UNITED STATES OF AMERICA Before the SECURITIES AND EXCHANGE COMMISSION

SECURITIES EXCHANGE ACT OF 1934 Release No. 56352 / September 5, 2007

ADMINISTRATIVE PROCEEDING File No. 3-12744

: CORRECTED

In the Matter of : **ORDER INSTITUTING**

: ADMINISTRATIVE AND CEASE-AND-Boston Stock Exchange, Inc. : DESIST PROCEEDINGS, MAKING

: FINDINGS, AND IMPOSING REMEDIAL

and : SANCTIONS AND A CEASE-AND-DESIST

: ORDER PURSUANT TO SECTIONS

James B. Crofwell, : 19(h) AND 21C OF THE SECURITIES

: EXCHANGE ACT OF 1934

Respondents. :

I.

The Securities and Exchange Commission ("Commission") deems it appropriate in the public interest and for the protection of investors that public administrative and cease-and-desist proceedings be, and hereby are, instituted pursuant to Sections 19(h) and 21C of the Securities Exchange Act of 1934 ("Exchange Act"), against the Boston Stock Exchange, Inc. ("BSE") and James B. Crofwell ("Crofwell").

II.

In anticipation of the institution of these proceedings, the BSE and Crofwell have submitted Offers of Settlement (the "Offers"), which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission's jurisdiction over them and the subject matter of these proceedings, which are admitted, the BSE and Crofwell consent to the entry of this Order Instituting Administrative and Cease-and-Desist Proceedings, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order Pursuant to Sections 19(h) and 21C of the Securities Exchange Act of 1934 ("Order"), as set forth below.

On the basis of this Order and the BSE's and Crofwell's Offers, the Commission finds that:

SUMMARY

These proceedings concern the failure of the BSE, between 1999 and 2004, to enforce certain of its rules intended to prevent BSE broker-dealer specialist firms from trading in a way that benefited them while disadvantaging their customers who were trying to buy and sell stock. The BSE failed to develop and implement adequate procedures for surveillance of violations of its customer priority rules, which prohibit specialists from trading ahead and interpositioning. Certain problems with the BSE's proprietary trading platform, BEACON (Boston Exchange Automated Communication and Order-Posting Network), and the adoption of a competing specialist initiative during 1996, made such surveillance difficult without fundamental programming changes to BEACON. BSE's failure to implement these programming changes and to otherwise conduct effective surveillance allowed hundreds, if not thousands, of violations per day to go undetected. Violations continued even after the Commission staff had repeatedly warned the BSE of the need to improve surveillance systems.

James B. Crofwell ("Crofwell"), the BSE's President between 1999 and 2003, knew that the procedures then in effect were inadequate. Crofwell provided a written timetable to the Commission indicating target dates to improve surveillance, but failed to devote resources necessary to ensure implementation. Crofwell received detailed written and verbal communications from the Commission staff and others at the BSE concerning these problems.

RESPONDENTS

- **A.** <u>BSE</u> (SEC File No. 024-10093) is a national securities exchange, headquartered in Boston, Massachusetts, and registered with the Commission pursuant to Section 6 of the Exchange Act.
- **B.** <u>Crofwell</u>, of Scituate, Massachusetts, was employed by the BSE as the Executive Vice-President, Information Systems from October 1986 until 1995, and thereafter as President and Chief Operating Officer of the Boston Stock Exchange until his resignation in 2003. As COO, Crofwell was responsible for all surveillance and technology functions at the BSE, including administration of the BEACON system.

¹ In essence, these rules prohibit a specialist from trading with a customer from his own proprietary account, and benefiting from the spread between his cost and the price to the customer, if there are customer market orders that could be matched at the same or better price.

FACTS

A. <u>BEACON Trading System and Applicable Rules</u>

The BSE, as a regional stock exchange, maintained a trading floor staffed by employees of member specialist firms, which were registered broker-dealers. While the BSE traded some primary listings, for the most part BSE specialists traded stocks that were also listed on other exchanges. The specialists utilized a proprietary BSE trading system known as BEACON. Using the BEACON system, a specialist at his terminal could enter quotes for principal trades and match customer orders to buy and sell stocks. Generally, customer market and marketable limit orders under 1299 shares were automatically routed to the specialist's automatic execution (commonly referred to as "autoex") window on his trading terminal screen. As designed, BEACON permitted the order to reside on the autoex window for a predetermined number of seconds, during which time the specialist could offer price improvement prior to execution, move the order to a manual execution window to effect a layoff trade, execute the order against his proprietary trading account, or match the order to another order. After the predetermined number of seconds, BEACON would look to execute orders in a combined limit order book and, if there were none, against the specialist's proprietary account. Trades larger than 1299 shares went directly to the manual execution window.

