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UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

JUAN FERNANDEZ, Individually and On Behalf Of All Others Similarly Situated, Plaintiff, vs. KNIGHT CAPITAL GROUP, INC., THOMAS M. JOYCE and STEVEN BISGAY, Defendants.	**Civil Action No. 2:12-cv-06760 (SDW)(MCA)** **SECOND AMENDED CLASS ACTION COMPLAINT AND DEMAND FOR JURY TRIAL**

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"***Knight's system of risk management controls and supervisory procedures was not reasonably designed to manage the risk of its market access. . . Knight willfully violated [the Market Access Rule].***"

—SEC Order Instituting Administrative and Cease-And-Desist Proceedings,
In the Matter of Knight Capital Americas LLC Respondent,
SEC Administrative Proceeding File No. 3-15570

"***The [SEC Order] painted Knight not as a victim of computers gone haywire, but as a firm that failed to test its systems adequately or prepare for potential breakdowns.***"

—*Bloomberg*

"***IBM found out that Knight's technology wasn't as modern as they had tried to get the markets to believe***."

— Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 5305-5308). Kindle Edition.

"***You have to make sure the model works the way you are representing, otherwise it's fraud***."

—Erozan Kurtas, Assistant Director
SEC Office of Compliance Inspections and Examination

I. INTRODUCTION

1. The downfall of Knight Capital Group can be traced directly to a single and incontrovertible truth: Knight's failure to adopt basic, industry-standard and SEC-required risk management and internal control practices ultimately led to one of the most colossal trading collapses in Wall Street history. The scope of the Company's catastrophe is so breathtaking, and the catalysts for Knight's implosion are so rudimentary, that even to this day commentators of the spectacle are dumbfounded as to the magnitude of Knight's risk management and control deficiencies, with no less of an authority than Knight's co-founders remarking that it is simply "beyond comprehension" for Defendants to have allowed this type of misconduct to occur.

2. Indeed, the SEC itself has now confirmed that, ***during the entirety of the Class Period***, Knight lacked the "efficient and reliable" control infrastructure that it had publicly touted, with the SEC unequivocally finding, at the conclusion of its formal investigation and

action against Knight, that the scant procedures the Company had in place were "***not reasonably designed to manage the risk of its market access***," and that as a result thereof, "Knight ***willfully*** violated Section 15(c)(3) of the Exchange Act and Rule 15c3-5 thereunder, and Rules 200(g) and 203(b) of Regulation SHO."[1] Knight's failure to adopt even *reasonable* risk management protocols thus directly led to the fateful events of August 1, 2012, when the Company's trading breakdown caused it to purchase ***$7 billion*** in erroneous securities positions within just forty-five minutes of the market opening, leaving Knight teetering on the brink of bankruptcy.

3. Knight and its senior executives willfully ignored a myriad of red flags concerning Knight's deficient controls which could have prevented the catastrophe. Indeed, Wall Street in general, and Defendants in particular, were well-aware of the necessary emphasis on risk controls that had evolved as the securities market became more automated and computer-centric, with high-frequency trading firms such as Knight deploying algorithms to execute up to millions of trades per second, seeking to capitalize on small discrepancies in securities prices.

4. The need for even stronger risk management and controls became a pressing issue for Knight and its competitors as high-profile trading anomalies in recent years accentuated the need for increased regulation, including the much-publicized "Flash Crash" of 2010. Tellingly, Defendant Joyce was one of the most vocal detractors railing against increased regulation, frequently contributing print commentary and making live media appearances to argue for independent market policing rather than regulatory intervention, while vociferously criticizing his competitors when other firms' control missteps hit the front pages. Joyce created an "above the law" corporate culture that consciously disregarded and scorned efforts to increase regulation.

[1] Unless otherwise indicated, all emphasis is added.

5. Even more troublesome, the Individual Defendants' compensation was directly tied to Knight's pre-tax operating income rather than a cost-neutral metric such as revenue or trading volume—in other words, the Individual Defendants were incentivized to forego costly operating expenditures such as risk management control overhauls in order to protect their paychecks.

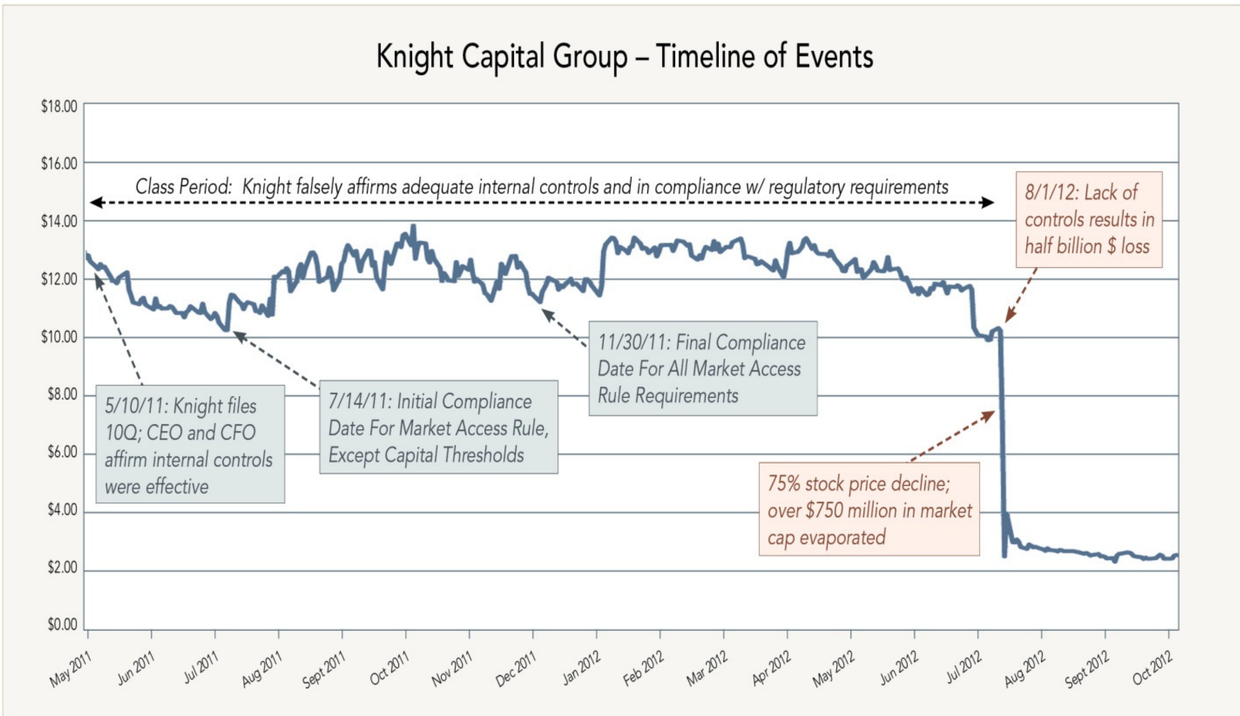
6. Against this backdrop, and in response to the highly-publicized Flash Crash, the SEC implemented a series of regulatory changes aimed at improving market structures, including most notably SEC Rule 15c3-5—the "Market Access Rule." Proposed in January 2010 and adopted in November 2010, the Market Access Rule, which codified basic internal control protocols that were already prevalent in the industry, ***required*** any broker or dealer providing market access to establish, document and maintain a system of risk management controls and supervisory procedures necessary to prevent erroneous orders and orders that exceeded appropriate pre-set credit or capital thresholds. The Market Access Rule thus ***required the exact risk management control measures*** the absence of which directly led to Knight's downfall.

7. Accordingly, by the beginning of the Class Period, Defendants were well-aware of the necessity of sound and effective risk management and internal controls, including the industry-standard and SEC-required protocols under the Market Access Rule. It was no secret that the Company was highly dependent on its ability to ensure the soundness and stability of its trading platform and that the viability of the Company's infrastructure was of utmost importance to investors, particularly after the Flash Crash and similar headline-grabbing anomalies. Knowing this, Knight regularly assured investors during the Class Period that, among other things, the Company "carefully manages its risk," that Knight maintained "efficient and reliable trading technology and infrastructure," that the Company's trading platform was "superior" to

those of its competitors, and that Knight had robust systems in place to "identify, analyze, manage and report on all significant risks facing the Company."

8. As the SEC has now confirmed, however, these statements were false. The harbinger of Knight's downfall was the New York Stock Exchange's Retail Liquidity Program ("RLP"), a competitor trading platform that would compete directly with the Company's core business. Despite Defendants' vociferous protests against the RLP, the program received SEC approval in July 2012 and set a target date for activation of August 1, 2012. Publicly, Defendants downplayed the threat that the RLP presented to Knight's business; privately, however, Defendants implemented a short-sighted and harried attempt to combat the launch of the RLP a mere four weeks later.

9. On August 1, 2012, Knight suffered a massive technological failure born from the Company's deficient risk management and internal controls, causing Knight to execute countless erroneous trades and accumulate a $7 billion trading position in minutes. The revelation of Knight's internal control deficiencies eviscerated the Company's stock price, which immediately plummeted 75% after Knight's control failure was apparent. This massive decline wiped out over $750 million in market capitalization over a two-day trading period, with the Company's stock price closing at $2.58 per share on August 2, 2012 on extremely high trading volume that was exponentially greater than Knight's normal trading volumes. This debacle required a highly dilutive emergency rescue package resulting in a nearly half-billion dollar loss for the Company and the fire sale of Knight a mere four months later at a fraction of its Class Period trading price, causing hundreds of millions of dollars in losses to investors:



10. The Company was also subject to a formal SEC action which culminated in a groundbreaking SEC Cease-and-Desist Order (the "SEC Order")[2] that invoked the first-ever fine of a broker-dealer for violating the Market Access Rule. Notably, the SEC affirmatively determined that Knight's ***willful*** failure to adopt the Market Access Rule's basic risk management controls adopted by the SEC nearly two years earlier directly led to the Company's "unconscionable" August 1, 2012 disaster. Among a host of stunning conclusions, the SEC found that Knight's risk management controls and supervisory procedures were defective and not even "reasonably" designed to comply with the Market Access Rule's requirements, including that the Company's "***internal reviews were inadequate***, its ***annual CEO certification for 2012 was defective***, and its ***written description of its risk management controls was insufficient***," all of which resulted in violations of the federal securities laws.

[2] The SEC Order is attached as Exhibit A and incorporated by reference herein.

11. While Defendants have publicly portrayed Knight as a victim of a glitch or computers gone haywire, the truth is that the Company's implosion can be traced directly to the Individual Defendants' hubris, their knowing disregard of regulatory requirements and their severely reckless disregard for necessary risk management changes. Indeed, the SEC Order confirmed that "***[s]everal previous events presented an opportunity for Knight to review the adequacy of its controls in their entirety***." In sharp contrast to the Individual Defendants—who, despite their widely-cited transgressions, retained lucrative employment agreements and merger compensation that softened the sting of personal monetary losses incurred immediately after August 1—Knight's shareholders were ultimately left holding the bag, suffering hundreds of millions of dollars in damages as a direct result of Defendants' fraud.

12. This action is brought on behalf of a proposed class of investors who purchased Knight securities between May 10, 2011 and August 1, 2012, inclusive (the "Class Period"). Defendants' false and misleading statements artificially inflated the price of Knight stock throughout the Class Period, and their undisclosed misconduct made shareholders' investments in the Company much riskier than Defendants publicly disclosed. When the truth concerning Knight's business and operations came to light, the Company's shareholders suffered catastrophic losses of nearly their entire investments in Knight securities.

II. PARTIES

A. Plaintiff[3]

13. Lead Plaintiff is a state retirement system and was established to provide benefits and retirement allowances for full-time municipal employees and police officers in the state of Louisiana. Located in Baton Rouge, Louisiana, LAMPERS was established on July 1, 1973, and is administered by a Board of Trustees. Lead Plaintiff purchased the publicly traded Knight securities at artificially inflated prices during the Class Period and has been damaged thereby. Evidence of Plaintiff's transactions in Knight securities during the Class Period were previously filed with the Court and are incorporated herein by reference. *See* Dkt. # 6-5 (Certification and Authorization of Lead Plaintiff).

B. Defendants

1. *The Company*

14. Defendant Knight is a Delaware corporation with principal executive offices located at 545 Washington Boulevard, Jersey City, New Jersey 07310. Knight is based in Jersey City, New Jersey and is a publicly traded financial services company that provides trade execution across multiple asset classes. The Company's common shares traded during the Class Period on the NYSE under the symbol "KCG." In the merger through which Knight was acquired by GETCO following the August 1, 2012 trading debacle, KCG Holdings, Inc.

