

STTM EVENT – DELAYED ALLOCATION SUBMISSION – ADELAIDE – 29 JULY 2014

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Glossary

Terms or Abbreviations	Explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
IMT	Information Management and Technology
MAP	Moomba to Adelaide Pipeline
MIS	Market Information System
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.
RTO	Real Time Operations
STTM	Short Term Trading Market
SWEX	STTM WebExchanger
SWEXIE	SWEX Interface Engine
VPN	Virtual Private Network – A virtual (private) network that can be used to securely connect computers physically connected to a larger (public) network



1 Summary

On 29 July 2014, Epic Energy was unable to successfully submit STTM facility allocations (for the Moomba to Adelaide Pipeline) for gas day 28 July 2014 by the 11:00 AEST cut-off time. In accordance with the NGR and STTM Procedures, a provisional ex post imbalance price was published at 11:00 AEST, the data submission window was extended to 15:00 AEST and the calculation of the ex post imbalance price was delayed to 16:00 AEST.

Epic Energy successfully submitted its allocation notice before the extended cut-off time of 15:00 AEST. This allocation notice was used as an input into the calculation of the ex post imbalance price for the Adelaide hub. Both the provisional ex post imbalance price and the 'delayed' ex post imbalance were the same at \$3.3600/GJ.

There was no market impact.

Epic Energy has advised that it has identified system improvement opportunities which when implemented will significantly reduce the likelihood of a failure to submit data as a result of a VPN connection failure.

2 Background

2.1 Event reporting requirements

This report has been prepared under 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 effect of the event on the operation of the STTM.

2.2 Allocation data and ex post imbalance price

By 11:00 AEST on each gas day at Adelaide, 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 notice¹ 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.

3 Description of event

At 09:30 AEST on 29 July 2014, Epic Energy advised AEMO that, due to a VPN connection failure it was unable to submit its allocation notice for the Moomba to Adelaide Pipeline for gas day 28 July 2014.

At the 11:00 AEST cut-off time for the Adelaide hub, the STTM systems checked for a matching pair of PAD and MSD files. As there were none the STTM systems defaulted the facility allocation for the MAP and triggered the delayed ex post price process. A provisional ex post imbalance price of \$3.3600/GJ was determined.

Epic Energy successfully submitted the PAD and MSD files at 13:32 AEST before the extended cut-off time of 15:00 AEST. The completed allocation notice was used as an input into the calculation of the ex post imbalance price for the Adelaide hub.

¹ Refer to Appendix A for more detail on the allocation notice and related validations.



4 Epic Energy's comments in relation to the data submission

Epic Energy has advised AEMO as follows.

"Epic Energy South Australia Pty Ltd (EESA) operates the Moomba to Adelaide Pipeline System (MAPS), and is a Market Participant of the Short Term Trading Market (STTM). EESA operates a Customer Reporting System (termed CRS) for 'semi-automatic' processing of its daily reporting to the market.

EESA undertakes daily verification for data submitted to AEMO. Whilst undertaking this verification process on 29 July 2014 the following sequence of events occurred:

- 9:23 AEST- EESA CRS system prompts EESA operators that PAD and MSD files were not processed;
- 9:30 AEST EESA's operators identify that the VPN connection that operates between EESA and AEMO systems was not operational;
- 10:24 AEST EESA's operators liaise with AEMO support staff who advise that an email with a CSV file would be acceptable to meet the 11:00 AEST deadline, EESA provide the files;
- 11:00 AEST AEMO notifies EESA that data needed to be uploaded using VPN connection and default values would be used until data was submitted. AEMO advised that the national gas rules provided for such an event within a revised submission deadline of 15:00 AEST;
- 12:41 AEST- VPN connection service resumed allowing processing to recommence; and
- 13:32 AEST EESA operators verify with AEMO that uploading of PAD and MSD files had been completed within the 15:00 AEST deadline.

EESA's investigation into why the data was not submitted by 11:00 AEST identified the following contributing factors:

- Failure of the EESA VPN connection with the AEMO system, and
- Misunderstanding in terms of ability to provide alternative file format (CSV upload) impacting timeliness of addressing the failure of the EESA VPN connection failure.

EESA's investigation has identified the following STTM system improvement opportunities:

- Provide alarm to notify Pipeline Control and the IT team of VPN failure to help with early identification of communication system failure.
- Review and ensure understanding of procedure to ensure early activation of secondary VPN link.

EESA believes the implementation of the above items will significantly reduce the likelihood of a failure to submit data as a result of a VPN connection failure."

