

**DETERMINATION OF THE MARKET SURVEILLANCE AND COMPLIANCE PANEL
MSCP/2013/D4**

Market Surveillance and Compliance Panel (“MSCP”)

Mr Thean Lip Ping, Chair
Professor Lim Chin
Mr Lee Keh Sai
Mr TPB Menon
Mr Philip Chua

Date of Determination

26 September 2013

Party

Energy Market Company Pte Ltd ("EMC")

Subject

Energy Market Company's failure to release real-time and short-term dispatch schedules to the Power System Operator on 22 May 2013

FACTS AND CIRCUMSTANCES

1. EMC submitted a self-report on 21 June 2013 that it did not release the real-time dispatch schedules for period 37 and the short-term dispatch schedules for period 38 on 22 May 2013 to the Power System Operator (“PSO”).
2. On 22 May 2013, EMC performed the Disaster Recovery Preparedness (DRP) Exercise to switch the National Electricity Market of Singapore (NEMS) System from Production site to Disaster Recovery (DR) site between 4.35p.m. and 5.35p.m. This exercise was conducted as part of EMC's annual disaster recovery work plan.
3. At 5.57p.m., on 22 May 2013, the PSO informed EMC that it had not received the real-time dispatch schedule file for period 37 (starting 6.00p.m.) from EMC. The short-term dispatch schedules for period 38 were also not sent to the PSO.
4. EMC found that its failure to release the real-time dispatch schedules for period 37 and short-term dispatch schedules for period 38 to the PSO on 22 May 2013 was due to the file transmissions being wrongly directed to an EMC's test server, instead of the PSO's server.
5. During the system test for the Server Replacement Project (SRP) in December 2012, the Production and backup DR server configurations were updated to direct the file transmissions to EMC's test servers.

6. Prior to the SRP going live on 21 March 2013, there was a change release to direct the file transmissions for both the Production and DR systems to the PSO's server. However, the implementer of the change release accidentally omitted the DR system and only normalized for the Production system. Since the Production system was the primary system for operations at the time, the NEMS System was not affected by this omission.
7. When the NEMS System was switched from Production site to DR site on 22 May 2013, the DR system became the primary system for the NEMS. Since the file transmissions for the DR system were directed to EMC's test server at the time, the real-time dispatch schedules and short-term dispatch schedules were not sent to the PSO.
8. There were four checkpoints to detect file transmission issue in the DRP Exercise procedures. According to these procedures, an appointed EMC staff will verify the file transmission with the PSO at 4.56p.m., 5.01p.m., 5.26p.m. and 5.31p.m. prior to releasing the schedules to the market at 5.36p.m. However, these verifications were not performed, resulting in the error going undetected.
9. The incident was resolved at 6.15p.m. The dispatch file delivery to the PSO resumed from period 38 onwards on 22 May 2013.
10. EMC conducted a DRP post mortem on 23 May 2013. The importance of following all IT procedures were re-emphasized to its IT staff. EMC had also taken disciplinary action on the staff who failed to follow the relevant procedures in this incident.
11. EMC will be introducing a designated "Checker" role, in addition to the existing DRP Coordinator role, to counter-check that all DRP Exercise procedures are successfully completed before the release of the NEMS System to the market.
12. On 19 August 2013, the MSCP wrote to inform EMC that it considered that EMC had prima facie breached sections 7.7.2A.3 and 9.2.1.1 of Chapter 6 of the Singapore Electricity Market Rules (the "market rules") and invited EMC to make written representations. EMC replied on 26 August 2013 that it would not be making written representations.

APPLICABLE MARKET RULES

13. Section 7.7.2A of Chapter 6 of the market rules provides that

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, 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*.

14. Section 9.2 of Chapter 6 of the market rules provides that





- 9.2.1 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 that the EMC shall issue real-time dispatch schedules to the PSO prior to the beginning of each dispatch period.

ENFORCEMENT

15. Based on the evidence available, the MSCP determined that EMC breached sections 7.7.2A.3 and 9.2.1.1 of Chapter 6 of the market rules. Accordingly, the MSCP wrote to EMC on 5 September 2013 informing EMC of the breaches, and invited EMC to make written representation before the MSCP decides on the quantum of financial penalty and costs.
16. EMC replied on 11 September 2013 that it would not be making written representations. However, EMC urged the MSCP to take into consideration EMC's diligence in resolving the matter expeditiously with negligible adverse impact on the market as well as EMC's commitment in ensuring the smooth and reliable operation of the NEMS system and maintaining the operational integrity of the market.
17. This incident was self-reported and had no significant impact on the wholesale electricity markets. EMC has also taken remedial actions to prevent recurrence of the problem.
18. EMC has the necessary IT procedures in place. This rule breach would have been averted if the two EMC staff had followed the IT procedures diligently.

19. The MSCP determines that a financial penalty be imposed on EMC for breaching sections 7.7.2A.3 and 9.2.1.1 of Chapter 6 of the market rules on 22 May 2013. The MSCP assesses the penalty in the sum of \$3,000 after taking into account all the relevant circumstances. The MSCP hereby directs that EMC pays the sum of \$3,000 as financial penalty and costs of investigation fixed at \$1,500. The total sum of \$4,500 is to be paid forthwith.

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