RELIABILITY PANEL AEMC

Reliability standard and settings review 2018

Public meeting

RELIABILITY PANEL

7 March 2018

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Welcome and introduction

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Meeting aims

- The meeting will focus on feedback on the Panel's proposal to keep the market price cap and cumulative price threshold at their current levels.
- EYs modelling of five minute settlement and implications for the Panel's final recommendations on these price settings will also be discussed.
- Issues relevant to the broader market and regulatory frameworks for reliability are outside the scope of this review, and so will not be covered at this meeting. These broader issues are being addressed through the Energy Security Board's proposed National Energy Guarantee and the AEMC's Reliability Frameworks Review.
- Today's focus is on hearing your views and encouraging discussion.
- The Panel will be informed by the contributions made by attendees and will convey relevant information to the entire Panel for their consideration.
- The Panel is to publish the final report by 30 April 2018.

Today's agenda

Time	Agenda Item
1.30 pm	**Welcome and introduction** *Brian Spalding, Chairperson, Reliability Panel*
1.40 pm	**The Reliability Panel's role** *Brian Spalding*
1.50 pm	**The purpose of the market price cap and the cumulative price threshold** *Jackie Biro*
2.25 pm	**Modelling scenarios to date** *Ben Vanderwaal*
2.45 pm	Afternoon tea
3.00 pm	**Five minute settlement** *Ben Vanderwaal*
3.35 pm	**Providing regulatory stability** *Suzanne Falvi*
4.00 pm	**Additional issues** *Lily Mitchell and Rob Prydon*
4.20 pm	**Closing remarks** *Brian Spalding*

The Reliability Panel's role

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Reliability Panel - overview

- The Panel forms part of the Australian Energy Market Commission's institutional arrangements that support the national electricity system.
- The Panel's core functions relate to the safety, security and reliability of the national electricity system. It is established in the National Electricity Law (NEL).
- The NEL sets out the key responsibilities of the Panel. These include:
  - to monitor, review and report on the safety, security and reliability of the national electricity system; and
  - at the request of the AEMC, to provide advice in relation to the safety, security and reliability of the national electricity system.
- The Panel represents a range of participants in the NEM, including consumer groups, generators, network businesses, retailers and AEMO. An AEMC Commissioner chairs the Panel.
- Our work program is largely driven by specific requirements set out in the National Electricity Rules. Generally, our work focuses on determining standards and guidelines, to maintain a secure and reliable power system.

Reliability Panel Work Programme 2018

Meetings

Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Syd	Syd	Phone	Phone	Melb	Phone	Phone	Melb	Phone	Phone	Syd

Monitoring

- **Annual Market Performance Review 2017**
- **Annual Market Performance Review 2018**

Pricing

- **Review of the Reliability Standard and Settings**

System Security work

- **AEMC Emergency Frequency Control Frameworks Review**
  Final report - July 2018
- **Review of Frequency Operating Standards – stage 2**
  Reliability Panel review to recommence mid 2018
- **AEMC Generator Technical Performance Standards Rule Change**
  Final report - July 2018
- **Review of Template for Generator Compliance Programs**
  Reliability Panel review may commence mid 2018

The reliability standards and settings review

- The Panel is required to review the reliability standard and settings every four years.
- This current review is to recommend the standard and settings to apply from 1 July 2020 until the next review.
- Key milestones to date:
  - **6 June 2017** – The Panel published an Issues Paper for public comment and received seven submissions.
  - **21 November 2017** – The Panel published a draft report setting out draft recommendations on the reliability standard and settings, for public comment. We received four submissions on the draft report.
- The Panel is carrying out the review in accordance with the Rules, the Terms of Reference, and guidelines on the review of reliability standard and settings (2016).
- As outlined earlier, the final report to be published by 30 April 2018.

The Panel's draft recommendations

Component	Current and recommended level from 1 July 2020
Reliability standard	A maximum expected unserved energy in a region of 0.002 per cent of the total energy demanded in that region for a given financial year.
Market price cap	**$14,200/MWh ($2017)**
Cumulative price threshold	**$212,800 ($2017)**
Administered price cap	$300/MWh
Market floor price	-$1,000/MWh

Based on the focus of stakeholder comments, the draft recommendations on the MPC/CPT will be the focus of today's discussion

The assessment criteria

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The assessment criteria in undertaking the review

1. The national electricity objective:

‘to **promote efficient** investment in, and efficient operation and use of, electricity services for the **long term interests of consumers** of electricity with respect to….(a) price and reliability…of supply of electricity; and (b) the reliability…of the national electricity system.’

