



**FOR A BETTER WORLD**

Building J, 13 Reo Crescent, Coolaroo, VIC 3048 Australia  
Phone +61 3 9247 4777 Facsimile +61 3 9247 4747  
Visy Industries Australia Pty Ltd ABN 74 004 337 615

[www.visy.com.au](http://www.visy.com.au)

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

**Lodged via:** AEMC website

5<sup>th</sup> October 2015

Dear Mr Pierce,

**Re: Wholesale Gas Markets Discussion Paper**

Visy welcomes the opportunity to make comment on the AEMC's Wholesale Gas Markets Discussion Paper. We acknowledge the lateness of our submission but hope that our input as a gas user can be taken into consideration in the AEMC's further deliberations

Yours sincerely,

(Royce DeSousa)

GM – Energy & Sustainability, Visy Industries Australia

# Introduction

Visy appreciates the AEMC's efforts to re-think the design of east coast gas markets and pipeline arrangements.

Visy recognises there are serious challenges to the efficacy of east coast markets and pipeline access regimes which must be dealt with. Some of these challenges include:

1. High concentration of gas production in very few producers
2. Very few pipeline owners and limited competition
3. Pipelines heavily contracted in many instances and cases of 'capacity hoarding'
4. Limited options available to large end-use buyers of gas for competitive paths to gas procurement (in many cases due to 1,2,3 above)
5. Pressures on market and pipeline arrangements brought to bear by emerging massive and dynamic gas users (Gladstone LNG facilities)

On the other hand, there are some strong aspects to the east coast that have emerged in recent times:

- Well-established DWGM which enabled wholesale buyers AND large end-users such as Visy to buy gas direct 'at the well-head' and take advantage of the 'net pool' DWGM to balance requirements
- Recent STTMs in non-Victorian city-centres which have enabled users to buy 'at the city gate' in an environment where seizing appropriate transmission capacity, to get gas from wellhead to source, is increasingly challenging

Visy recognises the CoAG Energy Council's imperative to improve liquidity and flexibility of gas markets on the east coast and agrees that the Council's vision is the prism through which any proposal for a new or revised market/pipeline frameworks design should be considered.

## COAG Energy Council vision

The COAG Energy Council's vision as noted in the AEMC's (August 2015) Wholesale Gas Markets Discussion Paper is for:

*"the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focussed at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities"*

As the AEMC also succinctly noted in the foreword to its Paper,

*"While natural gas is growing in importance to the Australian economy, **some domestic gas users are facing difficulties negotiating new gas contracts during this transitional period.** In the Commission's view, this **highlights the importance of achieving the COAG Energy Council's Vision of a liquid wholesale gas market and providing participants with greater flexibility when buying and selling gas.** Trading gas through well-functioning markets is also fundamental to **consumers being able to know whether the gas price reflects underlying demand and supply conditions.**"*

From a user's perspective, Visy distils the Council's vision as requiring a market which:

1. addresses user difficulties in striking new gas contracts can be addressed,
2. is liquid and allows participants have greater flexibility when buying and selling gas, and
3. allows users to know whether gas pricing reflects underlying demand and supply fundamentals

## AEMC proposed options

### Virtual Hub options

We note that of the 3 options the AEMC has put forward. Options 2 and 3 have tended to focus on converting some or all regions to Virtual Hubs which would seem to necessitate an "entry/exit" model for pipeline services.

While Visy understands the AEMC's drive in proposing options of this nature is to attempt to increase the number of parties being active in a reduced number of Hubs (and thereby liquidity), we are concerned about (1) the risk and challenge associated with conversion to virtual hubs in some cases, and (2) whether the creation of particular hubs will in fact improve liquidity and properly address the Council's vision

### Physical Hub option

AEMC's Option 1 is a physical hub-centered approach. While a physical hub-centred approach makes more sense to Visy, the replacement of STTMs and DWGM with mere balancing platforms is not supported by Visy for reasons outlined further below.

### EU Market designs

The AEMC's work of surveying and analysing various international markets and pipeline access regimes is commendable and we note that EU markets including the UK's NBP seems to be one of the bases for suggesting the expanded use of virtual hubs in Australia's east coast markets.

It should be noted though that the EU markets referred to are highly meshed in terms of pipeline layout and points of production/source and points of demand – this infrastructure scenario is an ideal foundation for a virtual hub with an entry/exit transmission model – indeed, it would seem to be difficult to see how a physical hub philosophy could be possible in such a context.

