

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2005/D19**

Market Surveillance and Compliance Panel (“MSCP”)

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

Date of Determination

8 July 2005

Party

Energy Market Company Pte Ltd (“EMC”)

Subject

Failure to determine and release real-time schedule and to publish information for period 25 on 7 November 2004

Applicable Rule(s) in the Singapore Electricity Market Rules

1. Section 9.2.1 of Chapter 6 of the market rules provides that:

“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 in accordance with section D.24 of Appendix 6D, 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 commencement of the dispatch period.

2. Section 9.2.3 of Chapter 6 of the market rules provides that:

“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 in Appendix 6A of Chapter 6 provides that the EMC must release the real-time dispatch schedule to market participants prior to 30 seconds before the commencement of the dispatch period.

3. Section 9.2.4 of Chapter 6 of the market rules provides that:

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

- 9.2.4.1.1 total load;
- 9.2.4.1.2 total transmission losses;
- 9.2.4.1.3 total reserve requirements by reserve class;
- 9.2.4.1.4 total regulation requirements;
- 9.2.4.1.5 energy prices associated with each market network node at which a generation registered facility or generation settlement facility is located...;
- 9.2.4.1.6 the uniform Singapore energy price...;
- 9.2.4.1.7 reserve prices for each reserve class and reserve provider group...;
- 9.2.4.1.8 regulation prices...;
- 9.2.4.1.9 any system energy shortfalls reported by the market clearing engine;
- 9.2.4.1.10 any system reserve shortfalls, by reserve class, reported by the market clearing engine;
- 9.2.4.1.11 any system regulation shortfalls reported by the market clearing engine; and
- 9.2.4.1.12 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 schedule for period 25 on 7 November 2004 was determined and released and the information published after the deadline to do so. The EMC had upgraded its backup application on 6 November 2004. The EMC had tested this upgrade on the IT systems at the Disaster Recovery site before implementing it on the Production IT systems on 7 November 2004 between 1130hrs and 1248hrs. The test was carried out successfully without any problems.
5. After implementing the backup application on the Production IT systems, the dispatch run for period 25 was not completed on time as the Oracle database failed to respond. The EMC's vendor for the database informed the EMC that the reason for this incident was likely to be caused by a lack of memory resources at the time of the dispatch processing.
6. The EMC will carry out future upgrades during the 18 minute window period when no dispatch processing occurs.
7. This incident did not cause a significant impact on the wholesale electricity market.

Determination

8. On 11 April 2005, the MCSP 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 MSCP 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, rectified quickly and without significant impact on the wholesale electricity markets.
11. Therefore, the MSCP determined that the appropriate enforcement action to be taken was to issue a letter of non-compliance to the EMC and to direct the EMC to pay costs, fixed at \$1,000.



Joseph Grimberg
Chair
Market Surveillance and Compliance Panel