

26 March 2015

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 Submitted via AEMC website - GPR0003

Dear John,

**RE: East Coast Wholesale Gas Market and Pipeline Frameworks Review, Public Forum Discussion Paper**

Thank you for the opportunity to provide comment on the East Coast Wholesale Gas Market Frameworks Review (Review) Public Forum Discussion Paper (Paper). We note the Review is considering the appropriate structure, type and number of facilitated gas markets on the east coast, the opportunities to improve risk management and any changes to encourage the efficient use of, and investment, in pipeline capacity.

Stanwell's interest in the gas market is as an industrial buyer and trader of gas for the gas-fired Swanbank E and Mica Creek power stations. Swanbank E power station has a capacity of 385MW and is located 10km from Ipswich, QLD. Mica Creek power station is 302MW and is located near Mount Isa, QLD. Stanwell is an active participant in the Brisbane STTM and Wallumbilla hub.

**Stanwell's vision for the east coast gas markets**

Stanwell envisions a single east coast gas market which is liquid, transparent and which provides appropriate signals for investment and supply. Stanwell acknowledges that this vision is a long term goal and that appropriate transition steps must occur. Importantly, existing property rights must be protected.

One proposal for a well functioning east coast gas market may be that modelled on the National Electricity Market (NEM). The NEM is widely acknowledged to be a case study in successful microeconomic reform and has remained robust for 15 years.

Development of the gas market along the lines of the NEM could occur as follows:

East coast gas market proposal	Comparison to NEM	Comment
Participants provide injection and withdrawal bids to AEMO	Electricity generators provide dispatch offers to AEMO. Rather than receiving demand bids, AEMO produces demand forecasts.	Arbitrage between regions is eliminated as AEMO receives all injection and withdrawal information
Gas volumes are scheduled by AEMO	AEMO's NEM Dispatch Engine determines the most efficient combination of generator's dispatch	AEMO would act as an independent market operator who manages the scheduling of gas in order to maintain system security and the most

		efficient use of gas
AEMO calculates and publishes the gas price/s at regular intra-day intervals	AEMO calculates and publishes the wholesale electricity price every 5 minutes for each region in the NEM	Gas prices would reflect the equilibrium price that participants are willing to buy and sell gas
Transportation costs are estimated by AEMO in advance and charged to shippers	AEMO calculates Transmission Loss Factors and Distribution Loss Factors which reduce the wholesale price received by generators	An independent market operator sets cost reflective transport costs. Buyers and/or sellers may be incentivised to locate in areas that reduce transport costs
Gas pipeline investment and revenue is regulated by the AER and buyers pay usage charges based on their consumption	Investment in, and the revenue of, electricity transmission and distribution networks are regulated by the AER in accordance with State based reliability standards. Consumers pay network charges broadly based on their electricity consumption.	The gas network revenue determination by the AER should incorporate all the revenue of the pipeliner. Similar to the electricity networks, the gas pipelines should not be allowed to obtain unregulated revenue which could prevent the development of markets (see Stanwell's comments in the 'Improve the commercial and regulatory environment for infrastructure' section below).
A separate balancing market is operated by AEMO based on offers to provide balancing services by participants and the pipelines. The cost of this service is recovered from consumers.	AEMO operate an ancillary services market to ensure system security. Generators bid to provide this service. The cost of this service is recovered from consumers.	
New producers or consumers connect to the transmission or distribution network through a connection agreement rather than specifying a pathway	Electricity connection agreements specify a location not a pathway	

## **Improve the commercial and regulatory environment for infrastructure**

It is Stanwell's experience that the regulatory framework for pipelines does not provide the right incentives for the efficient allocation of capacity or enough flexibility to promote an active short term market.

Stanwell is supportive of measures to introduce pipeline capacity trading, however, an active market in capacity trading is unlikely to eventuate without changes to the existing pipeline access arrangements and the introduction of regulatory arrangements for nodal points. Currently, regulatory access arrangements allow users to reserve sizable portions of capacity with little or no incentives to release their capacity. This reduces the capacity which is available to smaller and new entrant users. These smaller users will continue to be disadvantaged if larger users with unused capacity do not participate in the capacity trading market.

Further, the existing regulatory environment for gas infrastructure does not provide enough flexibility to promote an active and liquid short term gas market. The arrangements also appear to restrict competition. For example, users are often charged excessive fees for intraday nominations by pipelines. This prevents users from purchasing unused capacity from other parties and instead encourages the purchase of services directly from the pipeline.

The current regulatory arrangements also seem to reward the pipeline for constraints rather than encouraging investment to relieve constraints. This occurs as constrained pipelines lead pipeliners to benefit from enhanced returns on premium, non-standard products.

