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Infinium fined $850,000 for computer malfunctions

By Hal Weitzman in Chicago and Gregory Meyer in New York

One of the biggest automated trading firms in the US has been slapped with $850,000 in total fines for computer malfunctions that led to it breaking trading rules at CME Group, the futures exchange operator.

The penalties handed to Infinium Capital Management, a 10-year-old Chicago trading firm, are among the first fines of their kind and reflect the prevalence of the use of computer algorithms to drive trading in commodity derivatives markets.

They also highlight the concerns of many critics of automated – including "high-frequency" – trading about whether trading firms are properly monitoring the reliability of their algorithms before they set them to work in markets.

Bart Chilton, a commissioner at the Commodity Futures Trading Commission, the US futures regulator, and one of the most outspoken critics of what he calls "cheetah traders", told the Financial Times that the Infinium case highlighted the problem.

"These superfast trading systems, when they go feral, can do so in a hurry," Mr Chilton said. "They are out there trying to scoop up micro-dollars in milliseconds. I do question the value they add to markets. And get this, they aren't even required to be registered with the regulator. That needs to change."

Last year's "flash crash", in which markets plunged and recovered within 20 minutes, heightened worries that rogue automated trades – which make up about half of volume in US equity markets – can disrupt financial markets before humans are able to intervene and shut off the programmes.

Automated trading is also under scrutiny in Europe, where the European Commission has proposed that firms engaging in algorithmic trading would also have to provide regulators with a description of their strategies.

CME handed Infinium the $850,000 fine for a series of malfunctions in computer trading programmes.

In one case, dating back to October 2009, CME accused the firm of "failing to diligently supervise its systems, employees or agents" and said that by "allowing a malfunctioning [automated trading system] to operate in a live trading environment, Infinium committed an act detrimental to the welfare of the exchange".

CME said Infinium had discovered a problem in its computer trading system and had verbally instructed its staff to disable the relevant aspects of its programmes.

However, it said the firm did not ensure that they had done so. A few weeks later, the firm's automated system erroneously bought Nasdaq futures contracts, following which Infinium contacted CME asking the exchange to invoke an erroneous trade rule and adjust the price at which some contracts had been bought.

In another case, which occurred in February 2010, a computer malfunction led Infinium's automated systems to enter 6,767 orders for crude oil futures on CME's Nymex market. Within 24 seconds, the firm had bought 4,612 contracts before the rest of the order was cancelled.

CME said an investigatory panel had found that Infinium had only "back-tested" the malfunctioning algorithm for one or two hours before putting it into the live markets, as opposed to the six-to-eight week time frame laid out in its usual testing protocol. It also noted that the algorithm bypassed the automatic shutdown systems by placing orders for single contracts rather than one large order.

"The maximum shutdown units risk parameter was not triggered because the strategy, which was designed to trade an energy-based [exchange traded fund] against crude, had been incorrectly configured to trade crude against the energy-based ETF," CME noted. "The maximum shutdown units risk parameters had been set to shut down the algorithm based on values for the ETF, not for crude."

CME said that in trying to place trades to offset the error, an Infinium employee had also used another trader's identification to access the exchange's trading system – another breach of its rules.

Infinium had revealed the trading error and CME's investigation last year. Chuck Whitman, founder and chief executive of Infinium, said at the time that the incident "was a result of human error in a software test group and the parties associated with this error are no longer with the firm".

According to the terms of the ruling, Infinium agreed to pay the fines without either admitting or denying having violated the exchange's rules.

The CME noted that Infinium had taken "significant steps" since February 2010 to enhance its quality assurance controls and risk protections, bringing it up to the standards recommended by the Futures Industry Association (FIA), the main industry body.

Mr Whitman could not be reached for comment.