

STTM EVENT REPORT – GAS DAY 19 AND 21 NOVEMBER 2011

PREPARED BY: Market Performance

DOCUMENT REF: STTM ER 11/004

DATE: 8 December 2011

Contents

1	Summary.....	3
2	Event reporting requirements.....	3
3	Background.....	3
3.1	Facility hub capacity and the ex ante market.....	3
3.2	Allocation data and ex post price.....	4
4	Description of events.....	4
4.1	Facility Hub Capacity – Gas Day 21 November 2011.....	4
4.2	Facility Allocation data – Gas Day 19 November 2011.....	4
5	Jemena EGP comments.....	4
6	AEMO's assessment of the actions taken.....	5
6.1	Facility Hub Capacity – Gas Day 21 November 2011.....	5
6.2	Facility Allocation data – Gas Day 19 November 2011.....	6
7	Market Impacts.....	6
7.1	Facility Hub Capacity – Gas Day 21 November 2011.....	6
7.2	Facility Allocation data – Gas Day 19 November 2011.....	6

Glossary

Terms or Abbreviations	Explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
EGP	Eastern Gas Pipeline
NGR	National Gas Rules
MOS	Market Operator Service
STTM	Short Term Trading Market

1 Summary

On 20 November 2011, Jemena Eastern Gas Pipeline (EGP) encountered problems with its IT connectivity to the AEMO market systems resulting in the following:

1. Facility Hub Capacity – Gas Day 21 November 2011

On 20 November 2011, Jemena EGP did not submit the facility hub capacity for gas day 21 November 2011 by the 9:30 AEST cut-off time. In accordance with the National Gas Rules (NGR) and STTM Procedures, the window for the submission of the EGP data was extended to 11:00 AEST. Jemena EGP was unable to submit the facility hub capacity by the extended cut-off time of 11:00 AEST. As a result, the default hub capacity supplied on D-2 was used as an input into the ex ante schedule for gas day 21 November 2011 for the Sydney hub.

2. Allocation data – Gas Day 19 November 2011

On 20 November 2011, Jemena EGP was unable to submit the STTM facility allocations for gas day 19 November 2011 by the 11:00 AEST cut-off time. In accordance with the NGR and STTM Procedures, the submission window was extended to 15:00 hours AEST and the calculation of the ex post imbalance price was delayed to 16:00 hours. Jemena EGP submitted its notice before the extended cut-off time of 15:00 hours AEST. This notice was used as an input into the calculation of the ex post imbalance for the Sydney hub.

This report reviews these events.

2 Event reporting requirements

On 16 June 2011, changes to the STTM validation and price setting processes became operational. The intent of these changes was to provide STTM facility operators¹ 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.

Section 7.6 of the STTM Procedures requires AEMO to publish a report² if:

- data submitted to AEMO by an STTM facility operator under rules 414 or 419 of the NGR fails validation, and has lead to confirmation or substitution of data; or
- an STTM facility operator fails to provide data under rule 414 and 419 and this has lead to the substitution of data.

AEMO must publish the report within 30 business days of the conclusion of the event.

3 Background

3.1 Facility hub capacity and the ex ante market

STTM facility operators provide AEMO with daily estimates of the capacity that their STTM facility has available to deliver gas to the hub on the following three gas days. The hub capacity of the STTM facility limits the quantity of gas the STTM will schedule for delivery to the hub from that facility on a gas day.

Because the facility hub capacity can have an effect on the resulting ex ante schedule, AEMO validates data submitted daily by the facility operators. If the data submitted by the facility operator breaches the validation thresholds or no data is submitted by the required cut-off time on D-1 (09:30 AEST for the Sydney hub), then the submission window is extended for a maximum of 1.5

¹ An STTM facility operator is defined as the operator of an STTM pipeline, STTM storage facility, or an STTM production facility.

² Under clause 7.6 of the STTM Procedures, the report must include: a description of the event; AEMO's assessment of the actions taken by STTM facility operators and AEMO in relation to the event; AEMO's assessment of the effect of the event on the operation of the STTM; and any other matter than AEMO considers relevant.

hours to allow the facility operator time to either confirm that the submitted data is valid or submit new data.

If the facility operator fails to submit hub capacity data by the extended cut-off time, the provisional hub capacity information submitted on previous days for the relevant gas day will be used. For example, if the capacity for the gas day D is not submitted on D-1, then the capacity submitted on D-2 for Gas Day D is used. If the D-2 is not available, then D-3 is used. If that is not available then the default hub capacity (registered with AEMO) is used to generate the ex ante market schedule.