2. The National Electricity Rules:

Clause 3.9.3 A (f) of the Rules states that:

The Reliability Panel may only recommend a market price cap or cumulative price threshold which the Panel considers will:

- allow the reliability standard to be satisfied without the use of AEMO’s powers to intervene under clauses 3.20.7(a) and 4.8.9 (a); and
- in conjunction with other provisions of the Rules, not create risks which threaten the overall integrity of the market.

The assessment criteria in undertaking the review

3. Final guidelines 2016:

The Panel will be guided by the following principles in order to meet the NEO…

Providing a stable, predictable and flexible regulatory environment. The Panel will exercise its judgment so as to achieve predicted outcomes, while reflecting significant changes in market conditions, to support efficient investment and operational decisions by participants.

4. Terms of Reference:

The Panel is to consider how changing the relevant reliability settings may affect price risk management behaviour, including potential impacts on contract markets, and how this may affect investment outcomes in the NEM.

The purpose of the market price cap and the cumulative price threshold

Purpose of the market price cap and the cumulative price threshold (MPC and CPT)

- The regulatory framework for reliability in the NEM is market-based.
- The purpose of the MPC/CPT is to:

  1. **Protect the long-term integrity of the market.**
  2. **Allow investment sufficient to satisfy the reliability standard.**

- The appropriate level of the MPC/CPT can be thought of as occupying a range of reasonable values reflecting likely expected market outcomes.
- **In the short run** a significant change in the MPC/CPT is**:**
  - Expected to impact wholesale energy prices; a lower MPC/CPT should lower average wholesale prices and a higher MPC/CPT should raise average wholesale prices.
  - Unlikely to feed into immediate retail price changes as retail offers reflect a range of factors including the contract hedging position of the retailer, which has the effect of delaying retail price changes in response to wholesale energy price movements.

Purpose of the market price cap and the cumulative price threshold

In the long run:

- An excessively low MPC can be expected to:
  - Undermine investment in new capacity.
  - Result in unserved energy in excess of the reliability standard.
- It is uncertain what the impact on expected average wholesale prices would be as, while there would be a significantly lower maximum price, the average price outcome would depend on bidding behaviour and other factors.
- The reverse is the case for an excessively high MPC/CPT, whereby increased investment in the NEM will deliver reliability in excess of the standard with higher average wholesale prices.

Questions

1. *Does the role of the market price cap change in the current market environment?*
2. *What is the interaction between the market price cap and actual prices paid by consumers? Would a lower MPC reduce energy prices for consumers, in either the long or the short term?*

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Modelling scenarios - update

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Modelling scenarios - update

0.002% USE scenarios

MPC Scenario 1

- 1040 MW retirements in SA

MPC Scenario 2

- 2600 MW retirements in Vic
- VRET 5150 MW

Base costs

- 8% WACC
- $10/GJ gas price (OCGTs)
- CCGTs included with $8/GJ fuel price

High costs

- 10% WACC
- $18/GJ gas price (OCGTs)
- CCGTs not included

High (as is)

Cap defender (OCGT bids $300/MWh)

12% WACC

Half lifetime for OCGTs (15 instead of 30 years)

Modelling scenarios - revised results

MPC scenario	Sensitivity		Theoretical optimal MPC ($/MWh)		Marginal new entrant technology (achieved capacity factor)
			Original	Revised	
MPC Scenario 1 (South Australia)	Base costs		$1,500	$1,500	CCGT (70%)
	High costs	High	$8,900	$8,900	OCGT (3.5%)
		Cap defender	$9,500	**$9,000**	OCGT (2.1%)
		12% WACC	$21,000	$21,000	OCGT (3.5%)
		Half lifetime	>$50,000	>$50,000	OCGT (3.5%)
MPC Scenario 2 (Victoria)	Base costs		$1,500	$1,500	CCGT (70%)
	High costs	High	$23,000	**$12,500**	OCGT (6.3%)
		Cap defender	$24,000	**$21,000**	OCGT (2.0%)
		12% WACC	>$50,000	**$37,000**	OCGT (6.3%)
		Half lifetime	>$50,000	>$50,000	OCGT (6.3%)

Modelling scenarios - updated

Questions

1. *Should the Panel be giving more consideration to a particular scenario or sensitivity?*

