FACTS AND CIRCUMSTANCES


2. On 4 May 2021, SHUL G1 experienced technical difficulty at approximately 14:50 hours due to unresponsive auto voltage regulator (“AVR”) soft button. The operation team faced issue to enable the AVR soft button manually at the control screen as it was unresponsive to the “ON” command. Hence, SHUL G1 was unable to synchronise to the grid.

3. Shell Eastern Petroleum subsequently activated the instrumentation team. Therefore, offer variation after gate closure was submitted for period 32 at 15:23 hours to reflect the physical status of the plant and to allow time for troubleshooting to be performed while getting the AVR soft button back to working condition.

4. Subsequently, a second offer variation after gate closure was submitted at 15:52 hours to withdraw the energy offers for periods 33 and 34. This was done as the instrumentation team required more time for troubleshooting.

5. Shell Eastern Petroleum informed that it was found that there were patching works performed on the network as part of software security. The patchworks interfered with the software configuration of the synchronisation software. With this investigation outcome, instrument and software team performed rectification with the support from original equipment manufacturer.
According to section 10.4.1.1b of Chapter 6 of the Market Rules, offer variations after gate closure are only allowed for the three consecutive dispatch periods immediately following a forced outage or failure to synchronise. Since SHUL G1 was unable to synchronise to the grid at period 30 (14:50 hours) on 4 May 2021, this indicate that offer variations made for periods 31, 32 and 33 on 4 May 2021 were exempted.

However, the offer variation made after gate closure for period 34 on 4 May 2021, which was submitted to reflect non-generation, was not in compliance with section 10.4.1 of Chapter 6 of the Market Rules.

On 23 August 2021, Shell Eastern Petroleum submitted its written representations to the MSCP with further information detailing the incident. Shell Eastern Petroleum submitted additional information on the submission process, and mitigating factors for the MSCP’s consideration, including that:

a. Shell is an embedded generator and the electricity produced with Shell’s generating units SHUL G1 and BKOM G1 is predominantly for Shell’s internal consumption. Shell is a net importer which constantly withdraws electricity from the grid.

b. As the AVR soft button was not responding to the “On” command for synchronisation, the forced gate closure was performed for period 32. The soft button issue persisted beyond the initial gate closure violation made for period 32, and subsequent gate closure was performed for periods 33 and 34.

c. To prevent recurrence:
The current work process will be updated, expiration status of security certification will be monitored on a monthly basis and the relevant departments will be notified of certificate expiry on a 90 days lookahead to ensure that re-certification activity is completed before the relevant expiry date; and

Production Team Leaders (“PTLs”) and Assistant PTLs to be informed of the updated market rules issued in August 2019, in particular Section 10.4.1.1. and in any future updates of market rules.

d. Shell Eastern Petroleum did not require a hearing.

APPLICABLE MARKET RULES

Section 10.4.1 of Chapter 6 provides that

Notwithstanding sections 5.1.5, 5.1.6 and 5.1.7, no offer variation or revised standing offer shall be submitted by or for a market participant within 65 minutes immediately prior to the dispatch period to which the offer variation or revised standing offer applies, except:

10.4.1.1 where it is intended:

a. for a generation registered facility, to reflect its expected ramp-up and ramp-down profiles during periods following synchronisation or preceding desynchronisation; or

b. for a generation registered facility, to reflect its revised capability for the three consecutive dispatch periods immediately following a forced outage or its failure to synchronise; or
c. to contribute positively to the resolution of an energy surplus situation pertaining to which the EMC has issued an advisory notice under section 9.3.1, by allowing for decreased supply of energy; or

d. to contribute positively to the resolution of energy, reserve or regulation shortfall situations pertaining to which the EMC has issued advisory notices under section 9.3.1, by allowing for increased supply of energy, reserve or regulation; or

e. to contribute positively to the resolution of energy, reserve or regulation shortfall situations in that dispatch period, where:

i. the shortfall situations were indicated in a system status advisory notice issued by the EMC in respect of a high-risk operating state or emergency operating state declared by the PSO; and

ii. at the time of submission of such offer variation or revised standing offer, the EMC has not yet withdrawn, in respect of that dispatch period, such system status advisory notice, by allowing for increased supply of energy, reserve or regulation; and

f. for a load registered facility, to reflect its revised capability during a forced outage or following a decrease in energy withdrawal under sections 9.3.3 and/or 9.3.4 of Chapter 5; and

10.4.1.2 where the price so offered, other than for additional quantities of energy, reserve or regulation, is the same as that previously offered for that dispatch period.

ENFORCEMENT

10. Based on the facts referred to above, the MSCP determined that Shell Eastern Petroleum had breached section 10.4.1 of Chapter 6 of the Market Rules for period 34 on 4 May 2021.

11. The incident was self-reported and did not have a significant impact on the National Electricity Market of Singapore. Shell has also taken remedial actions to avoid future reoccurrences.

12. The MSCP hereby issues a letter of non-compliance to Shell Eastern Petroleum and directs Shell Eastern Petroleum to pay costs fixed at $2,000. The MSCP reminds Shell Eastern Petroleum to observe its obligations under the Market Rules at all times.

T P B Menon
Chair, Market Surveillance and Compliance Panel