3.2 Allocation data and ex post price

By 11:00 AEST on each gas day, the allocation agent for the relevant STTM facility is required to submit the STTM facility allocation for the previous gas day.

The STTM facility allocations provide AEMO with the final 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 am AEST, then AEMO triggers a warning and an extended period is made available for the allocation agent to deliver the STTM facility allocations for the relevant facility by 15:00 hours AEST.

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

4 Description of events

4.1 Facility Hub Capacity – Gas Day 21 November 2011

On 20 November 2011, Jemena EGP was unable to submit the facility hub capacity for gas day 21 November 2011 by the 9:30 AEST cut-off time. The AEMO systems notified the facility operator and the market that the facility hub capacity had not been submitted.

An extended window was opened for Jemena EGP to deliver the facility hub capacity by 11:00 AEST. Jemena EGP were still unable to deliver the hub capacity by that time. The AEMO systems notified the market that the hub capacity had not been delivered.

The AEMO systems then used the facility hub capacity submitted on 19 November 2011 (i.e. the D-2 hub capacity for gas day 21 November 2011), which was 185,000 GJ.

4.2 Facility Allocation data – Gas Day 19 November 2011

On 20 November 2011, Jemena EGP were unable to submit the STTM facility allocation data for gas day 19 November 2011 by the 11:00 am AEST cut-off time. The AEMO systems notified the facility operator and the market that the STTM facility allocation data for the EGP had not been submitted.

An extended window was opened for Jemena EGP to deliver the STTM facility allocations by 15:00 AEST. Jemena EGP delivered the STTM facility allocation data by 14:03 AEST. This updated data was used as an input into the calculation of the ex post imbalance price for gas day 19 November 2011.

5 Jemena EGP comments

Jemena EGP experienced an unplanned connectivity issue on Sunday 20 November 2011 which delayed the submission of Jemena EGP's facility hub capacity (FHC) for gas day 21 November 2011, and the pipeline allocation data (PAD) and market operator service (MOS) submission for gas day 19 November 2011.

Jemena EGP noted that on this occasion the data files were available for submission but Jemena EGP was unable to upload the files to AEMO on the secure pathway and the AEMO helpdesk was notified.

Whilst Jemena EGP was able to submit the PAD and MOS files before the 15:00 hours AEST deadline, it was not able to meet the FHC submission deadline as required under rule 414(1) of the NGR. The EGP FHC for gas day 21 November 2011 (as well as D-2, D-3) was 185,000 GJ. Jemena EGP noted that this capacity number was consistent with the default hub capacity and as such there was no adverse impact on the STTM.

Jemena EGP advised that the root cause of this incident was faulty IT hardware with no redundancy. The incident was identified by Jemena's network support provider at 02:00 hours EDST on 20 November 2011 when the AEMO link failed and the connectivity switched to a backup link which was subsequently found to be inactive. It was later confirmed that the required connection device had reached end of its useful life and a hardware replacement request was initiated. At 22:30 hours EDST the same day the hardware replacement arrived at the Jemena EGP data centre, however, the part was found to be damaged on arrival. Another hardware replacement request was initiated and the equipment arrived the following day. This hardware was installed at 10:30 hours EDST on 21 November 2011 and tests confirmed market data services for AEMO were available at 12:30 hours EDST on 21 November 2011.

Jemena EGP noted that it was ultimately able to submit the STTM data after working through an interim submission solution with a third party service provider.

A number of incident mitigation actions, including a further investigation of the limited redundancy on the external network link, have been identified by the Jemena IT team and these actions will continue to be implemented until completed.

6 AEMO's assessment of the actions taken

6.1 Facility Hub Capacity – Gas Day 21 November 2011

Jemena EGP did not submit the facility hub capacity by the cut-off time (09:30 am AEST for Sydney) in accordance with rule 414(1) on 20 November 2011 for gas day 21 November 2011. Jemena EGP was also unable to submit the facility hub capacity by the extended window (11:00 AEST for Sydney) in accordance with 7.1.3B of the STTM Procedures. As a result, AEMO used the D-2 facility hub capacity in accordance with rule 414 (2A) of the NGR and clause 7.1.3C of the STTM Procedures.

Market reports of missing data operated as expected. Under Section 7.1.3A of the STTM Procedures, AEMO must notify a facility operator of missing data. This was undertaken by SMS/e-mail messages to the facility operator contacts that are registered in the AEMO systems if no date is received by 09:30 AEST.

