DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2007/D15

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 and release real-time schedule for period 37 and to publish relevant information on 20 March 2007

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.

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 prior to 30 seconds before the beginning 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 in 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 beginning of the dispatch period.

Facts and Circumstances

4.   Energy Market Company ("EMC") made a self-report on 03 April 2007 that the real-time schedule for period 37 on 20 March 2007 was not sent to the PSO and published on EMC's Trading Website.

5. According to EMC, from 17 March 2007 to 19 March 2007, it noticed that there was an intermittent problem which resulted in the dispatch related data files from PSO arriving late to the NEMS systems. EMC decided to investigate the cause of delay by performing network traffic monitoring and analysis. EMC intended to use the "Netscout" hub to monitor the network traffic data.

6. On 20 March 2007 at approximately 2:00pm, EMC issued commands to the Cisco Switch to monitor the incoming and outgoing traffic from the ports of two Application Weblogic servers to a free port on the network switch (called "destination port"). At 5:55pm, a network cable was connected between the "destination port" and the Netscout hub.

7. At 5:58pm, EMC noted that there was a network connectivity problem on both Application Weblogic servers. At 6:01pm, EMC was notified of an issue with the real-time dispatch schedule by the monitoring system. EMC suspected that a fault with the new network cable was the cause of the connectivity problem. The cable was immediately disconnected and network connectivity with the two Application Weblogic servers was immediately restored.

8. At 6:45pm, EMC connected a new network cable from the "destination port" to the Netscout hub. This was done without any issue and the network traffic was monitored successfully.

9. EMC has since the incident, been unable to observe the problem involving late dispatch related data files from the PSO.

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

Determinations

11. On 24 May 2007, the MSCP issued a letter informing EMC that it considered that 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 EMC to make written representations. No written representations were received by the deadline stipulated.

12. The MSCP determined on the basis of the facts referred to above that EMC breached sections 9.2.1, 9.2.3 and 9.2.4 of Chapter 6 of the market rules.

13. However, the breach was self-reported, rectified quickly and without 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 $1,000.00.

Lim Chin
for Chair, Market Surveillance and Compliance Panel