All trades on the BSE are subject to certain rules promulgated by the BSE. BSE Rules, Ch. 2 § 11, titled *Trading While Acting as a Broker as to Market Orders*, prohibits a member from personally buying or initiating the purchase of any security on the exchange for his own account or for any account in which he, his member organization or a partner is directly interested, while such person holds an unexecuted customer market order to buy such a security, and prohibits similar conduct with respect to sales. In addition, BSE Rules, Ch. 2 § 6, titled *Bids and Offers for Stocks*, prohibits a member from making a bid or offer at a lower price than an existing clearly established bid. The rule similarly prohibits a member from making an offer or bid at a higher price than an existing clearly established offer. The rule further requires the highest bid and lowest offer to have precedence. Where bids or offers are at the same price, the rule sets forth a hierarchy of precedence. In addition, BSE Rules, Ch. XV, Sec. 2(b), governing specialists' responsibilities, require a specialist to hold the interests of orders entrusted to him above his own interests, and to ensure timely, best possible execution in accordance with the terms of the order and the rules and policies of the exchange.

B. Competing Specialist Initiative ("CSI")

In 1996, the BSE implemented a program to permit competing specialists, using the BEACON trading system, to trade in the same stocks in order to promote price competition and

² Layoff trades are trades that are executed on other exchanges for the account of the BSE specialist, and may represent either proprietary or customer transactions.

³ During the relevant period, the predetermined amount of time was generally 15 seconds. While efforts occurred during the relevant period to encourage specialists voluntarily to reduce the time from 15 to 3 seconds, specialists could manually intervene to raise or lower the time, and the BSE lacked the ability to systematically conduct surveillance for compliance with the reduced time.

liquidity.⁴ The CSI Approval Order cited the specialists' duty, under BSE Rules, Ch. XV, Sec. 2(b), to hold interests of orders entrusted to them above their own interests, and established a policy that there was only one exchange market in a security.⁵ As a result of the CSI implementation, the Exchange assumed a duty to conduct surveillance of competing specialist trading to ensure compliance with customer priority rules. While an innovative business practice, CSI made it more difficult for the Exchange to conduct priority rule surveillance. The BSE did not respond timely or adequately to these problems.

C. How Priority Rule Violations Occurred on the BSE

There are two types of priority rule violations. Interpositioning occurs where the specialist fails to match (or cross) two orders, and instead executes both orders against his proprietary account, thereby participating on both sides of the trades and making a risk-free profit. Trading ahead occurs when the specialist, while holding a customer market or marketable limit order, effects a proprietary trade on the same side of the market securing a better price for the firm's account, leaving the customer order to be traded at an inferior price or not at all. The specialist has an affirmative obligation to match the customer orders.

Prior to mid-2004, flaws in the BEACON system made it easier for specialists to violate the BSE's customer priority rules. BEACON did not electronically examine the specialist's own automatic or manual execution screen for an order that could be executed against an incoming order. BEACON also did not electronically examine the automatic or manual execution screens of any competing specialist for an order that could be executed against an incoming order. Other BEACON shortcomings also contributed to the BSE's inability to conduct effective surveillance. For example, BEACON allowed frequent manual overrides, which are very difficult to track. These manual overrides provided opportunities for specialists intentionally to violate priority rules.

D. BSE Fails to Develop Priority Rule Surveillance Systems and Respond to Evidence of Violations

During February 1999, Commission staff informed the BSE in writing of the need to immediately develop trading ahead surveillance procedures. At the time, the BSE had no automated surveillance report that was designed to detect priority rule violations. BSE surveillance staff conducted only limited sampling reviews for priority rule violations, based on block trade reports and specialist general activity reports. There were no written procedures for trading ahead surveillance. The procedures utilized by the BSE were ineffective and did not result in any formal disciplinary actions against specialists during the relevant period.

⁴ See Boston Stock Exchange Inc., Order Granting Approval of Proposed Rule Change Permitting Competing Specialists on the Floor of the Exchange, Exchange Act Rel. No. 37045 (March 29, 1996); 61 FR 15318 (April 5, 1996) ("CSI Approval Order").

⁵ The CSI Approval Order also stated that competing and regular specialists had the same affirmative and negative market obligations. *Id.* at III.B.

At or about the same time, BSE staff learned that the BEACON trading system allowed numerous trades to be automatically executed in violation of the customer priority rules. The specialist's manual and automatic execution screens did not electronically interact with each other. Accordingly, BSE staff realized that a specialist could execute an order while there was another order in BEACON, which, if the two were matched, could have resulted in a better execution for the customer. BSE staff realized that certain programming changes to the BEACON trading platform were required in order to detect and prevent autoex and other priority rule violations.

