

Santos Ltd
ABN 80 007 550 923
Santos Centre
60 Flinders Street
Adelaide South Australia 5000
GPO Box 2455
Adelaide South Australia 5001
Telephone: 61 8 8116 5000
Facsimile: 61 8 8116 5050
www.santos.com



26 March 2015

Mr John Pierce
Chairman
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

Dear Mr Pierce

GPR0003: East Coast Wholesale Gas Market and Pipeline Frameworks Review

Santos welcomes the opportunity to participate in the Australian Energy Market Commission's (AEMC) east coast wholesale gas market and pipeline frameworks review that has been initiated by the COAG Energy Council and their vision for the gas market.

As a proudly Australian company, Santos is a leader of the Australian natural gas industry, with more than 60 years of responsible gas exploration and production across the nation. Santos is one of Australia's largest domestic gas producers, supplying natural gas to all mainland Australian states and territories, ethane to Sydney and oil and other liquids to domestic and international customers.

It is in this context that Santos believes it is well placed to comment on the review, to ensure that all aspects of the changing market dynamics are highlighted.

Santos is of the view that while it is important to ensure the continued development of the facilitated markets and pipeline frameworks are undertaken, we also believe that the major issue facing the east coast gas markets are the impediments to bringing on much needed new supply.

The rapid increase in east coast gas demand has resulted in additional supply being required to meet forecasted demand. The market is trying to solve this impending shortage, by identifying and preparing to bring on the next tranche of gas supply to move the market back to equilibrium. What we are now seeing is Governments actively impeding new sources of supply coming into the market, thus interfering with efficient market outcomes. This has the effect of increasing price and putting pressure on those areas of the economy that rely on gas as a fuel source and feedstock, directly impacting jobs, GDP and economic welfare.

Regulation and oversight of natural gas developments are necessary and strongly supported by Santos and others in the industry. There are well functioning regulatory regimes in SA and Queensland that strike the appropriate balance between gas development and environmental protection. A coordinated and streamlined set of regulations for the natural gas industry that strikes the appropriate balance between development and environmental protection is called for.

Santos does believe that an efficient facilitated market is one where transaction and administration costs are at a minimum. The east coast currently has 3 different forms of facilitated markets requiring any player who participates in all states of the east coast to have systems and processes in place for each form of facilitated market. The spot market in Melbourne bears little resemblance to the short term trading markets in Sydney, Adelaide and Brisbane or the Wallumbilla Gas Supply Hub. These differences increase the barriers to entry by increasing the level of complexity for participants in multiple markets. Santos has long called for a standardisation of facilitated markets, to drive efficiencies and reduce basis risk among regions. Standardisation could also facilitate more players entering the market, improving activity and provide incentives for further development of a liquid secondary market.

However, supply hubs alone will not enable a competitive market if a company that buys excess supply at one of the hubs is unable to deliver it to their market of choice. To enable this, Santos agrees that a market for available capacity should be introduced, whereby companies that own pipeline capacity can choose to sell any available capacity in a traded market place. Santos also supports transparency in pipeline markets that interface with the facilitated markets, so capacity can be traded more actively.

Santos' views on the specific questions from the discussion paper are attached to this letter.

Should you have any questions in relation to this submission, please contact Matt Sherwell at matt.sherwell@santos.com or on (08) 8116 5824.

