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

Dear Mr Pierce

GPR0003: Draft report on Stage 2 of the East Coast Wholesale Gas Market and Pipeline Frameworks Review

Santos is pleased to provide the following comment on the Australian Energy Market Commission's (AEMC) draft report on Stage 2 of the East Coast Wholesale Gas Market and Pipeline Frameworks Review.

The East Coast gas market has grown rapidly to meet the needs of the domestic and export markets, so it is an appropriate juncture for the AEMC to progress on wholesale market design initiatives to facilitate trading. However, more could (and should) be done to enable additional supply to be brought on to the market - a liquidity-enabling design is only desirable if there is sufficient gas to flow through it. We believe this is necessary to fulfil the full COAG vision. This includes encouraging the COAG Energy Council to prioritise policy streams of *Encouraging Competitive Supply* and *Removing Unnecessary Regulatory Barriers* in the Gas Market Development Plan[1].

The draft report does expand on the previous discussion papers in the areas of information provision, capacity trading and wholesale market design. However, there are still many unanswered questions in each of these areas. Much of the work in Northern Hub future design, Southern Hub and pipeline capacity trading is incomplete as the design is not sufficiently specified in the document to understand possible issues and potential unintended consequences. This assessment can only be made following more detailed discussions, which have not yet taken place. Santos will continue to participate in these discussions to ensure the new East Coast gas market design benefits all market participants.

This submission responds to specific areas Santos believes are important for the AEMC to consider when assessing the Stage 2 Draft Report.

[1] COAG Energy Council Gas Market Development Plan – Summary as at December 2015; https://scer.govspace.gov.au/files/2015/12/Gas-Market-Development-Plan.pdf

In summary the areas that Santos warranted highlighting at this stage of the AEMC review:

- Wholesale Gas Trading Markets – potential benefits of Southern Hub, Moomba and STTM redesigns, and concerns with the unintended impacts of a Wallumbilla future vision, although more details are required;
- Pipeline Capacity Trading – potential market benefits, as long as the value of existing contracts are not eroded; and
- Information provisions – focus should be on ensuring information that increases trading liquidity is available, although not all the requests appear to meet this threshold.

Wholesale Gas Trading Markets

Santos sees merit in continuing to explore the direction of the wholesale gas trading market design recommendations in the draft report, and notes that these are only high level descriptions of the future state. Although there are concerns regarding any design that would increase the risk of non-CSG specification gas entering the Northern Hub precinct. To convert these high level designs to something that can be implemented will require further significant design and consultation to ensure that the benefits and costs can be articulated and any transitional issues resolved.

Northern Hub

Santos strongly supports the current AEMO design of the Wallumbilla Gas Supply Hub which includes the optional hub services model. Time should be afforded to enable establishment and operation of the optional hub services model with the view that it can successfully meet COAG's vision for liquidity and transparency. The change to a virtual hub should only be considered if there is a demonstrable, clear failure in the optional hub services approach. Market participants need certainty to invest, whether it be in upstream ventures or the establishment of trading systems and governance frameworks. The market views constant structural changes as interference, which may lessen the likelihood of new entrants and reduce investment in development of additional reserves.

Santos sees the potential for increased risk to the GLNG facility if gas was freely able to move through the region without the appropriate controls to gas specification. Significant investments in the LNG facilities and associated gas supply infrastructure have been made to aid in limiting and tracking any non-CSG specification gas travelling through Wallumbilla. Any moves that result in an increase chance of non-CSG specification gas being delivered to Wallumbilla and then to an LNG facility could be result in severe operational issues and major shut downs at the facility. In Santos' opinion, a virtual hub design would increase this risk.

Potential limited competition in the market for hub services

Santos has concerns with the potential extension of the auctioning of un-nominated capacity to hub services (being compression and redirection facilities within Wallumbilla), due to a range of concerns including: raised risk of non-CSG gas specification, sanctity of contractual rights, plus loss of reliability due to contracting of redundancy historically purchased through higher tariffs in existing contracts to ensure very high reliability rates (i.e. N + 1 compressors).

