STTM EVENT – ADMINISTERED EX-POST PRICE – SYDNEY HUB – 19 MAY 2015

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Final

Contents

Glossary

Terms or Abbreviations	Explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
EGP	Eastern Gas Pipeline
GJ	Giga joules
IMT	Information Management and Technology
MIS	Market Information System
MOS	Market Operator Service
MSD	MOS step allocation data (daily file). Note MSD files are only submitted for pipelines.
NGR	National Gas Rules
PAD	Facility Allocation data (daily file). Note PAD files are submitted for all facilities.
NGR	National Gas Rules
RTO	Real Time Operations
STTM	Short Term Trading Market
SWEX	STTM Web Exchanger
SWEXIE	SWEX Interface Engine

1   Summary

On 20 May 2015, AEMO was unable to publish the ex post imbalance price for the Sydney Hub as required by rule 426 of the National Gas Rules (NGR). This was due to a failure by market systems to retrieve validly submitted pipeline allocation data for the Eastern Gas Pipeline (EGP). This failure resulted in the use of default allocation data. In accordance with rule 429 of the NGR, AEMO determined that an administered ex post pricing state applied to the Sydney Hub for gas day 19 May 2015.

There was no market impact from the use of an administered ex post price because there was no impact to the deviation price used in settlements. There were also no impacts in prudential monitoring.

AEMO engaged Oracle to conduct an investigation of this event. Oracle could not diagnose a root cause of the failure. AEMO has since engaged Context Information Security to perform an audit in relation to this event. That audit is currently in progress.

This report has been prepared under Rule 497 of the NGR (for a reviewable[1] event) and Section 7.6 of the STTM Procedures to assess the actions taken by STTM facility operators and AEMO in relation to the event and the event's effect on the operation of the STTM.

All references to time in the report refer to Australian Eastern Standard Time.

2   Background

By 11:00 AEST on each gas day at Sydney, the allocation agent for the relevant STTM facility is required to submit the STTM facility allocation for the previous gas day. For any STTM pipeline, the daily STTM facility allocation notice consists of two files, a facility allocation file and a market operator service (MOS) step allocation file (also known as the PAD and MSD files respectively).

The STTM facility allocations provide AEMO with the delivered quantity of gas for the relevant gas day. The STTM facility allocations are used as an input into the calculation of the ex post imbalance price for the gas day in question. The ex post imbalance price is one of the prices used to determine a trading participant's deviation payment or charge.

If the STTM facility allocations are not submitted by 11:00 AEST, then AEMO systems trigger a warning and an extended period is automatically made available for the allocation agent to deliver the STTM facility allocations for the relevant facility by 15:00 AEST.

If the STTM facility allocations are not submitted by the 15:00 AEST extended window, AEMO will use default allocations for the relevant facility to calculate the ex post imbalance price.

Where there is a market system failure that causes AEMO to be unable to use the STTM facility allocations to produce an ex post price within the timeframe required by rule 426 of the NGR, AEMO will declare an administered ex post pricing state.

3   Description of Events

On 20 May 2015, validly submitted pipeline allocation data files for the previous gas day for the Eastern Gas Pipeline were not able to be used in the determination of the ex post price, causing market systems to use default allocation data instead. AEMO investigated the cause of the provisional ex post price and concluded that it was due to a server performance issue. As a result, a provisional ex post price for Sydney was calculated (and published) using default allocations.

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[1]   For the purposes of this report, the reviewable event is the administered ex post pricing state.

4   Cause of the Event

The immediate cause of the event was poor server performance that caused a delay within market systems, ultimately causing the market systems to use default allocation data instead of actual allocation data. AEMO is currently awaiting the results of an audit to determine whether any changes to market systems could have contributed to the server performance problem.

5   Market Impacts

5.1   Administered ex post pricing state for the Sydney hub

The administered ex post price (being administered at the ex ante price) for the Sydney hub was lower compared to the ex post price if the administered ex post pricing state had not applied (refer to the table below).

Date	Ex ante price	Administered ex post price (i.e. ex ante)	Ex post price (if it was not administered)	MOS Increase Cost	Positive Deviation Price	Negative Deviation Price
19/05/2015	$2.10	$2.10	$2.60	$4.16	$4.16	$2.10

The positive and negative deviation prices are set respectively by the maximum and minimum of the ex ante price, the ex post price and the relevant MOS cost (increase or decrease).

The correct MOS Increase Cost was determined for the gas day because the allocations submitted for EGP were used in the MOS cost calculation. As the maximum of the price inputs, the MOS Increase cost set the positive deviation price.

The ex post price (if not administered) was above the administered ex post price and the ex ante price. As the ex ante price was the minimum of the price inputs, it set the negative deviation price.

Accordingly the positive and negative deviation prices used in settlements were not affected by the administered ex post price and hence there was no market impact from the administered ex post pricing state.

6   Further Assessment of the Event

6.1   Actions taken by participants, facility operators, and AEMO

AEMO's assessment is that STTM facility operators did not contribute to or cause the event, and the event was due to issues within AEMO's market systems.

AEMO support staff responded appropriately to monitoring alarms on the day but were not able to resolve the market systems issue before normal market operation was affected.

AEMO correctly determined that an administered ex post pricing state applied for gas day 19 May 2015 at the Sydney hub under NGR 429. The market was notified of the administered state via MIS report INT666 Market Notice (and also via email/SMS).

6.2   The effect of the reviewable event on the operation of the STTM

As set out in section 5, the market impact of the administered ex post price was zero because there was no change to deviation payments/charges. There were no impacts in prudential monitoring.

6.3 Whether the provisions of Part 20 of the NGR were adequate to address the reviewable event

In accordance with rule 429 of the NGR, AEMO determined that an administered ex post pricing state applied for gas day 19 May 2015, as it was unable to produce an ex post price by using valid facility operator allocation data for the Sydney hub.

The NGR specifically provide for the possibility of AEMO not meeting all its obligations under rule 426 (e.g. not being able to determine an ex post imbalance price using validated data by the required time) by providing for different administered market states in Subdivision 6 of Part 20.

In this instance, there is nothing to suggest that the provisions of Part 20 of the NGR were not adequate.

7 Resulting Actions

To reduce future risk, AEMO coordinated ongoing monitoring of server performance from Thursday 21st May until it was able to add an alert to identify server performance issues.

AEMO is also applying a patch to the relevant market systems to prevent any future server performance issues from causing default allocation data to be used when valid allocation data has already been submitted.

Further actions may result from the completed audit. Participants will be apprised of relevant findings.