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[3] Lead Plaintiff Louisiana Municipal Police Employees Retirement System ("Plaintiff") alleges upon personal knowledge as to allegations specifically pertaining to Plaintiff and, as to all other matters, upon the investigation of its counsel. Many of the facts related to Plaintiff's allegations are known only by the Defendants, or are exclusively within their custody or control. Lead Counsel's investigation included, among other things, without limitation: (a) review and analysis of public filings made by Knight Capital Group, Inc. ("Knight" or the "Company") and other related parties and non-parties with the U.S. Securities and Exchange Commission ("SEC"); (b) review and analysis of press releases and other publications disseminated by certain of the Defendants and other related non-parties; (c) review of news articles, shareholder communications, and postings on Knight's website concerning the Company's public statements; (d) review of other publicly available information concerning Knight and the Individual Defendants (as defined below); and (e) interviews of confidential witnesses ("CWs"), each of whom was a former employee of Knight. Plaintiff believes that substantial additional evidentiary support for its allegations will be developed after a reasonable opportunity for discovery.

("KCG") emerged as the parent company of the legacy Knight Capital Group, Inc. and GETCO Holding Company, LLC, both of which became wholly-owned subsidiaries of KCG following the merger.[4]

2. *The Individual Defendants*

15. Defendant Thomas M. Joyce ("Joyce") was, at all relevant times, Knight's Chief Executive Officer and began his tenure as such in May 2002. Joyce has been Chairman of the Board since December 2004 and has served as a Director since October 2002. In addition to his total compensation package of $6,369,909 for 2011, Joyce also received a $7.5 million retention bonus to remain with the Company following Knight's merger with GETCO Holding Company, LLC, as well as equity and other payments to bring his total golden parachute compensation to above $8 million. In July 2013, a few days after Knight was formally taken over by GETCO, Joyce unexpectedly resigned as Executive Chairman of the Board and Chief Operating Officer of the Company.

16. Defendant Steven Bisgay ("Bisgay") was, at all relevant times, Knight's Chief Financial Officer and has served in that capacity since August 2007. Prior to his appointment as CFO, Bisgay served as Managing Director, Business Development for the Company since November 2005, was the Group Controller for the Company since June 2003 and served as the

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[4] According to the Company's Form 10-Q filed on November 12, 2013 for the quarterly period ended September 30, 2013, the transaction structure is described as follows:

> On July 1, 2013, Knight Capital Group, Inc. ("Knight") merged with and into Knight Acquisition Corp., a wholly-owned subsidiary of KCG Holdings, Inc. ("KCG"), with Knight surviving the merger, GETCO Holding Company, LLC ("GETCO") merged with and into GETCO Acquisition, LLC, a wholly-owned subsidiary of KCG, with GETCO surviving the merger and GA-GTCO, LLC, a unitholder of GETCO, merged with and into GA-GTCO Acquisition, LLC, a wholly-owned subsidiary of KCG, with GA-GTCO Acquisition, LLC surviving the merger (collectively, the "Mergers"), in each case, pursuant to the Amended and Restated Agreement and Plan of Mergers, dated as of December 19, 2012 and amended and restated as of April 15, 2013 (the "Merger Agreement"). Following the Mergers, each of Knight and GETCO became wholly-owned subsidiaries of KCG.

Director of Internal Audit for the Company since June 2001. According to Knight's Proxy Statement filed with the SEC on Form DEF 14A on April 3, 2012 (the "2012 Proxy"), Bisgay was charged with "enhancement of the company's overall risk management infrastructure" and was thus primarily responsible for the Company's risk evaluation and controls. In addition to his total compensation package of $2,859,000 for 2011, Defendant Bisgay received a retention bonus of $250,000, as well as equity and other payments to bring his total golden parachute compensation to above $1.5 million. Bisgay now serves as Chief Financial Officer of the surviving entity post-consummation of the Knight-GETCO merger.

17. Defendants Joyce and Bisgay are collectively referred to herein as the "Individual Defendants." According to Knight's 2012 Proxy, Joyce and Bisgay, among other senior executives of the Company, were tasked with maintaining a process to "identify, analyze, manage and report on all significant risks facing the Company." To that end, and "[i]n performance of risk oversight," the Individual Defendants had to provide reports and regularly meet to discuss "significant risks facing the Company, including enterprise, financial, operational, legal, regulatory and strategic risks."

18. Knight and the Individual Defendants are referred to herein as "Defendants."

III. JURISDICTION AND VENUE

19. This action arises under Sections 10(b) and 20(a) of the Exchange Act (15 U.S.C. §§ 78j(b) and 78t(a)) and Rule 10b-5 promulgated thereunder (17 C.F.R. § 240.10b 5).

20. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§1331 and 1307, and Section 27 of the Exchange Act (15 U.S.C. § 78aa).

21. Venue is proper in this Judicial District pursuant to 28 U.S.C. §1391(b) and Section 27 of the Exchange Act. Knight maintains its corporate headquarters in this District, and

many of the acts charged herein, including the preparation and dissemination of materially false and misleading information, occurred in substantial part in this District.

22. In connection with the acts and omissions alleged in this complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including, but not limited to, the mails, interstate telephone communications, and the facilities of the national securities markets.

IV. BACKGROUND OF KNIGHT AND ITS ALGORITHMIC TRADING

A. Background of Knight

23. Knight is a global financial services firm that provides access to the capital markets across multiple asset classes to a broad network of clients, including buy- and sell-side firms and corporations. Knight opened for business in 1995, and through its subsidiaries, is a major liquidity center for foreign and domestic equities, options, futures, fixed income securities and currencies. On active days, Knight can execute in excess of 10 million trades, with volume exceeding 20 billion shares. With offices in the United States, Europe and Asia, Knight's clients include more than 5,000 broker-dealers and institutional clients.

24. Knight's primary business model is serving as a market maker by fulfilling retail client orders using the Company's own capital. A September 14, 2012 Motley Fool article entitled, "Everything You Need To Know About The Knight Capital Meltdown," likened Knight's business as a market-maker to a used car salesman:

> Knight's primary business is market making. As Georgetown professor Jim Angel explains it, a market maker is like a used-car dealer . . . a market maker will buy a stock from you right when you want to sell it, and then hope that they can sell it to someone else at a slightly higher price. In short, market makers buy at the bid and sell at the offer price. Of course, while a used-car dealer might hope to see a turnaround time of days or weeks and a profit of hundreds or thousands of dollars

> on your car, with a market maker we're talking about turnaround times of seconds, or even fractions of seconds, and profit per share calculated in pennies.[5]

25. According to Congressional testimony by Defendant Joyce on June 20, 2012, the majority of the trades that Knight executes are on behalf of retail investors. Although retail customers do not come to the Company directly, their brokers do, and Knight counts amongst its clients some of the largest brokerage firms in the U.S., including Scottrade, TD Ameritrade, Fidelity, Raymond James, E*Trade, Pershing, Wells Fargo and Vanguard.

26. Knight serves it clients as a market maker by using what it purports to be sophisticated, automated, high-speed algorithmic systems to place trades on a number of stock exchanges, including the NYSE, NYSE Amex, the OTC Bulletin Board and OTC Markets. Throughout 2011 and 2012, Knight's aggregate trading represented approximately 10% of all trading in listed U.S. equities.

27. In recent years, Knight and other market makers have experienced substantial changes and pressures in their operating structures and financial underpinnings. Increasing regulatory concern over high-frequency, algorithmic trading has ushered in a new era of heightened oversight and operational responsibility, with the SEC imposing a significant overhaul regarding the risk management controls that firms such as Knight are required to implement to meet regulatory requirements. High-profile technological missteps raised public awareness of the pitfalls of high-speed algorithmic trading, thus pushing agencies to proactively increase the risk management requirements imposed on broker-dealers such as Knight.

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[5] *See* http://www.fool.com/investing/general/2012/09/14/everything-you-need-to-know-about-the-knight-capit.aspx.

B. The 2010 Flash Crash

1. *The Market Events of May 6, 2010 and their Aftermath*

28. A pivotal event in Wall Street history that influenced how market makers such as Knight operate occurred on May 6, 2010, in what is known as the "Flash Crash." On this date, the Dow Jones Industrial Average plummeted 1,010.14 points in about five minutes, only to recover the bulk of those losses minutes later. It was the second largest point swing—and the largest one-day point decline on an intraday basis—in Dow Jones history. Those few minutes of sheer panic, chaos and confusion put a spotlight on the necessity for broker-dealers such as Knight to adopt robust risk and control mechanisms and highlighted the need for radical regulatory reform, thus fundamentally changing the way the securities markets operated.

29. On May 11, 2010, the Joint SEC-CFTC Advisory Committee on Emerging Regulatory Issues (the "Joint Committee") was established in response to the Flash Crash. On September 30, 2010, the Joint Committee released the report of its investigation into the Flash Crash.[6] The Joint Committee found that many of the almost 8,000 individual equity securities and exchange traded funds ("ETFs") that traded on May 6, 2010 suffered sudden and significant price declines before recovering most of their losses only moments later. Meanwhile, other equities experienced violent swings, with over 20,000 trades across more than 300 securities executed at prices that differed by more than 60% from the equities' values just moments earlier. Several stocks, including the stocks of eight major companies in the S&P 500 such as Accenture, CenterPoint Energy and Exelon, fell to $0.01 per share for a short time. Other stocks, including Sotheby's, Apple and Hewlett-Packard, increased in value to over $100,000 per share, before returning to their "pre-flash crash" levels.

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[6] The Joint Committee's Findings Regarding the Market Events of May 6, 2010 (the "Joint Committee Findings") can be found at http://www.cftc.gov/ucm/groups/public/@otherif/documents/ifdocs/staff-findings050610.pdf.

2. *Regulatory Reaction to the Flash Crash: Knight Swims Against the Regulatory Currents*

30. In the months following the Flash Crash, the SEC, the exchanges and the Financial Industry Regulatory Authority ("FINRA") adopted significant measures to rein in the potential for future market-destabilizing trading phenomena. While increased regulatory oversight was welcomed by a large portion of the market, Knight chose not to begin implementing the internal risk controls that a market-shifting event such as the Flash Crash would bring, instead opposing regulatory proposals and remaining steadfast in its view that the SEC should not "over-regulate" the industry. For example, in a June 4, 2010 letter to SEC Corporate Secretary Elizabeth M. Murphy, Knight General Counsel Leonard J. Amoruso stated that Defendants "disagree with the viewpoint that volatility should be regulated or mandated out of existence, ***or that we should introduce safeguards to protect market participants*** from periods of high volatility."

31. After several months of investigation and hearing testimony, on February 18, 2011, the Joint Committee issued a report of its recommendations in light of its findings on the Flash Crash.[7] The Joint Committee recommendations provided several suggested reforms to address "glaring issues" in order to restore order and confidence in the market. The SEC made the most fundamental change in the form of the Market Access Rule.

C. **The Market Access Rule**

32. One of the primary regulations that the SEC implemented in recent years was Rule 15c3-5, known as the "Market Access Rule," which was first proposed on January 26, 2010.[8] The SEC formally adopted the Market Access Rule on November 3, 2010 after a lengthy

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[7] *See* http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/jacreport_021811.pdf.

[8] The January 2010 release can be found at http://www.sec.gov/rules/final/2010/34-63241.pdf.

comment period,[9] which included the submission of 47 comment letters from various market participants, nearly all of which supported the "overarching" purpose of the Rule—"to assure that broker-dealers with market access have effective controls and procedures reasonably designed to manage the financial, regulatory, and other risks of that activity."[10]

33. The SEC adopted the Market Access Rule as a codification of some common-sense risk management and internal control measures that were standard in the industry, and also as a precaution to avoid notable market events. To prevent these anomalies, the Market Access Rule required that brokers and dealers "appropriately control the risks associated with market access, ***so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system***."[11]

34. The Market Access Rule focuses on three areas: supervisory and risk management controls and supervisory procedures, direct and exclusive control protocol, and implementation and maintenance of an effective program for surveillance and compliance, including a certification from the CEO:

- Subsection (b) of the Market Access Rule requires brokers or dealers with market access to "***establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks***" of having market access. According to the SEC Order, this subsection addresses arrangements, such as those at Knight, where a broker-dealer's trading activities place its own capital at risk.

- Subsection (c) of the Market Access Rule identifies the specific required elements of a broker or dealer's risk management controls and supervisory procedures. This subsection requires a broker or dealer to have systematic financial risk management controls and supervisory procedures that "***[p]revent the entry of orders that exceed appropriate pre-set credit or***

[9] The November 3, 2010 press release can be found at http://www.sec.gov/news/press/2010/2010-210.htm.