The ability for any users to utilise auction platform could enable heavily off-CSG-specification gas to enter Wallumbilla, where the majority of purchasers are only able to take a CSG-specification. Any contamination of gas beyond CSG specification at Wallumbilla could result in the shutdown of the LNG facilities.

Due to the sensitivity and additional risk involved, Santos would be interested in the consideration of changing the Northern Hub to be converted to a CSG-specification gas basis.

Typically redundancy within a compression facility (total required compression being N, plus 1 spare compressor, i.e. N + 1) is built into the design to ensure high reliability where the users pay higher tariffs within their contracts to obtain this very high reliability. The redundancy within a compression facility hence unutilised capacity could present to the market as un-nominated capacity, however if this capacity is then auctioned there is the potential to lower the reliability hence erode the existing contracted rights due to reducing the redundancy from N + 1 to something lower. This difference in operating model is the core reason why Santos is not supportive of directly extending the auctioning model to the compression facilities.

Similar to pipeline capacity auctioning, Santos believes the potential to apply the auctioning of un-nominated capacity as applied to hub services needs to consider the existing contractual rights negotiated and agreed by shipper and compression/ hub services owner including that of intraday renominations. Any intraday renomination for capacity should still be transacted as per the current system.

Any changes brought about by the implementation of a capacity auction process must ensure that purchasers of firm services are not required to re-purchase their own capacity through the auction process if they want to renominate. This would result in purchasers of firm services effectively paying twice for the same capacity and reducing the value of their existing firm capacity. Any reduction in value in an existing property right would require the payment of compensation

There are situations where *reasonable endeavours* right to intraday renominations exist for Hub services and these have been procured through higher charges within existing tariff arrangements, where the auctioning of un-nominated capacity would also not necessarily align with the timing of when the shippers require this capacity change, hence negatively impacting flexibility of existing contractual rights

Moomba Gas Supply Hub

The recommendation of the creation of the Moomba Gas Supply Hub is widely supported and Santos agrees that it is a good transitionary step to help promote liquidity in the market. The Moomba Gas Supply Hub is perfectly positioned to enable all producers another avenue to multiple market demand centres as it allows access to a number of important east coast transmission pipelines.

STTMs

Santos agrees with the evolution of the STTM, moving to a balancing market ensuring that trade is concentrated at the hub trading locations, with the view to providing a reliable reference price. Determining when there is sufficient liquidity in the northern and southern hubs as well as the ability to access pipeline capacity will require further analysis.

The draft report flags that the conversion of the STTMs to balancing markets may require Wallumbilla Gas Supply Hub to move to a virtual hub. However, this should not be considered as necessary or a precondition to transitioning the STTM to balancing markets. These are really two independent steps, and need to be separated to enable Wallumbilla Gas Supply Hub to evolve. Liquidity should be the measure, not the form of market design.

Southern Hub

The recommendations in the Stage 2 Draft Report will have a substantial impact to the Victoria wholesale gas market. While these changes appear to address some of the known issues that the review was undertaken to resolve, Santos would welcome further detailed information on the continuous exchange based trading and the entry–exit capacity allocation, including how existing measures will be transitioned to any new Southern Hub.

Measures of gas market and pipeline capacity trading liquidity.

Santos has concerns around the design of the liquidity measures and whether they will sufficiently address the quantitative intent of the vision to measure the *liquidity*. Santos would welcome the opportunity to consult further on the design of the measures and suggests that it could be beneficial to consider the rate of change of the measures as part of the assessment framework.

Pipeline Capacity Trading

The AEMC design work is planning for a future where more short term buyers and sellers will trade available physical (and potential virtual) gas and deliver that gas to their desired destination. This vision is welcomed by Santos, as it would result in a more effective allocation of its resources and augment risk management options for producers and buyers.

It should be noted that the current Eastern Australia marketplace does not reflect this vision, as there is little demand for short term (day or week ahead) capacity, with current buyers mostly in the market for longer term capacity. Santos will seek to use short term capacity trading should there be a market for it in the future and fit with Santos requirements. Santos does not believe that greater incentives are required to promote the utilisation of short term capacity than cost recovery or profit for the user.

