STTM INCIDENT REPORT - GAS DAY 8 DECEMBER 2011

PREPARED BY: Market Performance

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Contents

Glossary

Terms or Abbreviations	Explanation
AEST	Australian Eastern Standard Time
AEMO	Australian Energy Market Operator
MOS	Market operator services
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.
RBP	Roma to Brisbane Pipeline
STTM	Short Term Trading Market

1   Summary and purpose

On 9 December 2011, determination of the ex post imbalance price for gas day 8 December 2011 at the Short Term Trading Market (STTM) Brisbane hub was delayed from 1:30pm to 5:30pm. The delayed determination of the ex post imbalance price was as a result of a defect in the STTM systems, which incorrectly triggered a provisional ex post price at the 12:30pm STTM facility allocation submission cut-off time. The provisional and delayed ex post imbalance prices (both $2.6231 / GJ) were calculated using valid allocation quantities submitted by APA for the Roma to Brisbane Pipeline (RBP).

This report reviews the events that resulted in a delayed ex post imbalance price for gas day 8 December 2011.

Please note that all times in this report are expressed in Australian Eastern Standard Time (AEST).

2   Background

On 16 June 2011, changes to the STTM validation and price setting processes became operational. The intent of these changes is to provide STTM facility operators with an ability to rectify possible data errors or confirm that flagged data is correct before that data is used in the STTM scheduling and price setting process.

For any STTM pipeline providing MOS, 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 [1]). These files are typically submitted a few minutes apart. Validations by the AEMO STTM systems are performed as follows:

- *Separate PAD and MSD validations*—validation are performed separately on the facility allocations (PAD) and MOS step allocation file (MSD) for each pipeline facility at the time the pipeline operator submits each file;

- *The PAD/MSD matching check*—a validation is run to check that the total MOS quantities in both the facility allocation file and MOS step allocation file for each pipeline match. This is run at the time the MOS step allocation file is submitted. This validation requires the facility allocation file to be submitted before the MOS step allocation file.

- *The PAD/MSD cut-off check*—in case the PAD and MSD sequence [2] is not followed, the STTM system also performs a daily check, at the submission cut-off time, that there is a valid matching pair of facility allocations and MOS step allocation files for each STTM pipeline. This should be run at 11:00am for the Sydney and Adelaide hubs and 12:30pm for the Brisbane hub.

  In the absence of a matching pair of valid files, default allocations for the relevant STTM pipeline are applied and used as an input into the calculation of the provisional or ex post imbalance price.

3   Incident description

On 9 December 2011, APA submitted an STTM facility allocation file for gas day 8 December 2011 on the RBP at 10:57am and a MOS step allocation file at 11:00:14am, in advance of the 12:30pm cut-off time for the Brisbane hub. These files were within the upper and lower warning limits validations.

On 9 December 2011, the 11:00am validation run for the Sydney and Adelaide hubs performed by the STTM system (which checks that there is a valid matching pair of facility allocations and MOS step allocations at the submission cut-off time) also incorrectly checked files for the Brisbane hub. As the MOS step allocation file was submitted by APA slightly after 11:00am, the STTM system determined that there was not a matching pair and applied a default allocation for the RBP. This

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[1]   Refer to STTM participant build pack and STTM participant build pack business validations addendum.
[2]   For example second PAD file could be submitted which doesn't match the first MSD file.

PAD/MSD cut-off check should not have run at 11:00am for the Brisbane hub (it should run only at 12:30pm). This is the first identified defect in the STTM systems affecting outcomes on the day.

APA submitted a second pair of files at 11:33am and 11:36am in advance of the 12:30pm cut-off time for the Brisbane hub, which successfully passed validations. The second pair of files contained updated allocation data for the RBP.

At the 12:30pm Brisbane hub cut-off time, the STTM systems correctly checked for a matching pair of facility allocations (PAD) and MOS step allocations (MSD) files. This check passed validations. However, the STTM systems incorrectly triggered a provisional ex post imbalance price at 12:30pm. To determine whether to delay the ex post imbalance price and produce a provisional ex post imbalance price by 1:30pm, the STTM system checked for the existence of default allocations. Because the data base had recorded a default flag for the RBP, which had been generated at 11:00am, the STTM systems triggered a delayed ex post imbalance price even though it had been superseded by a valid file pair of files. This is the second defect in the STTM systems affecting outcomes on the day.