Yours sincerely



James Baulderstone

**Vice President Eastern Australia
Santos Ltd**

Facilitated markets	
Question	Comments
Given their performance to date, are the existing markets able to facilitate transactions required to manage current conditions?	<p>The current balancing markets (STTMs & DWGM) perform an important function, enabling the physical market as a whole to be operated effectively and efficiently. Ensuring the market is balanced is their major function, with trading any imbalances available as a secondary benefit. Because trading is confined to “overs and unders” it is not always suitable for large industrial customers to manage their full commodity exposure risk and it is not a suitable market to base a derivative contract on to assist in providing new risk management tools for market participants.</p> <p>The main impediment in the current facilitated markets is the lack of firm transport availability to get gas to and from different trading markets</p>
Will the current market framework be able to facilitate transactions that may be required to meet future conditions?	<p>The current framework would meet future needs of the market if the market that we want to deliver is similar to today. However if the goal is to be aligned with the COAG Energy Councils vision of a liquid secondary trading market able to meet the risk management objectives of multiple new and existing players is desired, then the current structure needs some refinement. Moving to more standardisation in supply hubs as well as greater access to capacity trading to enable those who purchase via a facilitated market are able to transport their gas to their intended destination.</p>
Are there barriers to using the wholesale markets, for instance for new entrant retailers or for large users wishing to participate directly in the markets?	<p>Complexity of multiple different markets rules, mechanisms, timings and administration requirements, mean that any new entrant would require significant time to gather the required expertise to effectively manage the risk of using a or multiple facilitated markets.</p> <p>Once a new entrant was able to either learn or purchase the requisite experience to manage the risks involved in using a facilitated market, the next barrier is the ability to get transport availability to move their gas purchased to their required destination. The combination of these 2 impediments result in a proposition that it is not inviting for a new entrant or industrial to enter the wholesale market themselves, as opposed to continuing to enable a major retailer manage the risk for them.</p>
What opportunities are there for improved integration between the markets?	<p>There are a number of improvements that have already been suggested in the scoping study that Santos agrees with. These include alignment of balancing market (STTM & DWGM):</p> <ul style="list-style-type: none"> • Minimum market price caps; and • Start of gas day. <p>Santos also recommends that the AEMC consider standardising all balancing markets so there is one model across all regions, to reduce the complexity for all participants.</p>

STTM	
Questions	Comments
Are the original objectives for the STTM still relevant and compatible with the new Council vision? How have stakeholders' experience with the STTM corresponded to initial expectations?	<p>The initial concept for the STTMs was designed to provide transparent price signals, enable the participation of all major gas users, efficiently price congestion on the system and facilitate secondary trading. The vision has progressed from these initial objectives, although the objectives are an initial step to the broader fully integrated, liquid market vision.</p> <p>Broadly speaking the original objectives is still relevant with one exception. Santos believes that the structure of the STTM and the complexities around the it result in few major users of gas being actively involved in the STTMs, choosing to work through retailers of gas to eliminate the risks associated with the balancing market.</p>
Are all STTM hubs (Sydney, Adelaide and Brisbane) delivering value to market participants?	Yes, although there is only limited depth in the market and unless there is available pipeline capacity to move the gas or another customer to sell it to, there is little need to trade or ability to maximise any arbitrage opportunities between markets.
What design features of the STTM could be improved to reduce costs and improve efficiency? (eg is there a role for intra-day trading?)	<p>Increasing the transparency over the price and gas volume schedule would improve efficiency, currently both are retrospective once schedules are released following gas allocation.</p> <p>The ability to set a price ceiling minimises price risk, however the lack of transparency over price will sometimes result in not being allocated gas due sitting below the price allocation stack on a day</p> <p>Intra-day trading is not a service that is available as a design feature of the STTM with facilitated trades requiring nomination a day ahead of the gas day. The WGSN have incorporated this as a design feature although currently the service is cost prohibitive when compared to trading a day ahead and the market value for a gas commodity.</p> <p>Santos would welcome a review of the STTM across all regions for inclusion of an intraday trading service.</p>
Given that most gas supply is bilaterally contracted, is it realistic to expect that prices in the STTM will signal underlying supply and demand conditions? If not, what is the role and value of STTM within the broader gas market framework?	It is true that the prices in the STTM will never be a true reflection for the total market supply and demand, although this was never the intention. As a balancing market first and foremost, it enables buyers and sellers to manage their daily imbalances. The STTM places a price on these imbalances which reflect the availability of supply and the demand of buyers. This is not a market price that will ever be used to set a forward price curve off to assist with risk management and financial derivative contracts. It is, however, an effective mechanism for the efficient management of the daily supply and demand imbalances and should be considered in this way.

