected.

As stated in the draft report, a biennial report on the Bulletin Board is recommended. A report every two years balances the frequency of reporting with the administrative process that would need to be undertaken to create the report and any subsequent work program arising. The Commission does not consider that a frequency of two years will create a burden for AEMO that outweighs the benefit of providing a relevant report on the Bulletin Board's operations and timely identification of appropriate changes for further consideration by stakeholders. It notes the support from stakeholders for action to maintain the relevance of the Bulletin Board.

As set out in proposed rule 149, AEMO's biennial report should be public and, at a minimum, include information on:

- AEMO's recent and planned Bulletin Board work program;
- usage and performance of the Bulletin Board; and
- any recommended changes to the Bulletin Board.²⁵⁰

To aid it in this task, AEMO must consult with Bulletin Board users, the AER and AEMC. It is important that all interested parties have the opportunity to participate in the consultation process for the report. The inclusion of 'BB user' in the proposed rule provides for the inclusion of advocates or other small gas users or their representatives as suggested by PIAC (see proposed rule 141).

It should be noted that while the biennial report will identify recommended changes to the Bulletin Board, stakeholders will be able to engage with any subsequent relevant procedure or rule change process required to implement such changes.

The Commission's final recommendation is therefore that AEMO be required to publish a biennial report on the Bulletin Board's operations and potential future developments. This report is to be prepared following consultation with Bulletin Board users, the AER and the AEMC.

²⁵⁰ The draft report recommended that the biennial report also include information on compliance and enforcement activities related to the Bulletin Board. This has not been included in the proposed rule or this final recommendation as the quarterly AER compliance reports are a more appropriate and timely source of this information.

A Abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AEMC (Commission)	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Bulletin Board	Natural Gas Services Bulletin Board
COAG	Council of Australian Governments
CSG	coal seam gas
draft report (Stage 2 Draft Report)	Stage 2 Draft Report on Information Provision
DTS	Declared Transmission System
DWGM	Declared Wholesale Gas Market
East Coast Gas Review (review)	East Coast Wholesale Gas Market and Pipeline Frameworks Review
GMLG	Gas Market Leaders Group
GSH	gas supply hub
GSOO	Gas Statement of Opportunities
LNG	liquefied natural gas
NEM	National Electricity Market
NGFR	National Gas Forecasting Report
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
PMRS	Petroleum Resources Management System
Procedures	Bulletin Board Procedures
Regulations	National Gas (South Australia) Regulations
STTM	Short Term Trading Market
Vision	COAG Energy Council Australian Gas Market Vision
working group	Information Provision Working Group

B Final recommendations

The package of recommendations set out in this report include changes to the current operation of the Bulletin Board as well as required amendments to the NGL, Regulations, NGR and the Procedures. The full set of recommendations is set out below.

A new reporting model (Chapter 2)

The Commission recommends the following changes be made to the reporting model to instil a greater level of confidence in the information reported on the Bulletin Board:

- **Recommendation A:** Broaden the stated purpose of the Bulletin Board to recognise the important role that information plays in enabling informed and efficient decision making, as well as aiding price discovery and facilitating trade.
- **Recommendation B:** Improve the reporting framework by:
 - Removing the link that currently exists between the obligation to report and the zonal model.
 - Simplifying the exemption criteria in Part 18 of the NGR by:
 - removing the existing exemption criteria;
 - reducing the minimum reporting threshold to 10TJ/day for transmission pipelines, production facilities, storage facilities, GSH compression facilities and large user facilities; and
 - only allowing large users to seek an exemption from reporting, with an annual exemption from reporting daily consumption available if the large user can demonstrate to AEMO that it satisfies the annual reporting exemption criteria.
 - Removing the distinction that currently exists in Part 18 of the NGR between facilities commissioned pre- and post-1 July 2008.
 - Redrafting the registration provisions to provide greater clarity about who is required to apply for registration, who and what are required to be registered, when registration is required and the interaction between registration and reporting.
 - Introducing an information standard for all facilities to employ and classifying the obligation to comply with this standard as both a civil penalty and conduct provision. This standard will require the facility or field operator to act with all due skill, diligence, prudence and foresight and in compliance with all applicable legislation, authorisations, industry codes of practice and in the case of information or data about proved and probable reserves, SPE-PRMS.

