

**GAS SUPPLY HUB EXCHANGE AGREEMENT  
IMPACT & IMPLEMENTATION REPORT – SUMMARY SECTION**

<b>Issue Number</b>	GSH IIR015		
<b>Impacted Jurisdiction (s)</b>	Queensland All GSH Trading Locations		
<b>Proponent</b>	Roy Kaplan	<b>Company</b>	Australian Energy Market Operator
<b>Affected Gas Markets(s)</b> <ul style="list-style-type: none"> <li>▪ Retail</li> <li>▪ Wholesale</li> <li>▪ Bulletin Board</li> <li>▪ STTM</li> </ul>	Gas Supply Hub	<b>Consultation process (Ordinary or Expedited)</b>	Ordinary
<b>Industry Consultative forum(s) used</b>	GSH Reference Group	<b>Date Industry Consultative forum(s)consultation concluded</b>	25 July 2018
<b>Short Description of change(s)</b>	Amend the Gas Supply Hub – End of Day Benchmark Price Methodology for Wallumbilla and publish a new End of Day Benchmark Price for South East Queensland (SEQ)		
<b>Procedure(s) or Documentation impacted</b>	Gas Supply Hub – End of Day Price Benchmark Price Methodolgy, amendment to Section 3 Methodology		
<b>Summary of the change(s)</b>	Amend the existing Wallumbilla Benchmark price so that it is inclusive of both netted and non-netted day-ahead trades (i.e. all trades between 9am and 5pm in the Day-ahead product)  Publish an end of day benchmark price for the Day Ahead South East Queensland product		
<b>I&amp;IR Prepared By</b>	Mark Anderson	<b>Approved By</b>	Peter Geers
<b>Date I&amp;IR published</b>	17 September 2018	<b>Scheduled date for end of consultation under EA 3.3, 3.4 or 3.6</b>	15 October 2018
<b>Email address for responses</b>	<a href="mailto:Hub_Reference@aemo.com.au">Hub_Reference@aemo.com.au</a>		
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## IMPACT & IMPLEMENTATION REPORT – DETAILED REPORT SECTION

### CRITICAL EXAMINATION OF PROPOSAL

<p>1. Description of change(s) and reasons for change(s)</p>	<p>Currently, the Benchmark Price is calculated as the volume-weighted average of all ‘on-screen’ trades in the day-ahead netted product (those that occur before 1pm).</p> <p>Analysis by AEMO shows that the number of trades that occur after 1pm (non-netted product) has been almost double that which occurs before 1pm (in the netted product).</p> <p>The proposal is to amend the existing Wallumbilla Benchmark price so that it is inclusive of both netted and non-netted day-ahead trades (i.e. all trades between 9am and 5pm in the Day-ahead product).</p> <p>Further, following requests from Industry and with the SEQ being the most liquid location, AEMO considers that it would be beneficial to publish an end of day benchmark price for the Day Ahead South East Queensland product.</p> <p>The SEQ index should provide a more accurate indication of market prices and AEMO is hopeful that as industry participants become more confident in the market indices, derivative markets such as the ASX futures will develop accordingly.</p>
<p>2. Reference documentation</p> <ul style="list-style-type: none"> <li>▪ Exchange Agreement</li> <li>▪ Other</li> </ul>	<p><u>Gas Supply Hub – End of Day Benchmark Price Methodology</u></p> <p><b>Proposal:</b> Amend the Price Methodology to be inclusive of both Wallumbilla Day Ahead Netted and Non-Netted Gas Products.</p> <p>Publish a Day Ahead SEQ index consistent with the revised Wallumbilla methodology</p>
<p>3. The high level details of the change(s) including:</p> <ul style="list-style-type: none"> <li>▪ A comparison of the existing operation with changed operation</li> <li>▪ A marked up version as amended (see section 1)</li> </ul>	<p><u>Current methodology</u></p> <p>The Benchmark Price is currently calculated as the volume-weighted average of all ‘on-screen’ trades in the day-ahead <i>netted</i> product.</p> <p><u>Proposed methodology</u></p> <p>The Benchmark Price to be calculated as the volume-weighted average of all ‘on-screen’ trades in the day-ahead <i>netted</i> and <i>non-netted</i> products.</p> <p>Publish an SEQ Benchmark price consistent with the revised Wallumbilla methodology above.</p>

<p>4. Assessment of significant of change</p> <p>(eg: material, non-material or non-substantial)</p>	<p>The proposed amendment is a non-material change to current market operations with no impact on existing products.</p>
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<p style="text-align: center;"><b>ASSESSMENT OF LIKELY EFFECT OF PROPOSAL</b></p>	
<p>5. Overall Industry Cost / benefit (tangible / intangible / risk) analysis and/or cost estimates</p>	<p>Costs:</p> <ul style="list-style-type: none"> <li>• AEMO anticipate no implementation costs to gas trading exchange members with this proposal.</li> </ul> <p>Benefits:</p> <ul style="list-style-type: none"> <li>• Provide a more accurate indication of market prices by capturing all day ahead trades which in turn aids pricing efficiency and increases market transparency</li> <li>• ASX is hopeful the derivatives markets will develop as participants become more confident in the indices</li> </ul>
<p>6. The likely implementation effect of the change(s) on stakeholders</p> <p>(e.g. Industry or end-users)</p>	<p>Incorporated in section 5 above</p> <p>The proposed amendment will have no impact on existing products and operations, with no anticipated functional changes to existing participant system interfaces and reports (data for monthly transactions will be published in existing reports).</p>
<p>7. Testing requirements</p>	<p>AEMO will carry out testing of the index calculations.</p> <p>No testing will be required from industry.</p>
<p>8. AEMO's preliminary assessment of the proposal's compliance with rule 540(1) NGR:</p> <ul style="list-style-type: none"> <li>- consistency with NGL and NGR,</li> <li>- appropriate with regard to national gas objective</li> <li>- appropriate with regard to likely compliance costs for Operator or Members</li> </ul>	<p><u>Consistency with NGL and NGR</u></p> <p>The publication of an index price is not a requirement in the NGL and NGR.</p> <p><u>National Gas Objective</u></p> <p>The national gas objective is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply.</p>