BSE internal documents also demonstrate awareness of BEACON's flaws at all levels of the organization. For example, a January 3, 2000 memorandum described priority rule surveillance problems created by the CSI as "major," and proposed a programming change to BEACON to ensure that BEACON auto-ex orders automatically interact with the manual windows for potential agency orders entitled to execution in price and time priority. A February 8, 2000 memorandum stated that, due to shortcomings in existing software, any priority rule surveillance reports that could be generated with the BSE's existing technology yielded too many exceptions to be useful, and characterized priority rule issues as an SEC priority.

A handout prepared for an April 13, 2000, meeting of interested BSE specialists and staff described the interpositioning problem as "critical," and reported that a single-day examination found that, of 79,383 trades executed on the exchange, at least 2,276 (2.8%) involved possible interpositioning. A summary of the meeting reflects that those attending felt both their firms and the Commission staff would view the situation very negatively. The writer observed that the number of price corrections required could be in the thousands per day. A November 27, 2000 memorandum also quantified the number of incidents, finding that 749 out of 37,226 trades (2%) involved priority rule issues.

Throughout 2000-2002, the need to improve priority rule surveillance was being reported as a status item in periodic reports prepared by the BSE internal audit department. These reports reflected a lack of progress on the project to improve priority rule surveillance during this period, and that it was low priority. A February 2002 internal summary discusses an exit interview conducted by the Commission oversight staff that month, as the result of a follow-up examination, and notes that priority rule surveillance deficiencies were viewed as a repeat violation. Between 1999 and 2004, the BSE did not initiate any formal disciplinary action against its members for priority rule violations.

As a result of these failures to act, priority rule violations, which occurred frequently, went undetected at the BSE throughout the period 1999 to mid-2004, when a substantial solution was implemented. Violations occurred both within a specialist's own accounts and between competing specialists. The BSE placed its business interests in developing the CSI ahead of its responsibilities as a self-regulatory organization with a statutory duty to regulate its members.

An exchange's obligation to enforce compliance under Section 19(g)(1) of the Exchange Act "necessarily includes an obligation to monitor and maintain surveillance over its members."

⁶ Chicago Stock Exchange, Inc., Exchange Act Rel. No. 48566, 2003 WL 22245922 at *8 (September 30, 2003), quoting Boston Stock Exchange, Inc., Exchange Act Rel. No. 17183, 1980 WL

An exchange violates Section 19(g)(1) when it fails "to be vigilant in surveilling for, evaluating and effectively addressing issues that could involve violations of its own rules."

E. Crofwell's Role

Crofwell was responsible for ensuring that the changes necessary to comply with the Commission staff's 1999 directive to immediately develop trading ahead surveillance procedures were implemented. In response to initial communications from the Commission staff, Crofwell stated in writing that the BSE would work to implement a same-day review of trading ahead activity by the target date of June 30, 1999 and would keep the staff informed of progress. The June 30 target was not met. Rather, there was no material improvement in the BSE's ability to prevent or detect priority rule violations until mid-2004. Crofwell was made aware of the lack of progress and the surveillance problems through timely and frequent written and verbal communications from other BSE employees. He received many, if not all, of the internal memoranda described above. He was aware that BEACON's shortcomings required a programming solution, not simply creation of a new surveillance report. He was responsible for the allocation of computer staff programming resources, and the project was assigned a low priority. After initial discussions occurred between his IT staff and BSE surveillance staff, he improperly deferred any significant effort to comply with the Commission staff's directive until a redesigned trading system, BEACON 2, was developed.

Crofwell's failures reflect serious errors of judgment despite repeated warnings. Crofwell failed to take necessary additional steps to ensure that the BSE met its obligation to enforce its own rules. He failed to conduct an adequate search for staff that could competently implement a solution, failed to take steps to ensure that adequate financial resources were devoted to the surveillance and enforcement programs, failed to utilize outside consultants to review the situation and make recommendations, and failed to recommend appropriate actions to the Board of Governors. As a result, during the period when Crofwell was responsible for responding to the Commission staff's directive to develop priority rule surveillance procedures, there was effectively no progress. As a result, Crofwell was a cause of the BSE's violations of Section 19(g) of the Exchange Act.

As a result of the conduct described above, the Commission finds that the BSE violated Section 19(g)(1) of the Exchange Act by failing, without reasonable justification or excuse within the meaning of Section 19(h)(1) of the Exchange Act, to enforce compliance with its customer priority rules from at least February 1999 until July 2004.