[10] *See* http://www.sec.gov/rules/final/2010/34-63241.pdf.

[11] *See* Risk Management Controls for Brokers or Dealers with Market Access, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010).

capital thresholds in the aggregate for each customer and the broker or dealer . . . ." In addition, this subsection requires a broker or dealer to have regulatory risk management controls and supervisory procedures that are "***reasonably designed to ensure compliance with all regulatory requirements***," including "being reasonably designed to . . . [a]ssure that ***appropriate surveillance personnel receive immediate post-trade execution reports*** that result from market access."

- Subsection (e) of the Market Access Rule requires brokers or dealers with market access to "***establish, document, and maintain a system for regularly reviewing the effectiveness of their risk management controls and supervisory procedures required by paragraphs (b) and (c)***. . . ." This sub-section also requires that the CEO review and "***certify that such risk management controls and supervisory procedures comply with subsections (b) and (c)***" of the Market Access Rule, and are kept as part of the company's books and records. These requirements are intended to ensure compliance on an ongoing basis, in part by charging senior management with responsibility to regularly review and certify the effectiveness of the controls.[12]

35. In addition to, and as an extension of, the requirements listed above, the Market Access Rule required broker-dealers such as Knight to incorporate transaction risk controls designed to prevent the initiation of a disastrous series of mistaken trades—the exact scenario that unfolded at Knight. Specifically, broker-dealers routinely incorporate into their systems transaction risk controls that include limits on the number of trades, number of shares purchased or sold, dollar value and percentage of total volume of trades occurring in any given order and across a sequence of transactions in a given stock, or in aggregate across several stocks. Any attempted transactions that violate one or more of these specified limits are not executed and a real-time alert is sent out to advise the company and its client of the violation.

36. In addition, real-time risk monitoring systems backup the hard-coded transaction limits, thus quickly alerting companies of an extraordinary large number of transactions, volume

[12] While Defendant Joyce assumed the role of CEO over Knight's subsidiary that handles the market-making division in July 2012, the "unit's former CEO, Joseph Mazzella, ***had certified Knight's compliance with the market-access rule before July***." *See Wall Street Journal*, November 13, 2012, "SEC Expands Knight Probe," http://online.wsj.com/article/SB10001424127887324595904578117253534571388.html.

of shares or dollar value being traded.[13] Moreover, basic supervisory controls required continuous profit and loss monitoring and loss limits on individual traders, trading teams and lines of business, and any breaches of these limits required immediate trading suspensions, investigations, former reports and remedial action.[14] The Market Access Rule also required that a company's risk protocols are documented, reviewed and updated on a regular basis, and most broker-dealers ensured compliance by establishing a risk committee and an individual risk officer that are responsible for meeting these obligations.[15] Notably, Knight ***did not even incorporate a risk officer*** in its organizational hierarchy until months after the August 1 trading debacle.[16]

37. The compliance date for the Market Access Rule was set for July 14, 2011, with a limited exemption providing a six-month compliance extension to requirements pertaining to

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[13] In addition to automated transaction risk controls, it is common practice, and a requirement of market regulations including the Market Access Rule, for broker-dealers to develop and implement a wide variety of additional risk management policies and procedures to ensure that the firm is protected from excessive market, counterparty and credit risk, and to ensure compliance at all times with prevailing regulations. *See* SIFMA Market Risk Guidelines, March 2012, http://www.sifma.org/uploadedfiles/societies/sifma_internal_auditors_society/market-risk-management-audit-guideline.pdf: "A firm must establish, document and maintain policies, controls and procedures to an auditable standard: (1) Concerning the operation of its VaR model approach; and (2) For monitoring and ensuring compliance with the policies, controls and procedures."

[14] *See* http://www.sec.gov/rules/final/2011/34-64748.pdf (citing 17 CFR 240.15c3–5(c)(1)(i) and (ii); 17 CFR 240.15c3–5(c)(2)(i) and (iv)); *see also* CBOE Regulatory Circular RG11-065 May 26, 2011: New SEC Rule 15c3-5 Risk Management Controls for Brokers or Dealers with Market Access, https://www.cboe.org/publish/regcir/rg11-065.pdf.

[15] *See* NASD Notice to Members 99-92: SEC, NASD Regulation, And NYSE Issue Joint Statement On Broker/Dealer Risk Management Practices, http://www.finra.org/web/groups/industry/@ip/@reg/@notice/documents/notices/p004054.pdf: "At several firms, traders and trading personnel were expected to play an active role in risk management. Many firms employed an independent (i.e., from revenue production) risk manager who was appropriately experienced and reported to a sufficiently high level of authority (e.g., Board of Directors, or Chief Executive Officer) that his challenges to a trader's pricing of a position were taken seriously and were implemented without requiring the concurrence of the revenue side of the business."

[16] *See* Federal Reserve Board Supervisory Letter re Compliance Risk Management Programs, http://federalreserve.gov/boarddocs/srletters/2008/SR0808.htm: "The primary responsibility for complying with applicable rules and standards rests with the individuals within the organization as they conduct their day-to-day business and support activities. ***The board, senior management, and the corporate compliance function are responsible for working together to establish and implement a comprehensive and effective compliance risk management program and oversight framework that is reasonably designed to prevent and detect compliance breaches and issues***."

capital thresholds. For all other requirements of the Market Access Rule, the compliance date remained July 14, 2011. As of November 30, 2011, all broker-dealers, including Knight, were required to comply with all provisions under the Market Access Rule. As described in §V(C)(5) below, the SEC has now concluded in its ground-breaking SEC Order that Defendants ***willfully*** failed to reasonably incorporate the industry-standard and legally-required practices described above in Knight's risk management and control structure, making investments in the Company's securities a much riskier proposition than Defendants publicly portrayed.

D. The Individual Defendants Were Incentivized To Avoid Control Costs

38. Knight found itself in a precarious position with respect to its control structure, having failed to adopt basic, industry-standard measures amidst cost-cutting efforts and now facing regulatory requirements that would compound Defendants' errors. Indeed, the Market Access Rule required broker-dealers such as Knight to adopt comprehensive risk management protocols, and meeting these obligations required capital investments to ensure that adequate human and technological resources were allocated towards these necessary risk management and internal controls. Around this same time, however, a downturn in financial results, as well as increased regulatory costs, led Knight to drastically tighten spending.

39. Notably, in August 2011—only one month after firms were initially required to comply with the Market Access Rule—Knight announced it was eliminating about 6 percent of its employees by reducing staff in, among other areas, research, technology, operations and other support functions. In a statement issued by the Company, CEO Joyce stated:

> [F]or the past two and a half years, aside from a few brief periods, we've witnessed a prolonged deterioration in market conditions. While we largely maintained our revenue momentum, overall financial performance lagged. In response, we focused the cuts on businesses and regions in which the competitive dynamics have shifted or the barriers simply proved too great. . . . we will

continue to seek further cuts in annual operating expenses as part of a broader expense management plan.

40. Defendants' decision to forego the necessary capital investments in their risk management infrastructure was disastrous for Knight. A detailed post-mortem regarding the Knight trading disaster released in 2013 provides insight on this extremely reckless decision-making and underlying rationale, as well as the deficiencies that these operational cuts caused:

> ***Trading firms were expected to have controls in place*** and invest in the technology to keep up to date . . . Management constantly scrutinized technology budgets and ***didn't want to spend the money on safeguarding their systems***. Circuit breakers, kill switches, fuse boxes or any type of failsafe mechanisms always got cut, as companies reasoned accidents would never happen. ***It was a fallacy, a lunacy, a heresy.*** It was not the lack of technical capability. ***Management cut these investments all the time***.[17]

41. For the Individual Defendants, however, an additional incentive beyond budgetary concerns existed for them to scale back expenditures on internal control systems: their own personal compensation. Specifically, the Individual Defendants were incentivized to keep costs to a minimum since their compensation was keyed to the Company's pre-tax operating income.[18] Thus, the Individual Defendants' compensation was not tied to expense-neutral metrics like revenue or trading volume, but instead relied upon a pre-tax operating income statistic that was sensitive to additional operational expenditures and could be inflated in the short term by underfunding areas such as risk management controls.

42. This was particularly true since, beginning in 2008, Knight's pre-tax earnings plummeted on a yearly basis. In 2008, the Company's pre-tax earnings were $314.3 million; in 2009, the figure dropped to $232.8 million; and in 2010, the Company's earnings dropped to

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[17] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 886-891). Kindle Edition.

[18] According to Knight's 2012 Proxy filed with the SEC on April 3, 2012, Defendant Joyce's "2011 annual incentive opportunity related to the 2011 performance year was conditioned upon the achievement of certain consolidated pre-tax operating income targets of the Company."

$150 million, or less than half the total from two years' prior. Accordingly, Knight's financial results were steadily declining and its competition was consistently increasing. During this time, Defendant Joyce's compensation correspondingly declined from $20.9 million in 2008 to $6.2 million in 2010.

43. Given these difficulties the Company was facing, coupled with Defendants' unwillingness to comply with increased regulation, the Individual Defendants rolled the dice—they refused to outlay the additional capital expenditures necessary to buttress their inadequate existing risk control structure and fully comply with the additional requirements mandated by the Market Access Rule. In doing so, Defendants risked the fate of the entire Company, placing their own financial interests ahead of the interests of Knight's shareholders.

E. Knight's Failure to Comply with the Market Access Rule

44. Against a deteriorating industry landscape, heading into 2012, Knight was desperate to preserve its market share and order flow and meet the pressures of Wall Street expectations. At the same time, and despite Knight's admitted financial difficulties in funding operations, the Company had to provide some semblance of adherence to the Market Access Rule's risk management requirements. Knight's woefully inadequate attempts to comply with the Market Access Rule thus began well in advance of the Rule's July 14, 2011 compliance date. These attempts fell into four primary categories: initial assessment of compliance, written description, written supervisory procedures, and post-compliance date reviews. Indeed, Knight was critically deficient in each of these vital areas, as the SEC has now confirmed:

- Knight's initial compliance assessment was deficient in that it (i) merely "focused on compiling an inventory of Knight's existing controls" and ***failed to document the evaluation of the controls themselves***; (ii) ***did not consider possible problems within Knight's Smart Market Access Routing System*** ("SMARS"), one of the Company's systems that handled a significant number of orders and which caused the August 1, 2012

trading meltdown; and (iii) did not consider the inability of PMON, Knight's post-execution position monitoring system and primary risk monitoring tool, ***to prevent the entry of orders that would exceed a pre-defined capital threshold***, relying on human monitoring rather than automated alerts and failing to display limits for internal accounts or trading groups.

- Knight's written control descriptions, or narrative, of its controls was deficient, incomplete and inaccurate, thus violating the Market Access Rule's documentation requirements. For instance, the Company omitted several key trading groups from its narrative and only added others in a reactionary manner after experiencing erroneous trading events, including an October 2011 error in the Company's Lead Market Making ("LMM") desk that resulted in a $7.5 million loss.

- Knight's written supervisory procedures were similarly deficient in that, as the SEC Order determined, such descriptions were incomplete as written. Moreover, the SEC found that Knight's written procedures were inadequate and unclear, falling well short of the requirements under the Market Access Rule.

- Knight's review process pursuant to its written procedures was also deficient. Notably, the SEC Order makes absolutely clear that the reviews (i) ***did not consider whether Knight needed controls to limit the risk that SMARS could malfunction***, and (ii) ***did not consider whether Knight needed controls concerning code deployment or unused code residing on servers***—the precise risk management errors that led to the Company's trading disaster.

45. Thus, despite the immediate need for a risk management overhaul that the adoption of the Market Access Rule and other events should have sparked at the Company, the SEC Order found that Knight did not even broadly consider whether it had sufficient controls in place to prevent the entry of erroneous orders, regardless of the specific system that sent the orders or the particular reason for that system's error. Knight also did not have any mechanisms to test whether its systems were relying on stale data. All of these deficiencies were clear violations of the Market Access Rule and resulted in an operational environment at Knight that was unquestionably deficient, markedly riskier and in direct contrast to the public portrayals promulgated by Defendants during the Class Period.