In contrast, the east coast of Australia is characterised by long, point-to-point transmission with production and demand located at either end and does not share the EU's meshed arrangement which is most conducive to an expanded Virtual Hub design.

Visy struggles to support deployment of virtual hub based on apparent successful operation in other jurisdictions with meshed systems and would need to see a lot more detail in terms of the advantages in an east coast Australia context to be convinced.

### Entry / Exit transmission model

While there may be benefits, the establishment of an entry/exit model will not, per se, solve the problem of pipeline capacity scarcity which is a key concern for the east coast of Australia as highlighted above.

## **Virtual Hub “Black Box”**

At present, what would happen *within* the proposed virtual hubs remains unclear. Interactions with pipelines, dealing with pipeline capacity and contracting constraints are not canvassed in meaningful detail at this stage.

Transitioning of existing bilateral transmission contracts (some of long duration – 10 years or more) into an entry/exit regime in which all pipelines would presumably be ‘covered’ by regulation.

Both hubs proposed in AEMC’s Option 3 involve, within one hub, pipelines which are both covered and uncovered presently – coverage of all pipelines and transition of tariffs would be a difficult exercise, particularly in the case where there are currently two pipeline paths from production to point of usage where one pipeline path (or at least part of it) is covered and the other is not – eg EGP vs VTS + MSP on Longford to Sydney route.

Victoria appears to function well as a virtual hub of sorts, which the multiple production zones seem to be ideally suited to – critically though, there is one transmission system (and owner in Victoria) allowing a pseudo-entry/exit pricing regime with relative ease.

These complexities require serious deliberation if a virtual hub approach is to be considered.

## **Three options proposed dispense with STTMs and creation of balancing-only markets**

The AEMC-proposed options all seem to dispense with STTMs as markets in their own rights, to be replaced with balancing-only markets.

Visy does not support the removal of STTMs as markets in their own right (nor, for that matter, the removal of the DWGM as a market in its own right, as proposed in Option 1)

## **Importance of STTMs and DWGM – more than balancing points**

### **Detriment to end-users in replacing STTMs with balancing-only hubs**

As pointed out in Visy’s submission on the Stage 1 Review Report by the AEMC, the STTMs have opened up genuine supply alternatives to users that did not exist before the advent of these markets.

Even more critically, the STTMs have allowed users to procure some or all of their gas without the need to contract for transmission pipeline capacity. Users can register either as a conventional wholesale market participant (STTM Shipper) or as an STTM User which does not necessitate the holding of a transmission contract.

The STTMs have therefore provided competitive alternatives to users in the procurement not only of the gas commodity but also of a surrogate form of pipeline capacity – this has been especially critical in particular regions where pipeline capacity has been fully contracted by pipeline owners to large incumbent Shippers - in some cases large tranches of capacity are effectively ‘hoarded’ by some Shippers.

Users have been voting with their feet in regard to the value of the STTM – as AEMO has pointed out, there have been a large number of large users enlisting in STTMs within just the last year as end users start to recognise the benefits (AEMO presentation back in February 2015 highlighting 16 new applicants to the

STTM in the prior 4-5 months). The old paradigm may have been for only wholesale users to trade their own gas but this paradigm no longer applies as end-users begin to expand their direct wholesale participation via STTMs.

There have been legitimate concerns highlighted by many stakeholders about there being too few large participants both in production and wholesaling sectors. STTMs have, at least, opened a partial relief path from this situation for users and conversion of STTM hubs to balancing points only will see a very unfortunate reversion to highly enhanced market power of few parties in the gas supply chain.

### **The importance of STTMs to end users in a “transmission constricted” world**

Many pipelines on the east coast are fully contracted – this is a strong barrier to entry of parties unless capacity trading is effective. To date, capacity trading on some fully contracted pipelines has been limited.

Further, from an anecdotal perspective, there appears to be a large degree of “capacity hoarding” by particular Shippers on particular pipelines. While outside the pipeline owners’ control to a degree, this also forms another barrier to entry to pipeline access by new entrants and end users.

In a context where it is simply not possible to contract relevant pipeline capacity, it’s irrelevant that a user may be able to contract gas upstream of the pipeline as it cannot get it ‘to the city gate’ – apart from buying from a few large retail sellers, a user’s only other avenue to acquire gas ‘at the city gate,’ is currently via an STTM.

