



Australian
Competition &
Consumer
Commission

East Coast Gas Inquiry

Issues paper

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Introduction

1. Eastern Australia¹ is witnessing an unprecedented level of investment in the development of liquefied natural gas (LNG). More than \$63 billion is being invested in three LNG projects in Queensland, creating thousands of jobs and business opportunities across Australia.
2. These projects are contributing to the significant growth of export earnings in the Australian economy. In 2013-14, Australia exported 23.2 million tonnes of LNG worth A\$16.3 billion. By 2019-20, the LNG projects across Australia are expected to be exporting 76.6 million tonnes of LNG worth A\$46.7 billion with around one-third of this volume coming out of Eastern Australia.²
3. While providing economic benefits for the Australian economy, the LNG projects are significantly altering the supply and demand dynamics in the domestic gas industry in Eastern Australia. Domestic gas users have been exposed, for the first time, to international gas prices and there are increased uncertainties about the future availability of gas for domestic use in Eastern Australia. These developments are occurring at a time when many long-term domestic gas supply agreements are expiring, putting many domestic gas users in an unfamiliar position when negotiating new gas supply arrangements.
4. A number of public inquiries have been undertaken by federal and state governments, triggered by LNG developments and the concerns of industry participants about the effect of these developments on their businesses.³ These inquiries have examined various aspects of the supply of gas in Eastern Australia and often involved public consultations.
5. Many of these inquiries reported that domestic gas users had experienced difficulties in finding reasonable gas supply offers and raised concerns about rapidly increasing gas prices and deteriorating non-price terms and conditions. A number of inquiries recommended a review of the state of competition in the domestic gas industry to identify and assess any actual or potential presence of market power and any actual or potential exercise of market power, particularly resulting from the developments triggered by the LNG projects.
6. On 13 April 2015, the Small Business Minister required the Australian Competition and Consumer Commission (ACCC) to undertake an inquiry into the competitiveness of wholesale gas prices and structure of the gas industry in Eastern Australia (the East Coast Gas Inquiry) under Part VIIA of the *Competition and Consumer Act 2010* (Cth) (CCA).

Terms of Reference

I, Bruce Billson, Minister for Small Business, pursuant to section 95H(1) of the *Competition and Consumer Act 2010*, hereby require the Australian Competition and Consumer Commission to hold an inquiry into the competitiveness of wholesale gas prices and the structure of the upstream processing, transportation, storage and marketing segments of the gas industry. The inquiry may include but not be limited to Victoria, New South Wales, the

¹ Queensland, Victoria, NSW, South Australia, Tasmania and the Australian Capital Territory.

² Based on estimates of the Chief Economist at the Department of Industry and Science.

³ This includes inquiries previously conducted by the Commonwealth Department of Industry and Science, the Productivity Commission, the Australian Energy Market Commission (AEMC), the NSW Legislative Council Select Committee and the Victorian Gas Market Taskforce. The AEMC is currently conducting a review of the wholesale market and pipeline frameworks in Eastern Australia.

Australian Capital Territory, South Australia, Queensland and Tasmania.

Matters to be taken into consideration in the inquiry shall include, but not be restricted to:

- i. the availability and competitiveness of offers to supply gas and the competitiveness and transparency of gas prices
- ii. the competitiveness of, access to, and any restrictions on market structures for gas production, gas processing and gas transportation
- iii. the significance of barriers to entry into the upstream production sector
- iv. the existence of, or potential for, anti-competitive behavior and the impact of such behavior on purchasers of gas
- v. transaction costs, information transparency, including gas supply contractual terms and conditions, and other factors influencing the competitiveness of the markets.

This is not to be an inquiry in relation to supply by any particular person or persons. The inquiry should not consider competition in gas retail markets.

The inquiry is to be completed and a report submitted to me within 12 months of the receipt of this notice.

The East Coast Gas Inquiry

7. Previous inquiries into the supply of wholesale gas in Eastern Australia received conflicting reports from gas suppliers and gas users about prevailing supply and demand conditions, the extent of active gas supply negotiations and the supply outcomes. It was difficult for these inquiries to assess competing claims about these issues due to critical information about gas supply agreements and contractual negotiations being unavailable due to confidentiality restrictions.
8. Holding the inquiry under Part VIIA of the CCA allows the ACCC to use compulsory information gathering powers to overcome these confidentiality restrictions. The ACCC will use these statutory powers, in combination with extensive industry stakeholder consultation, to collect and analyse information about the gas industry, building on the findings of the previous inquiries.
9. The ACCC's key focus in the inquiry is on obtaining a comprehensive understanding of the structure of the gas industry (including supply and demand characteristics, gas supply and transportation arrangements, the ability of industry participants to access gas reserves and key infrastructure, pricing outcomes, the availability and accuracy of information, the dynamics of gas trading and the nature of interactions between industry participants) for the purpose of:
 - (a) making factual findings and recommendations, and
 - (b) assessing the state of competition in the wholesale supply of gas (including associated services such as processing, transportation and storage).
10. The competition assessment will predominantly focus on whether:
 - (a) there are any features of the gas industry in Eastern Australia that limit competition between suppliers of gas or providers of associated services (e.g. barriers to accessing gas reserves or key transportation, processing or storage infrastructure)
 - (b) there is, or has been, any specific behaviour by gas industry participants in Eastern Australia that either restricts competitive access to supply of gas or provision of associated services or involves the exercise of market power (the

ACCC's assessment of competition will not be limited to behaviour that potentially contravenes the CCA).

11. The ACCC does not intend to investigate or make findings on matters that relate to the international competitiveness of the gas industry in Eastern Australia, such as environmental regulations, workforce productivity or industrial relations laws, except to the extent that understanding such issues contributes to the ACCC's competition assessment as set out above.

Consultation process

12. The ACCC will be seeking views of interested parties by way of written submissions and hearings throughout the inquiry.

Issues paper

13. This issues paper outlines in general terms the issues that the ACCC expects to explore during the East Coast Gas Inquiry. The ACCC invites interested parties to make submissions on the issues raised in this paper. The list of issues included in this paper is not exhaustive. The ACCC is open to interested parties raising other issues in their submissions that they consider to be relevant to the inquiry. The ACCC also invites interested parties to contact the ACCC to discuss these matters in more detail.
14. The ACCC is aware that many of these issues have been explored at length in previous public inquiries. The ACCC encourages interested parties to provide specific information which will assist it in its investigation of competing claims about market conditions.
15. In particular, the ACCC is seeking specific examples of market structures, key factors, or behaviour by market participants that may:
 - (a) affect the incentives or ability of parties to supply gas or provide access to infrastructure services (pipelines, processing and storage)
 - (b) affect the ability or willingness of parties to compete in the supply of gas or provision of pipeline services (e.g. transaction costs, barriers to entry, information availability etc.)
 - (c) demonstrate whether the outcomes observed in the domestic gas industry are driven by broader changes, such as rising production costs or export price linkages, or are indicative of an increase in the market power of domestic gas suppliers
 - (d) demonstrate possible anti-competitive conduct.
16. The ACCC does not expect that all interested parties will address all of the issues raised, but rather that interested parties will address the issues which relate to their business operations or their areas of concern.
17. The ACCC already has access to submissions which were made to previous inquiries and so does not expect interested parties to repeat those submissions. The ACCC would prefer that submissions to the inquiry be focused on specific experiences of interested parties that are relevant to the terms of this inquiry.
18. There is scope for the ACCC to use its compulsory information gathering powers to obtain relevant information from interested parties, including where the interested parties would otherwise be restricted from providing the key information due to

confidentiality provisions. The ACCC invites interested parties, where appropriate, to discuss this issue further with the ACCC in advance of making a written submission to the inquiry.