Afternoon tea

Five minute settlement

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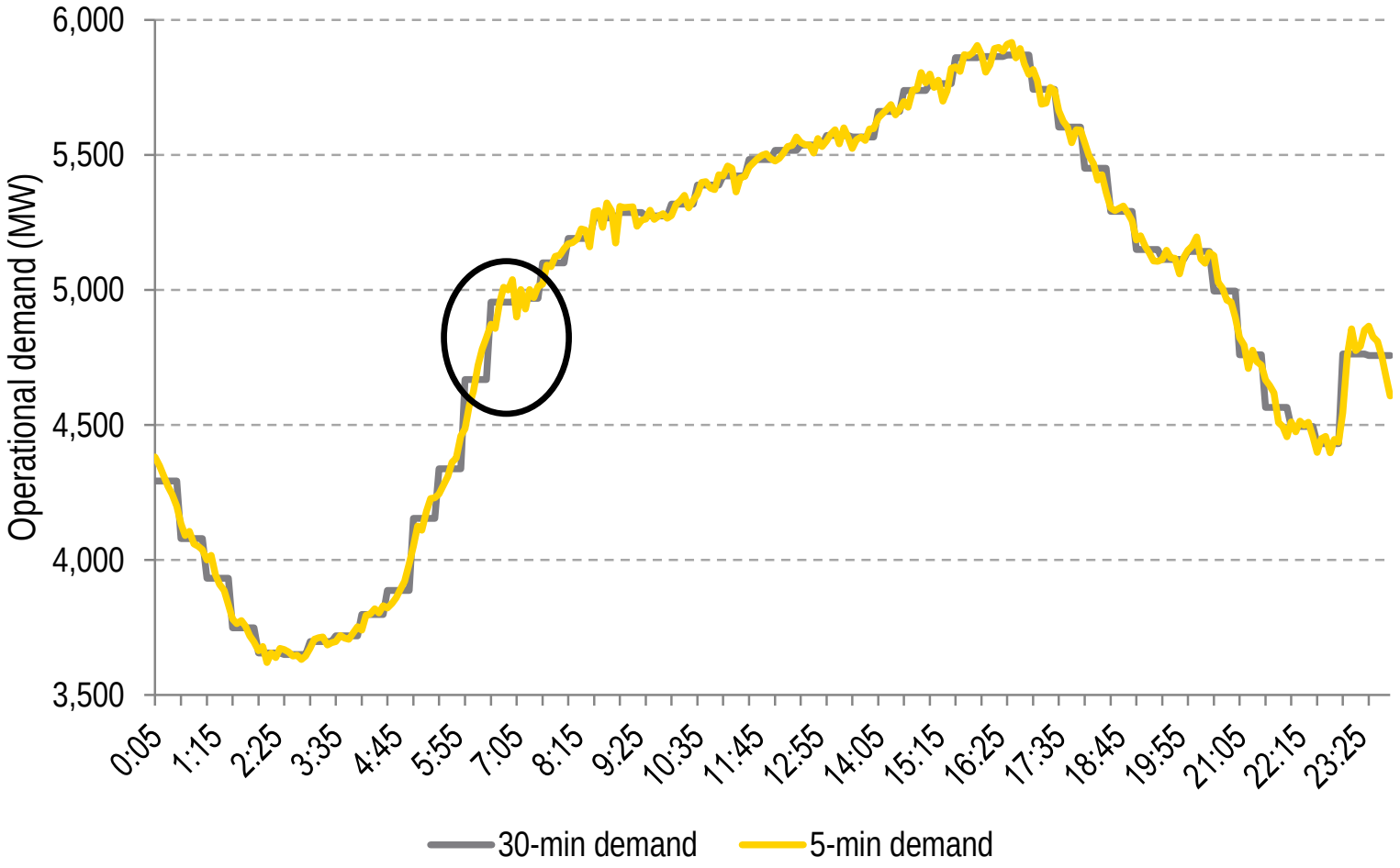
