

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2007/D11**

Market Surveillance and Compliance Panel (“MSCP”)

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

Date of Determination

31 August 2007

Party

Energy Market Company Pte Ltd (“EMC”)

Subject

Failure to determine, release the short-term schedules for periods 18 and 19 and to publish the relevant information on 24 January 2007

Applicable Rule(s) in the Singapore Electricity Market Rules

1. Section 7.4A.1 of Chapter 6

“The EMC shall, in accordance with section 7.6 and Appendix 6A, determine a short-term schedule corresponding to the nodal load forecast described in section 7.2.1.1.”

According to the market operations timetable, the EMC is required to commence computing the short-term schedule 4 minutes prior to the beginning of the dispatch period.

2. Section 7.7.2A of Chapter 6

“Not later than 25 minutes prior to the commencement of the first dispatch period of the short-term schedule referred to in section 7.4A, the EMC shall, for each dispatch period included in the short-term schedule:

7.7.2A.1 release to the dispatch coordinator for each registered facility the projected schedules for energy, regulation and reserve, by reserve class, for that registered facility;

7.7.2A.2 publish the information described in section 7.7.3; and

7.7.2A.3 communicate to the PSO the projected schedules for energy, regulation and reserve, by reserve class, for each registered facility, together with the information described in section 7.7.3, in accordance with the system operation manual and any applicable market manual.”

3. Section 7.7.3 of Chapter 6

“In accordance with sections 7.7.1, 7.7.2 and 7.7.2A, the EMC shall publish the following information for each dispatch period and for each market outlook scenario, pre-dispatch schedule scenario and short-term schedule:

- 7.7.3.1 the projected total load;
- 7.7.3.2 the projected transmission losses;
- 7.7.3.3 total reserve requirements by reserve class;
- 7.7.3.4 total regulation requirements;
- 7.7.3.5 projected energy prices associated with each market network node at which a generation registered facility or generation settlement facility is located....;
- 7.7.3.6 the projected uniform Singapore energy price....;
- 7.7.3.7 projected reserve prices for each reserve class and reserve provider group....;
- 7.7.3.8 projected regulation prices....;
- 7.7.3.9 any predicted system energy shortfalls;
- 7.7.3.10 any predicted system reserve shortfalls, by reserve class;
- 7.7.3.11 any predicted system regulation shortfalls; and
- 7.7.3.12 a list of security constraints and generation fixing constraints applied.”

Facts and Circumstances

- 4. EMC made a self-report on 7 February 2007 that the short-term schedules for periods 18 and 19 on 24 January 2007 were not processed, sent to the PSO and published on the EMC Trading Website.
- 5. Based on our investigation, there was a failure to determine and release short-term schedules on 24 January 2007 for periods 18 and 19 in accordance with the market rules and to publish the relevant information within the deadlines required under the market rules.
- 6. EMC said that on 24 January 2007, at 7:56 am, it found that the processing of the short-term schedule by the market clearing engine (MCE) had terminated. The Oracle database indicated that there was an “insufficient space error”.
- 7. When the cause of the problem was identified, EMC added additional data storage space to its Oracle database at 8:40 am to permit the MCE processing to continue. The NEMS systems resumed normal operations after that.
- 8. EMC said that the NEMS systems are configured to automatically allocate additional Oracle database data storage space. This was scheduled to occur at 8:40 am on the day of the incident. However, due to the increase in pricing re-runs as a result of irregular Market Network Node (MNN) prices, the database had expanded faster than expected and led to the termination of the short-term schedules before the additional space was added.
- 9. EMC’s immediate action was to add extra data storage space to the Oracle database in order for the MCE to continue as normal. An urgent system change was implemented within a day of the incident to ensure sufficient free space was available in the database before the execution of each and every dispatch schedule.
- 10. To mitigate the risk of future similar occurrences, EMC decided to implement pro-active monitoring of the free space available within the NEMS databases to notify staff in the event of low available space. This was implemented as part of the Server Re-platform project on 11 March 2007.

11. This incident was self-reported, inadvertent, rectified quickly and did not have a significant impact on the wholesale electricity markets.

Determinations

12. On 29 March 2007, the MSCP issued a letter informing EMC that it considered that EMC had prima facie breached sections 7.4A.1, and 7.7.2A of Chapter 6 of the Singapore Electricity Market Rules (the 'market rules') and invited EMC to make written representations. No written representations were received by the deadline stipulated.
13. The MSCP determined on the basis of the facts referred to above that EMC breached sections 7.4A.1 and 7.7.2A of Chapter 6 of the market rules.
14. However, the breach was self-reported, rectified quickly and without significant impact on the wholesale electricity markets.
15. 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 \$1,000.00.

A handwritten signature in black ink, appearing to read 'Lim Chin', with a horizontal line extending to the right from the end of the signature.

Lim Chin
for Chair, Market Surveillance and Compliance Panel