19. Interested parties should provide submissions by no later than 5pm on **2 July 2015**. Responses may be emailed to gas.inquiry@acc.gov.au with the title: Submission re: East Coast Gas Inquiry. If you would like to discuss the matter, please contact:
 - (a) Jeremy Jose ((03) 9290 6940) for queries relating to gas exploration, production and supply, or
 - (b) Jeremy Llewellyn ((03) 9290 1428) for queries relating to gas transportation and storage.
20. In making a public submission to this inquiry, please title your document "Public Submission to ACCC East Coast Gas Inquiry by [INSERT NAME] on [INSERT DATE]". Public submissions will be posted on the ACCC's website.

Confidentiality of submissions

21. The CCA contemplates that interested parties making submissions to the East Coast Gas Inquiry are entitled to make claims for confidentiality in certain circumstances.
22. The ACCC anticipates that there will be important information of relevance to the East Coast Gas Inquiry that will be capable of being treated as confidential under the relevant provisions of the CCA (e.g. information about commercial negotiations or the costs of producing, processing, transporting or storing gas).
23. The ACCC can accept a claim of confidentiality from the party making a submission if disclosure of information contained in the submission would damage their competitive position. If the ACCC is satisfied that the confidentiality claim is justified, it must keep that information confidential unless it considers that disclosure of the information is necessary in the public interest.
24. If the ACCC considers that the confidentiality claim cannot be upheld, the ACCC will provide the parties with an opportunity to withdraw the submission (or part of the submission) containing the information. If the submission (or part of the submission) is withdrawn then the ACCC will not take it into account. If a party elects not to withdraw the submission (or part of the submission) then the ACCC may disclose the information publicly. If the ACCC subsequently considers that disclosure of information that has initially been treated as confidential may be necessary in the public interest, the ACCC will consult with the party providing the information before any such disclosure is made.
25. The ACCC invites interested parties, where appropriate, to discuss confidentiality issues further with the ACCC in advance of making a written submission to the inquiry.
26. Any information for which parties would like to claim confidentiality should be provided in a separate document (e.g. as an Annexure to a public submission) and should be clearly marked as "confidential" on every page. Reasons must be provided in support of the claim for confidentiality, so that the ACCC can properly consider whether the claim is justified. The document containing confidential information should have a title such as "Confidential Annexure to Submission by [INSERT NAME] on [INSERT DATE]."

Hearings

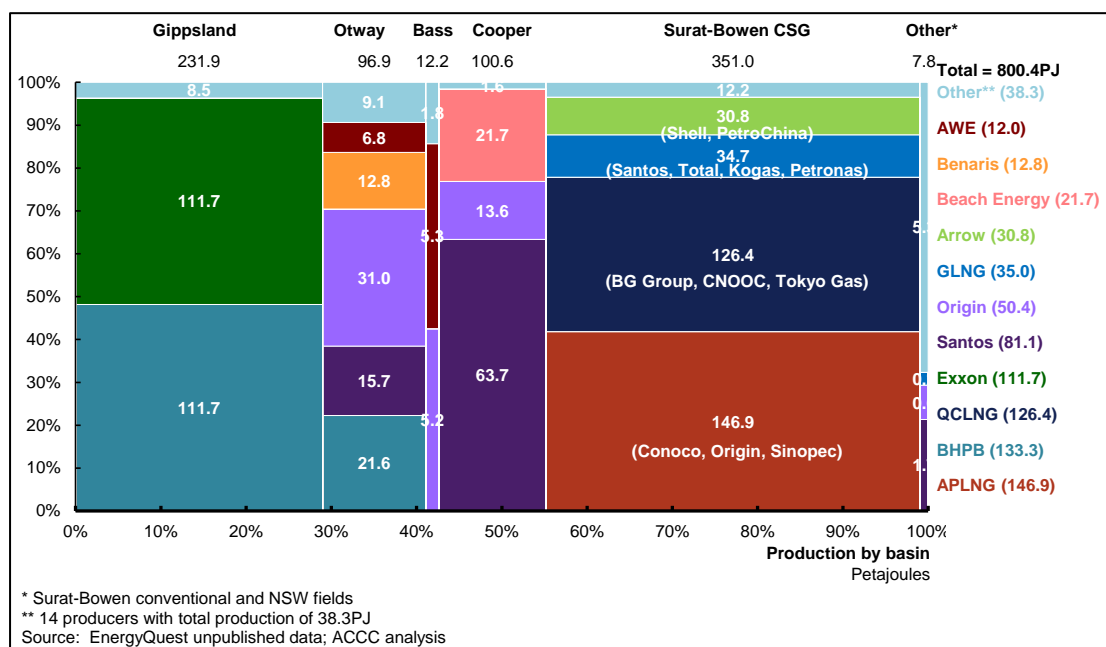
27. The ACCC intends to hold public hearings which will enable the ACCC to hear directly from parties in relation to the issues being considered in the inquiry. Private hearings may also be held where the evidence to be given at those hearings is of a confidential nature. All parties providing information at public or private hearings will be required to do so under oath or affirmation. The exact timing and location of these hearings is yet to be determined.
28. The timing and location of public hearings will be made available on the ACCC's website⁴ when they have been determined.

Areas for inquiry - gas exploration, production and supply

Changes affecting the domestic gas industry

29. The domestic gas industry is undergoing significant and rapid change as a result of an unprecedented level of investment in, and development of, LNG projects in Eastern Australia. The three LNG joint ventures⁵ have entered into large long-term LNG export agreements, which require them to have access to significant gas reserves to ensure they can reach sufficient levels of production to meet their export obligations. These LNG joint ventures control over 75 per cent⁶ of gas reserves and a significant proportion of total gas production in Eastern Australia, along with linkages and interests to other major production areas and reserves through individual members of the joint ventures. Gas production is now predominantly split between the Surat-Bowen Basin in Queensland and the Gippsland Basin in Victoria (Figure 1).

Figure 1: Gas⁷ production in Eastern Australia, petajoules (12 months to March 2015)



⁴ <http://www.accc.gov.au/regulated-infrastructure/energy/east-coast-gas-inquiry-2015>.