F. Defendants Knew Full Well the Potentially Disastrous Ramifications of Inadequate Risk Management and Internal Controls

46. Ironically, on November 30, 2011—the same day that the last of the Market Access Rule's requirements became effective—Knight participated in the KBW Securities Brokerage and Market Structure Conference (the "KBW Conference"), during which Defendant Joyce gave a presentation (the "KBW Conference Presentation") in which he misleadingly boasted that the impact of the Market Access Rule on Knight would be "minimal" since the Company "began instituting controls before the rule became effective."[19]

47. While Defendants, especially Joyce, were adamantly opposed to increased regulations such as the SEC's adoption of the Market Access Rule, Defendants never hesitated to broadcast the risk and control missteps of Knight's competitors, often contrasting Knight's superior capabilities to the opposition's inferior systems. In fact, Joyce was one of the harshest critics of the NASDAQ's technological and risk management failures during the NASDAQ's botched handling of Facebook's May 18, 2012 IPO:

(a) At 12:01 pm, approximately 30 minutes after Facebook belatedly began trading, Joyce emailed NASDAQ CEO Robert Greifeld, urging him to halt trading in Facebook shares. At 5:07 pm that day, after trading had finished, Joyce sent another email to Griefeld describing the IPO as a "disaster." Approximately 10 minutes later, Joyce told SEC Chairman Mary Schapiro over the phone that Facebook's botched IPO would cost investors tens of millions of dollars.

(b) On May 21, Joyce appeared on CNBC's "Squawk on the Street", during which he extensively criticized NASDAQ, in particular for not delaying the opening of Facebook trading and for not testing its software sufficiently: "***The failure was NASDAQ's. This was arguably the worst performance by an exchange on an IPO ever***. . . This was like your server going down, except on a massive scale. ***And instead of stepping back and rebooting, they kept plowing ahead***."

[19] The KBW Conference Presentation can be found at http://www.knight.com/investorRelations/downloads/11-30-2011.pdf.

(c) In a May 21, 2012 *Business Insider* article entitled, "CEO of Knight Securities Blowtorches the NASDAQ for Bungling the Facebook IPO," Joyce explained that ***because of several technical and systemic issues*** that happened on Friday when Facebook began trading on NASDAQ, Knight Capital is now sitting with a loss and his brokerage firm got "punched in the nose" and "it hurt." He added that they're planning on filing a claim and he expects FINRA to adjudicate the situation.

(d) In a July 4, 2012 *Wall Street Journal* article entitled "A NASDAQ Critic Takes Aim,"[20] Joyce stated that "[t]his isn't about making the markets more efficient." Rather, "[i]t's about investor confidence."

48. Given Joyce's repeated and vociferous criticisms of NASDAQ's handling of the Facebook IPO and the exchange's technological glitches that were at the heart of these failures, Defendants were well-aware of the importance of operational and risk controls to the stability of trading exchanges and platforms, and they thus acted with scienter in failing to ensure that Knight had adopted these basic, industry-standard and SEC-required risk management protocols.

G. Defendants Disregard Numerous Red Flags Alerting Them To Knight's Risk Management and Internal Control Failures

49. While the Market Access Rule provided specific codification of necessary risk control procedures, Defendants lacked sufficient internal controls well before the formal implementation of the Rule. Defendants were aware of the importance of operational risk controls due to Knight's prior SEC and FINRA violations. Specifically, in late 1999, the National Association of Securities Dealers' Regulation ("NASD") found that Knight had "***failed to establish, maintain and enforce written supervisory procedures reasonably designed to achieve compliance with applicable securities laws and regulations*** and with applicable NASD rules relating to potentially improper or illegal trading activities near the close of the market."[21] In 2002, Knight paid $1.5 million to settle charges of market making and trading violations,

[20] *See* http://online.wsj.com/article/SB10001424052702303933404577504981772663406.html.

[21] *See* www.finra.org/brokercheck, Docket/Case Number CMS990150.

including failing to honor posted quotes and accurately report trades, according to the National Association of Securities Dealers' Regulation subsidiary.[22] At the time, the Knight settlement was the largest fine imposed by NASD Regulation for those types of violations.

50. Similarly, in 2004, Knight agreed to pay $79 million to settle fraud charges brought by the SEC. The SEC found that Knight had defrauded its institutional investors and censured the company for failing to reasonably supervise institutional sales traders. In addition to paying the monetary penalty, Knight agreed to conduct an independent review of its policies and procedures for executing obligations, reporting trades and limiting orders, as well as its supervisory and compliance structure. In 2006, the NASD found that, among other violations, Knight's "***supervisory system did not provide for supervision reasonably designed to achieve compliance with applicable securities laws, regulations and NASD rules***."[23]

51. Moreover, Knight's own history of technological and enterprise failures demonstrate that Defendants' knew of the Company's deficiencies. In fact, Confidential Witness ("CW") 1, Knight's former Vice President of Compliance who was employed at the Company between October 2010 and February 2012, confirmed that the August 1, 2012 trading meltdown was not an isolated event, stating that "***there were tremors of things like this previously***" and that Joyce knew about these events. CW 1 stated that a couple months before she[24] left Knight there were multiple "***software glitches*** that brought about problems and losses ***in the millions of dollars***." In fact, the day before the Company's August 1 meltdown, a trading error in Knight's "specialist" unit resulted in a loss of almost $1 million. As one analyst noted in the days following the Company's collapse, "[o]ne of the problems with even such a relatively small loss

[22] The NASD later changed its name to the Financial Industry Regulatory Authority ("FINRA").

[23] *See* www.finra.org/brokercheck, Docket/Case Number 2005000086301.

[24] To maintain the confidentiality of the former employees cited herein, all confidential witnesses are referred to in the feminine.

is that it is still nearly half of Knight's 'value at risk' or VAR, a publicly disclosed measurement of how much the firm expects to lose in any given trading day."[25]

52. Notably, the SEC Order makes clear that Defendants either knew or were severely reckless in not knowing that Knight's risk management systems fell drastically short of meeting the requirements of the Market Access Rule, or even the most basic internal control requirements. For example, the SEC found that in October 2011, Knight used test data to perform a weekend disaster recovery test. After the test concluded, Knight's LMM desk remarkably continued to use the same test data to generate automated quotes when trading began that Monday morning, resulting in a $7.5 million loss for Knight. In fact, the SEC Order concluded that "***[s]everal previous events presented an opportunity for Knight to review the adequacy of its controls in their entirety***."

53. Accordingly, a plethora of red flags demonstrate that Defendants were keenly aware of the importance of risk management and internal controls and the requirements necessary for Knight to safely operate, including among others: (i) Joyce's incessant critiques of NASDAQ's slow intra-day response to the issues and the lack of preparation for what the exchange knew would be a taxing endeavor; (ii) Knight's past regulatory violations; (iii) other notable industry control events such as the Flash Crash; and (iv) the Company's own experience with lesser, yet significant, trading glitches. Despite Defendants' awareness of the critical role that organizational integrity plays in the functioning of the markets, and in a cataclysmically ironic turn, NASDAQ's issues in connection with the Facebook IPO proved to be mere hiccups in comparison to the complete control deficiencies that plagued Knight's operations throughout the Class Period and which ultimately nearly ruined the Company only a few months later.

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[25] *See ValueWalk*, "Knight Capital Trader Flubs $800K Trade One Day Before $400M Loss," http://www.valuewalk.com/2012/08/knight-capital-group-kcg-trader-flubs-800k-trade-one-day-before-400m-loss/.

H. The Competition Continues to Mount: The NYSE Liquidity Program

54. In October 2011, the NYSE proposed its RLP, which was designed to decrease the advantages enjoyed by companies such as Knight that employed automated trading programs. The NYSE's October 12, 2011 press release announcing the submission of the RLP to the SEC touted price improvements and enhancements to transparency, liquidity and competition that would be realized through the program's implementation.

55. Because the NYSE's RLP was designed to work along the same lines as the dark pools that traded large blocks of shares for retail customers and institutions, the announcement of the RLP further compounded the pressures that Knight faced after the Flash Crash. An October 12, 2011 *Bloomberg* article noted that "retail order flow is the cream of the crop," and that the RLP "would provide an incentive to retail brokers to send orders directly to the exchange, which may dissuade them from selling orders to wholesalers," such as Knight. The article quoted one analyst as stating that, for the NYSE, the program was "absolutely a way to compete against the internalization and drive more order flow."

56. Publicly, Knight falsely assured the market and its investors that the RLP would have little to no effect on the Company's business and operations. During an earnings conference call held on November 30, 2011, Defendant Joyce, in referring to the NYSE's then-proposal for the RLP, stated: "[f]rankly, I don't see how the SEC can possibly okay it." After the SEC approved the RLP, Joyce continued to downplay its significance, stating during a July 18, 2012 earnings conference call: "***Frankly, we're not overly concerned as to the potential impact on Knight's retail order flow***. . . . ***we are not overly concerned with the impact on our business*** . . . it's a one-year pilot program. And I guess, we're going to learn a lot. We feel pretty good about our offering in comparison to that. . . . ***So let the games begin***."

57. Despite these hollow assurances to investors, however, Knight railed against the RLP's passage. In the months following the NYSE's announcement, Knight repeatedly criticized the RLP and requested an extension of the comment period thereon, ironically claiming in comment letters to the SEC that if the program were approved and the NYSE were allowed to conduct its pilot, the "proverbial slippery slope will be that many market participants will seek similar relief" for fear of allowing the NYSE to have a "monopoly," resulting in "undesirable market behavior" and thrusting the U.S. equity markets in a problematic environment "***without adequate study and analysis***."[26]

58. On July 5, 2012, the NYSE issued a press release announcing that the SEC had approved the RLP.[27] The NYSE press release also announced that it expected to officially institute the RLP on August 1, 2012. The writing was on the wall for Knight. The competition was no longer coming from other market makers, or even from other market entrants or startups. This time, the competition was coming directly from the exchange itself. Given the sharp turnaround from the SEC's approval of the RLP to the launch date of the program, Knight faced a conundrum: risk losing market share in the immediate aftermath of the RLP launch as investors obtained more aggressive pricing directly from the NYSE, or launch its own competing system to operate on the new platform ***in less than one month*** in order to stave off the exchange's fierce competition.

59. Knight chose the latter and implemented its own competing system in a matter of weeks—a fateful decision that ultimately almost collapsed the entire Company. A September 14, 2012 *Motley Fool* article noted that Knight's answer to the RLP was to build its own trading

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[26] *See* http://www.knight.com/newsRoom/researchAndCommentary.asp, November 28, 2011 Re: Securities Exchange Act Release No. 34-65672; March 7, 2012 Securities Exchange Act Release No. 34-66346 (File Nos. SR-NYSE-2011-55 and SRNYSEAmex-2011-84).

[27] *See* "NYSE Euronext to Launch Retail Liquidity Program," http://exchanges.nyx.com/node/3840.

algorithm that would participate directly in the RLP. The article went on to criticize the Company for "trying to defend its turf"—a market making division that accounted for exactly half of Knight's 2011 $1.4 billion in revenue, and which was placed at risk because of the RLP:[28]

> In a sign of the extent to which market makers and exchanges are intertwined, Knight's route to defending its market share from the threat of the Retail Liquidity Program was to actually participate in the Retail Liquidity Program. As the RLP represented a potentially attractive trading pool for retail investors, Knight could limit its market-share losses by jumping in the pool itself and trying to out-hustle other traders in there. In order to do that, though, Knight's tech team would have to build a new software system that would be able to talk to and trade with the RLP.

60. Similarly, *Dealbook* observed on August 2, 2012 that Knight had to compete with the RLP "[i]n a bid to keep a grip on its customers.. . . that would position it competitively amid market changes . . . ." *Dealbook* went on to observe that Knight's motivations were simply bravado and money: "[u]nlike rivals that hesitated, Knight Capital's presence on Day 1 would ensure bragging rights and extra profits."[29]

61. Indeed, other commentators echoed the sentiment that Knight's decisions were driven by the reckless greed and aggression of Defendant Joyce himself: "Ultimately, in a bid to keep a grip on customers, Knight Capital pushed to accommodate its systems to incorporate NYSE's RLP on August 1. ***Unlike rivals that took a more measured approach, Knight Capital's presence on the day of the launch of the program would only continue the aggressive style championed by its chief executive officer of taking advantage of any opportunity to increase revenues and profits***."[30]

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[28] *See The Motley Fool*, "Everything You Need To Know About the Knight Capital Meltdown," http://www.fool.com/investing/general/2012/09/14/everything-you-need-to-know-about-the-knight-capit.aspx.

[29] *See Dealbook*, "Trying To Be Nimble, Knight Capital Stumbles," http://dealbook.nytimes.com/2012/08/02/trying-to-be-nimble-knight-capital-stumbles/.

[30] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3309-3314). Kindle Edition.