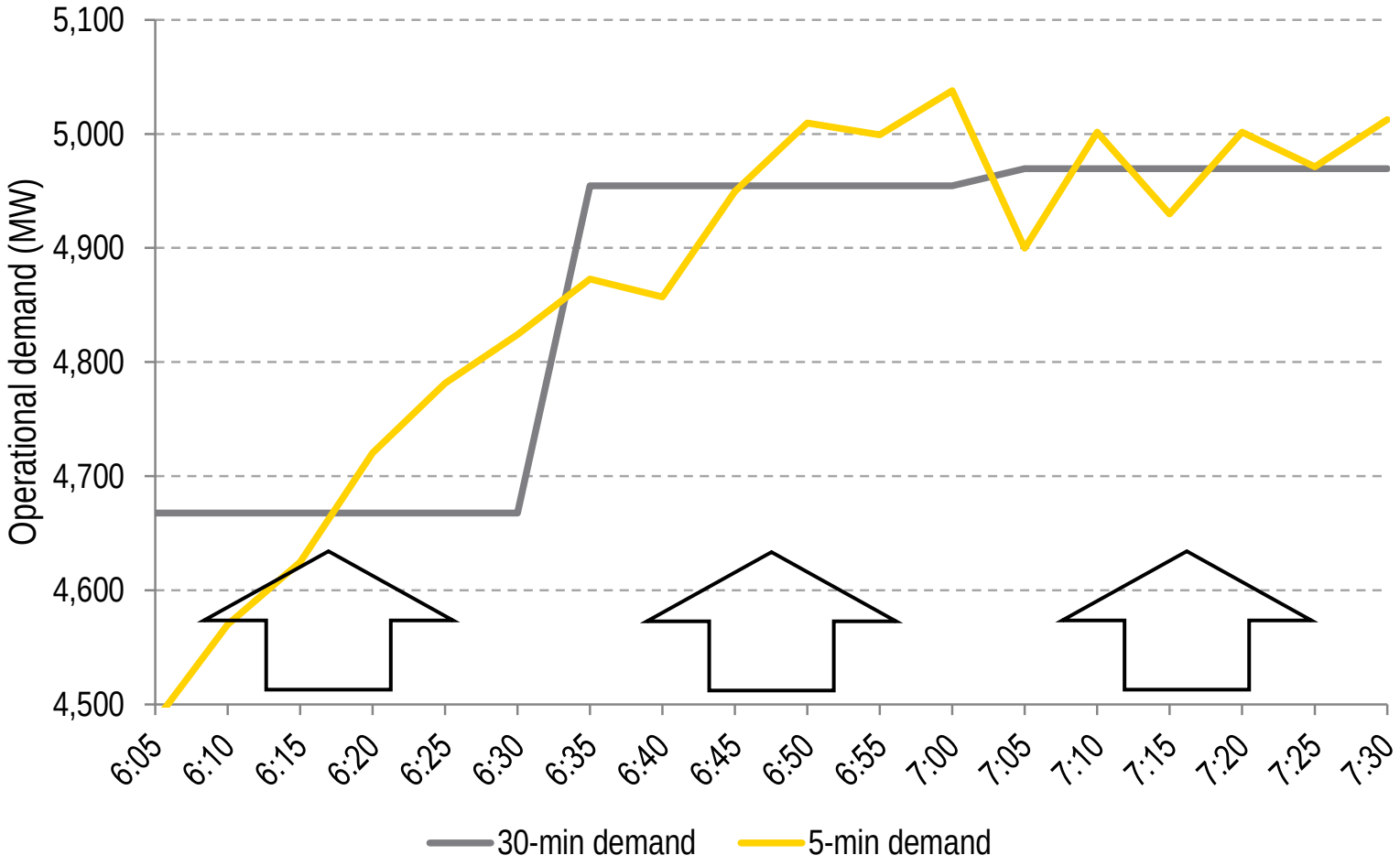
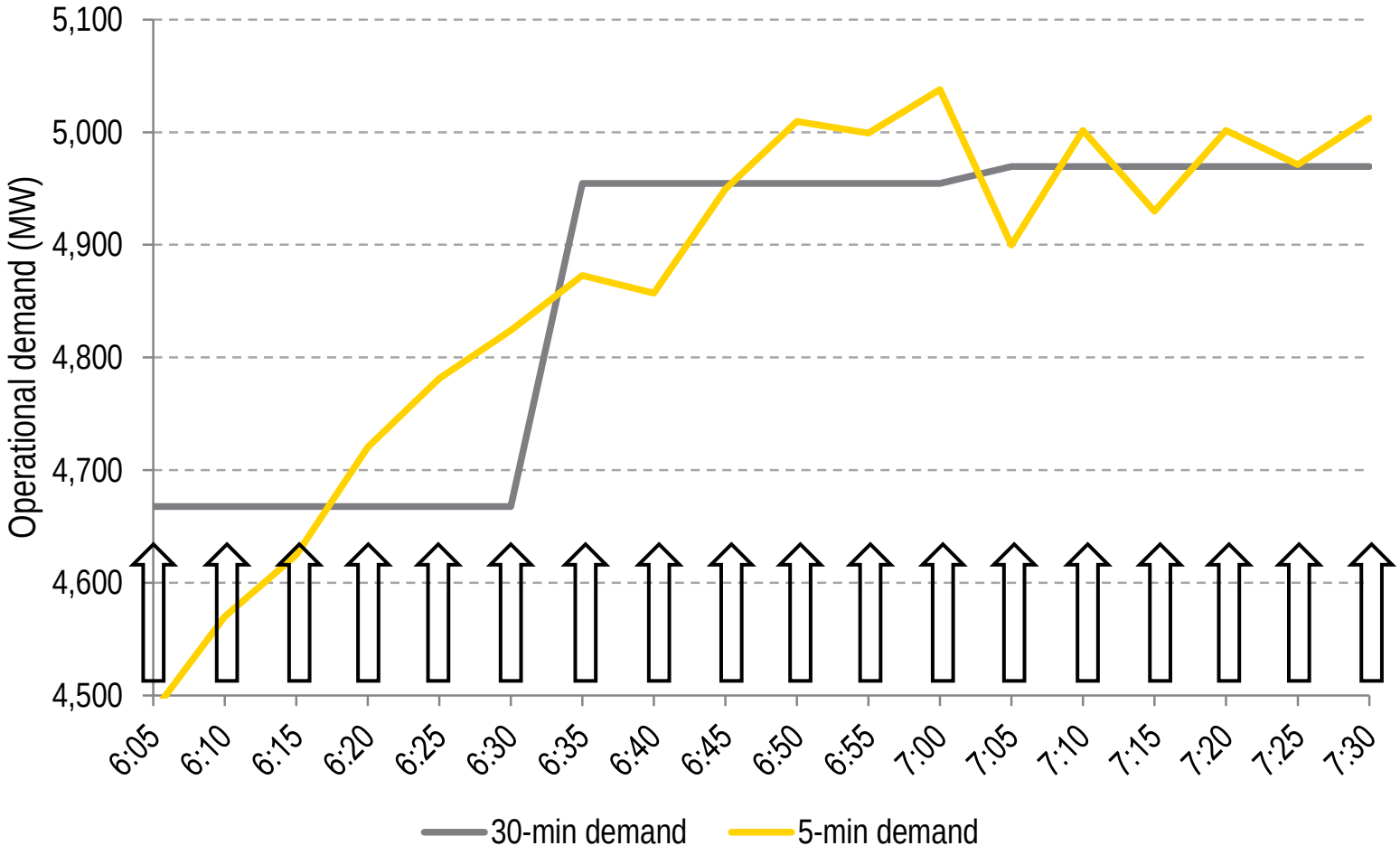
Five minute settlement