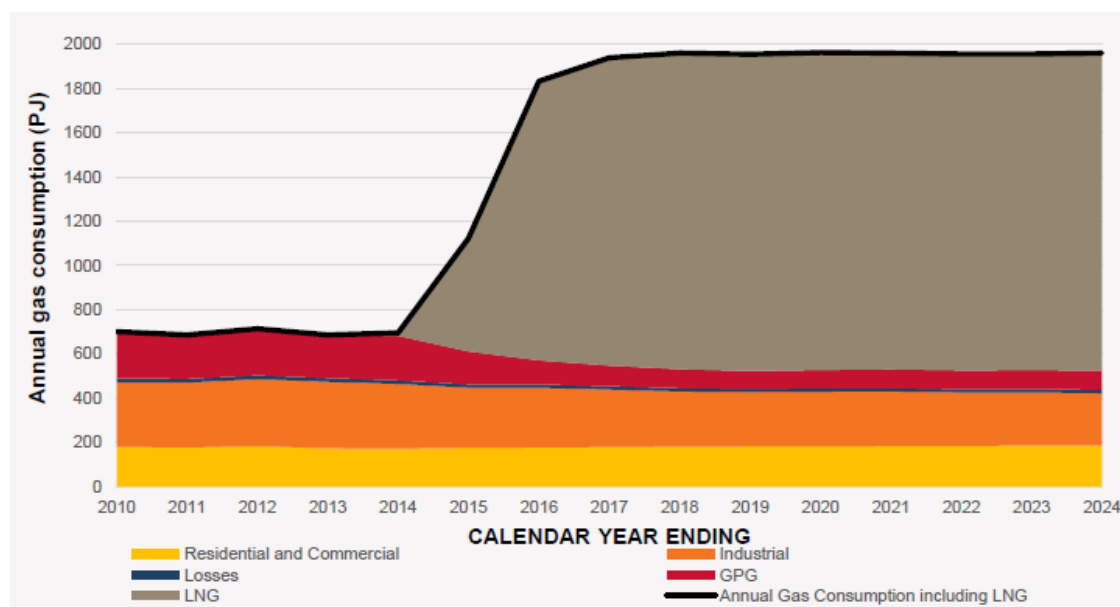
⁵ Queensland Curtis LNG, Australia Pacific LNG and Gladstone LNG projects.

⁶ This figure includes reserves controlled by Arrow LNG (currently in abeyance), which are counted given Shell's proposed acquisition of BG Group.

⁷ Conventional gas, ethane and CSG.

30. When the LNG projects reach full production, they will account for more than two thirds of total gas demand in Eastern Australia. Aside from LNG related developments, the Australian Energy Market Operator has forecast that the other major effect on the domestic demand for gas will come from a substantial and sustained fall in gas powered electricity generation (GPG) in Eastern Australia (Figure 2).

Figure 2: Gas demand in Eastern Australia⁸



31. The integration of major domestic gas producers with the LNG projects is contributing to significant changes in domestic gas supply and demand dynamics. Some of these gas producers are already re-directing gas to their Queensland LNG projects that would have been previously supplied to domestic users.⁹ Domestic users in South-Eastern Australia¹⁰ are expected to become increasingly reliant on gas production from offshore Victoria, as large volumes of gas that were previously supplied from the Cooper and Surat-Bowen Basins into South-Eastern Australia are instead directed to the LNG projects.
32. Even with such re-direction of gas supplementing coal seam gas production, there are conflicting views about the ability of the coal seam gas fields in Queensland to produce sufficient volume of gas to meet the large LNG export commitments. If LNG export agreements contain strict gas delivery conditions, including penalty clauses for failure to meet LNG supply commitments, any gas supply constraints (and associated risks) are likely to affect domestic gas users in Eastern Australia.
33. An additional uncertainty for domestic gas users arises from any potential effects of the changes in international LNG demand on Queensland LNG project requirements. If international demand for LNG increases, it may provide opportunities for the Queensland joint ventures to sell LNG on spot markets in addition to their long-term contractual commitments and put further pressure on gas supply in Eastern Australia. Conversely, if international demand for LNG reduces, it may result in additional gas becoming available for the domestic gas users.

⁸ AEMO "National Gas Forecasting Report 2014". <http://aemo.com.au/Gas/Planning/Forecasting/National-Gas-Forecasting-Report>.

⁹ For example, gas from Santos' interests in the Cooper Basin in South Australia has been sold to GLNG.

¹⁰ Victoria, New South Wales, South Australia, Tasmania and the Australian Capital Territory.

34. The effects of the changes, or uncertainties about the supply and demand dynamics in Eastern Australia, appear to be flowing through to domestic negotiations for the supply of gas. Some domestic gas users reported to previous inquiries that domestic gas prices are rapidly rising and gas producers are reluctant to enter into new long-term gas supply agreements. Some gas users are concerned that this may indicate that there is inadequate competition within the gas supply chain, resulting from high concentration of domestic gas suppliers, including suppliers that are integrated with LNG projects.
35. However, it is possible that the observed changes in the gas industry are the result of other factors. Higher prices and difficulties experienced by gas users in negotiating gas supply agreements may be due to domestic users being exposed to international prices, producers not having uncontracted gas available for supply, changes in costs of production and transport, or may reflect risks and uncertainties in an industry that is undergoing considerable change. The extent to which inter-basin competition is viable, particularly in relation to gas produced other than in the Cooper basin, is also not entirely clear.
36. Assessment of the degree of competition in the supply of gas requires consideration of the constraints on the exercise of market power by gas suppliers and of the opportunities available to gas buyers. This includes the opportunities and barriers faced by new entrants, the availability and cost of alternative energy sources or energy suppliers, and the ability of buyers to exercise countervailing power.
37. As an example, some major gas users are adopting strategies to manage their increased risks in this new environment by directly investing in new gas production projects to diversify supply options. Another strategy could include investing in additional infrastructure (e.g. new pipelines, processing or storage facilities) to facilitate gas development, create additional sources of gas supply and manage the scheduling of gas delivery more effectively. However, development and implementation of such strategies requires expert understanding of the pricing and risks of new investments, which adds considerable additional complexity, risks and cost to gas users, outside of their core business.

Questions on changes affecting the domestic gas industry

- Q.1 How are changes in the gas industry affecting gas buyers? Provide details of the key changes and explain their effects, including whether the effects vary by location and whether these effects are expected to be temporary in nature.
- Q.2 Are gas suppliers in Eastern Australia likely to meet both LNG export commitments and domestic gas demand over the life of the LNG projects, given the gas reserves base and the expected gas production schedule? Explain why or why not.
- Q.3 Are there currently any factors that are significantly restricting or limiting the ability or incentive for gas producers to explore for, or develop, new gas reserves? If so, explain.
- Q.4 Does vertical integration of domestic gas producers with the LNG export projects materially affect the incentives of those or other gas producers to supply domestic gas users? If so, does this effect vary by location?
- Q.5 Has the development of LNG export facilities created opportunities for gas suppliers to exercise market power in any location in Eastern Australia? If so, explain where and how.

- Q.6 What factors affect the scope for inter-basin competition between gas producers in Eastern Australia? What are the circumstances in which such completion is viable and in which it is not viable? Provide examples.
- Q.7 What factors dictate whether it is commercially viable for gas users to employ strategies (such as vertical integration or sponsorship of new entry) to respond to the changing environment?
- Q.8 What opportunities are available to gas users for switching to alternative types of energy sources in response to rising gas pricing? What factors affect the ability of gas users to do so? How likely is this outcome? To what extent is any response from gas users likely to affect the broader dynamics of the domestic gas industry?