V. THE KNIGHTMARE ON WALL STREET: KNIGHT'S INEFFECTIVE RISK MANAGEMENT AND INTERNAL CONTROLS PUSH THE COMPANY TO THE BRINK OF FINANCIAL COLLAPSE

A. Knight Scrambles to Prepare for the RLP

62. The NYSE was set to launch its RLP on August 1, 2012. To gratify Knight's attempt to protect its business and for bragging rights, Knight made a number of changes to its systems and software code to allow it to access the RLP. Despite the fact that the NYSE had released specifications of the RLP to market participants since early December and had made available a testing platform for six months, Defendants only established and tested these haphazard changes during the little over four weeks before the RLP's launch—a distressingly short time to implement such a crucial endeavor and one which was doomed to fail given the rampant risk management and control deficiencies prevalent in Knight's operational infrastructure.

63. According to CW 4, Executive Vice President and Global Head of Operations Steve Sadoff, who reported directly to Defendant Joyce, was responsible for the entire development of the system to access the RLP. An August 2, 2012 *Dealbook* article observed that, in the face of impending competition from the RLP, and in stark contrast to Knight's extremely reckless approach, Knight's competitors "took a more measured approach" since "[t]he time between the approval of the software and the time it was implemented was incredibly quick."[31]

64. One of the most fundamental changes Knight made was deploying new software code in SMARS, one of Knight's high speed, algorithmic routers that was housed across eight different computer servers. One of SMARS' core functions was to receive orders from other

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[31] *See Dealbook*, "Trying To Be Nimble, Knight Capital Stumbles," http://dealbook.nytimes.com/2012/08/02/trying-to-be-nimble-knight-capital-stumbles/; *see also Dealbook*, August 3, 2012, "Trading Program Ran Amok, With No 'Off' Switch," http://dealbook.nytimes.com/2012/08/03/trading-program-ran-amok-with-no-off-switch/.

components of Knight's trading platform (so-called "parent orders") and then, as needed based on available liquidity, send one or more representative orders (so-called "child orders") to external venues for execution (such as to the RLP).

65. Knight intended to insert new computer code into SMARS that would allow it to access the NYSE's RLP (the "RLP Code"). The RLP Code was supposed to replace unused code known as "Power Peg." Knight had discontinued using the Power Peg code in 2003 and had moved its major functionality to a different point in the code sequence in 2005. Notably, the SEC Order concluded that a "written protocol requiring the retesting of the Power Peg code in 2005 could have identified that Knight had inadvertently disabled the cumulative quantity functionality in the Power Peg code." Nevertheless, it was still a part of SMARS and remained fully functional when Knight programmers began deploying the RLP Code.

66. Knight assigned a single technician to deploy the new RLP Code, which began on July 27, 2012. In direct violation of the Market Access Rule and contrary to standard industry protocol, Knight did not have a second technician review the new RLP Code deployment, and no one at Knight realized that the old, unused Power Peg code had not been removed from the full installation. As detailed above, one reason for this failure was Knight's lack of procedures or protocol that required such a review. As the SEC Order concluded, a "written procedure requiring a simple double-check of the deployment of the RLP Code could have identified that a server had been missed and averted the events of August 1."

B. The August 1, 2012 Knight Debacle

67. On August 1, 2012 Knight went live with its new RLP Code to push itself onto the NYSE's new trading platform. The decision was made to go live despite the fact that, as Joyce later admitted, the Company had only finished adding the new RLP Code hours before the markets opened. The ramifications of this decision were immediate and catastrophic. Despite

the purportedly strong and reliable technological, operational and risk management controls and procedures that Knight publicly said it had in place—and, indeed, which were required by the Market Access Rule—Knight's launch proved to be a historic failure caused directly by the Company's deficient technological, operational and risk management controls.

68. The catastrophe began before the 9:30 opening bell. During the morning of August 1, Knight received orders that were eligible for trading on the RLP that were designated for pre-market trading. These orders were processed by SMARS. Beginning at 8:01 am, however, an internal Knight system began generating automated emails, known as "BNET rejects," that referenced SMARS and contained the error message "Power Peg disabled." The BNET rejects were sent in real time, and were directly caused by the faulty deployment of the RLP Code. Between 8:01 and the 9:30 market open, Knight's system automatically sent ***97*** of these emails to a group of Knight personnel—an average of one error message approximately every 56 seconds. As the SEC Order noted, Knight did not design the BNET rejects to be system alerts, and Knight personnel did not generally review them as they were received. This was another colossal and basic control failure, as the SEC concluded that "[h]aving a procedure that integrated the BNET Reject messages into Knight's monitoring of its systems . . . could have prevented the events of August 1."

69. When the markets opened at 9:30, Knight's problems went from bad to worse. The Company immediately experienced massive technological malfunctions related to the deficient deployment of the RLP Code, which had triggered the dormant Power Peg code still present on Knight's server and resulted in the continuous and rapid procession of child orders for each incoming parent order without regard to the number of share executions Knight had already

received from trading centers. Thus, while one part of Knight's order handling system could see that the parent orders had been filled, this information was not communicated to SMARS.

70. Only one minute into trading, traders on the NYSE floor saw that there was 12% more trading volume in all stocks compared to the average volume during the previous week. "***Really, everybody noticed***," Doreen Mogavero, president of Mogavero Lee & Co., said. "***It wasn't two seconds before I was running around, saying, 'What is going on with these stocks?***'"[32] The problem only got worse. Two minutes later, at 9:33, there was 116% more trading volume than the previous week's average. By 9:34 am, NYSE officials had traced the malfunction to Knight. Knight employees and NYSE officials began sending frantic messages to Knight executives. Meanwhile, NYSE CEO Duncan Niederauer tried unsuccessfully to contact Defendant Joyce, who was not in the office that morning. An August 14, 2012 *Wall Street Journal* article described Knight's dumbfounded response to these notifications:[33]

> When NYSE Euronext trading-floor officials called Knight at about 9:35 a.m. to try to pinpoint the cause of unusual swings in dozens of stocks, just after the Big Board opened for trading, Knight traders and their supervisors had no immediate answers, said people familiar with the morning's events. The NYSE had to call Knight several times before deciding to shut the firm off, the people said.
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> * * *
>
> And Knight was reluctant to hit a so-called kill switch, wanting to avoid shutting off all order processing, which would disrupt customers' trading, according to people familiar with the matter.

71. Despite receiving word from the market a mere five minutes into the trading day, Knight could not and did not stop its wayward system for approximately 45 minutes—an unheard of duration for an algorithmic trading platform installed by an established firm that

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[32] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 255-256). Kindle Edition.

[33] *See Wall Street Journal*, "Knight Upgrade Triggered Old Trading System, Big Losses," http://online.wsj.com/article/SB10000872396390444318104577589694289838100.html.

purportedly followed sophisticated and necessary operational risk management controls. Indeed, as one commentator stated:

> As the torrent of faulty trades spewed from a Knight Capital trading program, no one at the firm managed or wanted to stop it until an explanation could be found. . . ***One of the questions the SEC would later ask was why there appeared to be a breakdown in controls*. *There was no one person at Knight to take responsibility for the problem when it occurred***, leading to further confusion and extending the time it took to stop the flow.[34]

72. Ironically, the solution to the malfunctioning SMARS system lay in the 97 BNET reject emails that were sent to Knight personnel prior to the 9:30 opening bell. The SEC Order describes how these error messages, generated due to the malfunctioning code, "provided Knight with a potential opportunity to identify and fix the coding issue prior to the market open" but "were not acted upon before the market opened and were not used to diagnose the problem after the open."

73. During this period of runaway trading, a number of NYSE stocks were experiencing unusually high trade rates of over 100 trades per second. Many of these trades fell within the bid/ask spread, something very abnormal for trades and quotes from these exchanges, and virtually all of these trades were effectuated in lots of 100 shares—the minimum number required to be reported in the system. The trades were also very evenly spaced in time and in some cases buys and sells were almost contemporaneous, with the closing trade showing the next exchange sequence number. The bid/ask spread across these trades remained very stable during this rapid buying and selling, whereas typical orders of this nature would have widened the bid/ask spread quickly. The reason for this phenomenon is that the trade executions for this period were nearly instantaneous with purchases at the offer and sales at the bid, suggesting that the same firm, Knight, was on both sides of the trades.

[34] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 490-491, 517-522). Kindle Edition.

74. As noted in the Knight post-mortem: "Nanex Research would later conclude that Knight was buying at the offer and then, almost immediately, selling at the bid, then buying at the offer, then selling at the bid and so forth. Almost all trades alternated between buying at the offer and selling at the bid, which meant losing the difference in price. In the case of Exelon Corporation (EXC), for instance, that meant losing about 15 cents on every pair of trades. 'Do that 40 times a second, 2400 times a minute, and you now have a system that's very efficient at burning money.'"[35]

75. A significant number of additional trades that Knight executed during this period featured Knight only on one side of the transaction, and thus the Company was effectively paying another firm to capture the other side of that trade. As rival firms stepped in to take the other side of these transactions against Knight, the Company accumulated a massive market position which ultimately resulted in a loss of hundreds of millions of dollars.

76. In all, 212 parent orders were processed by the defective Power Peg code after trading began at 9:30.[36] These 212 orders resulted in SMARS sending millions of child orders, resulting in 4 million executions in 154 stocks for more than 397 million shares over 45 minutes. At the height of the malfunction, Knight held nearly $7 billion worth of stocks, consisting of a roughly $3.5 billion net long position in 80 stocks and a roughly $3.15 billion net short position in 74 stocks. Had Knight's risk controls been as robust as it claimed during the Class Period, various protocols and safeguards, including basic human interference, should have stepped in to cut-off Knight's system and avoid the catastrophic trading losses that ensued.

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[35] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 460-464) Kindle Edition.

[36] These 212 orders are distinct from the pre-market trading orders that resulted in the 97 BNET rejects email error messages.

77. The millions of erroneous executions influenced share prices during the 45 minute period. For 75 of the stocks that Knight traded, Knight's executions comprised more than 20 percent of the trading volume and contributed to price moves of greater than 5%. Of those 75 stocks, 37 had had price moves of greater than 10%, with Knight's executions constituting more than 50% of the trading volume. The table below depicts the trading activity present on the NYSE, ARCA and AMEX listed stocks, where Knight was active, as opposed to the NASDAQ stocks, where Knight was not active, during the first 30 minutes of trading on the immediate trading days before and after the Company's trading failure:

First 30 minutes (9:30 - 10am) of Each Trading Day							
					Change From Previous Day		
	Date	#Trades	#Shares	$Value	#Trades	#Shares	$Value
NYSE, ARCA, AMEX Stocks	30-Jul-2012	1,696,694	467,408,855	14,126,276,122			
	31-Jul-2012	1,814,234	485,507,172	14,931,264,499	117,540	18,098,317	804,988,377
	1-Aug-2012	6,217,621	1,029,344,408	26,732,206,293	4,403,387	543,837,236	11,800,941,794
	2-Aug-2012	2,516,561	627,333,251	19,214,374,621	-3,701,060	-402,011,157	-7,517,831,672
	3-Aug-2012	2,234,668	623,774,201	19,258,792,075	-281,893	-3,559,050	44,417,454
	6-Aug-2012	1,675,771	465,628,789	13,144,155,894	-558,897	-158,145,412	-6,114,636,181
	7-Aug-2012	1,956,698	541,837,175	15,212,436,940	280,927	76,208,386	2,068,281,046
	Date	#Trades	#Shares	$Value	#Trades	#Shares	$Value
Nasdaq Stocks	30-Jul-2012	700,709	167,518,203	6,181,552,366			
	31-Jul-2012	763,773	186,114,958	6,376,026,290	63,064	18,596,755	194,473,924
	1-Aug-2012	746,035	177,456,831	5,422,292,697	-17,738	-8,658,127	-953,733,593
	2-Aug-2012	952,583	212,732,799	6,513,146,750	206,548	35,275,968	1,090,854,053
	3-Aug-2012	889,177	214,466,805	6,662,005,563	-63,406	1,734,006	148,858,813
	6-Aug-2012	635,463	157,096,864	4,650,731,465	-253,714	-57,369,941	-2,011,274,098
	7-Aug-2012	844,900	213,950,821	6,479,849,837	209,437	56,853,957	1,829,118,372

78. As depicted in the chart above, for the exchanges on which Knight was active, there were an additional 4.4 million trades, 544 million shares traded, and $11.8 billion in value traded over the previous trading day, whereas stocks on the NASDAQ—where Knight did not have a presence—actually experienced fewer trades, shares traded and value of stock traded. This erratic and violent volatility impacted many of the world's leading companies:

	Number of Trades Between 9:30 and 10:00 am[37]			**Percentage Change in Number of Trades**	
Company	***July 31***	***August 1***	***August 2***	***8/1 to Prior Day***	***8/1 to Next Day***
Bank of America	10,814	**124,175**	17,870	**1048%**	**-86%**
Ford	7,814	**109,045**	8,164	**1296%**	**-93%**
Citigroup	14,434	**91,218**	20,900	**532%**	**-77%**
Pfizer	23,410	**67,507**	15,072	**188%**	**-78%**
General Motors	1,367	**40,056**	10,072	**2830%**	**-75%**
Berkshire Hathaway (B)	1,702	**36,989**	2,688	**2073%**	**-93%**

79. These share price movements also affected other market participants, with some participants receiving less favorable prices than they would have in the absence of these executions and others receiving more favorable prices.

