

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2009/D2**

Market Surveillance and Compliance Panel (“MSCP”)

Mr Thean Lip Ping, Chair
Professor Lim Chin
Mr Lee Keh Sai
Mr TPB Menon

Date of Determination

23 June 2009

Party

Energy Market Company Pte Ltd (“EMC”)

Subject

Failure to release on time to the PSO the real-time dispatch schedule for period 33 on 9 February 2009

Applicable Rule(s) in the Singapore Electricity Market Rules

1. Section 9.2.1 of Chapter 6

“The EMC shall, prior to the commencement of each dispatch period and in accordance with the market operations timetable, use the market clearing engine to determine for that dispatch period:

9.2.1.1 a real-time dispatch schedule, containing schedules of energy, reserve and regulation for registered facilities, to be released to the PSO, which in accordance with section 9.1.2 of Chapter 5 shall be deemed to constitute the dispatch instructions issued by the PSO to the applicable dispatch coordinators unless and until further dispatch instructions are issued by the PSO to a given dispatch coordinator pursuant to section 9.1.3 of Chapter 5; and

9.2.1.2 a real-time pricing schedule determined by the market clearing engine...including:

- a. energy prices for each market network node;
- b. the uniform Singapore electricity price;
- c. reserve prices for each reserve class and for each reserve provider group; and
- d. regulation prices.”

The market operations timetable in Appendix 6A of Chapter 6 provides for the EMC to begin computing a real-time dispatch schedule using the market clearing engine 5 minutes prior to the beginning of the dispatch period.

The market operations timetable in Appendix 6A of Chapter 6 provides for the EMC to release the real-time dispatch schedule to the PSO prior to 30 seconds before the beginning of the dispatch period.

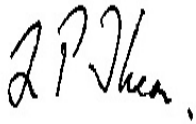
Facts and Circumstances

2. Energy Market Company (“EMC”) made a self-report on 5 March 2009 that it did not release to the PSO the real-time dispatch schedule for period 33 on 9 February 2009 within the deadlines required under the market rules.
3. EMC said that it was notified by the PSO on 9 February 2009 that the real-time dispatch schedule for period 33 was received late from EMC.
4. Under the market operation timetable in Appendix 6A of Chapter 6 of the market rules, EMC is to release the real-time dispatch schedule for period 33 to the PSO by 15:59:30 hrs. However, on 9 February 2009, the real-time dispatch schedule for period 33 was released by EMC to the PSO at 15:59:45 hrs, resulting in 15 seconds delay.
5. For the purpose of dispatch, the PSO, in the absence of the real-time dispatch schedule, used the relevant short-term dispatch schedule in accordance with the system operation manual.
6. On investigation, EMC found that the delay was due to the longer real-time dispatch schedule approval process in the database table used by both the market clearing engine and EMC’s Settlement system. The real-time dispatch schedule approval usually takes only 4 seconds. However, during the incident, the approval process took a long time and the dispatch schedule was thus sent late to the PSO by 15 seconds.
7. EMC said that at the time of the incident, the NEMS system was also processing the settlement reports (SQL reports) with high disk and process utilization from 15:57 to 16:00 hrs. The simultaneous processing of the SQL reports and the real-time dispatch approval resulted in the said approval process taking longer time. The system was back to normal after 16:00 hrs when the processing of SQL reports was completed.

Determination

8. The MSCP had on 9 April 2009 sent a letter to EMC informing EMC that it was of the view that EMC was prima facie in breach of the market rules for the incident on 9 February 2009 and invited EMC to make written representations.
9. On 20 April 2009, EMC submitted a letter with its written representations. EMC said that it had since implemented preventive measures to prevent and reduce the recurrence of such incident.
10. EMC said that it had on 11 February 2009 re-configured the database disks to optimize disk I/O (input/output) to improve overall NEMS system processing. It said that the change had resulted in significant disk I/O performance
11. EMC had also brought forward the system approval timing from the 28th and 58th minutes of every hour to 26^h and 56th minutes of every hour to allow more time for processing with effect from 15 April 2009. EMC said that the change would benefit the market in that there will be early dispatch schedule information to the PSO and the market participants.

12. After taking into consideration the written representations submitted, the MSCP determined that EMC breached sections 9.2.1 of Chapter 6 of the market rules.
13. However, the breach was self-reported, inadvertent, rectified quickly and did not have a significant impact on the wholesale electricity markets.
14. Therefore, the MSCP determined that the appropriate action to be taken was to issue a letter of non-compliance to EMC and to direct EMC to pay costs, fixed at \$1,300.00.



Thean Lip Ping
Chair, Market Surveillance and Compliance Panel