The main reason that there has been little movement in secondary trading to date is lack of demand for this type of short term product. Without the suitable demand there is little incentive for the industry to spend its finite resources on developing the market place, when there are other priorities at hand.

Below are specific comments on areas raised from the Stage 2 Draft Report.

Auction for contracted but un-nominated capacity

> *Improved incentives for shippers to sell access:*
>
> As previously mentioned it is Santos' experience that there has historically been minimal interest in purchasing secondary capacity in the pipelines where it is a shipper. On the few occasions that there was interest there have been bilateral discussions between the parties to determine availability, term and price. The perception that there are many parties interested and that there is unmet demand is not consistent with Santos' experience of the market place.
>
> Santos supports any efforts to facilitate the standardisation of short term capacity contracts, although we believe that this process should be driven by industry.

As a producer who is looking to minimise cost, or use finite resources more efficiently, it is difficult to foresee a situation where we would hold on to capacity if there are willing buyers and therefore do not understand AEMC's comment that there is "limited incentive to trade". In fact it is the exact opposite; there is no greater incentive to trade than recouping some of the expense invested to underwrite a pipeline.

The current proposal enables the pipeline owner to conduct the auction process and receive the all the funds from any such auction. Whilst acknowledging that there is the possibility for shippers to sell existing capacity prior to the nomination cut off time, this will not always be possible as shippers often need to wait for customer nominations. These nominations can change for a number of reasons, including any flex availability in customer contracts, and changes can occur any time prior the submission of the shipper's nomination to the pipeline operator. In this scenario there will not be the chance to pre-sell any excess capacity due to timing. However the pipeline operator will have the chance to recoup additional revenue from the auction of this unused capacity, even though the original shipper has paid for the firm capacity. This creates a situation where shippers have underwritten the original investment and pipeline owners can obtain super profits by selling the capacity twice.

Santos understands that this auction process will have an additional administrative charge for the pipeline operator. However, we believe that the shipper should receive the revenue over and above this administration cost, having already fully paid for the service.

Existing nomination and re-nomination rights

The draft report correctly outlines the difficulties with aligning pre-existing nomination times as they have been negotiated together between the shipper the pipeline owner. These nomination times in the relevant Gas Transportation Agreement (**GTA**) are then used as a guide for the corresponding Gas Supply Agreements (**GSA**) with customers. Any planned changes will not only affect the shipper, but also all customer contracts. Harmonising nomination time's sounds like a simple idea, however, analysis will be required to see if it is feasible for producers and customers alike. Transitional arrangements may be required to grandfather existing GTAs, if there are impediments to harmonising existing nomination times.

Harmonisation across the States will require additional consideration around the operational impacts, particularly in respect to the time selected as the start of the gas day.

Renominations occur frequently on major transmission pipelines and may include intraday nominations. In most cases these renominations are due to a customer renominating up or down their gas requirements for that day as allowed for in their contract and in reaction to changing conditions. Where it has been negotiated with the pipeline owner, shippers have the ability to renominate intraday volumes up and/or down and this commonly occurs.

These renominations also allow markets like the DWGM to stay in balance, enabling more or less gas to enter the Victorian distribution system when there is an imbalance. The impact of the nomination cut-off will result in less flexibility for customers to reshape their load, possibly resulting in increased costs and less efficient operations.

Consideration also needs to be given for the preservation of any contractual right negotiated and agreed by shipper and pipeline owner including that of intraday renominations. Any intraday renomination for capacity should still be transacted as per the current system.

Any changes brought about by the implementation of a capacity auction process must ensure that firm shippers are not required to re-purchase their own capacity through the auction process if they want to renominate. This would result in firm shippers effectively paying twice for the same capacity and reducing the value of their existing firm capacity GTA. Any reduction in value in an existing property right would require the shipper to be compensated.