80. When the dust settled, Knight was able to pare its position to $4.6 billion in stocks it had accumulated. However, because this enormous position would have prevented Knight from opening for business on August 2 due to regulatory capital requirements, and to offset the risks of maintaining such a massive position, Knight was forced to frantically find a way to unload these shares. After desperately canvassing the market well into the night, the Company finally reached agreement with several opportunistic suitors only hours before the market open on August 2. These rival firms, including Goldman Sachs and J.P. Morgan, purchased portions of Knight's positions at discounts ranging from 5% to 9%. Goldman purchased the bulk of

[37] Source: *Bloomberg*.

Knight's portfolio at a 5% discount, or approximately $230 million less than the price of the stocks.[38]

81. According to the Company's Form 10-K filed with the SEC on March 1, 2013, Knight's loss "severely impacted [the Company's] capital base and business operations," and Knight "experienced reduced order flow, liquidity pressures and harm to customer and counterparty confidence." Although Knight had managed to stave off disaster for one day, the repercussions of the August 1 meltdown meant that the Company would need to make additional financial arrangements in order to survive the weekend.

82. When all was said and done, Knight suffered losses of $461 million, and an impairment charge of an additional $143 million. The Company's liquidity crisis came as a surprise to the market: "The losses uncovered a surprisingly weak standing for Knight Capital and threatened the survival of the firm. These losses were greater than the company's cash and cash equivalents position by the end of the second quarter of 2012 when it held $365 million."[39] Citing a purported drain on Knight's capital cushion and liquidity pressures resulting therefrom, the Company hastily put together a "rescue package" in the days following August 1 to save it from financial ruin. Engaged in a race against the clock, Knight was forced to reach out to potential suitors or face possible bankruptcy—a scenario that came so close to fruition that that the Company's lawyers did not stop working on Knight's possible Chapter 11 filing until 4:00 a.m. on the morning of Monday, August 6.

83. On that date, Knight confirmed that it was able to strike a $400 million rescue deal with a group of investors, allowing the Company to stave off collapse. The last few dollars

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[38] *See Wall Street Journal*, August 13, 2012, "Knight Held $7 Billion of Stocks Due To Glitch," http://online.wsj.com/article/SB10000872396390444900304577577580222134916.html.

[39] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 196-198). Kindle Edition.

from the consortium came rolling in just 15 minutes prior to the market opening. The rescue package was arranged by Jefferies and included investments from TD Ameritrade and the Blackstone Group. GETCO and Stifel, Nicolaus & Company were also involved in the deal. An August 6, 2012, press release issued by the Company stated in part that "[t]his capital infusion was undertaken in response to the extraordinary trading loss experienced by Knight on August 1, 2012, which significantly depleted Knight's capital base and in turn precipitated a loss of customer and counterparty confidence and liquidity crisis that, if not immediately addressed, would have threatened Knight's ability to continue to operate." The deal was massively dilutive to Knight's existing shareholders as it provided the rescue investors with $400 million of Knight's preferred stock with the right to buy shares at $1.50 per share.

84. Under normal conditions, such a large and dilutive private placement of equity would have required approval by the Company's shareholders pursuant to Shareholder Approval Policy of the NYSE. However, as the Company's August 6, 2012 Form 8-K explains, the Board relied on the "financial viability" exception to the Shareholder Approval Policy, which permits listing companies to bypass shareholder approval if the delay associated with shareholder approval would jeopardize the company. As a result, Knight shareholders had no say in the dilution of their shares or permitting rival companies such as GETCO an inside glimpse into the operations of Knight.

85. A few months later, in December 2012, Knight was sold to GETCO at a fraction of its Class Period market capitalization value, the final nail in the proverbial coffin for the Company. Notably, while GETCO executives largely dominated the management composition of the combined entity, Defendants Joyce and Bisgay fared comparatively well, with Joyce receiving a $7.5 million retention bonus and retaining the positions of Executive Chairman and

Chief Operating Officer, while Bisgay received over $1.5 million while retaining his Chief Financial Officer position of the surviving entity.[40]

86. For Knight shareholders, however, the picture was much bleaker as the damage inflicted upon them was massive and irreparable. Knight had been trading at over $10 per share on July 31, 2012, just before the trading failure occurred. After the system collapse and internal control breakdowns were revealed, Knight's stock price was eviscerated, plummeting 75%, and wiping out over $750 million in market capitalization, over a two-day trading period to close at $2.58 per share on August 2, 2012 on enormous trading volume. After the "rescue" deal, Knight's share price barely recovered, trading around $2.60 per share until the sale of the Company in December at $3.75 per share.

C. Market and Regulatory Reaction To Knight's Failure

1. Knight's Stunning Lack of Controls Is Revealed

87. Following Knight's August 1, 2012 meltdown, it became apparent that the Company's operational and risk management systems had failed to a cataclysmic proportion, and that the Company's meltdown was not an isolated and innocent event that could easily be explained as a one-time software failure. Also evident was that the reason for this failure was the Company's desire to roll out its own system to prevent market share loss to the NYSE's RLP, despite the precious few weeks in which Knight could develop and test such a system, the previous operational cuts and drawbacks that the Company had instituted, and the well-known deficiencies in risk management protocols born out of management's long-standing defiance of increased regulatory control.

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[40] *See Traders Magazine*, February 21, 2013, "GETCO Executives Dominate Knight Takeover, http://www.tradersmagazine.com/news/getco-executives-dominate-knight-takeover-110899-1.html.

88. According to people with direct knowledge of the matter, executives at Knight transferred the NYSE investigators to several areas of the firm before the exact source of the error was discovered and the trade could be shut down. One Wall Street executive with direct knowledge of the matter said that "there was a lot of 'it's not us, let me put you in touch with this guy,' before the thing was figured out."[41]

89. However, Knight's devastatingly slow response to the gravity of the situation left many Wall Street commentators dumbfounded:

> When computerized stock trading ran amok, ***the firm responsible could typically jump in and hit kill switches***. These could be implemented both at the software level and at the hardware level and allowed firms to pull the trigger and get out of the markets completely, either in select market or all markets; if managers had to hit a kill switch, they could do it within a number of minutes. Firms also had network monitoring and order monitoring tools that could tell them all destinations and trades routes of any and all orders going to the market. ***It would have been very unusual if Knight were unable to get that information immediately***. ***Wasn't Knight one of the most sophisticated trading outfits on Wall Street? Wasn't Sadoff overseeing 475 people and a budget exceeding $100 million, sufficient to make sure Knight's systems were indestructible***?[42]

90. Indeed, Knight's failure to simply kill its entire trading system within minutes of the market open was an open question for insiders, as a risk management function such as a "kill switch" is one of the most rudimentary tools that broker-dealers have for years:

> Many traders said it would have made sense if the firm's employees had not caught the problems for the first minute or so, given the speed at which Knight's program was firing orders. After that, though, the problems were visible for all to see. ***Sophisticated trading firms were expected to embed warning signals into their computerized trading systems, so when all else fails, there was always a "circuit breaker" or "kill switch" that could immediately stop trading.*** That was the type of protection many high-frequency trading firms used when they noticed that the Flash Crash was underway in 2010; nobody wanted to be left holding

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[41] *See Fox Business*, "SEC Was Looking at Knight in Midst of Errant Trade," http://www.foxbusiness.com/investing/2012/08/14/sec-was-looking-at-knight-in-midst-errant-trade/.

[42] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 483-489). Kindle Edition.

instruments that were to lose value. ***Surprisingly this time, Knight didn't have this protection***.[43]

91. As the Knight post-mortem recounts: "***For trading firms, not having kill switches in place was tantamount to drivers lacking auto insurance***. Do we really need auto insurance? If so, which coverage do we need? It is money out of the door. A lot of people risk their lives not having auto insurance because they just don't want to spend the money on it; but ***if something goes wrong, they will find themselves in trouble***."[44]

92. The entire trading industry was well-aware that substantial risk management controls for broker-dealers such as Knight was a necessary cost of doing business: "***None other than GETCO*** wrote in a response to a public consultation about MiFID from an E.U. commission, "***Authorized firms engaging in automated trading should have in place robust risk controls***."[45]

93. Tellingly, during an August 2, 2012 interview on *Bloomberg TV's* "Market Makers" program, Defendant Joyce tried to rationalize the control breakdown as a "glitch," stating that it "does not affect the individual investor. We did not harm any investor, we got them out of the way." In response, Stephanie Ruhle of Bloomberg TV stated: "But it does affect those who might look to buy Knight Capital stock. If you were to invest in a Company, would you be interested in buying shares of a company that within a day or two could get wiped out?" Joyce responded:

> No, of course not, but this was an anomaly. Not one we're proud of. But it was an anomaly and working to fix it. We have of course backed out the software that

[43] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3929-3935). Kindle Edition.

[44] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 897-900). Kindle Edition.

[45] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 931-932). Kindle Edition.

> caused the problem. You can't immunize people from making mistakes. You can't keep people from doing stupid things whether it is writing some imperfect code . . . . ***That's what happens when you have a culture of risk***.

94. Joyce's nonchalance during the interview was emblematic of the Company's disregard for the massive losses suffered by Knight's shareholders: "Even after the August 1 glitch, Knight would have come to say that no client was negatively impacted by their mistake, a false point of pride among the almost absolute dilution for their original shareholders."[46]

95. During the interview, Defendant Joyce was also asked: "what do you need to do to prevent this from happening again?" Joyce replied: "***Well we need to [do] a little better job on our testing environment certainly***. And we're reassessing that as we speak."[47]

2. *Knight's Co-Founders and Former Knight Executives Concur That The Control Deficiencies Were "Beyond Comprehension"*

96. Knight's co-founder, Walter Raquet, was less forgiving in his assessment of the cause of the Company's disaster, placing the blame squarely on the Individual Defendants and their extremely reckless lack of appreciation for risk management and internal controls:

> Management screwed up. The CEO screwed up and he should be fired. Do you have an action from the stockholders against the management for being grossly incompetent? How could you lose that type of money? ***How could you expose the company to that type of liability? It's all management. It's not technology. It's management. It's accountability taking***.
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> My initial reaction was how the hell could something like that happen? I mean ***we had more controls on risk so the automated executions could be shut down***. It was probably 15 people that could just take things down, you could override things and lock things down. ***It was beyond my comprehension how something could run and not be shut off. It couldn't have happened under Kenny's and my watch, we had so many controls that something like that could not have***

[46] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3608-3609). Kindle Edition.

[47] *See Bloomberg TV*, "Tom Joyce, Chief Executive Officer at Knight Capital, Talks To Erik Schatzker On Bloomberg TV," http://www.bloomberg.com/video/knight-s-joyce-says-all-hands-on-deck-after-error-2vra~oOASTuqY6NuXQFx2g.html.

> ***happened.*** And I don't know how… it's beyond me. Trading is risk, you have to be able press the button and stop things. You can't have something in a little black box take over and ruin your life. ***The company was not being run by hands-on management like when Kenny and I were involved***.[48]

97. Kenneth Pasternak, another co-founder of Knight and the Company's former Chief Executive Officer, echoed Raquet's sentiments concerning Defendant Joyce's failure to ensure that Knight's risk management systems were adequate and that a major code rollout like the RLP code was monitored closely, stating: "I was a producing manager and I understood all the risks that could possibly impact the firm. I would write these circuit breakers myself and give them to the coders. So if I were there, this would never have happened because the what-if statements would have shut down the trade." Pasternak further emphasized that risk management controls for a firm such as Knight fell well within the realm of responsibility for Defendant Joyce:

> For Pasternak, the facts were clear: there was no circuit breaker in place. Furthermore, he said that during his time as CEO, he would sit down and look for certain behaviors from both a regulatory point of view and an operational point of view and ***do exactly what most firms do. He said he often performed this analysis as part of his job as CEO; not only Pasternak but also Raquet.*** "They were very hands on in the development of new code and very much involved with the roll out of new programs and insuring that the code included compliance rules of the business," said [former Knight Chief Financial Officer Robert] Turner.[49]

98. Jamil Nazarali, a former Knight executive who left the Company a few months prior to August 1, 2012 and who is currently the Senior Managing Director and Head of Execution Services at Citadel, shared similar sentiments as Knight co-found Walter Raquet, with Nazarali stressing that Knight's failure was not a technological glitch but rooted in deficient risk management and internal controls:

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[48] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 2621-2633). Kindle Edition.