The provisional ex post imbalance price generated shortly after 12:30pm incorrectly used the latest facility allocation data submitted by APA at 11:33am. The provisional ex post price should have used the default allocations (also known as the market schedule quantities). This resulted in a provisional ex post imbalance price of $2.6231 /GJ instead of $3.1600 /GJ (had the default allocations been used).[3]

No email or sms notifications were issued to the market at 12:30pm to advise of a provisional ex post price at the Brisbane hub because there were no STTM facility allocations' validation thresholds breached, nor missing STTM facility allocation data, at 12:30pm.

The ex post imbalance price of $2.6231 / GJ was published shortly after the second cut-off time of 4:30pm, correctly using the latest valid data submitted by APA (at 11:33am).

4   Identified causes and rectification

There are two defects identified in the STTM system which together incorrectly caused the determination of the provisional ex post imbalance price and the associated delayed ex post imbalance price. These are:

1. The check that there is a valid matching pair of a pipeline allocation file and a MOS step allocation file for each pipeline facility runs correctly at 11:00am for the Sydney and Adelaide hubs, but incorrectly includes the Brisbane hub. This has been amended so that the Brisbane hub check is run only at 12:30pm.

2. The STTM system checks to see if default STTM facility allocations exist and, if so, this triggers a provisional ex post imbalance price. However, in determining the ex post imbalance price, the system retrieves the latest validated allocation data submitted before the cut-off time. This logical inconsistency is to be modified so that the system checks for the latest allocation data when determining if a provisional ex post price should be triggered, rather than simply just checking for the existence of default STTM facility allocations.

The first system fix, to perform a PAD and MSD matching check only at 12:30pm for the Brisbane hub, was implemented on 22 December 2011. The second system fix is expected to be fixed by the end of February 2012. Note that implementing the first fix makes the second defect unlikely to reoccur.

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[3]   When the STTM system is determining the provisional ex post price, it looks for the last submitted valid files. Had the PAD/MSD check only been run at 12:30pm, then the system would not have generated a default flag nor triggered a delayed ex post imbalance price.

5   Erroneous MIS reports

Due to the first defect, the INT675 default allocation notice published at 11:00am reported that default allocation applied to the RBP. Other than the first defect identified above, INT675 does not have any other defects.

The INT689 Ex post facility allocation quantity report published at 12:32pm incorrectly reported that default allocations were used to determine the provisional ex-post imbalance price for the RBP.

The INT689 Ex post facility allocation quantity report published at 4:32pm incorrectly reported that default allocations were used for the delayed ex post imbalance price. While resolving the first defect, above, will resolve this specific reporting error, INT689 has an existing known defect where it will report erroneously when the ex-post imbalance price is delayed. The fix for this defect has been prioritised for the September 2012 IT release cycle.

6   Compliance issues

APA submitted STTM facility allocations for the RBP in accordance with rules 419(1) and (2), which require submissions be provided by 4.5 hours after the start of a gas day (i.e. 12:30pm).

AEMO market systems incorrectly performed the check that there is a valid matching pair of a pipeline allocation file and a MOS step allocation file at 11:00am, which should not have been performed until 12:30pm for the Brisbane hub. Consequently, at the 12:30pm cut-off, AEMO market systems incorrectly triggered a provisional ex post imbalance price due to the existence of a default allocation flag generated at 11:00am, even though they had been superseded by a valid pair of files which had passed the check at 12:30pm. In this instance, the STTM systems did not comply with rule 426(1A) which allows for the determination of the ex post imbalance price to be delayed until 9.5 hours after the start of each gas day only if:

(a) information provided under rule 419(1) fails a validation undertaken by AEMO in accordance with the STTM Procedures; and

(b) AEMO reasonably considers that the information referred to in paragraph (a) may be substituted in accordance with the STTM Procedures; or

(c) no information is provided under rule 419(1)

The provisional ex post imbalance price was incorrectly calculated using the latest pipeline allocation data submitted by APA at 11:33am instead of the market schedule quantities as per section 7.2.1E(a) of the STTM Procedures (also referred to as the default allocations in this report).

The ex post imbalance price determined shortly after 4:30pm was correctly calculated using the latest data submitted by APA (at 11:33am).

7   Market Impacts

Since the provisional ex post imbalance price was equal to the ex post imbalance price ($2.6231 /GJ), there were no impacts on trading participants resulting from using the provisional ex post imbalance price to calculate the cumulative price for the next gas day or for prudential monitoring.

Furthermore, there has been no reported impact from any trading participant from the delay in publishing the ex post imbalance price, nor for the incorrectly calculated provisional ex post imbalance price and the erroneous MIS reports.