Under section 7.1.4 of the STTM Procedures, AEMO must make the capacity information available to trading participants. AEMO generated market information reports and notified the trading participants by SMS/e-mail. This was performed as follows:

- Report INT653 – Ex Ante Pipeline Data report which is published just after 09:30 AEST showed the facility hub capacity the market would use for the Jemena EGP facility for the upcoming gas day as 185,000 GJ. This was the D-2 hub capacity previously submitted by Jemena EGP. The same report published at 11.00 showed the facility hub capacity for Jemena EGP as 185,000 GJ.

SMS/e-mail messages were sent to 24-hour contacts that are registered in AEMO systems for the affected hub advising them that Jemena EGP had failed to submit a hub capacity at 09.30 AEST and again at 11:00 AEST.

AEMO systems operated as expected. The ex ante market price and schedules for gas day 21 November 2011 were produced before 13:00 AEST for the Sydney hub using the D-2 hub capacity data submitted by Jemena EGP on 19 November 2011 for gas day 21 November 2011.

6.2 Facility Allocation data – Gas Day 19 November 2011

Jemena EGP did not submit the STTM facility allocations on 20 November 2011 for gas day 19 November 2011 by 11:00 am AEST in accordance with rule 419 (1). This triggered a warning in the AEMO market systems and a notice was sent to Jemena EGP and to market participants.

Jemena EGP was able to submit the facility allocation information at 14:03 hours AEST, before the 15:00 hours AEST extended cut off time. This allocation information was used to produce the ex post price for gas day 19 November 2011.

- Report INT 657 - Ex Post Market Data Report which is published just after 11:00 AEST showed the provisional ex-post price as \$1.5607/GJ. The same report published just after 15:00 AEST showed the ex-post imbalance price as \$1.5607/GJ. The imbalance quantity for the hub had changed slightly (201 GJ) but the price had not.

SMS/e-mail messages were sent to 24-hour contacts that are registered in AEMO systems for the affected hub advising them that Jemena EGP had failed to submit the STTM facility allocations by 11:00 hours.

AEMO systems operated as expected. A provisional ex post market price was produced just after 11:00 hours AEST and then the ex-post imbalance price was produced just after 15:00 hours AEST for gas day 21 November 2011.

7 Market Impacts

7.1 Facility Hub Capacity – Gas Day 21 November 2011

With few exceptions, Jemena EGP has been submitting 185,000 GJs as a facility hub capacity as its D-3, D-2 and D-1 (ex-ante) facility hub capacity since the commencement of the STTM.

Jemena EGP advises that its ex ante hub capacity for gas day 21 November 2011 was 185,000GJs, which was also the D-2 and D-3 hub capacity for gas day 21 November 2011.

As such, the use of the D-2 capacity for the ex ante market schedule had no financial impact on the scheduling of the Sydney STTM market for gas day 21 November 2011. In addition, there have been no reported impacts from any trading participant.

The facility hub capacity reports are available from the AEMO website at:
http://www.aemo.com.au/data_gas/sttm_data.html.

7.2 Facility Allocation data – Gas Day 19 November 2011

As a consequence of the STTM facility allocations not being submitted by 11:00am AEST, a provisional ex post imbalance price of \$1.5607/GJ was produced by 12:00 hours AEST using a default allocation for the EGP. A delayed ex post imbalance price of \$1.5607/GJ was produced by 16:00 hours for the Sydney hub using the allocation notice submitted by Jemena EGP.

On this occasion, there was no difference between the provisional ex post imbalance price and the delayed ex post imbalance price, noting that the imbalance quantity changed from 14,823GJ to 15,024 GJ (a difference of 201 GJ). The cumulative price for the next gas day used the provisional ex post imbalance price. This resulted in no difference in cumulative price outcomes.

Consistent with the NGR, there was no prudential monitoring run on 20 November 2011 (note that prudential monitoring is run on business days). When prudential monitoring was run on 21 November 2011 (covering month to date) the ex post imbalance price was used to determine the trading participants' exposure for gas day 19 November 2011. This resulted in no difference in

prudential monitoring outcomes). In addition, there have been no reported impacts from any trading participant.

The allocation quantity reports are available from the AEMO website at:
http://www.aemo.com.au/data_gas/sttm_data.html.

In summary, it appears that Jemena EGP has taken steps to address the issue encountered on 20 November 2011 and identified mitigation actions to be followed through. The procedures for data validation, substitution and price setting appeared to work fully as intended under the rules, without material impact on market outcomes.