	<p><u>Potential compliance costs</u></p> <p>AEMO believes the costs to gas trading exchange members in implementing this proposal are minimal. AEMO does not believe there will be any ongoing costs to gas trading exchange members to comply with this proposal.</p> <p><u>Exchange Fees</u></p> <p>In accordance with the National Gas Rules Part 22, 534(3), AEMO is required to consult with gas trading exchange members on the structure, introduction and determination of exchange fees.</p>
<p>9. Consultation Forum Outcomes</p> <p>(e.g. the conclusions made on the change(s) whether there was unanimous approval, any dissenting views)</p>	<p>AEMO presented a Discussion Paper to the GSHRG on the 25<sup>th</sup> July 2018 and requested any concerns with the change progressing to be raised by 8<sup>th</sup> August 2018.</p> <p>Feedback was supportive of the proposed changes.</p>

<b>RECOMMENDATION(S)</b>	
<p>10. Should the proposed changes be made, (with or without amendments)?</p>	<p>AEMO recommends that the proposal should be implemented.</p>
<p>11. If applicable, a proposed effective date for the proposed change(s) to take effect and justification for that timeline.</p>	<p>Proposed implementation date is December 2018.</p>

## ATTACHMENT A

### Documentation Changes

### GAS SUPPLY HUB – End of Day Benchmark Price Methodology

#### 1. Introduction

Clause 10.3 of the gas trading exchange agreement (Exchange Agreement) allows for the Operator to publish a benchmark price for a Product, in accordance with a published methodology.

AEMO has decided to publish an end of day benchmark prices (“EOD Benchmark Price”) for the Day Ahead Netted ~~and Day Ahead Non-Netted~~ Gas Products ~~for the Wallumbilla Trading Location (the “Applicable Product”). This document sets out the methodology to be used to calculate the EOD Benchmark Price. The Benchmark price will be published for the following locations:~~

- ~~(1) Wallumbilla~~
- ~~(2) South East Queensland~~

~~This document sets out the methodology to be used to calculate the EOD Benchmark Price.~~

For the purpose of determining the EOD Benchmark Price, ~~for the Wallumbilla Trading Location~~, references in the methodology to Transactions, Bids or Offers for the Location mean all Transactions, Bids or Offers for the ~~Wallumbilla Trading Locations~~ noted above.

AEMO intends to publish the EOD Benchmark Prices for the Day Ahead Gas Product each day.

The EOD Benchmark Price is subject to change or correction by AEMO at any time.

#### 2. Definitions

Words and phrases in this methodology are either defined in this document or have the meaning given to them in the National Gas Rules or the Exchange Agreement.

#### 3. Methodology

##### Step 1

Subject to the methodology conditions noted below, the EOD Benchmark Price for a day for a Location for the Applicable Product is:

- (a) the volume weighted average price per Unit of all Transactions for the Location for the Applicable Product made on that day; or
- (b) if there are no Transactions made on that day for the Location for the Applicable Product, determined in accordance with Step 2

##### Step 2

The EOD Benchmark Price for a day for a Location for the Applicable Product will be the EOD Benchmark Price published for the previous day for that Location, unless:

- (a) there is an open Bid price at ~~the end of the trading day 13:00 AEST~~ on the day for the Location for the Applicable Product that is higher than the EOD Benchmark Price published for the previous day for that Location, ~~in which case the EOD Benchmark Price for the day will be the highest Bid price at 14:00 AEST on the day~~; or
- (b) there is an open Offer price at ~~the end of the trading day 13:00 AEST~~ on the day for the Location for the Applicable Product that is lower than the EOD Benchmark Price published for the previous day for that Location, ~~in which case the EOD Benchmark Price for the day will be the lowest Offer price at 13:00 AEST on the day~~.

### **Methodology Conditions**

- (a) Only Transactions, Bids and Offers on the Exchange Trayport trading screen will be included in the determination of an EOD Benchmark Price.
- (b) Pre-matched Trades will not be included in the determination of an EOD Benchmark Price.
- (c) Conditional Bids or Offers (i.e. All or None) will not be included in the determination of an EOD Benchmark Price under Step 2.
- (d) Only Bids or Offers for at least 5TJ/day will be included in the determination of an EOD Benchmark Price under Step 2.
- (e) Only Bids or Offers that are open and displayed on the Exchange Trayport trading screen for at least 5 continuous minutes will be included in the determination of an EOD Benchmark Price under Step 2.
- (f) The volume weighted average price per Unit under Step 1 will be calculated to two decimal places.
- (g) Where a there has never been a Transaction, Bid or Offer for the Applicable Product for a Location, the initial default EOD Benchmark Price for the Applicable Product for that Location will be \$5/GJ.