- **Recommendation C:** Strengthen the compliance framework by classifying the obligation to register as a civil penalty provision. Notes should also be added to the relevant rules to identify those that are civil penalty or conduct provisions.

New reporting requirements (Chapter 3)

The Commission recommends the following improvements to the Bulletin Board to address the informational gaps and asymmetries that have been identified through this review:

- **Recommendation D:** The entities that are required to report Bulletin Board information to AEMO should be expanded to include:
 - The operators of gas fields with 2P reserves – These operators will be required to report their 2P reserves on an annual basis (or more frequently if a revised estimate is subsequently reported to the ASX or a government agency).
 - The operators of GSH compression facilities – These operators will be subject to similar reporting obligations as operators of BB transmission pipelines.
 - Large users – The operators of large user facilities (including LNG facilities) are to report the nameplate capacity of their facilities and daily consumption. The operators of LNG processing facilities will also report on their facility's short- and medium-term capacity outlook and material intra-day capacity changes.
- **Recommendation E:** A consequence of the removal of the zonal model from Part 18 of the NGR is that regional pipelines and facilities attached to those pipelines would be required to report Bulletin Board information to AEMO. It also means that facilities in the Northern Territory and north Queensland around Moranbah and Townsville would be required to report. However, the Commission's recommendation is that these remote, unconnected, pipelines and facilities be excluded from the Bulletin Board framework until such time as they are connected to the primary east coast gas system of pipelines and facilities.
- **Recommendation F:** Amend the existing reporting requirements to:
 - Require those facilities that report on their medium-term capacity outlook to also report on planned expansions and asset retirements.
 - Improve the frequency with which information is reported and alerted to the market in regard to material intra-day changes to a facility's capacity or nominations, with information to be reported as soon as practicable on the gas day.
 - Require pipeline operators to report nominations and forecasts on both a receipt point (injection) and delivery point (withdrawal) basis.

- Require producers to report nominations and forecasts for production facilities.
- Remove the obligation for AEMO to publish estimates of the total forecast demand on peak demand days.

Publication of information on the Bulletin Board (Chapter 4)

The Commission recommends the following changes to address the information gaps that have emerged under the zonal model that is currently used to aggregate pipeline flows (actual flows, nominations and forecast flows) information:

- **Recommendation G:** That AEMO be responsible for the aggregation of information to be published on the Bulletin Board and that:
 - BB pipelines must report actual flows, nominations and forecast information on a disaggregated basis, by receipt and delivery point; and
 - AEMO must publish its aggregation methodology in the Procedures, in consultation with stakeholders.

Under this recommended approach AEMO would have the responsibility and flexibility to determine the aggregation methodology to be used through the Procedures in consultation with stakeholders and in reference to the needs of Bulletin Board users. In addition, different types of information would be published at different times:

- Pipeline nomination and forecast information would be aggregated and published without delay. This information would not be published in disaggregated form because aggregated information is sufficient to provide an overview of expected gas flows. In addition, it may have competitive impacts for gas fired generators in the NEM.
- Pipeline receipt and delivery point actual flows would be aggregated and published on the following day to provide an overview of actual flows around the market. It would also be published in a disaggregated form. The Commission has not identified any competitive impacts from the publication of actual gas flows.
- Large user actual gas use data would be published on the following day. The Commission has not identified any competitive impacts from the publication of actual gas flows. In addition, AEMO would aggregate large user gas use to provide an overview of different types of demand across the market (for example, by user type).