Access to new gas resources

38. There are a number of potential challenges facing parties seeking to develop new gas resources. One such challenge arises from the different titles regimes in jurisdictions in Eastern Australia. Each state and territory, and the Commonwealth, applies its own regime to the allocation, management and transition of titles from exploration and appraisal, to development and production, and to decommissioning and relinquishment.
39. Individual jurisdictions also offer a range of special arrangements to encourage exploration and development programs which may include flexible work programs or extended tenure in exchange for undertakings on exploration expenditure.
40. The award and management of titles may be a long and onerous process, with interactions with various state and Commonwealth environmental regimes, local and state planning regimes and native title processes.
41. There have been concerns raised that companies with little or no expertise or financial backing have been awarded titles and that some companies are taking advantage of the regulatory regimes to extend the length of time they hold titles, with little evidence of development being carried out on the title. If this is occurring, this may have the effect of tying up acreage and limiting opportunities for entry of new suppliers, reducing potential sources of new supply.
42. Further, the actions of governments, in applying what are sometimes perceived as onerous regulatory requirements or creating a climate of investment uncertainty through the application of moratoriums, may also be contributing to barriers to entry for new suppliers or adding to the cost of gas for users.

Questions on access to new gas reserves

- Q.9 Do exploration title regimes and their administration facilitate behaviours that limit competition through denying new entrants? If so, explain how.
- Q.10 Are you aware of any specific instances where industry participants have used regulatory processes or title regimes to impede new entrants?
- Q.11 Are there any other regulatory barriers which create significant difficulties in accessing new gas reserves?
- Q.12 Are technical or financial requirements for entry of a new gas supplier changing? If so, describe these changes, identify key drivers and their effect.

Access to processing facilities

43. In order to develop and produce gas, potential suppliers need to own or be able to access processing facilities required to supply gas at the specification required by users. There are various processing facilities throughout Eastern Australia ranging from large processing plants (e.g. Longford in Gippsland, Moomba in the Cooper Basin and the CSG processing facilities in the Surat-Bowen Basins) to mid-size plants treating gas from other offshore fields and some small plants treating gas from isolated or smaller scale projects. Depending on gas composition and levels of impurities, gas processing facilities can be high tech and high cost, or much simpler where the gas stream is relatively clean.¹¹
44. Moomba Processing Hub (MPH) is emerging as a potential “gateway” in the gas network in Eastern Australia, separating gas production in Queensland, which is largely expected to supply the LNG projects at Gladstone, from gas production in South-Eastern Australia, which may supply gas of different specification to a different customer base. In addition, MPH is potentially the key processing facility for new Cooper Basin gas projects which may seek to supply gas to users in South-Eastern Australia. MPH is also being suggested as a potential new trading hub for gas in Eastern Australia.
45. In a competitive market, new gas suppliers would have adequate opportunities to access processing facilities when there is spare capacity available or if an expansion of an existing processing facility could be achieved at lower cost than constructing a new one. Concerns have been expressed by some industry participants that access to processing infrastructure, on reasonable terms, may be a barrier to entry for new gas producers or may be used by infrastructure owners to control or limit the supply of gas.

Questions on access to processing facilities

- Q.13 Is the cost of building new processing facilities or the ability to access existing facilities a significant barrier for prospective entrants? If so, explain how and give examples of where this has occurred.
- Q.14 Do owners of processing facilities have an incentive to provide third party access to spare processing capacity? Explain why or why not.
- Q.15 Are there any examples of industry participants attempting to gain access to processing facilities owned by another party? If so, were they successful in gaining access on reasonable terms? Explain why or why not.
- Q.16 How important is it for existing or prospective gas suppliers to gain access to the Moomba Processing Hub? Are there any examples of industry participants attempting to gain access to this hub? If so, were they successful in gaining access on reasonable terms? Explain why or why not.
- Q.17 Do gas specification requirements materially affect the supply of gas for different uses? Is any divergence of gas specifications between Queensland LNG and other uses a barrier to trading gas within Eastern Australia (e.g. due to processing cost differences)? If so, explain how.

¹¹ Santos has reportedly spent close to \$300 million upgrading Moomba infrastructure, largely to process different gas compositions from the new wells being drilled in Cooper Basin to ensure a suitable gas stream for the LNG plant at Curtis Island.

Negotiation of new gas supply agreements

46. The scope for gas buyers to compare the gas supply offers they receive with those received by other industry participants, and to change their supplier, plays an important role in driving competition in the wholesale supply of gas.
47. Gas supply agreements have historically been long-term and gas buyers typically had few difficulties renegotiating those agreements. However, since the development of LNG projects, gas users have expressed concerns that gas supply agreement negotiations have become more challenging.
48. A 2013 survey published by the Australian Industry Group found that nearly half of the 61 gas-using businesses surveyed in Eastern Australia were looking for new gas supply agreements. Of those, nearly 10 per cent reported that they could not get an offer at all, a third reported that they could not get a serious offer and a quarter reported that they could get an offer from only one gas supplier.¹² Gas users have also raised concerns that gas suppliers are offering gas supply agreements which are for a shorter duration than requested by gas users or are not willing to supply gas at a price that meets the users' commercial needs.
49. Some gas users have argued that these outcomes are indicative of gas suppliers in Eastern Australia having market power and exercising it to strategically withhold supply of gas to increase profits at the expense of domestic gas buyers.
50. However, reluctance by gas suppliers to commit to long-term gas supply agreements with gas users may be commercially rational behaviour in a highly uncertain environment. Gas suppliers may, for example, be unable to charge prices to gas users in Eastern Australia that are high enough to compensate them for forgone expected export revenues and other costs of not fulfilling their export obligations.¹³

Questions on negotiations of new gas supply agreements

- Q.18 Have industry participants encountered any difficulties in obtaining offers of gas supply, or been involved in any failed negotiations for supply of gas? If so, describe the negotiation, providing comments on what concerns arose about the process of negotiation and how this was different to previous negotiations.
- Q.19 Are there differences in the behaviour of gas suppliers in relation to negotiations for supply from, or to, different geographic regions? If so, provide details.
- Q.20 What are the key factors affecting the terms on which gas suppliers are willing to offer gas to users? Explain the effect of these factors on gas suppliers.

Rising domestic gas prices

51. Gas supplied to users in Eastern Australia has historically been priced using a cost-plus formula, in which the contract price paid for gas by users was calculated based on the cost of production plus a margin, and escalated with inflation. However, the development of the LNG projects has resulted in domestic gas users being exposed to international gas prices for the first time, which appears to be significantly affecting domestic gas prices.

¹² Australian Industry Group, Energy shock: the gas crunch is here, 2013.

¹³ Productivity Commission, Examining Barriers to More Efficient Gas Markets, March 2015, p.23.

52. There have been some views expressed in the gas industry that prices in Eastern Australia will eventually converge to the levels implied by LNG netback prices.¹⁴ As there is no worldwide benchmark LNG price, LNG prices in gas supply agreements are usually indexed to the average price of an energy commodity such as oil. A number of new domestic gas supply agreements involving gas suppliers in both the Cooper and Gippsland Basins have reportedly been linked to oil prices.¹⁵
53. Gas users are raising concerns that prices payable under new gas supply agreements are rapidly increasing. There is also significant uncertainty about the key drivers of the price outcomes and the short-term and long-term implications for prices.
54. A common and consistent complaint made by major gas users is that the price increases, at least in part, are driven by insufficient competition in the supply of gas in Eastern Australia and are greater than they would be in a competitive environment.
55. There could be a number of other factors contributing to gas prices rising above their historical levels, including the exposure of domestic gas users to international gas prices, rising costs of exploration, development and production as well as uncertainty about expectations of LNG export volumes and long-term prices.
56. Some gas users have also expressed concerns about the relevance of the LNG netback price to domestic gas prices, lack of clarity as to what a netback Gladstone price is and how it would be translated to various other locations in Eastern Australia. Some market participants consider that a move to spot price indexation in long-term gas supply agreements is desirable to ensure a competitive and efficient market for supply of gas.