Five minute settlement



Five minute settlement



Five minute settlement scenario

MPC Scenario 2

- 2600 MW retirements in Vic
- VRET 5150 MW

High costs

- 10% WACC
- $18/GJ gas price (OCGTs)
- CCGTs not included

Five minute settlement

MPC scenario	CPT	Theoretical optimal MPC ($/MWh)*	
		30-minute modelling	Five-minute modelling
MPC Scenario 2 (Victoria) High costs	Current ($212,800)	$12,500 (-12%)	$11,500 (-19%)
	-5%	$13,000 (-8%)	$12,000 (-15%)
	-10%	$15,000 (+6%)	$13,000 (-8%)

* All modeling results in this table are rounded to the nearest $500.

Questions

- *What are the implications, if any, of the results of five minute modelling for the Panel's final recommendations?*
- *Do you agree with the analysis of interconnections between the market price cap and the cumulative price threshold?*

Providing regulatory stability

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Providing regulatory stability

The Panel does not wish to unnecessarily exacerbate uncertainty in the market. The Panel therefore weighted their draft recommendations in favour of supporting certainty and stability in the national electricity market.

Questions

1. *To what extent is stability of the market price cap and the cumulative price threshold (in nominal terms) important for investment decisions for the period 1 July 2020 – 1 July 2024?*

2. *Do you agree with the Panel's arguments to keep the market price cap and the cumulative price threshold at their current levels?*

Additional issues

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Additional issues - Interventions

In its draft report the Panel considered that reliability-related interventions by AEMO do not suggest a need to alter the level of the market price cap and/or cumulative price threshold.

Question

- *Should the costs of market interventions be incorporated into the setting of the market price cap?*

Additional issues - Long-term market integrity

The Panel considered both prudential requirements and impacts on the contract market that could affect investment outcomes.

The Panel concluded that maintaining the market price cap and cumulative price threshold at the current level or increasing it in line with EY's suggestion would have no material impact on liquidity in the contract market.

Question

- *Are there other threats to the long-term integrity of the market that the Panel should factor into its decision on the market price cap / cumulative price threshold?*

Other issues

The Panel may consider any other issue it considers relevant.

Question

- *Are there issues that the Panel did not examine, or examine adequately, in the draft report that they should take into account in making their final recommendations on the level of the market price cap and/or the cumulative price threshold*?

Closing remarks

- The Panel will consider the meeting outcomes in making their final recommendations, to be published by 30 April 2018.