National Electricity Market of Singapore

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2008/D9**

Market Surveillance and Compliance Panel ("MSCP")
Mr Thean Lip Ping, Chair
Professor Lim Chin
Mr Lee Keh Sai
Mr TPB Menon

Date of Determination
15 July 2008

Party
Energy Market Company Pte Ltd ("EMC")

Subject
Delay in validating offer variations on 15 March 2008

Applicable Rule(s) in the Singapore Electricity Market Rules

1.   Section 5.6.1 of Chapter 6

      "Where the EMC receives any offer, it shall:
      5.6.1.1   stamp the offer with the time that it was received;
      5.6.1.2   within five minutes, confirm receipt of the offer; and
      5.6.1.3   within five minutes, validate the offer in accordance with section 5.7.1 and
                 release information indicating that the offer has been:
                 a.   accepted as valid; or
                 b.   rejected, with reasons for the rejection."

Facts and Circumstances

2.   Energy Market Company ("EMC") submitted a self-report on 27 March 2008 that one of the
      offer variation batches (batch no: 171279) received at 7:57 am on 15 March 2008 was not
      validated until 8:06 am. Under the market rules, EMC is required to validate all offers
      received from market participants within 5 minutes of receipt.

3.   EMC said that at the time of the incident, the Oracle Offer Validation process was affected
      as it was competing with some other Oracle processes waiting for the same internal Oracle
      resources.

4.   A similar incident had occurred on 5 November 2007, but EMC was unable to determine
      the exact cause of that incident.

5. However, for this incident, EMC had identified the root cause. EMC said that this particular issue occurred in the NEMS Oracle database whenever one of the back end jobs which recompile all invalidated objects within the database overlaps with the offer loading process which also uses the same objects. The overlapping of the processes causes longer waiting time within Oracle database memory processes.

6. EMC further revealed that it had successfully reproduced this issue in its User Acceptance Test database. EMC had also implemented in the NEMS Production database an urgent change on 19 March 2008 to turn off the explicit compilation of invalidated objects. This turning off avoided the higher internal Oracle memory waiting times within the database. As a result of this change, the Oracle database will now internally manage the compilation of invalidated objects on a request basis with no impact on the NEMS System.

7. EMC said that offer batch no: 171279 from a market participant was affected. However, as the relevant offers were processed in the market clearing engine run, there was no material impact on the market participant and the wholesale electricity markets.

Determination

8. On 30 June 2008, the MSCP issued a letter informing EMC that it considered that EMC had prima facie breached section 5.6.1.3 of Chapter 6 of the Singapore Electricity Market Rules (the 'market rules') and invited EMC to make written representations. EMC replied that it would not be making representations.

9. The MSCP determined on the basis of the facts referred to above that EMC breached section 5.6.1.3 of Chapter 6 of the market rules.

10. However, the breach was self-reported, inadvertent, rectified quickly and without material impact on the wholesale electricity markets.

11. 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.

Thean Lip Ping
Chair, Market Surveillance and Compliance Panel