Questions on domestic gas prices

- Q.21 What are the key factors currently affecting the price of gas in Eastern Australia? Are current prices expected to be transitory or likely to be sustained? What information is most important to informing your view?
- Q.22 Do gas users have sufficient information to be confident that they are receiving reasonable offers for long-term gas supply arrangements? If so, what are the sources of that information?
- Q.23 Is there an appropriate reference price for gas in Eastern Australia? Is one necessary? What are the pros and cons of different reference prices?
- Q.24 Are buyers that enter into oil-linked gas supply agreements able to effectively hedge their exposure to changes in oil prices? If so, how? If not, why not?

Changes in non-price terms and conditions of gas supply agreements

57. The changes in market conditions outlined above may also be leading to a deterioration in the non-price terms and conditions of gas supply agreements. In addition, some non-price terms have the potential to influence the behaviour of buyers and sellers of gas in a way that distorts commercial outcomes.
58. Historically, non-price terms such as the duration of gas supply agreements, price review mechanisms, quantities (including flexibility on delivered quantities) and

¹⁴ A notional price of gas at a particular point along the gas supply chain, calculated by subtracting downstream costs, such as the transport, liquefaction and shipping costs, from the delivered price of LNG to the export customer.

¹⁵ For instance, Origin agreement with Beach Energy announced in April 2013, Lumo's agreement with the Gippsland Basin JV announced in May 2013 and AGL's agreement with the Gippsland Basin JV announced in April 2015.

delivery locations were typically rolled over from agreement to agreement and remained relatively stable. However, following the recent development of the LNG projects, this appears to have changed.

59. Gas buyers have raised concerns that they are being offered considerably shorter term gas supply agreements with less flexibility to vary gas volumes, thereby increasingly and unfairly burdening them with risk they are not well placed to manage. Decreased flexibility in gas supply arrangements has been observed either through deterioration in the underlying terms and conditions or stricter contractual enforcement of 'take or pay' and other non-price terms and conditions. Some gas users have argued that an imbalance in non-price terms and conditions in gas supply agreements is evidence of the exercise of market power by gas suppliers, which is negatively affecting their businesses.
60. However, there may be various reasons for the changes in non-price terms and conditions in gas supply agreements. The changes in the gas industry as a result of LNG developments have led to a substantial increase in uncertainty and risk in the sector. In particular, uncertainty about the ability of gas reserves to meet contracted supply, domestic and international gas prices in the medium to long term, and domestic demand for gas, all have the potential to influence the terms and conditions of gas supply agreements being re-negotiated in this environment.

Questions on non-price terms and conditions

- Q.25 How do non-price terms and conditions offered by gas suppliers in new gas supply agreements differ to previous agreements? Provide examples with reference to recent gas supply negotiations, successful or unsuccessful. To what extent have any changes affected the business of gas buyers?
- Q.26 What are the factors driving any changes to the non-price terms and conditions that suppliers are offering to gas users? To what extent are any such changes necessary and desirable given the changes in the domestic gas industry? To what extent are any such changes being driven by transportation capacity constraints or uncertainty about available transport capacity?
- Q.27 In what way do non-price terms and conditions influence the negotiations for the price for gas or vice versa? Which non-price terms and conditions have the biggest effect on price negotiations?
- Q.28 Has there been a noticeable change to the extent to which gas suppliers require strict and full compliance with non-price terms and conditions of gas supply agreements? What do you consider has driven any change?
- Q.29 Are there non-price terms and conditions being included in new long-term gas supply agreements which may be warranted in the current market circumstances, but which could have an effect on supply of gas in Eastern Australia beyond those circumstances? If so, explain the likely effect.

Availability of information and trading liquidity

61. An important characteristic of a well-functioning competitive market is that participants have ready access to the information they require to make informed and efficient decisions in both the short-run and long-run, as well as the ability to act on that information.
62. Historic reliance on long term, confidential, bilateral gas supply agreements in Eastern Australia has been a useful mechanism for supporting long term investments when risks were more quantifiable, but has contributed to information on prices and

contract terms not being readily available outside the contracting parties. Further, the bespoke nature of this contracting means that prices and non-price terms and conditions across gas supply agreements are not easily comparable.

63. In the past, many gas users were not reliant on acquiring a comprehensive understanding of information about gas supply for the purpose of undertaking negotiations of new gas supply agreements. For many gas users, such negotiations often involved only direct discussion with an existing producer or retailer and gas supply agreements were often renewed with little or no renegotiation of terms and conditions, including only minor readjustments for incremental price increases.
64. However, the changes in the gas industry, rapidly rising gas prices, uncertainty about future availability of gas and expiry of many long-term gas supply agreements appear to have significantly increased the desire for gas users to gain access to timely and relevant information about prices and gas supply dynamics.
65. Gas users are expressing concerns that they are finding it difficult to be confident that they are being offered gas at prices which are not higher than they should be in a competitive market, in the absence of adequate information about relevant reference prices, LNG export commitments and anticipated short to medium term gas production levels. This in turn creates uncertainty as to whether the offered prices provide the right price signals to inform their negotiations, investments and risk management strategies.
66. A lack of market transparency and high levels of supply uncertainty are not unique to Eastern Australia. However, many commodity markets have well-established trading arrangements and futures markets that provide the opportunity for suppliers and consumers to manage future price and supply risks. Those instruments enhance liquidity in the trading market and give an indication of future price movements.
67. The current facilitated markets in Eastern Australia (the Declared Wholesale Gas Market (DWGM), the Short Term Trading Market (STTM) hubs and the Wallumbilla Gas Supply Hub) were set up to provide additional options to complement the trade of wholesale gas through bilateral gas supply agreements and to allow greater transparency and improved price discovery. However, they were never designed to displace bilateral contracts for longer term transactions. In current form, they trade small gas volumes and appear to have only a limited relevance to the price of the long-term gas supply agreements.
68. The international comparisons that are most likely to be relevant for Australia come from the experiences in the US and the European Union (EU), although gas industries in those regions have more intra and inter market connections, more liquidity and many more competitors in the supply of gas and associated services. Gas reforms introduced in those regions have resulted in more information availability, market transparency and trading liquidity than is currently seen in Eastern Australia.¹⁶ Those reforms resulted in the unbundling of services and infrastructure, ensured third party access to associated services (processing, transportation and storage) and introduced measures to improve information availability and transparency (e.g. both the EU and the US require significant pipeline data to be published).
69. Over time, the reforms have contributed to the development of a number of real and virtual trading hubs (e.g. the Henry Hub in Louisiana and the National Balancing Point

¹⁶ SCER, Regulation Impact Statement, Gas Transmission Pipeline Capacity Trading, 2 December 2013 available at <http://www.scer.gov.au/workstreams/energy-market-reform/gas-market-development/gtpct/>.

in UK), which provide pipeline and trading services across multiple infrastructure connections. These services facilitate gas trade and have supported the development of financial instruments to manage risk for gas producers, customers and traders. The Henry Hub also provides a widely quoted gas reference price for the US domestic market and is also linked to future LNG trade out of the US.