Although such fees are a commercial decision by pipeline owners, if the regulatory environment rewarded the pipeline owners for their involvement in trading markets, fees which limit gas trading could be reduced. The market requires a regulatory framework that provides for maximum short term trading flexibility.

## **Response to selected AEMC questions**

### *Facilitated markets*

1. Given their performance to date, are the existing markets able to facilitate transactions required to manage current conditions?

- The STTM and Wallumbilla Hub allow participants to trade the differences between their expected usage and their GSA
- These markets do not currently facilitate large, long term transactions at competitive prices
- The markets are limited by participant's access to the underlying infrastructure. This reduces trading and liquidity.

2. Will the current market framework be able to facilitate transactions that may be required to meet future conditions?

- It is likely that the current market will not be able to facilitate future conditions. If producers remain reluctant to secure transport to existing markets, then it is likely that there will be insufficient sellers to ensure effective competition. This situation will



become particularly problematic when gas supply is tight. Ineffective supply side competition will not be in the best interests of consumers.

3. 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?

- The markets are not active enough for a large gas user to rely solely on these markets for large, long term transactions. While futures markets may develop, and these will assist, it will be some time before they will be able to facilitate large transactions.
- The complexity and cost of operating under various market arrangements is also a barrier to entry. In addition, access to infrastructure also limits participation.

4. What opportunities are there for improved integration between the markets?

- Stanwell supports the integration of the east coast gas markets provided the benefits can be shown to outweigh the costs. One possible design for an integrated east coast gas market could be based on the NEM. The details of this proposal are introduced earlier in Stanwell's submission.

#### *The STTM*

1. 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?

- There is no evidence that buyers are relying solely on the STTM for their gas supply, instead preferring to enter into traditional gas supply agreements for the bulk of their requirements and use the STTM for managing "overs and unders" and opportunistic transactions.
- Due to infrastructure constraints and lack of market depth, the STTM does not provide sufficient security of competitive gas supply to new entrants.
- In Queensland, the Brisbane STTM reduces liquidity at Wallumbilla as participants can offer or bid at Wallumbilla at uncompetitive levels knowing that the STTM is available as a last resort market.

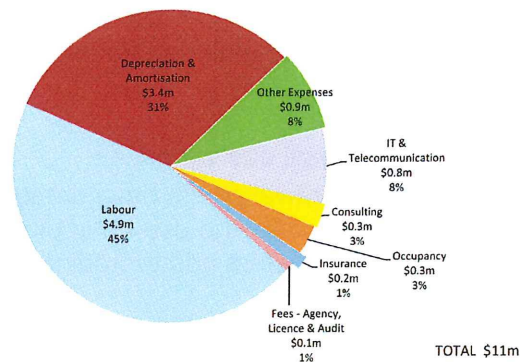
2. Are all STTM hubs (Sydney, Adelaide and Brisbane) delivering value to market participants?

- The STTMs have imposed significant costs on participants. The budget for operating the STTM in 2015/16 is \$11m which is about 8.2c/GJ. As can be seen in the pie chart below, \$4.9m (45%) of the cost of operating the STTM is labour costs. This seems to be very high given market operations should be highly automated<sup>1</sup>.

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<sup>1</sup> AEMO STTM Gas Budget and Fees 2015-2016 <http://www.aemo.com.au/About-AEMO/Corporate-Publications/Energy-Market-Budget-and-Fees>

Figure 2 Expenditure by category 2015-16



3. What design features of the STTM could be improved to reduce costs and improve efficiency? (eg is there a role for intra-day trading?)

- Introduce intra-day trading. This would reduce participant imbalances and therefore reduce balancing charges. However, some users may not have access to their gas consumption data on an intra-day basis.
  - Balancing services are offered by shippers through offers which are set one month in advance. The one month in advance requirement stifles competition as not all shippers can offer on a month ahead basis. Balancing services may be more cost effective if shippers were able to offer services on a day ahead basis. Alternatively, and to offer certainty to participants, balancing services could be performed by the pipeliner at a fixed rate set by the AER. The month ahead balancing in Brisbane also lowers liquidity in the Wallumbilla Hub as participants cannot trade their gas on a day to day basis as it is uncertain what they need to put aside for their balancing obligations
  - Encourage producers and pipeline owners to participate in the STTM
3. 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?
- The market is starting to reflect the underlying supply and demand dynamics. For example in early March the behaviour of QLD gas fired generators appeared to be influenced by an outage at the QCLNG plant. This LNG outage resulted in excess gas making its way to QLD generators direct or indirect via the Wallumbilla Hub and Brisbane STTM gas markets. Stanwell surmised that the LNG outage may have started when most gas fired generation was online and running at high capacity and the Brisbane STTM price dropped from \$4.20 GJ on 7th March down to \$1.61 GJ on the 8th March.