As a result of the conduct described above, the Commission finds that Crofwell failed to enforce compliance with the BSE's customer priority rules described above, within the meaning

²⁵⁴⁵⁴ at *3 (October 1, 1980); *see also New York Stock Exchange, Inc.*, Exchange Act Rel. No. 41574, 1999 WL 430863 at *1 (June 29, 1999); *National Ass'n of Securities Dealers, Inc.*, Exchange Act Rel. No. 37538, 1996 WL 447193 at *2 (August 8, 1996) (same).

⁷ Chicago Stock Exchange, 2003 WL 22245922 at *8, quoting National Ass'n of Securities Dealers, 1996 WL 447193 at *2.

of Section 19(h)(4) of the Exchange Act, and was a cause of the BSE's violations of Section 19(g) of the Exchange Act. 8

REMEDIAL EFFORTS

In determining to accept the BSE's Offer, the Commission considered remedial acts undertaken by the BSE since 2004, including the replacement of senior management responsible for regulatory compliance during the period in which the violations discussed herein occurred, and the more recent oversight and resources allocated to its regulatory functions.

UNDERTAKINGS

Respondent BSE undertakes to:

- 1. BSE shall, within 90 days after the issuance of the Order, enhance its existing training programs as necessary to implement a mandatory annual training program for all members of the regulatory staff responsible for surveillance, investigation, examination and discipline, that addresses compliance with the federal securities laws and the BSE's rules in place to prevent and deter unlawful trading.
- 2. BSE shall, within 30 days after the issuance of the Order, retain a Third Party Auditor (the "Auditor") not unacceptable to the Commission staff to conduct a comprehensive audit of the BSE's surveillance, examination, investigation and disciplinary programs, to determine whether:
 - a. the BSE's policies and procedures for surveillance, investigation, examination and discipline of member firms and individuals subject to its regulatory oversight are reasonably designed and effective to ensure compliance with and to detect and deter violations of the federal securities laws and the BSE's rules relating to trading; and
 - b. the BSE is in compliance with (i) its policies and procedures; (ii) any outstanding commitments made by the BSE in relation to written recommendations made by the Commission's Office of Compliance Inspections and Examinations ("OCIE") or the Division of Market Regulation ("Market Regulation") concerning trading surveillance; and (iii) any undertakings contained in this Order.

⁸ Section 19(h)(4) of the Exchange Act provides that the Commission is "authorized, by order, if in its opinion such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of this [Act], to remove from office or censure any officer or director of [a] self regulatory organization, if [the Commission] finds, on the record after notice and opportunity for hearing, that such officer or director . . . without reasonable justification or excuse has failed to enforce compliance . . . (A) in the case of a national securities exchange, with any [provision of this Act, the rules or regulations thereunder, or the rules of such self-regulatory organization] by any member or person associated with a member"

- 3. BSE shall require the Auditor to conduct an initial audit commencing within six months of the issuance of this Order and a second audit two years after the date of the initial audit, and, in each audit, to:
 - a. make the evaluations described in paragraph (2), above;
 - b. evaluate the adequacy of the resources (including staffing and compensation) that the BSE has devoted to its surveillance, investigation, examination and disciplinary programs;
 - c. evaluate the adequacy of the BSE's rules then in place to prevent and deter unlawful trading practices;
 - d. evaluate whether the BSE's practices are in compliance with: (i) its policies and procedures; (ii) any outstanding commitments made by the BSE in relation to written recommendations made by OCIE or Market Regulation concerning trading surveillance; and (iii) any undertakings contained in this Order; and
 - e. evaluate the BSE's live testing process, to be conducted during non-trading hours, of the BSE's automated surveillance systems using simulated trading data that includes data suggesting possibly abusive trading instances, including an analysis of the effectiveness of such surveillance systems when tested against the simulated trading patterns.
- 4. BSE shall require the Auditor and other qualified persons hired by the Auditor (collectively the "Auditor") to have adequate knowledge and understanding of the BSE's regulatory programs, policies and procedures and to possess sufficient competence and resources necessary to address the BSE's surveillance, examination, investigation and disciplinary programs.
- 5. BSE shall require the Auditor to develop a written audit plan of sufficient scope and detail to achieve the audit objectives described in paragraph (3) above, and to identify regulatory areas in need of special consideration. BSE shall further require that, in performing its duties, the Auditor and staff shall exercise due professional care and independence in performing the audit.
- 6. BSE shall require the Auditor to formulate an opinion based on sufficient, competent evidential matter that is obtained through, among other things, (i) inspection of documents, including written procedures, rules, and staff files; (ii) observation of trading processes and the BSE's regulatory systems and practices; (iii) interviews of regulatory staff, members and other relevant persons; and (iv) case studies and testing of various regulatory functions and trading practices.
- 7. BSE shall cooperate fully with the Auditor and its staff and provide the Auditor and its staff with access to its files, books, records, and staff as reasonably requested for the audit.

