FACTS AND CIRCUMSTANCE


2. On 26 November 2021, TPG received three email notifications related to issues with gas supply, two emails from Sembcorp Gas Pte. Ltd. ("SembGas") at 09:53 hrs, and 13:20 hrs requesting TPG to reduce its gas offtake to its allocated rate with immediate effect, and a third email from the Energy Market Authority ("EMA") at 13:47 hrs requesting TPG to comply with the notice issued by SembGas.

3. TPG carried out the fuel changeover operation ("FCO") for TUASCCP4 from gas to diesel at period 26. However, the FCO was not successful and TPG immediately reverted TUASCCP4 to gas fired to prevent a forced outage in the same period. At 13:19 hrs (P27), TPG submitted offer variations after gate closure to reduce TUASCCP4’s load for periods 28 and 29 to facilitate water purging process after its failed FCO to diesel. The cause of the failed fuel changeover to diesel was due to the combustor pressure margin low¹ which occurred at 12:51 hrs (P26).

4. Section 10.4.1.1b of Chapter 6 of the Singapore Electricity Market Rules ("Market Rules") allows for offer variations to be submitted after gate closure to reflect the facility’s revised capability for the three consecutive dispatch periods immediately followed by a forced outage

¹ The combustor stability margin can vary according to the changes of fuel composition. Combustor instabilities can trigger high-pressure fluctuations that are generally due to sudden changes in fuel quality.
or its failure to synchronise. In this case, TUASCCP4’s combustor pressure margin low incident occurred at period 26, therefore, the offer variations after gate closure submitted for period 28 and 29 fell within the allowable three-period window.

5. Following the failure to change the fuel source for TUASCCP4 and the repeated requests from SembGas and EMA for TPG to reduce its gas usage, TUASCCP3 was assigned for the FCO at period 28. At 13:13 hrs (P27), TPG submitted offer variations after gate closure for TUASCCP3 for periods 28 and 29 to facilitate the FCO from gas to diesel operation. The offer variations submitted for TUASCCP3 for periods 28 and 29 are not allowed under the Market Rules.

6. TUASCCP3 tripped at 13:45 hrs (P28) upon completion of the FCO, due to combustor pressure fluctuation high. At 13:56 hrs (P28), TPG submitted offer variations after gate closure for TUASCCP3’s revised capacity. Subsequently, at 14:50 hrs (P30), TPG submitted an additional offer variation after gate closure for TUASCCP3 for period 32.

7. TUASCCP3 tripped at period 28, therefore, the offer variations after gate closure submitted for periods 30 and 31 fall within the allowable three-period window under section 10.4.1.1b of Chapter 6 of the Market Rules. The offer variation after gate closure submitted for period 32 fell out of the allowable three-period window and therefore is not allowed under the Market Rules.

8. On 7 February 2022, the MSCP informed TPG that it was in prima facie breach of section 10.4.1 of Chapter 6 of the Market Rules for its offer variations after gate closure for TUASCCP3 for periods 28, 29, and 32, and invited TPG to submit written representations by 18 February 2022 before the MSCP issues a determination.

9. TPG did not submit written representations for the MSCP and did not require a hearing.

APPLICABLE MARKET RULES

10. 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

---

2 Changes in properties or composition in the fuel supply result in pressure fluctuations inside the combustor. Excessive combustion pressure fluctuation can result in damage to the components of the combustors or turbines.
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

11. Based on the facts referred to above, the MSCP determined that TPG had breached section 10.4.1 of Chapter 6 of the Market Rules for TUASCCP3 for periods 28, 29, and 32 on 26 November 2021.

12. The incident was self-reported. With regard to the offer variations after gate closure submitted for TUASCCP3 for periods 28 and 29 on 26 November 2021 the MSCP has determined that no further action will be taken.

13. The MSCP hereby imposes a financial penalty of $230,000 and directs TPG to pay costs fixed at $2,000 for the breach of section 10.4.1 of Chapter 6 of the Market Rules for its offer variation submitted after gate closure for TUASCCP3 for period 32 on 26 November 2021. The MSCP reminds TPG to observe the Market Rules and take appropriate corrective measures to prevent future recurrences.

Professor Walter Woon
Chairman, Market Surveillance and Compliance Panel