[49] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3935-3939). Kindle Edition.

> So if you look at what happened at Knight Capital on August 1, the first five minutes of that trading was really a software problem. ***The next 35 minutes where the software was not shut off was really a risk management and control and management processes problem.*** And I think it's important for all of us as we make our systems more robust and improve how we implement the software, that we also put in place the right management and risk protocols so that if something like that happens we can pick up the phone and call the New York Stock Exchange and say, 'Shut off all trading. Kill all open orders.' ***If that had been done five minutes after on August 1 at Knight Capital, we probably wouldn't be here right now***.[50]

99. Accordingly, in the fallout from the Knight August 1 trading disaster, a clear picture of Defendant Joyce's management style has emerged: "***Did Joyce have any of these concerns when he was wearing the CEO hat***? ***Was he so enamored in working on his golf handicap that he failed to spend a minute thinking about the existence of circuit breakers***? The facts don't speak, they scream by themselves." Indeed, the fact that Defendant Joyce was not present at the office on the day of the RLP Code rollout was not an uncommon occurrence for the notoriously "hands-off" Chief Executive: "People had criticized him for being on the golf course more than at his Knight office."[51]

100. Tellingly, the Individual Defendants' misconduct was emphasized by none other than Daniel Coleman, the Chief Executive Officer of GETCO, which was the winning suitor for Knight's business, highlighting that the Knight collapse was due to risk management failures rather than a technological glitch:

> For Coleman, doing it right meant fixing the way things were done at Knight, not the computers the firm used to trade high volumes of stock at fractions of seconds. "***I just want to differentiate between some science fiction notion of a***

[50] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3463-3468). Kindle Edition.

[51] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 2634, 3950-3954). Kindle Edition.

***machine gone crazy, and a problem that ultimately could have been caught and resolved probably more quickly than it was*.”[52]**

101. Accordingly, no less of an authority than Knight's co-founders, former executives and the head of the Company's acquirer all agree that what took place at Knight during the Class Period was not simply some minor technological glitch. Rather, Defendants' knowing misconduct represented a systemic and egregious abuse of basic control principles that is simply unfathomable at this late stage in the evolution of the securities markets.

3. *The Market Condemns Defendants' Misconduct*

102. The market and regulatory reaction was swift. In an August 3, 2012 SEC press release, Chairman Mary Schapiro bluntly stated that Knight's failure was "unacceptable" and that "existing rules make it clear that when broker-dealers with access to our markets use computers to trade, trade fast, or trade frequently, ***they must check those systems to ensure that they are operating properly***." The SEC further stated that it would launch an inquiry into whether Knight followed all applicable regulations prior to launching its software.[53]

103. An August 2, 2012 *Reuters* article reported on the client repercussions facing the Company, noting that retail brokerage giants such as TD Ameritrade, Scottrade, E*Trade and Vanguard—which typically routed about 25% of its trades through Knight—were still refusing to rout their orders through Knight.[54]

104. Also on August 2, 2012, a *Bloomberg* article noted that while Joyce "was one of the most vocal critics" of NASDAQ's handling of the Facebook IPO, it was "ironic that he has

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[52] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 4933-4935). Kindle Edition.

[53] *See* http://www.sec.gov/news/press/2012/2012-151.htm.

[54] *See Reuters*, "Knight's Future in Balance After Trading Disaster," http://www.reuters.com/article/2012/08/02/us-knightcapital-loss-idUSBRE8710PG20120802.

problems within the same area that NASDAQ had," giving rise to "a situation where you'd better take care of your own house before you start criticizing other houses."[55]

105. On August 3, 2012, *Reuters* published an article on the SECs examination of Knight's deficient risk controls, stating that the Market Access Rule, which "require[d] brokers to put in place risk control systems to prevent the execution of erroneous trades or orders that exceed pre-set credit or capital thresholds," "***gets at the heart of what went wrong on Wednesday at Knight***." The article noted that the SEC "***is examining how the algorithmic error got unleashed on the markets and whether the software used by Knight was properly tested before it was put into use on Wednesday***," and that Knight "***rushed out its program without testing it appropriately to get ahead of its competitors***." The article further quoted one attorney familiar with litigation concerning the Market Access Rule that, "[w]ith the magnitude of the problem that occurred, it seems to me there is likelihood that there was some problem in their risk controls."[56]

106. Cantor Fitzgerald CEO Howard Lutnick also suspected that Knight's trading losses were a direct results of its internal control failures, stating on August 6, 2012 that:

> You would figure every three second you would have an alarm that goes off; fifteen seconds after, there's a problem, it would be deafening in the place. You have to build in things in your systems where they turn themselves off. It should just be core and inherent in the system. If something goes wrong, it shuts itself down and kills itself. If you don't build that in, ***it is impossible to think how you wouldn't build that in 2012***. ***Everything about our system is designed to check, double check, triple check and quadruple check itself all the time***. . . . . If you do make a mistake, you'd darn well better catch it in one minute. One minute could have cost him a million dollars, he would be embarrassed; but ***this is someone who was picking on [Nasdaq CEO] Bob Greifeld and then two weeks later does the same thing***.

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[55] *See Bloomberg*, "Joyce Faces Knight Extinction as Computers Erase Profit," http://www.bloomberg.com/news/2012-08-03/joyce-faces-knight-extinction-as-computers-erase-profit.html.

[56] *See Reuters*, "US SEC Examining Risk Controls At Knight Capital," http://www.reuters.com/article/2012/08/03/sec-knight-idUSL2E8J33FU20120803.

107. As additional information concerning the Knight collapse reached the market, a clearer picture of Defendants' failures emerged. For instance, an August 3, 2012 *Reuters* article discussed Knight's scant oversight focus on technology risks facing the Company:[57]

> Knight Capital's 2012 proxy statement said the company's board and its committees met regularly to consider "significant risks" facing the company," but it did not specifically cite technology as a risk in that context.
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> * * *
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> Top company executives with responsibility for risk management, according to the proxy statement, include Chief Financial Officer Steven Bisgay, who was charged with "enhancement of the company's overall risk management infrastructure."
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> ***When trying to limit technology risk, it doesn't matter how often a board meets if the firm fails to conduct enough monitoring and testing of its technology systems***, said John Alan James, professor at Pace University's Lubin School of Business.
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> "***Again it comes back to how it is managed. It depends on how high a profile the CEO put on this***," James said.

108. Similarly, an August 3, 2012 *New York Times* article described that many traders concurred with the sentiment that, after the "first minute or so," "the problems were visible for all to see," thus suggesting an incredible lapse in risk controls such as simple halt commands that are rudimentary in trading systems:[58]

> "***Even just a minute or two would have been surprising to me. On these time scales, that is an eternity***," said David Lauer, a trader at a high-speed firm until a year ago. "To have something going on for 30 minutes is shocking."
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[57] *See Reuters*, "Knight Capital's Filings Reveal Scant Oversight Focus On Tech Risks For Board," http://blogs.reuters.com/financial-regulatory-forum/2012/08/03/knight-capitals-filings-reveal-scant-oversight-focus-on-tech-risks-for-board/.

[58] *See New York Times*, "Trading Program Ran Amok, With No 'Off' Switch," http://dealbook.nytimes.com/2012/08/03/trading-program-ran-amok-with-no-off-switch/.

> Howard Tai, an expert in high-speed trading at the Aite Group, said that at all the firms where he worked, ***there were several warning signals built into every computerized trading system. When all else failed, there was always the "automatic kill switch" that could immediately stop trading***.
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> Mr. Lauer said, "***It's kind of mind-boggling that it got so out of control***."

109. Other market participants shared in this confusion regarding Knight's woefully inadequate risk management and internal control systems, including Manoj Narang, Chief Executive Officer of Tradeworx, another high-frequency firm: "What is confusing virtually everybody, including me, is why Knight didn't have an automated stop loss in their strategies," he said. "It was the first day of NYSE's RLP program so ***there should have been multiple layers of risk controls***. In addition to having automated stop losses ***there should have been humans watching the strategy like a hawk***."[59]

110. An August 6, 2012 *Market Perspective* article discussed the various violations that Knight committed in releasing a deficient trading system:[60]

> Sarbanes Oxley Section 404 requires an evaluation of internal control risk. Internal controls are systems which should be in place to ensure that all functions are operating which would preclude unintentional acts form occurring. While this includes barriers to fraud, it also suggests that this is done to ensure that out of control risk takers are not emboldened to rig the system.
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> * * *
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> ***Clearly KGC put a new system in place without proper testing***.

111. In advance of the SEC's September 2012 Market Technology Roundtable Conference, Kor Trading submitted a comment letter in which it recounted an August 3, 2012 meeting with the SEC where it stated that had Knight complied with the requirements of the

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[59] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 3972-3975). Kindle Edition.

[60] *See Market Perspective*, "Sarbox 404: Is Anyone In Charge At Knight Capital," http://professorelam.typepad.com/markets/2012/08/sarbox-404.html.

Market Access Rule, the August 1 meltdown would have been avoided or significantly mitigated:

> KOR discussed tactical measures the Commission could consider undertaking to strengthen pre-trade and post-trade risk management. In particular, KOR recommended;
>
> 1. That the Commission Strengthen compliance and oversight of Rule 15c3-5 - Risk Management Controls for Brokers or Dealers with Market Access. ***Rule 15c3-5 should have provided sufficient pre-trade compliance that the event of August 1st, could have been avoided, or should have been significantly smaller in scope***. Additionally, the immediate post-trade execution reports required under the rule should have served to alert surveillance and compliance personnel of the impending issue.[61]

112. As Defendant Joyce explained on August 2, 2012 on *Bloomberg TV*, Knight Capital "put in a new bit of software the night before because we were getting ready to trade the New York Stock Exchange's RLP program."[62] It is evident that Defendants rushed to write the new code to enable trading on the RLP without identifying its operational risks, and thus failed to adequately test the defective software code prior to its introduction onto the Company's live environment, in contravention of their own disclosed policies, the SEC's requirements under the Market Access Rule, and Defendants' own statements concerning risk management repeated throughout the Class Period.

4. *Internal Investigations Confirm that the Company Lacked Proper Controls and Misled the Market*

113. On August 7, it was revealed that Knight was in talks with several external advisors to augment an internal review of its August 1 trading disaster. PwC was hired to perform a forensic examination of the trading malfunction. At the same time, Knight hired IBM to conduct a third-party review of its product development lifecycle processes. This review

[61] *See* http://www.sec.gov/comments/4-652/4652-27.pdf.

[62] *See Bloomberg TV*, "Tom Joyce, Chief Executive Officer at Knight Capital, Talks To Erik Schatzker On Bloomberg TV," http://www.bloomberg.com/video/knight-s-joyce-says-all-hands-on-deck-after-error-2vra~oOASTuqY6NuXQFx2g.html.

began on August 27, 2012. Ironically, IBM was also hired to review NASDAQ's botched handling of Facebook's IPO, of which Defendant Joyce had been so vocally critical.

114. It took IBM approximately 10 weeks to prepare its report. As part of the investigation, the IBM team interviewed everybody who was involved in the August 1 incident. Notably, Joyce was not interviewed because he was not at Knight's headquarters that morning. IBM's conclusions were troubling. The report concluded that ***Knight's technology was not as modern as it had led the markets to believe***, including inconsistent implementation processes across the Company's operations, excessive employee discretion, and particularly serious shortcomings in Knight's market making team:

> The market-making team was a particular case of concern. Quants were working with programmers together on developing and launching new algorithms; they quickly had to figure out from the data how to make money quickly too because they were competing with firms with the same sophisticated models and bright scientists. ***Launching new algorithms was the priority; testing was not***.[63]

5. *Knight "Willfully" Failed To Implement Basic Internal Control Protocols and Repeatedly Violated the Market Access Rule*

115. Immediately after Knight's August 1 meltdown, SEC Chairman Schapiro indicated that the SEC would conduct a review of the Company's practices to determine whether all applicable rules and regulations were followed. Then, on November 13, 2012, the SEC announced that it was broadening its probe of the Company to a formal investigation to examine Knight's risk-control procedures and the Company's compliance with the Market Access Rule. That same day, a *Wall Street Journal* article concerning the SEC's investigation of Knight revealed that the SEC had already rebuffed the Company's overtures to enter into a quick settlement, noting that the "SEC's decision to intensify its investigation is a setback for" Knight, whose Board had already "***went so far as to vote in favor of a settlement with the SEC***." The

[63] Perez, Edgar (2013-08-01). Knightmare on Wall Street, The Rise and Fall of Knight Capital and the Biggest Risk for Financial Markets. (Kindle Locations 5305-5308). Kindle Edition.

article also noted that "***Knight directors generally agreed in private deliberations among themselves that the firm had violated their capital thresholds, which is a component of the market access rule***."[64]

116. Several weeks later, a December 6, 2012 *Bloomberg* article hinted as to the reasons why the SEC rebuffed Knight's overtures. Erozan Kurtas, an Assistant Director within the SEC's Office of Compliance Inspections and Examinations, criticized Knight's conduct leading up to August 1, 2012 as "fraud," bluntly stating "You have to make sure the model works the way you are representing, ***otherwise it's fraud.***"[65]

117. On October 16, 2013, the SEC released its Order Instituting Administrative and Cease-and-Desist Proceedings. Having found that Knight "***willfully***" and repeatedly violated the Market Access Rule, the SEC censured Knight and penalized the Company $12 million. The SEC summarized its conclusions as follows:

> Beginning no later than July 14, 2011, and continuing through at least August 1, 2012, ***Knight's system of risk management controls and supervisory procedures was not reasonably designed to manage the risk of its market access. In addition, Knight's internal reviews were inadequate, its annual CEO certification for 2012 was defective, and its written description of its risk management controls was insufficient. Accordingly, Knight violated Rule 15c3-5***.

