

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2006/D14**

Market Surveillance and Compliance Panel (“MSCP”)

Mr Joseph Grimberg, Chair
Professor Lim Chin
Mr Lee Keh Sai
Mr TPB Menon
Mr David Wong

Date of Determination

24 August 2006

Party

Power System Operator

Subject

Network status file for trading period 36 on 2 February 2006 sent late to market clearing engine

APPLICABLE MARKET RULES

1. Section 8.1 of Chapter 6 provides that:

“8.1.1 The PSO shall, prior to each dispatch period and in accordance with the market operations time table, take the following actions so as to keep dispatch related data current and available for the EMC:

8.1.1.1 conduct such studies as may be necessary to determine the appropriate parameters to be used as inputs to the market clearing engine for the upcoming dispatch period;

8.1.1.2 determine or update, as the case may be, the dispatch related data referred to in Appendix 6G for the dispatch period; and

8.1.1.3 communicate the dispatch related data referred to in section 8.1.1.2 to the EMC.”

Appendix 6A.2 of Chapter 6

According to the market operations time table in Appendix 6A.2, for the real-time dispatch, the latest time to complete updating of dispatch-related data to be provided by PSO to EMC for use in the real-time dispatch schedule is T-5 minutes (ie 5 minutes before the beginning of a dispatch period).

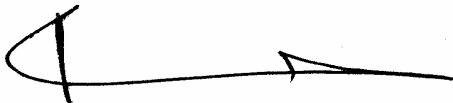
Appendix 6G.1.1 of Chapter 6 provides that:

“The information listed in sections G.2 to G.7 of this Appendix describes the dispatch related data referred to in sections 6.1 and 8.1 of this Chapter which the PSO must produce, revise as required, and communicate to the EMC in accordance to those sections and the applicable market manuals. Except as otherwise specified in these market rules, the EMC shall utilize the latest dispatch related data received from the PSO. In the event that such latest dispatch related data is not uploaded in time for the imminent market clearing engine run, the EMC shall utilize the latest available and uploaded dispatch related data for the market clearing engine run.”

Investigation Findings

2. According to the PSO, on 2 February 2006, the network status file (NWStat file) was created at 17:24:56 hr and sent to the MCE at 17:25:06 hr after the latest time required under the market rules for period 36 ie 17:25:00 hr. Hence the MCE was unable to use the NWStat file for the trading period 17:30 – 18:00 (ie period 36). This happened because an ad-hoc outage scheduler (OS) file creation process was still running when the periodic NWStat file generation process was initiated at 17:20.
3. Due to this simultaneous occurrence, the NWStat file was produced at 17:24:56 and the File Transfer Protocol (FTP) completed transferring the file to the MCE at 17:25:06. As the MCE started its process at 17:25, the MCE was unable to use this NWStat file when it reached the MCE after 17:25. In the absence of the updated NWStat file for uploading in time for the MCE run for period 36, EMC utilized the latest available dispatch related data in its system and uploaded it for the MCE run in accordance with section Appendix 6G.1.1 of Chapter 6 of the market rules.
4. The PSO reported that there was no major network switching, scheduled or unscheduled during the period concerned and there was no network constraint during the time of the incident. Therefore, there was little impact in using the last NWStat file.
5. On 20 March 2006, the PSO implemented a new functionality in the server to confine the ad-hoc running of the outage file to the time windows of 2nd to 8th minute of every hour and the 32nd and 38th minute of every hour. This is an addition to the scheduled OS file generated daily at 19:02. This change will ensure that in future the generation of the outage files will not overlap with the periodic generation of the NWStat file.
6. EMC carried out a re-run for period 36 on the MCE using the “late” NWStat file, and the result compared with that using the last NWStat file showed very little difference in terms of the dispatch schedule and price. Therefore, the incident had no significant impact on the wholesale electricity markets.

7. Based on the facts of the incident, it would appear that the PSO had breached section 8.1.1 of chapter 6 of the market rules when it sent the NWStat file to the EMC late for period 30 on 2 February 2006.
8. On 15 May 2006 the MSCP wrote to the PSO inviting written representations on allegations of potential rule breach of section 8.1.1 of chapter 6 of the market rules by the PSO.
9. On 29 May 2006, the PSO submitted written representations to the MSCP. The PSO said that it did not have any record of committing similar alleged breaches of market rules in the 3 years since the commencement of operation of the NEMS. The PSO said that after the incident on 2 February 2006, the following corrective measures were expeditiously implemented by the PSO on 20 March 2006 at 13:35 hours:
 - (a) The adhoc production of Outage Scheduler file ("OS") had been confined to fixed time periods of between the 2nd to 8th minute of every hour and the 32nd and 38th minute of every hour. These measures have been implemented in addition to the scheduled OS file production at 19:02 hours daily;
 - (b) As the time periods of the adhoc production of OS files are confined within a certain period, PSO would be better able to prevent similar situations. This would then minimize the possibility of any future delays in transmission of the NWStat files to MCE.
10. The MSCP determined on the basis of the facts referred to above that the PSO breached section 8.1.1 of Chapter 6 of the market rules.
11. However, the breach was self-reported, rectified quickly and without significant impact on the wholesale electricity markets.
12. Therefore, the MSCP determined that the appropriate enforcement action to be taken was to issue a letter of non-compliance to the PSO and to direct the PSO to pay costs, fixed at \$1,000.
13. Following the issue of a report by the MSCP recording the facts and circumstances of the breach, section 7.2.17 of the market rules also requires the PSO to provide a report to the MSCP setting out its explanation for the breach, and a plan detailing how it intends to reduce the likelihood of, or prevent, such breaches in the futures. We note that in this case, the PSO has already done so.



Joseph Grimberg
Chair
Market Surveillance and Compliance Panel