Funds collected from this mechanism could be used, for example, to contribute towards the next augmentation required relevant to that pipeline network or part thereof.

### **STTMs and DWGM prices remain a measure of the market**

Some claim that STTM and DWGM prices are irrelevant as a gauge of market supply and demand balance – pricing maybe driven to a large degree by buyer and seller long and short position but the fact is these markets provide an insight into the price that buyers and sellers agree on every single day. As the east coast gas market promises to be highly variable from one day to the next with LNG tanker fill volumes significantly varying on a daily basis, these daily indicators remain critical.

Existing spot market prices can also highlight constraints in supply and/or transmission which will not be exposed by the advent of gas trading (medium and longer term) alone.

Doing away with these markets will send gas-price transparency in the east coast backward, not forward.

## **Challenges to liquidity – commodity options for users**

### **Current challenge to liquidity and price transparency**

At present, apart from trade in spot markets, there are very few indicators of price.

A few large producers bilaterally contract with confidential price and terms and most often in recent times, discussions around pricing are indicated by sellers to be “market-reflective” whereas there are very few publicly available price indicators and it’s difficult to appreciate exactly what the market being reflected actually is.

Apart from buying gas via spot market (which may only be a partial solution to a buyers requirements in any case), large users are typically forced to negotiate bilateral agreements with very few parties in a highly illiquid environment. The other option is of course for users to buy in a conventional retail fashion but in this case, users are paying a premium to retailer for gas which is in any case procured in the same, constrained, bilateral contracting environment

## Visy-proposed Option

Leading from the points made above, Visy's view of key aspects of east coast markets which would be somewhat better equipped for the current landscape of producer and pipeline owner lack of diversity as well as the changing supply and demand landscape linked to Gladstone LNG:

- Retention of STTMs and DWGMs as mandatory spot markets in order to
  - allow end-users another path to gas procurement, and
  - allow end-users the ability to effectively procure transmission capacity where capacity is constrained, difficult to contract or hoarded by large Shippers
  - retain daily price signals reflecting daily supply and demand fundamentals – users can effectively procure 'at the city gate'
- Trading hubs at key physical points in the east coast in order to:
  - promote more liquid medium/longer term trading and gas, and
  - provide users with buying options beyond bilateral negotiations with very few parties
- Tools to address pipeline capacity unavailability
  - Allow wholesale and end-users more ready access to pipeline capacity
  - Provide a disincentive to those hoarding capacity.

### STTM and DWGM retention

As highlighted earlier, these markets should be retained and **not** be scaled back to 'balancing-only' regimes.

Having said this, both market types need to be simplified as they are overly complex and there are a number of risks that are ancillary to pure commodity price risk (eg ancillary services and uplift). These ancillary risks and complexity are a barrier to entry for medium tier and end-user entrants

### Transmission capacity trading and 'capacity hoarding'

#### Possibilities to address capacity hoarding

Capacity hoarding needs to be addressed if transmission access is to be genuinely open.

The use-it-or-lose-it approach employed in some EU markets maybe too blunt as it may target shippers with legitimate capacity acquisition who may have a legitimate endeavour in temporarily acquiring surplus capacity - for example, load expansion.

But other capacity hoarding disincentives could be considered. For example, a price signal to Shippers that increases as poor utilisation of capacity becomes increasingly evident. For example, a price might be attached to the top 10% of capacity procured by a Shipper because it happens to be unused (or used less

than X times in a year) by that Shipper which may encourage the Shipper to divest that unused capacity, unless it desperately requires it (and is therefore able to justify the increased price).

Thought needs to be given as to how money collected from this regime could be used but one idea is to pool the money towards further relevant system augmentation.

### **Capacity trading**

While pipeline owners have made efforts to create capacity trading platforms, they cannot be expected to aggressively drive such platforms as they are in conflict with their current commercial interests – at present, a pipeline owner (within a contract carriage regime) can contract pipeline capacity firm, and if it is unutilised on a day or for a period, it can be resold as say, ‘as available’ capacity – current pipeline owners can therefore have ‘two bites at the cherry’ unless the unutilised capacity is traded (in which case the pipeline owner is simply an intermediary with no material income which creates a relative disincentive to perform this function).

