STTM EVENT - ADMINISTERED EX-POST PRICE - SYDNEY HUB - 29 MAY 2013

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FINAL

Contents

Glossary

Terms or Abbreviations	Explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
IMT	Information Management and Technology
MIS	Market Information System
NGR	National Gas Rules
RTO	Real Time Operations
STTM	Short Term Trading Market

1 Summary

On 30 May 2013, AEMO's market systems experienced significant performance issues around 11:00 AM. Key scheduled system tasks failed to start or complete in a timely manner and in an appropriate order. As a result, the ex post price calculations for gas day 29 May for the Adelaide and Sydney hubs failed to initiate automatically and required manual intervention to restart.

Following a manual restart, the ex post price for Adelaide was successfully calculated and published by noon. However, a provisional ex post price for Sydney was calculated (and published) using default allocations due to the delay in completing data transfer of valid facility operator data within AEMO systems. AEMO was unable to address the transfer issue before the 12:00 PM publication time. Subsequently, the provisional ex post price was disapproved after AEMO determined that an administered ex post pricing state applied under rule 429 of the National Gas Rules (NGR).

The reason for the delay in completing the allocation data transfer has been attributed to an unusually high database loading around 11:00 AM. Since then, AEMO has implemented a timing change which transfers data at earlier times thereby reducing the amount of data to be transferred at 11:00 AM.

For Sydney, the market impact of the event from the use of administered ex post price was negligible because there were non-material impacts from changes to deviation payments/charges and in calculating the cumulative price for the next gas day. There were no impacts in prudential monitoring.

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 effect of the event on the operation of the STTM.

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

2 Description of Event

On 30 May 2013, AEMO's market systems experienced significant performance issues between 11:00 AM and 11:15 AM. Key scheduled system tasks failed to start or complete in a timely manner and in an appropriate order. As a result, the ex post price calculations for the Adelaide and Sydney hubs failed to initiate automatically and required manual intervention to restart.

Following a manual restart, the ex post price for Adelaide was successfully calculated and published by 12:00 PM. A provisional ex post price for Sydney was calculated and published using default allocations due to the delay in completing data transfer of valid facility operator data within AEMO systems. While the provisional ex post price was published by 12:00 PM, it was incorrectly produced using default allocations.

AEMO was unable to rectify the data transfer issue before the 12:00 PM publication time and subsequently determined that an administered ex post pricing state applied under NGR 429 and therefore disapproved the published provisional ex post price.

3 Cause of the Event

The reason for the delay in completing the allocation data transfer has been attributed to an unusually high database loading around 11:00 AM.

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

The 11:00 AM time is the most intensive processing time for STTM automated processing, where ex post prices for the Adelaide and Sydney hubs are calculated shortly after the input data transfer processes are expected to be completed. There is a logical sequential processing order for some of these tasks which if interrupted can result in unintended outcomes. High loading from multiple processes running in parallel can impact database server performance to a point where processing is delayed or scheduled jobs time out.

4   Market Impacts

4.1   Administered ex post pricing state for the Sydney hub

As a consequence of the delayed allocation data transfer within AEMO market systems which could not be rectified before the 12:00 PM publication time, AEMO determined that an administered ex post pricing state applied for gas day 29 May 2013 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).

The administered ex post price for 29 May is $5.0100/GJ for Sydney (being administered at the ex-ante price). If the administered ex post pricing state had not applied, the ex post price would have been $5.0088/GJ as the market was long by 396.4 GJ (ie. gas scheduled to the hub was 285,451 GJ and gas delivered was 285,054.6 GJ.

The small difference in price ($0.0012/GJ) had a non-material impact on prudential monitoring since there were no margin calls for any STTM participants which occurred from using the (higher) administered price. The cumulative price for the next gas day was correctly calculated using the administered price, was below the cumulative price threshold (ie. $36.6398/GJ compared to $440/GJ) and therefore did not trigger an administered price cap state.

The prices differences translate to changes in deviation payments/charges as follows:

- Deviation overpayments are $3.45 (ie. parties were overpaid by this amount because of the higher administered price)
- Deviation charges are the same (since the administered price is higher)

The deviation overpayments affected the net market balance (i.e. net market surplus or net market shortfall). The Sydney hub has higher net market shortfalls for the May billing period by $3.45, and this has a consequential impact to the distribution of shortfall charges.

With the administered ex post price, the shortfall charge distribution from the larger net market shortfall made parties worse off.   Parties who benefited from changes in deviation payments/charges had their 'gains' reduced. The net effect is that no participant is either better off by more than $1.16 or worse off by more than $0.42.

The main market impact is from uncertainty among STTM participants about the reliability of AEMO's market systems.

AEMO is not aware of any participant otherwise impacted by this event.

5   Further Assessment of the Event

5.1   Actions taken by participants, facility operators, and AEMO

AEMO's assessment is that STTM facility operators did not contribute to the event and all data required was correctly supplied to AEMO.

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

affected. Market Notices (ie. for the administered ex post pricing state) were issued appropriately.

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

For the purposes of this report, the reviewable[2] event is the administered ex post pricing state that applied at Sydney. Market impacts (including financial estimates) are described in Section 4.

The market impact of the event from the use of administered ex post price was negligible because there were non-material impacts from changes to deviation payments/charges and in calculating the cumulative price for the next gas day. There were no impacts in prudential monitoring.

5.3   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 as it was unable to produce an ex post price by 12:00pm using valid facility operator allocation data for the Sydney hub. Part 20 contemplates the possibility of AEMO not meeting all its obligations (eg. 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.

6   Resulting Actions

AEMO brought forward a planned deployment of a timing change which transfers data at earlier times thereby reducing the amount of data to be transferred at 11:00 AM. This was implemented on 31 May. Monitoring since then indicates that this has been successful in improving transfer times at 11:00 AM.

Other system processes which potentially affect performance have been rescheduled to times which won't run over the 11:00 AM window or have been shifted to alternative servers (where found to be a more appropriate configuration).

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2   Rule 497(2)(a) of the NGR includes an administered ex post pricing state as a reviewable event.