5 Assessment of the event

Epic Energy did not submit the STTM facility allocations by 11:00 AEST. This lead to an extended period being made available for data submission, allowing until 15:00 AEST for allocation notice submissions. Epic Energy completed its submission of a valid facility allocation notice at 13:32 AEST as allowed under section 7.2.1B of the STTM Procedures.

A provisional ex post market imbalance price was produced just after 11:00 AEST in accordance with the rules. The STTM systems determined the delayed ex-post imbalance price just after 15:00 AEST in accordance with clause 7.2.1C of the STTM Procedures.

AEMO notes Epic Energy's comment about being advised that an email with a CSV file would be acceptable to meet the 11:00 AEST deadline and later being advised that this was not the case.



AEMO support staff have been reminded that participant data cannot be submitted by AEMO on behalf of participants.

Market reporting operated as expected.

- MIS Report INT 675 Default Allocation Notice Report for the MAP was published just after 11:00 AEST because a valid STTM facility allocation notice had not been received by the 11:00 AEST cut-off time.
- MIS Report INT 657 Ex Post Market Data Report which is published just after 11:00 AEST showed the provisional ex-post price as \$3.3600/GJ. The same report published just after 15:00 AEST showed the 'delayed' ex-post price as \$3.3600/GJ.
- MIS Report INT 689 Ex Post Allocation Quantity Report which is published just after 11:00 AEST showed the default allocation data used in the provisional ex post schedule. The same report published just after 15:00 AEST showed the actual allocation data used for the ex-post imbalance price.

An SMS/email message was sent to the market at 11:51 AEST advising a provisional ex post imbalance price had been published due to a missing PAD file.

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

6 Market Impacts

As a consequence of the STTM facility allocations not being submitted by 11:00 AEST, a provisional ex post imbalance price of \$3.3600/GJ was produced using a default allocation for the MAP. A delayed ex post imbalance price of \$3.3600/GJ was produced by 16:00 AEST for the Adelaide hub using the allocation notice submitted by Epic Energy.

On this occasion, there was no difference between the provisional ex post imbalance price and the delayed ex post imbalance price, noting that the market short quantity changed from 253 GJ to 1,027 GJ. As there was no difference between the provisional and delayed ex post prices the cumulative price calculated after each price was determined was the same.

Prudential monitoring outcomes were unaffected since the provisional ex post imbalance price was used to determine trading participants' exposure was the same as the 'delayed' ex post imbalance price.

7 Conclusion

There were no market impacts resulting from the event.

Based on Epic Energy's comments above, it has identified system improvement opportunities which when implemented will significantly reduce the likelihood of a failure to submit data as a result of a VPN connection failure.

AEMO processes for data validation, substitution and price setting fully operated as intended under the rules, without material impact on market outcomes.



APPENDIX A: Facility Allocation data and the ex post imbalance price

By 4.5 hours after the start of 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 gas day starts at 6:30am at the Sydney and Adelaide hubs, and 8:00am for the Brisbane hub.

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 4.5 hours after the start of the gas day, an extended period is made available for the allocation agent to deliver the STTM facility allocations for the relevant facility by 8.5 hours after the start of the gas day.

If the STTM facility allocations are not submitted by 8.5 hours after the start of the gas day, AEMO will use default allocations for the relevant facility to generate the ex post imbalance price by 9.5 hours after the start of the 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 known² as the PAD and MSD files respectively). For each STTM facility allocation notice, the PAD file is required to be submitted before the MSD file and the two files are typically submitted a few minutes apart by the pipeline operators. Validations by the AEMO STTM systems are performed as follows:

- Individual PAD and MSD validations—validations are performed individually 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 (excluding overrun MOS) 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. The MSD submission is rejected if it fails this test.
- The PAD/MSD cut-off check—in case the PAD and MSD sequence³ is not followed, the STTM system also performs a daily check, at the D+1⁴ allocation submission cut-off time, that there is a valid matching pair of facility allocations and MOS step allocation files for each STTM pipeline. Accordingly, this is required to 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 allocation 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.

As far as the NGR and STTM Procedures are concerned these two files are treated as one allocation notice and neither can be considered to be validly submitted without the other.

² Refer to STTM participant build pack and STTM participant build pack business validations addendum at <u>http://www.aemo.com.au/Gas/Policies-and-Procedures/Short-Term-Trading-Markets/Rules-Procedures-and-Interface-Protocol</u>

³ For example, a second PAD file could be submitted which doesn't match the first MSD file.

⁴ D+1 refers to the day after the respective gas day D.