Design considerations

We acknowledge that investments in pipeline infrastructure were undertaken prior to the market reviews and this fundamental change in approach to the wholesale gas and pipeline market may result in costs to incumbent shippers. These costs will need to be acknowledged either through transitional arrangements (such as grandfathering) or, in some situations, payment of compensation to shippers.

There are significant unknowns still to be addressed including auction model design, setting of reserve price, determining the amount of capacity to be auctioned and terms and conditions of capacity and service standards. These and others issues will require significant, detailed review and Santos is looking forward to assist in the more detailed working paper stages.

Pipeline servicing a single facility

Santos supports the observation that single shipper pipelines should not be included in any auction for un-nominated capacity.

Secondary trading platform with information reporting requirements and standardised capacity products

Anonymity & confidentiality

As stated in the information provision section, there needs to be a case developed to justify the release of certain information. If information is not going to increase liquidity, or assist market participants in trading decisions, it should be questioned if this information really needs to be provided. This is particularly relevant when determining whether counterparty names could be published.

Santos does not support the public release of confidential information between willing buyers and sellers and believes the non-reporting of the counterparty name does not change the non-discriminatory nature of the auction process. The names of the transacting parties is not a relevant piece of information to assists buyers and sellers to trade and may breach existing contractual agreements.

Standardisation

Secondary trading of capacity products will also be assisted by the further standardisation of primary GTAs, to ensure that no one party is burdened with more risk than the other. This is something that will need to be worked through with industry, as the value derived from each GTA is specific to the counterparties that negotiate it. GTAs are often long term agreements lasting 10-15 years. Any existing agreements will require grandfathering to ensure that the value negotiated into the contracts are not lost, otherwise compensation may be required to ensure shippers are not disadvantaged through market changes.

Compulsory trading through the platform

As trading markets evolve and mature, they usually follow a standard cycle starting with bilateral negotiated agreements, moving to over-the-counter (**OTC**) contracts that are negotiated via a broker, and finally to exchange traded deals through a clearing house. At this most mature phase the contracts are highly standardised and quick and cheap to execute. The secondary capacity trading market is still in the initial bilateral trading phase and will organically move through the cycles if and when demand for this is sufficient and the market believes there are benefits to do so.

Santos does not believe that restrictions should be put in place to limit the use of prearranged trades. Prearranged trades serve a purpose and bilateral OTC contracts are still active in other mature energy markets (such as in the US and UK). A shipper should have the choice of method when offering their excess short term capacity.

Longer term use it or lose it mechanism

Santos supports the recommendations in the draft report that there is no immediate need to introduce a long-term use it or lose it mechanism. There is no evidence that there is capacity hoarding and initial changes should be implemented and allowed to function for a period of time before the need for such a mechanism is reassessed.

Information Provision

Santos is supportive of the provision of relevant and timely information to the market where it assists participants to make informed decisions and where the benefits outweigh the costs.

Santos believes that the additional information provision paper does not adequately reflect the positions of a number of producers, suppliers and retailers expressed during the information provision working group. The working group was more critical of some of the proposed changes and these criticisms do not appear to have been described adequately in the report. Santos, for example, challenged the relevancy of many of the information provision sections, as it was unclear how the information provisions suggested would actually assist market participants make more informed decisions.

Members of the working group also observed that the majority of the changes were coming from sectors that do not pay for the Gas Bulletin Board (**GBB**) and are not involved in the trading of natural gas and associated services.

Below are specific comments on areas raised from the Stage 2 Draft Report: Information Provision.

Purpose of the Bulletin Board

The proposal to broaden the definition of the purpose of the GBB, in Santos' view actually makes the definition more specific than the current definition. Santos feels that the current definition is broad enough to capture all changes envisaged in this review. There is the possibility this new proposed definition may potentially cause unintended consequences in later years if market requirements change.

The Council's vision for a "*liquid wholesale gas market*"[2] should always be the guiding point for the GBB with the focus on information that will assist participants to make better informed decisions that will facilitate trading. The proposed definition appears to over-reach without applying a business filter. Much of the information requested throughout the document has no demonstrated benefits to wholesale gas producers, suppliers or users.