Questions on information availability and trading liquidity

- Q.30 Is there adequate information publicly available about production capacity to supply LNG and domestic users? If not, what key sources of information are missing and what kind of issues does this create for market participants?
- Q.31 What information do gas users need for the purpose of being able to confidently engage in gas supply negotiations? How would it be used?
- Q.32 Does information asymmetry between gas suppliers and gas users have a significant effect on gas supply negotiations?
- Q.33 To what extent does the lack of a widely accepted external reference price affect market outcomes in the supply of gas in Eastern Australia?
- Q.34 Do facilitated trading markets currently provide a sufficient level of flexibility to market participants to manage risks and uncertainty in the changing market circumstances? To what extent are they likely to do so in the future?
- Q.35 To what extent are the pricing outcomes observed in facilitated trading markets likely to be relevant to the future negotiation of long term gas supply contracts?
- Q.36 Is the further development of existing or additional facilitated trading markets likely to result in better outcomes for market participants? If so, how?
- Q.37 To what extent are international comparisons relevant to the supply of gas and associated services in Eastern Australia? Are there any lessons from reforms in the US, the EU or elsewhere that may be relevant for Australia? What reforms or measures adopted in the US or the EU are not likely to work in Eastern Australia, and why? Are there any intermediate trading models between the US/EU trading markets and bilateral contracting that could improve information flow and increase trading liquidity in Eastern Australia?

Joint Marketing

- 70. Each gas producing area in Eastern Australia has many producers, but historically they marketed gas jointly.¹⁷ Joint marketing arrangements supported the original development of the gas industry in the 1960s and 1970s by helping gas producers to reduce risks and share marketing costs. Presently, only the Gippsland Basin joint venture producers continue to market jointly, with most other producers ceasing the practice.
- 71. Joint marketing arrangements may limit the options available to gas buyers seeking to secure gas supply agreements. Gas users have raised concerns that in the highly concentrated gas industry, joint marketing arrangements further limit the level of competition. Some users believe that if joint venture parties were to separately market their share of produced gas, the buyers may be able to negotiate better prices and more flexible contractual terms and conditions, particularly 'take or pay' or 'load factor' provisions.

¹⁷ Joint marketing is where multiple owners of a gas field join together to sell the output of the gas field, rather than selling the gas as separate entities in competition with each other.

72. In 2002, the COAG Energy Market Review expressed concern at the lack of upstream gas competition and recommended the separate marketing of gas be encouraged.¹⁸ More recent inquiries have also called for a review of joint marketing arrangements, some suggesting that they make the gas market vulnerable to the presence and exercise of market power, with others commenting that they restrict competition.¹⁹
73. Gippsland Basin joint venture gas producers have argued that joint marketing arrangements are necessary for practical reasons (e.g. because demand for gas is illiquid, lumpy and shallow, with the majority of gas purchased by a small number of customers under long-term gas supply agreements) and reduce gas supply costs, thereby reducing the end cost to gas users.

Questions on joint marketing

- Q.38 Are gas trading markets in Eastern Australia sufficiently well developed to enable the separate marketing of gas by producers in joint ventures? If not, what would the preconditions be for removing joint marketing?
- Q.39 What regulatory costs or savings arise from joint marketing of gas by producers? What are the costs and benefits that would flow from separate marketing of gas that is currently supplied under joint marketing arrangements? How significant would these be?

Areas for inquiry - gas transportation and storage

Ownership and regulation of transmission pipelines

74. Ownership in the transmission sector of the gas industry in Eastern Australia has seen a number of changes over the past decade. In 2007, APA had an interest in six of the major pipelines depicted in the figure below, Alinta owned three and Epic owned two.²⁰ Following its acquisition of Hastings Diversified Utilities Fund in 2013, APA now has an interest in eight of the 12 pipelines identified in this figure.²¹
75. Over the last decade there has also been a reduction in the number of pipelines subject to economic regulation,²² with only three of the pipelines in Eastern Australia currently subject to full economic regulation.²³

¹⁸ COAG Energy Market Review, Towards a truly national and efficient energy market, 2002, p.37.

¹⁹ Productivity Commission, Examining Barriers to More Efficient Gas Markets, March 2015, p.33, and Victorian Gas Market Taskforce, Gas Market Taskforce: Final Report and Recommendations, 2013, p.21.

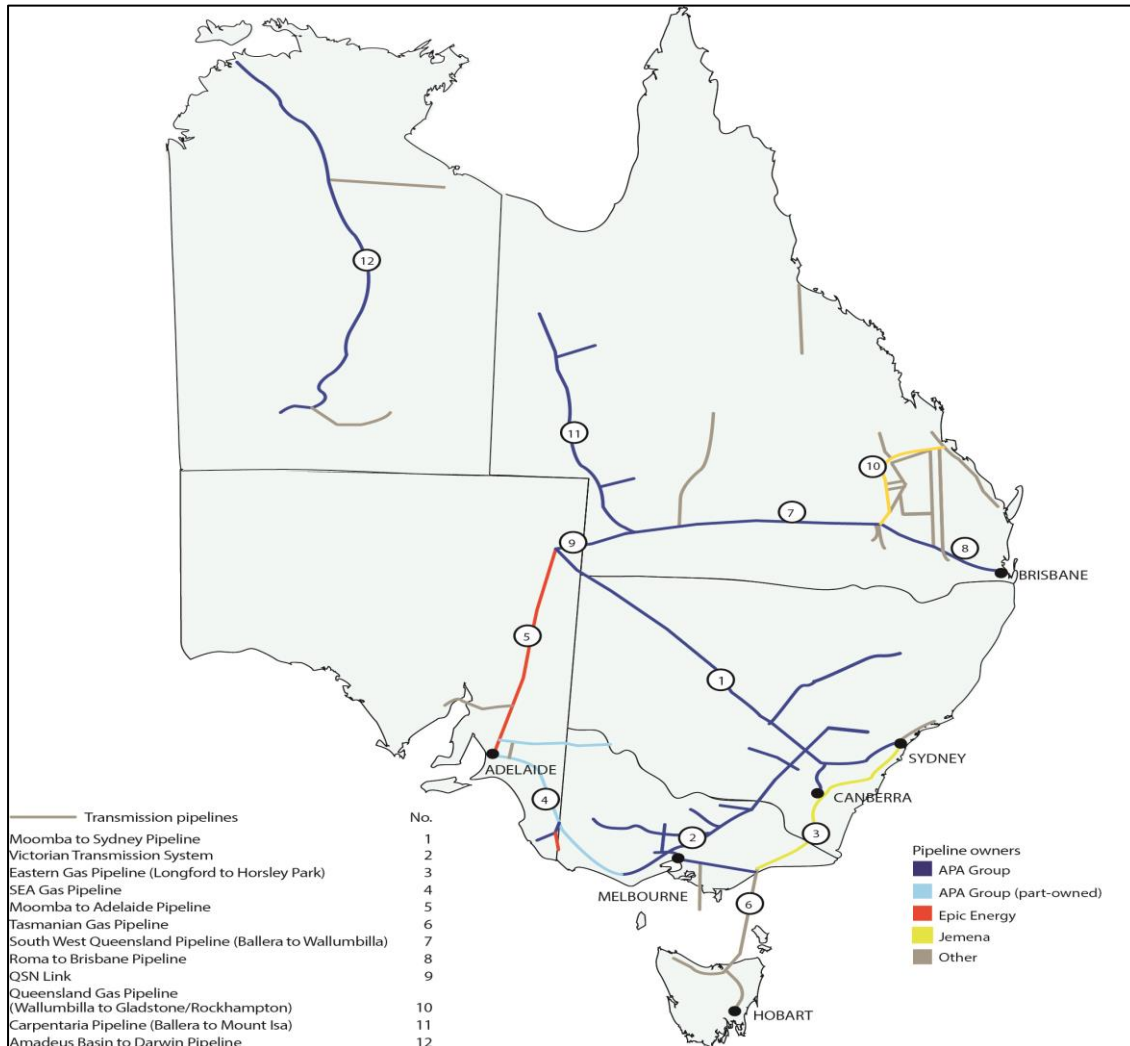
²⁰ In 2007, APA owned the Moomba to Sydney Pipeline, the Victorian Transmission System, the Roma to Brisbane Pipeline, the Carpentaria Gas Pipeline, the Amadeus Basin to Darwin Pipeline and also had a one third interest in the SEA Gas Pipeline (APA also owned the Central West Pipeline). Alinta owned the Eastern Gas Pipeline, the Tasmanian Gas Pipeline and the Queensland Gas Pipeline and Epic owned the Moomba to Adelaide Pipeline System and the South West Queensland Pipeline. See AER, State of the Energy Market 2007, p. 259.