## Wallumbilla Gas Supply Hub

1. Is Wallumbilla adding value to the way participants manage their gas portfolios and what directions should the development of the market take?
  - Yes - Wallumbilla has been helpful for managing small gas variances
  - Limitations on systems and participant supply/withdrawal points have created barriers to trade. This has been somewhat addressed by the use of “in pipe” transfers facilitated by the pipeline, however such transfers add to trading cost.
2. How does trading at Wallumbilla impact on trading in other wholesale markets?
  - Ideally only one market would operate in each region in order to maximise liquidity. The Wallumbilla hub appears to be a superior location in Queensland as it allows integration of interstate and LNG export markets, whereas the STTM is located at the end of a single pipeline. As discussed earlier, the Brisbane STTM reduces liquidity at Wallumbilla as participants can offer or bid at Wallumbilla at uncompetitive levels knowing that the STTM is available as a last resort market.
3. Would the establishment of a GSH at Moomba facilitate additional trade? Would a Moomba GSH impact on liquidity at Wallumbilla?
  - Moomba GSH will allow access to trade for southern participants which should increase liquidity in gas markets overall
  - A Moomba GSH may allow additional participants to trade however it will reduce liquidity at Wallumbilla. It would be better to design market arrangements to improve liquidity at Wallumbilla for example eg gas/capacity swaps across the pipelines. Alternatively, Stanwell supports the development of a virtual hub where participants from either Wallumbilla or Moomba can trade once capacity is secured.
  - If the Moomba GSH goes ahead, there may be some complexity facilitating trades between the GSHs associated with the different start of gas day.
4. 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?
  - Suggestions for improved information provision are answered in question 5) under Transmission Pipelines below



### Transmission pipelines

3. 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?
- Yes there are impediments to short term capacity trading:
    - Non standard contracts
    - Onerous process to get set up
    - Point to point Gas Transport Agreements
    - Inadequate information on available capacity
    - Variance charges on capacity trades between participants can be significant when compared to the variance charges charged by the pipeline and incurred by the secondary buyer of capacity - as discussed earlier in this submission under "Improve the commercial and regulatory environment for infrastructure"
  - These impediments could be addressed by a trading mechanism which allows capacity holders to easily sell capacity and a change to the pipeline regulatory regime which incentivises pipelines to support this market. However capacity trading will only occur at the margins for short periods of time because:
    - Existing shippers are likely to require their contracted capacity during peak periods and so will be able to trade their capacity on an 'as available' basis
    - The majority of buyers require access to a firm transportation service and can't therefore rely on an 'as available' service.
  - Alternatively, a completely new unified east coast gas market design modelled on the NEM (as discussed earlier) would not require the need for capacity trading as the market design would not enable the reservation of capacity
4. Does the increasingly interconnected nature of gas pipelines and markets on 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)?
- Yes, Stanwell supports an approach modelled on the NEM but only if the cost to harmonise the markets does not exceed the benefit and with appropriate transition allowances to protect existing property rights.
5. How useful is the information provided on the Bulletin Board to market participants and what additional information could be provided to facilitate secondary trading?
- Stanwell requests the AEMC provide some clarity on how this Review relates to AEMO's current Bulletin Board redevelopment program. Stanwell supports AEMO's redevelopment work and has provided feedback through the working group.
  - The current Bulletin Board is difficult to use and contains incomplete information. The redevelopment program must clearly define the purpose of the Bulletin Board.
  - The usefulness of the Bulletin Board is often diminished as data is not published by participants on time. There appears to be no penalty or incentive for participants to meet deadlines and for the relevant bodies to enforce the rules.
  - In the context of this review, consideration should be given as to the most appropriate platform for the publication and submission of data. Stanwell would prefer to see further consistency between the existing IT data publication processes currently operated by AEMO for the NEM and that operated by AEMO for the gas markets.
  - The following additional information would aid participant decision making:

- 12 month forecasts of capacity, system adequacy and maintenance information which contains key information in an easily useable format. For example, information on Medium Term Capacity is currently only provided in non standardised PDF form with little detail as to the GJ size of outages<sup>2</sup>.
- Information on intraday pipeline flows and linepack for all pipelines connected to the network - not just regulated pipelines
- Capacity and amount of gas available in storage facilities in QLD including non designated facilities
- The forecast and current amount of pipeline capacity available for storage
- A net system load profile for each demand hub

Thank you for your consideration of Stanwell's response to the Paper. If you would like to discuss any aspect of this submission, please contact Jennifer Tarr on 07 3228 4546.

Regards



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<sup>2</sup> AEMO National Gas Bulletin Board - Medium Term Capacity  
<http://www.gasbb.com.au/Reports/Medium%20Term%20Capacity.aspx>