	STTM signals short term supply & demand conditions, and it sets the price point for the gas scheduled and a benchmark for trades (day prior) on the Wallumbilla Gas Supply Hub.
Wallumbilla Gas Supply Hub (WGSB)	
<i>Questions</i>	<i>Comments</i>
Is Wallumbilla adding value to the way participants manage their gas portfolios and what directions should the development of the market take?	<p>The Wallumbilla Gas Supply Hub (WGSB) has only been in operation for 1 year, and is already going through some refinements, looking to move to single trading product to pool potential buyers and sellers together within a single market to generate the highest potential for trading liquidity. This is an important and necessary step in the development of the WGSB as without this an effective reference price would not be possible. As the market matures more refinements will be required, however the WGSB is showing promising signs of delivering on the vision of COAG.</p> <p>Another impediment that should be considered is the costs associated with intra-day trading. Intra-day trading is currently cost prohibitive to participants due primarily to the costs associated with pipeline charges, it is for this reason that there is very little intra-day activity. Consideration should be given to encouraging this under a cost effective/incentivised arrangement as will create further liquidity in the market and assist new and current market participants to use the WGSB to manage their risks or look to for arbitrage opportunities.</p>
How does trading at Wallumbilla impact on trading in other wholesale markets?	Santos has observed some change of behaviour with the advent of the WGSB. In some instances trading parties will wait for Brisbane STTM gas scheduling at around 2pm before executing genuine trades via the WGSB. In most of these instances it is assumed that the market participants are looking for delivered gas to Brisbane, therefore there is a preference for gas in Brisbane. If there is insufficient liquidity in at the Brisbane STTM, the market participants will look to execute at WGSB and use existing, or organise alternative transport arrangements.
Would the establishment of a GSB at Moomba facilitate additional trade? Would a Moomba GSB impact on liquidity at Wallumbilla?	<p>Santos is supportive of the establishment of a Moomba GSB, or other mechanism that would allow gas to be traded ex-Moomba. Moomba is the only point of the system that has connections with all the major gas markets, making it an important site for the development of the market.</p> <p>The move to add a Moomba trading location would enable all Cooper basin producers to trade volumes ex – Moomba, this is especially important for the smaller producers who may have transport capacity constraints ex-Wallumbilla as well as may also provide a route to market if a Northern Territory tie in were to go ahead. It should be remembered that not all participants want or need to trade ex-Wallumbilla.</p> <p>The impact to trading at WGSB should not be a consideration in determining if another hub or delivery point is needed. In Santos' opinion, if there is demand for an additional delivery point and it is executed properly, this will bring in new market participants and give confidence to the whole market, increasing liquidity in all areas.</p>

How useful is the information provided by the Wallumbilla hub to market participants and what additional information could be provided to improve accuracy and transparency at the GSH?	The information provided for the WGSB is satisfactory; Santos has been encouraged with the additions of moving to a single product which we believe will create additional anonymity for market participants in comparison to the current arrangements. Also the ability to facilitate 'bespoke' trade is a good functionality, provides an easy mechanism for transacting direct with a customer (where price, volume and delivery point are agreed prior to trading), it provides a transaction mechanism in support of, and / or, instead of Master Spot Agreements (MSA's).
Declared Wholesale Gas Market (DWGM)	
<i>Questions</i>	<i>Comments</i>
Are the original objectives and rationale for the DWGM relevant and compatible with the Council's vision?	<p>The original ambition of the DWGM was to enable participants the ability to trade imbalances and purchase wholesale gas to support full retail contestability and to encourage diversity of supply and upstream competition. To this end the DWGM has been a success, especially when considering that Victoria has twice as many gas retailers compared to other jurisdictions as well as multiple off-shore gas fields, processing plants and storage facilities.</p> <p>COAGs current vision is broader than the original DWGM's objectives and Santos supports the Victorian Governments review on the DWGM to ensure its still flexible enough to support and grow with the developments in the interconnected east coast gas market, which Victoria is currently and will continue to be a major demand and supply source for all of southern Australia.</p>
Is investment in the DTS occurring in an efficient and timely manner? Or are there limitations with the current investment and/or regulatory framework?	The nature of a regulated transmission network and the 5 year determination cycle can result in longer lead-times for development and inability to quickly move with market demand. Unlike other non-covered pipelines, the DTS restricts the ability for market led investment in additional capacity expansions. Flexibility is a priority for participants and is a catalyst for efficient market operations as well as enabling increased liquidity in the market. The additional regulatory layer that is required for the DTS results in a protracted decision making process and often a delay in securing the additional capacity to other markets. These restrictions appear to be at odds with the COAG vision.
Do the DWGM arrangements inhibit the transportation of gas between the DTS and interconnected pipelines?	Yes, Constraints at Culcairn, restriction on gas out of DTS onto MSP, constraints are daily at present. The impact to Santos is that at times full volumes of gas out of the DTS will not be scheduled. Similarly in winter this point may be restricted due to high demand.
How could the market design be amended to provide additional tools for participants	To facilitate the COAG vision, a more integrated model should be assessed, this may result in a transformational change in the either the STTM's or the DWGM. As mentioned previously, the complexity of multiple different markets