The Commission has identified a number of actions that could improve the Bulletin Board that do not require a change to the NGL, Regulations or NGR and recommends the following:

- **Recommendation H:** That AEMO progress the following actions under the current framework immediately to improve the information available on the Bulletin Board, including that AEMO:
 - adopt a fixed and consistent standard for the assumed direction of bidirectional pipelines.
 - add further pricing information to the Bulletin Board:
 - actual price and volume data for the Gas Supply Hub, STTM and DWGM;
 - ABS Price Index – if the ABS develops a wholesale gas price index then this could be included on the Bulletin Board; and
 - the voluntary publication of pipeline, storage facility and hub service charges – which could take the form of a link to the owner’s website, or a document or spreadsheet;
 - create a notice board segment within the Bulletin Board to provide market participants with the ability to notify each other of opportunities, such as an open season for a pipeline expansion or an auction of pipeline capacity.
 - AEMO to add links to the Bulletin Board to the following types of public information:
 - APPEA industry statistics, which, among other things includes statistics on CSG wells and drilling activities;
 - the Upstream Petroleum Resources Working Group’s annual report on unconventional gas reserves, resources, production, forecasts and drilling rates;
 - other reports prepared by the Office of the Chief Economist, Geoscience Australia, and other Commonwealth, state or territory government agencies on upstream activities; and
 - AER's quarterly compliance report and regulatory decisions for pipelines subject to full regulation.

Funding arrangements and future development (Chapter 5)

The Commission recommends the following changes to the cost recovery provisions in Part 18 of the NGR:

- **Recommendation I:** The pipeline operator cost recovery provisions be removed from the NGR.
- **Recommendation J:** The cost recovery provisions for AEMO's Bulletin Board activities be removed from the NGR.

To address the concerns stakeholders have raised about the need to maintain the relevance of the Bulletin Board over time the Commission recommends the following:

- **Recommendation K:** AEMO be required to publish a biennial report on the operation of the Bulletin Board and any potential changes required. The report is to be prepared in consultation with Bulletin Board users, the AER and the AEMC.

Changes to the NGL, Regulations, NGR and Procedures

To give effect to the recommendations outlined above, changes will need to be made to the NGL, Regulations, NGR and Procedures.

The changes to be made to the NGL, include amending:

- section 223 to include the words “natural gas or” before the words “natural gas services”;
- section 223(1) to include: compression facility operators; field operators; large users; and LNG processing facility operators; and
- the definitions in the NGL to include the definitions for those persons to be listed in s. 223(1).

The Regulations will also need to be amended to recognise a number of proposed rules that the Commission recommends be civil penalty and conduct provisions.

Part 18 of the NGR will need to be amended to implement the recommendations listed above. The provisions relating to the Procedures in Part 15B will also need to be amended.

Once changes have been made to the NGR, AEMO will be able to make consequential changes to the Procedures through the required consultative process.

C Summary of and responses to other issues raised in submissions

This appendix summarises stakeholder comments and issues that were not explicitly addressed in the body of this report, and the Commission's responses to these comments.

Stakeholder	Issue	AEMC response
General comments		
AEMO, p. 2.	Information recommendations should be considered in light of future outcomes from other work streams.	The Commission has considered the costs and benefits of the full package of reforms recommended under the East Coast Gas Market Review.
Santos, p. 7; QGC, p. 6; GDF Suez, p. 4; APLNG, p. 4.	Information should only be published if it clearly supports market development and benefits must outweigh the costs (compliance costs and confidentiality).	In producing this report the Commission has considered the costs and benefits of the recommendations. Costs and benefits will be further examined through the rule change process to implement these recommendations.
Uniting Care, p. 6.	Information should be provided to the market where it reduces the higher than necessary transaction costs and consumer bills.	An assessment of the recommendations against the NGO is provided at section 1.4.
Registration		
AEMO, Appendix B, p. 2.	Pipeline operators should be required to provide AEMO with a list of all large users prior to commencement of a new rule to assist registration.	Transitional requirements such as this may be considered further through the rule change process to implement these recommendations.