Santos supports the removal of 142 (b) "emergency management" section of the definition as this no longer is relevant.

Coverage - Upstream activities

There is a significant amount of upstream reserve information available for participants to find and use. Santos, like all producers listed on the ASX is required to publicly release reserve information annually. Moreover, AEMO in their annual Gas Statement of Opportunities (GSOO) collate and list all the reserve information in their working documents, which is also easily accessible on their website. It should also be noted that title holders of petroleum leases are also required to submit annual reports to most state and federal jurisdictions outlining the their reserves positions.

For these reasons, Santos does not support the proposed reporting of reserves on a 6 or 12 monthly basis for publication on the GBB. As an interim measure Santos recommends that the GSOO and the working files are listed on the GBB prior to any additional information requests being made to producers. Once the summarised GSOO information has been viewed and used, it may be appropriate to consider additional requests for producers to supply reserve information based on demonstrated information gaps. However, Santos strongly recommends that there be an initial step and recognition that there is already significant information available in the public domain. Consistent with current reporting, Santos supports the model where the data is obtained from the operator of a joint venture rather than the individual parties.

Santos like many gas market participants model the east coast gas markets including reserves, with information that is generally available. AEMC's infers that mandating this information provision will assist producers to explore more if they can see that reserves are decreasing. This inference demonstrates a lack of understanding on the amount of readily available information gas market as well as the drivers of producers, especially in this low oil price environment.

Likewise the requirement to produce uncontracted reserves may give potential buyers of wholesale gas misleading information as to the availability of gas to be contracted in the customer's time horizon. The reserves calculations look at the amount of resource that is commercially recoverable over the lifetime of a development. This 2P reserves number can be calculated over 40 year life span of the field depending the size and age of the processing facility. Therefore publishing an uncontracted 2P reserve number is no guarantee that the producer has uncontracted reserves for the years that the buyer is interested in. The uncontracted 2P reserves number is therefore not information that will materially influence gas buyers' behaviour.

[2] COAG Energy Council, *Australian Gas Market Vision*, December 2014

Assets used in the provision of hub services

Santos does not support the recommendation that operators of compressors in a gas supply hub should be subject to similar reporting obligations as operators of pipelines, due to limited benefits to the industry and the significant additional cost burden to report on these areas.

Large User Demand

Santos does not support the significant extension of reporting required of LNG users, particularly of note that LNG users are required to report to a greater level than other large users. The basis for this differentiation was due to the potential for LNG users to cause a major impact to the domestic market when there is a disturbance at the LNG plant. Evidence shows that when GLNG has had commissioning disturbances there have not been large volumes of gas that have been sent to market, as mitigations in place within GLNG materially reduce the requirement to dispose of distressed gas, resulting in minimal impacts to the market. These mitigations measures include turndown of the wells, linepack, injection into storage, plus existing commercial arrangements with third parties.

Santos is concerned that making available intraday LNG Plant capacity information may be misleading, particularly if participants believe that this information will provide a signal that there will be a requirement by a project to make gas available to trade. Depending on the extent and duration of any disruption to LNG operations, the mitigation measures outlined above may result in little or no gas required to be made available to the market. The ongoing issue of concern is this potentially inaccurate signal could reduce confidence of the market to utilise the data available on the GBB as it was intended.

In addition, at this point in time several LNG trains have been commissioned at the LNG plants on Curtis Island; this commissioning phase is typically the most volatile period of operation. Therefore going forward the reliability of the LNG plants will likely closely resemble that of other large industrial users (i.e. an ammonia plant etc.) due to the change to an operational phase and the mitigations in place to limit distressed gas.

If, however the AEMC does proceed with the current model of reporting, there should be consistent treatment of all large users (above a specified threshold) as the basis for the arguments for exclusion are not reflective of the historical experiences in the market during the most volatile period, being commissioning of several LNG plants during 2015.

In relation to the comment that "*the publication of an LNG's proponent's pipeline nominations is unlikely to have an effect on competition in the LNG market because the proponents have already sold most of their LNG under long-term contracts and any spot sales will take some time to reach the market*", Santos notes that operators of large facilities would typically have a mix of long-term and short-term contracts as a part of their business, hence this would not create an anomaly that separates the treatment of LNG from other Large Users.