to manage price and volume risk in the DWGM?	rules, mechanisms, timings and administration requirements, mean that any new entrant would require significant time to gather the required expertise to effectively manage the risk of using a or multiple facilitated markets. Harmonisation of the facilitated markets in the medium term should provide the ability for additional market participants to enter, increasing liquidity and reducing basis risks among jurisdictions.
Transmission pipelines	
<i>Questions</i>	<i>Comments</i>
Are the original objectives of the gas access regime still relevant and compatible with the Council's vision?	Santos believes that the original objectives of the gas access arrangements and the COAG vision are broadly aligned. It is not a question of the structure of the pipeline carriage models that is preventing secondary trade and potential efficiency gains, rather how the pipelines link in with the facilitated markets and how market participants can gain access to them. There are examples of different access arrangements being more efficiently utilised in overseas markets. In Santos' opinion it is more the lack of integration of all elements of the market that is preventing the markets working efficiently, not any one particular aspect.
Is the current low number of covered transmission pipelines a cause for concern or a measure of competition?	As mentioned previously, in other market both covered and uncovered transmission pipelines have effective competition. In the Australian context, we have seen a growth in the uncovered transmission pipeline networks, mainly due to the agility of the operators and shippers to work together to meet market demand. This shows that the market is working efficiently; shippers who have requirement to move gas around are contracting directly with pipeline operators to construct and expand pipelines directly. If there were no pipelines being built or expanded even though there was demand for it, that would be a concern, this however is not the case.
Are there impediments to short term trading of pipeline capacity trading? (ie why is secondary trading not occurring?) If so, how should these best be addressed?	<p>There are currently a number of options for market participants who are wishing to participate in capacity trading. APA and Jemena have markets listed and there are always multiple shippers who are willing to negotiate directly if their transport positions are not fully utilised. These options are good for existing large players, although may not meet the future vision of an actively traded market between locations and arbitrage trading opportunities.</p> <p>To further facilitate pipeline capacity trading Santos recommend the market move to reduce transaction costs by developing a standardised contract mechanism, possibly similar to an ISDA master agreement framework. Also the current administration costs from the pipeline owners are too high for new traders to enter into the market and make multiple trades. A review of opportunities may result in more interest from outside the incumbent market participants.</p>
Does the increasingly interconnected nature of gas pipelines and markets on	It is Santos' view that to achieve COAG's vision for Australia future gas market there needs to be a greater integration between the markets and pipelines. Whether it be more services on the markets to facilitate transportation of

the east coast form a driver for greater harmonisation of regulatory arrangements (eg a single carriage model or greater integration of market and pipeline frameworks)?	purchased spot gas or a more actively market based method of determining the price of trading unwanted pipeline capacity. If interconnection is only available for a few, the council's vision for a liquid trading market will be challenged.
How useful is the information provided on the Bulletin Board to market participants and what additional information could be provided to facilitate secondary trading?	There is an enormous amount of information on the Bulletin Board and Santos as well as many other market participants have been working with AEMO to make the Bulletin Board an essential tool for all players and observers of the east coast gas market. Santos believes that the level of information on capacity utilisation for pipelines is adequate for the market to trade effectively. In the future, if additional trading models are recommended, any additional information requirements will be considered.
Other issues	
<i>Questions</i>	<i>Comments</i>
Are there any issues or concerns relating to the wholesale gas market and pipeline frameworks not covered by this paper?	<p>Considering comments in the above letter and the puzzling situation in NSW where an opposition political party is campaigning to block a new gas supply project prior to the release of its environmental impact statement, circumventing due process, Santos thought it prudent to outline an extract of the COAG Energy Council's vision:</p> <p><i>"the Council's vision is for the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where the responses to those signals are facilitated by a supportive investment and regulatory environment".</i></p> <p>The market is providing a signal that new supply is required, and new supply sources have been identified and companies such as Santos are investing hundreds of millions of dollars to bring this supply to market. The great opportunity in the vision is the supportive regulatory framework.</p> <p>Whilst Santos acknowledges that this part of the vision is not in scope of the current review, it is imperative the COAG Energy Council move forward with this section of the vision. Santos purchased the Narrabri asset under an encouraging regulatory framework in NSW in 2011, move forward 4 years and hundreds of million dollars later the regulatory environment changed significantly, with disregard for scientific and other expert evidence. Santos looks forward to further discussions with AEMC on how it can support COAG Energy Council move this part of the vision forward.</p>