Stakeholder	Issue	AEMC response
Reporting threshold		
AGL, p. 4.	There should be a capacity threshold test to determine whether new pipelines should be included on the Bulletin Board.	The reporting thresholds recommended in section 2.5.3 apply to all pipelines, not only new pipelines.
New facilities		
AEMO, Appendix B, p. 4.	Legal drafting will need to consider how to define facilities connected to a distribution pipeline, which are not BB pipelines.	Under the proposed rule, facilities must register and report if they meet the reporting threshold. It does not matter whether they are connected to a transmission or distribution pipeline. See section 2.5.3.
AEMO, Appendix B, p. 1.	Reserves and resources information should be reported every six months and be aligned with GSOO development timeframes.	The recommendation is that 2P reserves must be reported at least once every 12 months (see section 3.4). In making this recommendation, the Commission has sought to minimise administrative duplication for gas field operators.
Santos, p. 8.	AEMO could publish the GSOO working files on the Bulletin Board and producers could provide information about gaps in reserves data on request.	The Commission is concerned with the fragmented and incomplete nature of the existing information that is voluntarily provided to AEMO for the GSOO. The recommendations for reporting of gas reserves is set out in section 3.4.
Santos, p. 8.	Mandating the reporting of reserves will not encourage more exploration as these parties have the market information they need to make decisions.	Reporting of reserves is expected to inform wider planning and investment decisions across the gas market. See section 3.4.3.
MEU, p. 15.	If a large user sources gas through a retailer, the obligation to report should be on the retailer.	In principle the Commission supports minimising the regulatory burden where appropriate. One of the recommendations is that large gas users should be exempt from reporting their daily gas use where they are the

Stakeholder	Issue	AEMC response
		only party at a delivery point and the transmission network operator is reporting that information (see section 3.6). Further opportunities to minimise administrative and regulatory burden can be considered in the rule change process.
Stanwell, p. 4.	The Bulletin Board should include LNG ship arrival and departure information. This would aid participants to understand how much gas is in storage at the LNG facility. It is difficult and time consuming to determine this information from the Queensland maritime site.	The Commission is not making this recommendation because LNG ship activity does not impact the domestic gas market. It is more relevant for LNG facilities to report capacity outages (see section 3.6).
APA, p. 18.	The Bulletin Board should include information on the prices of gas supplied to LNG plants, and on usage and prices for other infrastructure used in the LNG supply chain. This would aid price discovery.	The recommendations provide for prices for services to be voluntarily published on the Bulletin Board (see section 4.3). The recommendations related to wholesale gas market development in this review would also promote price discovery through the development of a reference price for gas.
APLNG, p. 5.	LNG facilities should only have to report material intra day changes to pipeline nominations instead of capacity outages.	The Commission recommends that LNG facilities should report both types of information for the reasons set out in section 3.6.3.
Aggregation and publication		
Stanwell, pp. 2-3.	If disaggregated forecast data (seven days ahead) is published with a five day delay, two days of the forecast data would be revealed.	Noted. It is recommended that forecast and nominations are only published in aggregated form. See section 4.2.
Jemena, p. 18.	An alternative to publishing individual large user data in distribution networks	The activity of large users on distribution pipelines can impact the wider market. The recommended reporting requirements are set out in section

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	is to publish aggregate consumption of large users and small users.	3.6.
AER, p. 6.	The AER could be involved in assessing situations where competition in another market is affected in order to determine whether a publication delay is necessary.	The Commission's recommendations set out in section 4.2.3 do not require a case by case assessment of impacts on competition.
Australian Energy Council, p. 2.	The Bulletin Board should be a data repository. Analytical applications can be developed by third parties. This will help to minimise costs.	It is important that the Bulletin Board provide an overview of gas flows in a form that is easy to understand, in addition to providing data that can be further analysed by interested parties. See section 4.2.3.
PIAC, p. 7.	The Bulletin Board should include a section that the general public can understand, as it is a public good.	The Commission is recommending that certain information be aggregated to provide an overview of gas flows in a form that is easy to understand. See section 4.2.3.
Funding		
Esso, p. 2.	Costs should be borne by the parties that benefit from the information.	The recommendation is that cost recovery would be determined by AEMO as part of their fee methodology process. See section 5.3.