²¹ APA also owns a number of other pipelines that are not highlighted in this figure, including the Central West Pipeline, the Central Ranges Pipeline, the Berwyndale to Wallumbilla Pipeline, the SESA Pipeline and the QCLNG Pipeline. See AEMC 2015, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Draft Report, 7 May 2015, Sydney p. 41.

²² Whereby the Australian Energy Regulator determines price and non-price terms of access.

²³ Roma to Brisbane Pipeline, the Victorian Transmission System and the Central Ranges Pipeline.

Figure 3: Current gas transmission pipeline ownership



Questions on ownership and regulation

- Q.40 Have users observed an increase in the price of pipeline services or deterioration in the terms on which pipeline services are provided? If so, to what extent is this due to increased concentration in ownership of transmission pipelines, decreased economic regulation or other factors? Provide specific examples of changes to prices/terms over the relevant period.
- Q.41 With so few transmission pipelines now covered by economic regulation, does the threat of coverage still place a constraint on pipeline owners' behaviour?

Pipeline services

76. The gas transmission pipeline system in Eastern Australia has evolved from single pipelines linking one production point to one demand centre in the 1990s to an interconnected pipeline system which links multiple supply sources to multiple points of demand.²⁴

²⁴ AEMC 2015, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Draft Report, 7 May 2015, Sydney p. 22.

77. The increased interconnection was facilitated by the construction in the early 2000s of the SEA Gas pipeline and Eastern Gas Pipeline (EGP) along with the QSN link in 2008 (see Figure 3 above).
78. In 2002, Parer recommended a 15 year no coverage regulatory holiday option for new transmission pipelines to support further investment.²⁵ However, further investment has not occurred in new pipelines servicing the domestic industry as a result of the inclusion in legislation of this provision, although it has been used by LNG pipeline developers.²⁶
79. Historically, flows on gas pipelines have been predominantly in one direction. However, a substantial number of major pipelines in Eastern Australia are now being enhanced to enable bi-directional flows in response to changes in the gas supply and demand dynamics resulting from LNG developments.
80. The South West Queensland, Melbourne to Adelaide (MAP), Roma to Brisbane and Moomba to Sydney (MSP) pipelines have been enhanced (or are being enhanced) for bi-directional gas flow capability, while the MAP will be connected to the SEA Gas pipeline, with these developments allowing increased delivery of gas to the north.²⁷ In May 2015, it was also announced that the EGP would be expanded through mid-line compression to allow more daily flow north.²⁸
81. These changes will enable gas to be transported from south to north (e.g. Victoria to the LNG facilities in Queensland) and from north to south (e.g. from the LNG fields in Queensland to NSW, South Australia and Victoria) and are expected to result in larger and more frequent fluctuations in the directional flow of gas in Eastern Australia.
82. With the increased interconnection of transmission pipelines in Eastern Australia, the demand for transportation services by some users is shifting from the traditional forward haul service to bi-directional services, interruptible, as available, park and loan, and ancillary services to manage variations in demand for gas (i.e. imbalance and overrun services and on-the-day renomination services). As noted in the AEMC review, gas flow information is only reported at a 24 hour daily level, and some participants (e.g. LNG proponents) have suggested that more real time gas data may be required to manage their portfolios and any surplus or shortfalls in gas.²⁹

Questions on pipeline services

- Q.42 Are pipelines being developed or enhanced to meet producer and shipper needs? Please provide examples of experiences in securing changes to pipelines to meet changes in supply and demand for gas.
- Q.43 Are pipeline services (including emerging hub facility service requirements in Wallumbilla) adequately evolving to meet user requirements? If not, explain which services are lacking on which pipelines and the effect of that on users.

²⁵ Parer, Towards a Truly National and Efficient Energy Market, Commonwealth of Australia, December 2002, p.38.

²⁶ www.ncc.gov.au.

²⁷ APA, Expressions of interest, URL: <http://www.apa.com.au/our-business/expressions-of-interest.aspx>, Accessed 20 May 2015; AEMO, Gas Statement of Opportunities, April 2015, pp. 2–3.

²⁸ AGL secures long-term gas transportation with Eastern Gas Pipeline agreement, URL: <http://www.agl.com.au/about-agl/media-centre/article-list/2015/may/agl-secures-long-term-gas-transportation-with-eastern-gas-pipeline-agreement>, Accessed 20 May 2015.

²⁹ AEMC 2015, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Draft Report, 7 May 2015, Sydney p. 153.

- Q.44 Are there any restrictions or limitations on the supply of specific ancillary pipeline services that are affecting competition in the supply or acquisition of gas? Do restrictions or limitations vary by location or by pipeline owner?
- Q.45 Is the level of available information on gas flows sufficient to support competition across pipeline services? Provide any examples where timely availability of information on gas pipeline conditions would have influenced which pipeline was used to transport gas. What are the costs/barriers to providing more disaggregated information?
- Q.46 To what extent is the 15 year no-coverage determination (the so-called Greenfields Incentive), a useful driver of pipeline investment? To what extent is it a restriction on access to pipelines?

Terms and conditions in gas transportation agreements

83. In its review of the wholesale gas market, the AEMC noted that a number of stakeholders have highlighted an apparent tension between demand for increasingly bespoke and tailored gas transportation agreements reflecting the more complex market environment on the one hand, and a need for more standardised contracts in order to allow for capacity trading on the other.³⁰ The AEMC also cited AGL's concerns that delivery point restrictions in contracts are limiting capacity trading.
84. In the ACCC's preliminary consultations in the course of this inquiry, parties have highlighted that delivery point restrictions and other terms in contracts, such as most favoured nation clauses, may be inhibiting competition or competitive offers for pipeline services. However, delivery point restrictions may reflect the need of pipeline operators to balance gas. Most favoured nation clauses (which entitle foundation shippers to any lower price subsequently offered to another shipper), have also been reported in the past as a key part of foundation gas transportation agreements.³¹

Question on terms and conditions for gas transportation

- Q.47 Are there contractual terms and conditions in gas transportation contracts that are limiting competition in the supply of pipeline services (including secondary trading of capacity)? If so, explain what those terms are, the rationale for them and their effect on pipeline users.