Of particular concern are the implications of LNG and pipeline reporting (intraday, medium and long term capacity outlook) especially where this level of public reporting is not required of the other LNG facilities worldwide, as it is considered confidential information. This over reporting creates a significant disadvantage for Gladstone LNG plants in their transactions within the international LNG market.

Alert system for changes in nominations

Santos does not believe that the benefit of an alert system to make users aware of changes through the gas day would outweigh the cost of implementation.

Reporting gaps and delays

The current GBB requirements are built around the zonal model concept, which (as has been outlined in the Draft Report) does have its limitations. Santos is conscious of the results of eliminating this concept, including the potential to impose GBB requirements on smaller regional pipelines and those areas that are currently not connected to the East Coast market. Santos recommends that there needs to be a conscious decision on what information is really required to meet the COAG vision. Too much information may overwhelm participants, with much of the disaggregated information not being relevant for the majority of trading-related decisions.

Simply removing the zonal model from the GBB rules will result in a large amount of irrelevant information being required to be reported. This will cause an administrative burden on participants and AEMO for little to no benefit for those who are or looking transact in the wholesale gas market. All additional information requests should have a rigorous assessment of the benefits and the costs prior to implementation.

Santos does not support the proposal to amend the procedures to require BB pipelines operating bi-directionally to provide a directional breakdown of actual deliveries and nominations as the netted flow is the data that impacts the market.

Exemptions

Santos does not believe that there is strong case for reducing the exemption threshold from 20 TJ/d to 10 TJ/d. The Draft Report references that the WA market has a 10 TJ/d threshold. However there is no detail given on why the reporting threshold in the WA market should be the benchmark for the East Coast market. The WA domestic market is less than 400 PJ[3] p.a., whereas the East Coast market is forecast to be approximately 1800 PJ[4] this year once all the Gladstone LNG facilities are at full capacity. It appears that even though demand is tripling on the East Coast, the Draft Report recommends a halving of the reporting threshold. This proposal is counterintuitive. Santos recommends that the reporting threshold is at a minimum maintained at 20TJ/d if not increased.

Santos supports the draft recommendations with regard to the proposed changes to the registration provision. Clearly articulating the expectations in the registration process should lead to less erroneous or non-registrations by participants.

Strengthening the compliance framework

Santos understands that there have been no major breaches of the compliance framework and questions the need to impose civil penalty provisions for reporting obligations as this will add cost to the industry covering compliance, where it is unclear what is looking to be improved to assist market liquidity.
Funding arrangements and future development

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[3] IMO, Gas Statement of Opportunities, November 2015
[4] AEMO, *2015 Gas Statement of Opportunities*, April 2015

Santos supports the removal of the GBB cost recovery methodology from the NGR enabling AEMO to incorporate this fee into its broader fee methodology process.

We also support the provision to enable AEMO clearer and more direct responsibility to maintain the GBB, but any updates to the bulletin board would need to have the expressed agreement of industry that use and are paying for the GBB. Any changes made would require industry approval, and would require demonstrating the cost and benefits of the changes.

Closing comments

With all of the approaches outlined in the draft report, there remains a significant amount of work to convert these identified initiatives into actionable changes to the regulatory framework or market rules. It needs to be acknowledged that some of the approaches may result in a fundamental change to how businesses currently operate as well as how parties who have entered into long term agreements under the existing regime will be transitioned to any new regime. Further consideration of any recommendations should also be made that result in additional burden for market participants at a time when the industry is seeking to eliminate costs due to the financial impact of the lower oil price environment. Only those recommendations that have a clear demonstrable impact and benefit should be considered for progression by COAG.

We are supportive of the work currently undertaken by AEMC on this transformation review to date and look forward to working closely to ensure that the roadmap for the future design is clearly defined with actionable and workable steps that will facilitate an effective market.

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

Yours sincerely

Matt Sherwell

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