Pipeline trading needs to be conducted and progressed by an independent agency whose objective is to aggressively drive liquid capacity trading

### **Trading hubs**

#### **Additional trading hubs as a means of improving liquidity and flexibility**

Visy believes that additional trading hubs (or indeed, adding a trading capability to existing non-trading hubs such as an STTM) have the strong potential to increase alternatives for gas buyers in an environment where very few producers and parties deal in infrequent bilateral sales. This is in line with the COAG Energy Council’s vision to increase liquidity and flexibility in gas purchasing options for buyers and sellers.

Wallumbilla is obviously an existing case in point where liquidity is increasing. Some focus has been given to Moomba as a possible trading point which also makes sense as a key production zone. However, to date, there has been little discussion of key production zones in Victoria which to date, and in advance of LNG demand, have been the largest sources of gas on the east coast. The Gippsland Basin has been the cornerstone of natural gas supply in the south east of Australia for decades and a logical point for trading relating to gas from that source is Longford/Vic Hub. The Otway Basin has been increasing in prominence and a logical interface for trading for gas from that source is Iona.

Both Longford and Iona are also ideal as they interface with the Vic DWGM allowing buyers to inject gas that they have purchased at the trading hub directly into the DWGM.

A further trading hub should also be considered at the Sydney STTM as a relatively liquid spot market where buyers may be keen to augment STTM spot purchases with traded gas - effectively contract gas could be sourced from any of Moomba, Gippsland or Otway basins but the buyer at the trading hub need not worry about source.

While Visy would like to see trading at Brisbane and Adelaide STTMs, it is unlikely that liquid trading will occur given the relatively small volumes of gas currently sent through these hubs.

Exchange trading should be promoted so that buyers and sellers can readily see what the history of trade has been and what options are available to them, if they choose to buy in a manner other than via bilateral contract or spot purchase, on an anonymous basis.

### **Number of hubs and liquidity**

While some parties have argued that there maybe too few parties to make such hubs liquid, Visy is more optimistic, and provided that participation in these trading hubs remains *voluntary*, participants will soon be able to indicate which hubs are most important to them – the worst case is that some hubs have limited activity (whereas others are more active) – this is much better than status quo where (apart from Wallumbilla which is only emerging, and STTMs which are short term price signals only) there is poor price transparency on the east coast at present.

Visy expects that the Longford/Vic Hub zone, in particular, is likely to be a highly liquid trading point – while this region is currently characterised by infrequent bilateral deals, the scale of injection and usage at this point should provide optimism about potential liquidity at this trading hub

### **Benefits of multiple hubs and spot markets**

The other advantage of multiple trading hubs and spot markets is that participants in the east coast will be able to analyse price variations between regions and, based on differences in transmission and production / demand balance at various points in the market, will be informed to make decisions about altering or optimising the profile of their gas buying or selling. In the longer term, this may also address some market power issues and allow for some equilibration between regions (subject to transmission constraint and production cost variation).

### **Similarity to AEMC Option 1**

In effect, Visy sees its proposed option as somewhat similar to AEMC’s proposed Option 1 but with the important caveat that STTMs and DWGM should retain their status a full spot markets without being scaled back to balancing-only.

### **Summary of proposed hubs and trading points**

Below is a tabular summary and a geographic representation of existing and proposed spot markets and trading points. NB: Source of map including pipelines upon which spot markets and hubs are super-imposed is AEMO (Bulletin Board).



Existing / Proposed	Region / Location and Name		System	Hub Type	Participation	Function
Existing	Victoria	DWGM	Spot Market	Virtual	Mandatory	Allow daily trading of volumes and balancing
Existing	Sydney	STTM	Spot Market	Physical	Mandatory	Allow daily trading of volumes and balancing
Existing	Brisbane	STTM	Spot Market	Physical	Mandatory	Allow daily trading of volumes and balancing
Existing	Adelaide	STTM	Spot Market	Physical	Mandatory	Allow daily trading of volumes and balancing
Existing	Wallumbilla	Hub	Trading Hub (incl Exchange Trading)	Physical	Voluntary	Allows medium/longer term gas trading
Proposed	Longford / VicHub	Hub	Trading Hub (incl Exchange Trading)	Physical	Voluntary	Allows medium/longer term gas trading
Proposed	Iona	Hub	Trading Hub (incl Exchange Trading)	Physical	Voluntary	Allows medium/longer term gas trading
Proposed	Moomba	Hub	Trading Hub (incl Exchange Trading)	Physical	Voluntary	Allows medium/longer term gas trading
Proposed	Sydney	STTM	Exchange Trading Platform	Physical	Voluntary	Allows medium/longer term gas trading