Pipeline capacity trading

85. Previous inquiries have highlighted that pipeline operators or shippers with primary capacity rights may have an incentive to hoard capacity or offer to sell spare capacity at a higher price than prospective buyers are willing to pay.
86. Participants may have an incentive to hoard capacity to affect competition in downstream gas retail markets. However, this may be mitigated if a party seeking additional or spare capacity is able to purchase an 'as available service' from a pipeline operator when secondary capacity is not available from a gas shipper. It is not clear if 'firm capacity' or 'as available capacity' are considered substitutes by industry participants. There is also a cost to a gas shipper of not using capacity since it has a high fixed cost component.³²

³⁰ AEMC 2015, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Draft Report, 7 May 2015, Sydney p. 32.

³¹ APA, Submission to AER rule change proposal to the AEMC: Rebateable Services.

³² AEMC 2015, East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Draft Report, 7 May 2015, Sydney, p. 54.

87. Risk management may be particularly significant in an environment of market uncertainty in influencing the level of spare capacity held.³³ Moreover, capacity may not be used at one point of time during the year but held in reserve for periods of peak demand. Capacity may also be available but there may be no counter-party seeking to buy it at any point in time.
88. Lastly, parties have also highlighted difficulties in obtaining capacity when it is required at short notice and/or for short periods.

Questions on pipeline capacity trading

- Q.48 Are you aware of any instances where pipeline capacity was sought but not made available or alternatively not able to be procured in time? Provide details, including whether that capacity was sought from pipeline operators or shippers.
- Q.49 To what extent are the new capacity listing platforms offered by APA and Jemena, or the current rule change proposal to the AEMC to enhance capacity information, likely to assist in the development of efficient capacity trading? If so, how?
- Q.50 To what extent, or under what conditions, are the 'as available services' offered by pipeline operators a substitute for capacity trade entered into with a shipper? If not, provide reasons.
- Q.51 How effective is competition between shippers and pipeline owners for the provision of contracted but unutilised capacity? If it is not effective, what factors are impeding competition?
- Q.52 Are the prices charged for capacity trades and 'as available services' what you would expect to observe in a workably competitive market?
- Q.53 How should available pipeline capacity be measured?
- Q.54 Are there any provisions in gas transportation agreements which limit or impede effective capacity trading? What are those provisions and how do they work to limit or impede capacity trading?

The role of storage

89. Underground or LNG storage facilities in Eastern Australia are small by comparison to overseas markets.³⁴ There are currently seven underground or LNG storage facilities, however, it is unclear how many of them provide third party access³⁵. Some further storage is currently being developed, notably the AGL Newcastle LNG facility.³⁶
90. Pipeline operators commonly offer a pipeline storage service, although this storage volume may be lower than underground gas storage. Gas powered generation facilities are also often built with connections to main transmission networks which allow for the storage of significant volumes of gas in the pipeline.

³³ Productivity Commission, Examining Barriers to More Efficient Gas Markets, March 2015, p. 120.

³⁴ Argus notes that Australia has only a handful of storage facilities operating on the East Coast market, compared to 400 storage facilities in the USA. Only 2 of Australia's storage facilities offer third party access.

³⁵ Ballera (Santos), Dandenong (APA), Iona (Energy Australia), Moomba (Santos), Newstead (Origin Energy), Roma (GLNG), Silver springs (AGL) – See Core Energy, Gas storage facilities: Eastern and South Eastern Australia, February 2015, p. 9.

³⁶ AGL, the Newcastle gas storage facility project, URL: <http://www.agl.com.au/about-agl/how-we-source-energy/gas-storage/newcastle-gas-storage-facility-project/the-project>. Accessed: 14 May 2015.

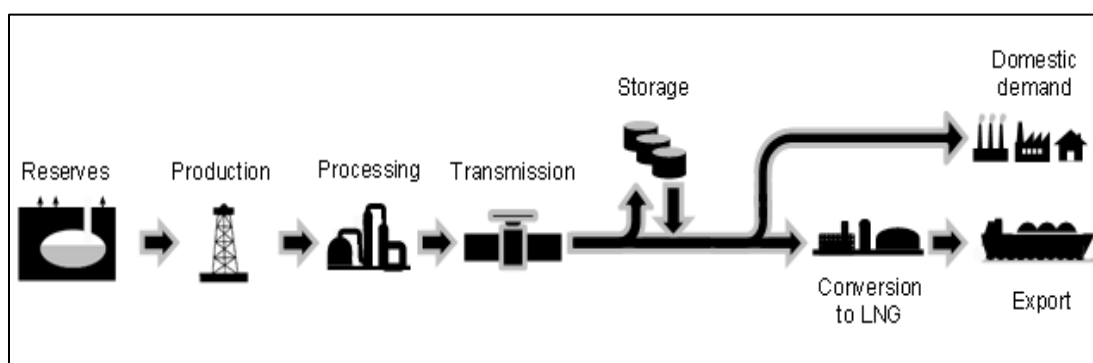
Questions on storage

- Q.55 How do industry participants use gas storage? Is this changing or likely to change given the gas industry re-structure? If so, explain why.
- Q.56 Are there adequate levels of gas storage in Eastern Australia? Does the market provide adequate locational and investment signals for adequate storage? If not, why not? Would new storage assist in supply, including during transitional and peak periods? If so, where would it be placed?
- Q.57 Are there adequate opportunities for third parties to access storage facilities? Do third parties have sufficient information to negotiate access on reasonable terms?
- Q.58 Are there barriers to the development of new storage facilities or expansion of existing storage capacity?

Co-ordination requirements

91. There are a number of steps in the upstream gas industry, which require co-ordination in order for gas to be supplied to users (Figure 4).

Figure 4: Stages of the gas supply chain³⁷



Note: Storage can occur either after transmission or prior to transmission.

Question on co-ordination of gas supply

- Q.59 Are there particular upstream activities which are more difficult to co-ordinate than others? Provide details of any difficulties experienced in achieving co-ordination and explain whether, and how, these difficulties affect the level of upstream and / or downstream competition in the supply of gas or other ancillary services.
92. Under the Victorian market carriage model (i.e. the DWGM) gas shippers do not need to enter into a firm gas transportation agreement to use the Victorian Transmission System. This differs from other jurisdictions where the contract carriage model is in place and gas shippers are required to enter into both a gas supply and transportation agreements. In the DWGM, there is significantly more retail energy competition than in other markets where contract carriage exists; however the DWGM is the oldest market and is underpinned by higher residential demand with retailers competing to sell dual fuel (electricity and gas).

Questions on differing carriage models

- Q.60 Does the contract carriage model affect the level of upstream and/or downstream competition in the supply or acquisition of gas or other ancillary services (besides transportation services)? If so, how?

³⁷ Productivity Commission, Examining Barriers to More Efficient Gas Markets, March 2015, p. 26.

Q.61 Does the need to co-ordinate between the different carriage models affect decisions made by market participants as to whether to engage in the transportation of gas in and out of Victoria? If so, how?

Next steps

93. The ACCC invites interested parties to make submissions on the issues raised in this paper and any other issues relevant to the inquiry.