

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL  
MSCP/2005/D1**

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**Market Surveillance and Compliance Panel (“MSCP”)**

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

**Date of Determination**

4 January 2005

**Party**

Energy Market Company Pte Ltd (“EMC”)

**Subject**

Failure to determine and release schedules and publish information for period 16 on 5 February 2004

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**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:

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

The market operations timetable under 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 under 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 commencement of the dispatch period.

2. Section 9.2.3 of Chapter 6

“The EMC shall, in accordance with the market operations timetable, release to the dispatch coordinator for each registered facility a real-time dispatch schedule comprising that portion of the real-time dispatch schedule referred to in section 9.2.1.1 that describes the quantities of energy, reserve by reserve class and regulation scheduled in respect of that registered facility.”

The market operations timetable under Appendix 6A of Chapter 6 provides for the EMC to release the real-time dispatch schedule and real-time pricing schedule engine prior to 30 seconds before the commencement of the dispatch period.

3. Section 9.2.4 of Chapter 6

“The EMC shall, in accordance with the market operations timetable, publish the following information as it pertains to each dispatch period:

- 9.2.4.1 total load;
- 9.2.4.2 total transmission losses;
- 9.2.4.3 total reserve requirements by reserve class;
- 9.2.4.4 total regulation requirements;
- 9.2.4.5 energy prices associated with each market network node at which a generation registered facility or generation settlement facility is located...;
- 9.2.4.6 the uniform Singapore energy price...;
- 9.2.4.7 reserve prices for each reserve class and reserve provider group...;
- 9.2.4.8 regulation prices...;
- 9.2.4.9 any system energy shortfalls reported by the market clearing engine;
- 9.2.4.10 any system reserve shortfalls, by reserve class, reported by the market clearing engine;
- 9.2.4.11 any system regulation shortfalls reported by the market clearing engine; and
- 9.2.4.12 a list of security constraints and generation fixing constraints applied.”


The market operations timetable under Appendix 6A of Chapter 6 provides that the EMC must publish the market information set out in section 9.2.4 of Chapter 6 prior to 30 seconds before the commencement of the dispatch period.

## Facts and Circumstances

4. According to the EMC, the real-time dispatch run for period 16 on 5 February 2004 terminated abnormally prior to completion. As a result, the EMC was unable to determine the real-time dispatch and pricing schedules, send the dispatch schedule to the PSO and dispatch coordinators and publish the relevant information prior to the start of the period.
5. Investigations carried out by the EMC indicated that one of the market clearing engines residing in the IT system had malfunctioned. After removing this market clearing engine, the EMC did not face any problems processing the dispatch schedules for subsequent periods.
6. The EMC requested that its vendor, Hewlett-Packett ("HP") assist in investigating the cause of the malfunction. It was found that a bug in the Windows 2000 Service Pack 2 which was installed in the system had caused the problem as this service pack did not contain patches to remove this particular bug. After this incident, the EMC upgraded the system to use Service Pack 4 which contained the latest patches to prevent this bug from recurring.
7. This incident did not cause a significant impact on the wholesale electricity market.

## Determination

8. On 14 September 2004, the MSCSP issued a letter informing the EMC that it considered that the EMC had prima facie breached sections 9.2.1, 9.2.3 and 9.2.4 of Chapter 6 of the Singapore Electricity Market Rules (the "market rules") and invited the EMC to make written representations. No written representations were received by the deadline stipulated.
9. The MSCSP determined on the basis of the facts referred to above that the EMC breached sections 9.2.1, 9.2.3 and 9.2.4 of Chapter 6 of the market rules.
10. However, the breach was self-reported and had no significant impact on the market. The EMC had taken remedial actions to prevent this incident from recurring. There was also no indication that the EMC had not made a reasonable attempt to comply with the market rules.
11. Therefore, the MSCSP determined that the appropriate enforcement action to be taken is to issue a letter of non-compliance to the EMC and directs the EMC to pay costs, fixed at \$1,000.



Joseph Grimberg  
Chair  
Market Surveillance and Compliance Panel