- 8. BSE shall require that each audit be concluded within 180 days of the field work. Audit work may be conducted in phases. No later than 45 days after each audit is concluded, BSE shall require the auditor to submit an audit opinion as to its assessment of the BSE's surveillance, examination, investigation and disciplinary programs to the BSE's Board of Governors and to the following officials at the Commission ("Commission Officials"): (i) the Director of OCIE; (ii) the Director of the Division of Market Regulation; and (iii) the Director of the Boston Regional Office. The audit opinion shall also be included in the BSE's annual report.
- 9. BSE shall require that the Auditor, no later than 45 days after each audit is concluded, submit an audit report to the Commission Officials. The audit report shall: (i) describe the purpose, scope and nature of the audit; (ii) set forth its evaluation and conclusions with respect to matters identified in paragraph (3), above; and (iii) identify any significant deficiencies or weaknesses in the BSE's policies and procedures, the BSE's compliance with its policies and procedures, the BSE's compliance with any outstanding commitments made by the BSE in relation to written recommendations made by the OCIE and Market Regulation concerning trading surveillance; or the BSE's compliance with any undertakings contained in this Order, and make recommendations to address any identified deficiencies or weaknesses.
- 10. The Auditor's recommendations shall be implemented, provided however, that, within 30 days after the date of each report specified in paragraph (9), above, BSE may advise the Auditor, in writing, of any recommendation that it considers to be inappropriate and state in writing the reasons for considering such recommendation inappropriate. With respect to any recommendation with which BSE and the Auditor do not agree, such parties shall attempt in good faith to reach an agreement within 60 days of the date of such report. In the event that BSE and the Auditor are unable to agree on an alternative recommendation, the Auditor's recommendation shall be binding and the BSE shall implement the recommendations.
- 11. No later than 90 days after the date of each report specified in paragraph (9), above, BSE shall develop a written plan of corrective actions to address each deficiency or weakness, including a date by which each corrective action shall be implemented. The BSE shall maintain a copy of such plan for the entire period of this undertaking and shall provide the plan to the Commission staff upon request.
- 12. BSE shall bear the full expense of the engagement set forth in paragraph (2), above. BSE shall allocate \$500,000 for each of the audits specified herein, for a total of \$1 million. If the expenses for the engagements exceed the designated funds, the BSE shall use additional funds to pay the costs of the audits. If any funds remain after the engagements are concluded, those funds shall be used solely for regulatory matters, including surveillance programs.
- 13. BSE shall require the Auditor to provide the Commission staff with any documents or other information the Commission staff requests regarding the work pursuant to this undertaking. The BSE shall not assert, and shall require the Auditor to agree not to assert, privilege or work product claims in response to any of the Commission staff's requests.

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- 14. BSE shall require the Auditor to enter into an agreement that provides that for the period of engagement and for a period of two years from completion of the engagement, the Auditor shall not enter into any employment, consultant, attorney-client, auditing or other professional relationship with the BSE, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity as representatives of the BSE. The agreement will also provide that the Auditor will require that any firm with which he/she is affiliated or of which he/she is a member, and any person engaged to assist the Auditor in performance of his/her duties under this Order shall not, without prior written consent of the Director of Market Regulation, enter into any employment, consultant, attorney-client, auditing or other professional relationship with the BSE, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity as such for the period of the engagement and for a period of two years after the engagement.
- 15. The BSE shall implement the enumerated undertakings within the time specified herein unless, upon written request and for good cause shown by the BSE, the Commission staff grants the BSE such additional time as the Commission staff deems reasonable and necessary to implement any of the enumerated undertakings.

IV.

In view of the foregoing, the Commission deems it appropriate to impose the sanctions agreed to in the BSE's and Crofwell's Offers.

Accordingly, pursuant to Sections 19(h) and 21C of the Exchange Act it is hereby ORDERED that:

- A. Respondents BSE and Crofwell are censured;
- B. Respondent BSE shall cease and desist from committing or causing, and Respondent Crofwell shall cease and desist from causing, any violations and any future violations of Section 19(g) of the Exchange Act; and
- C. Respondent BSE shall comply with its undertakings as enumerated in Section III, above.

By the Commission.

Nancy M. Morris Secretary