118. The SEC Order further included a host of conclusive findings that Knight did not have in place the risk management and internal controls that it represented during the Class Period, including, among other deficiencies, that Knight:

(a) did not have controls reasonably designed to prevent the entry of erroneous orders (SEC Order ¶9(A));

[64] *See* *Wall Street Journal*, "SEC Expands Knight Probe," http://online.wsj.com/article/SB10001424127887324595904578117253534571388.html.

(b) did not have controls reasonably designed to prevent it from entering orders for equity securities that exceeded pre-set capital thresholds (SEC Order ¶9(B));

(c) did not have an adequate written description of its risk management controls as part of its books and records in a manner consistent with Rule 17a-4(e)(7) of the Exchange Act (SEC Order ¶9(C));

(d) did not have technology governance controls and supervisory procedures sufficient to ensure the orderly deployment of new code or to prevent the activation of code (SEC Order ¶9(D));

(e) did not have controls and supervisory procedures reasonably designed to guide employees' responses to significant technological and compliance incidents (SEC Order ¶9(D));

(f) did not adequately review its business activity in connection with its market access (SEC Order ¶9(E));

(g) submitted a defective 2012 annual CEO certification because it did not certify that Knight's risk management controls and supervisory procedures complied with paragraphs (b) and (c) of Rule 15c3-5 (SEC Order ¶9(F));

(h) did not have a second technician review the deployment of the RLP code and had no written procedures that required such a review (SEC Order ¶15);

(i) did not design e-mail error messages, 97 of which were sent as early as 8:01 a.m. on August 1, to be system alerts—and indeed no Knight personnel reviewed these messages—despite the fact that these messages were sent in real time, were caused by the code deployment failure, and provided Knight with a potential opportunity to identify and fix the coding issue prior to the market open (SEC Order ¶19);

(j) did not have adequate controls in place to prevent the entry of erroneous orders or to monitor the output from SMARS, and did not have procedures in place to halt SMARS's operations in response to its own aberrant activity (SEC Order ¶21);

(k) did not have pre-set capital thresholds in the aggregate for the firm that were linked to automated controls that would prevent the entry of orders if the thresholds were exceeded (SEC Order ¶22);

(l) did not have written code development and deployment procedures for SMARS and did not require a second technician to review code deployment (SEC Order ¶26);

(m) did not have a written protocol concerning the accessing of unused code on its production servers (SEC Order ¶26);

(n) did not have supervisory procedures concerning incident response and did not have supervisory procedures to guide its relevant personnel when significant issues developed (SEC Order ¶27);

(o) did not consider possible problems with SMARS or the consequences of potential malfunctions in SMARS (SEC Order ¶28);

(p) did not consider its inability to prevent the entry of orders that would exceed a capital threshold and did not document sufficiently the evaluation done of the controls so that subsequent reviewers could identify these gaps in the assessment (SEC Order ¶28); and

(q) did not document sufficiently the evaluation done of the controls so that subsequent reviewers could identify these gaps in the assessment (SEC Order ¶29).

119. Notably, the SEC concluded that "***[s]everal previous events presented an opportunity for Knight to review the adequacy of its controls in their entirety***," including an instance in October 2011—just one month prior to implementation of the Market Access Rule and several months after market makers were put on notice of the rule's requirements—in which Knight used test data to perform a weekend disaster recovery test but mistakenly continued to use the test data to generate automated quotes when trading began that Monday morning, resulting in a nearly $7.5 million loss. (SEC Order ¶33).

120. The SEC Order also detailed Knight's remedial efforts to remedy its numerous compliance shortcomings. Knight agreed to retain, at its own expense, an independent consultant to conduct a comprehensive review of the Company's compliance with the Market Access Rule. This review is intended to be wide-ranging, and includes Knight's software development lifecycle processes for all of Knight's critical business systems. It also includes Knight's risk management controls and supervisor procedures regarding its deployment of new software and computer code, order routers, firm-wide capital thresholds and their linkage to order entry, and protocols for incident response. The independent consultant must prepare a

written report after the review, and is free to make any recommendations that may be necessary should Knight's efforts still be deficient.

121. As shown above, Knight clearly eschewed its professional responsibilities and obligations under SEC regulations in rushing its trading system to the market in order to compete with the NYSE's RLP. Tellingly, as a result of the myriad of control deficiencies running rampant throughout Knight's operations, the SEC concluded that "Knight willfully violated Section 15(c)(3) of the Exchange Act and Rule 15c3-5 thereunder, and Rules 200(g) and 203(b) of Regulation SHO." (SEC Order ¶49). These violations caused hundreds of millions of dollars in losses to the Company, which exposed a serious weakness in Knight's purportedly "highly liquid balance sheet" that—had Defendants' Class Period representations been accurate—should have been able to withstand such pressures.

D. <u>Knight's Liquidity Failure And Balance Sheet Representations</u>

122. While the technological failure of Knight's system, and the resulting nearly half-billion-dollar loss, was certainly a calamitous event for the Company, the magnitude of the loss when compared to Knight's purportedly "highly liquid balance sheet" misleadingly suggested that Knight was decently positioned on a liquidity basis to weather the storm. In fact, the Company represented barely a month earlier that it had $9 billion in assets, about 60% of which, or approximately $5 billion, consisted of cash or assets readily convertible into cash within five business days, according to the Company's 2011 Form 10-K. It stands to reason that a $440 million hit to this capital cushion—which is what Knight initially disclosed—while substantial, should not have served as the catalyst for the near-collapse of the Company, and should not have cost Knight's shareholders nearly their entire investments in the Company's securities:

123. Moreover, Defendants also materially understated Knight's value at risk ("VaR") throughout the Class Period. VaR measures the potential loss in value of an investment or portfolio over a defined period for a given confidence interval. As noted in a 1998 issue of the Journal of Applied Science, companies in the financial risk-taking business use VaR as a monitoring tool for detecting unauthorized increases in positions.[66] Investopedia defines VaR, as:[67]

> A statistical technique used to measure and quantify the level of financial risk within a firm or investment portfolio over a specific time frame. Value at risk is used by risk managers in order to measure and control the level of risk which the firm undertakes. ***The risk manager's job is to ensure that risks are not taken beyond the level at which the firm can absorb the losses of a probable worst outcome.***

124. Entities such as Knight must base value at risk calculations on the size of its trading positions and the expectation that a position size will increase or decrease throughout the period of calculation. Defendants knew or recklessly disregarded that Knight's trading algorithms could dramatically increase the sizes of its positions during the course of a trading

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[66] *See* Christopher L. Culp, Merton H. Miller, and Andrea M. P. Neves, *Value at Risk: Uses and Abuses*, J. of Applied Sci., Volume 10 No. 4, 31 (Winter 1998).

[67] *See* http://www.investopedia.com/terms/v/var.asp#ixzz2MQufI27B.

day without the ability to reduce unwanted positions and mitigate losses. Defendant's failure to consider in its calculations the potential for a dramatic increase in the size of its positions caused Knight to significantly understate the Company's VaR.

125. In addition to Knight's liquidity problems, the trading debacle also revealed that the Company had failed in adhering to regulatory requirements and basic risk management control principles. As thoroughly detailed above, the Company's trading debacle shone a light on a vast array of regulatory violations and exposed an operational system that was plagued by little-to-non-existent risk management controls that were a far cry from Defendants' Class Period representations of a robust, reliable and technologically sound Company.

E. "*What Did You Expect?*": Former Knight Employees Confirm That The Company Lacked Operational Risk Management Controls

126. In addition to regulators, outside observers and compliance experts, former Knight employees who were well-versed in the Company's risk management structure confirmed the complete absence of operational risk safeguards that lead to the prolonged trading failure. Indeed, these employees described a culture where operational or enterprise risk—in other words, a focus on the internal, technological and structural considerations inherent in Knight's operations—was completely abandoned in favor of the Company's market risks—in other words, a focus on the external, market-related considerations inherent in Knight's industry.

127. For instance, CW 2, a former Managing Director of the Trading Group at Knight who was employed at the Company between 2002 and February 2011, stated that a "deep problem" and the "most disturbing" aspect of the Company's controls was that "the business managers were both unable to and unwilling to make the call to kill it sooner rather than later." CW 2 added that this conscious and extended delay in pulling the plug was an "appalling" and "***unconscionably and unreasonably long period of time***."

128. Similarly, CW 3, Knight's former Managing Director and Head of Banking and Finance who was employed at the Company between August 2010 and January 2012, was also severely critical of Knight's internal operational and technological risk management controls. CW 3 stated that during her entire tenure at Knight she never saw any accountability or reviews of risks created by the Company's technology—the executives were more concerned about market risk as opposed to operational risk. CW 3 stated, "nobody at the risk department ever asked me about technology. They only asked about market risk. In other words, there was nobody who ever sat down and looked at a computer system being built and questioned whether that computer system could cause the firm risk. ***The focus was how are we going to build this system. There was never anyone whose focus was 'will this system cause the firm risk?'***"

129. CW 3 further added that, unlike other major industry participants with which she was familiar***, there was no enterprise risk oversight function at Knight***. CW 3 stated, "there was nobody whose job it was to sit down with me or anyone at Knight and say what are you building, what are the risks, what are we doing. The entire focus of the risk department was market risk not enterprise risk." CW 3 added that she "***never met anyone at KCG who had enterprise or operational risk as part of their mandate. It didn't exist. I never once was in a discussion in the firm that involved operational or enterprise risk, ever***."

130. CW 3 further revealed that it was common knowledge at Knight that there was limited to no oversight of operational risk. CW 3 explained that when she started working at Knight she "stumbled upon something that I'd never seen before, which was there was no separation between trading and operations." CW 3 stated that normally a trader should never have the ability to instruct the bank side of the business to move money between accounts, adding that this practice "should never happen."

131. CW 3 stated that soon thereafter she brought the issue up the chain of command to various individuals. For instance, CW 3 advised her superior, William Hartigan, Knight's former Global Markets Risk Management leader, the she had observed a significant amount of operational risk being taken at the Company and as a result she specifically asked who had responsibility for operational risk at the Company. According to CW 3, "the answer was nobody." Similarly, CW 3 inquired of Brian Strauss, Knight's Chief Credit Officer during CW 3's tenure, "who do I need to go to for operational risk?" CW 3 stated that she "was told that's not a function that we have," and that Mr. Strauss stated that "there was no one in charge or responsible for operational risk at Knight." CW 3 then alerted Defendant Bisgay, Knight's CFO, about this issue, and Bisgay brushed CW 3's concerns aside. Indeed, Defendants' complete disregard for operational risk oversight is further underscored by the fact that Knight ***did not even incorporate a risk officer*** in its organizational hierarchy until months after the August 1 trading debacle.[68]

132. CW 4, Knight's Director of Broker Dealer Sales from July 2011 to May 2012, confirmed CW 3's account of the complete lack of risk controls. She recalled that during her tenure, "nobody was talking to each other" and there was "no test" of the RLP Code as far as she knew. CW 4 explained that Knight should have had defined rollout schedules and a committee for the RLP Code setting forth release schedules. Despite asking "six or seven times" about these internal controls, CW 4 reports never being exposed to them. As a result, CW 4 described how, when "we were discussing what went wrong" at Knight, the sentiment expressed was "what did you expect?"

[68] Mr. Strauss was appointed as the newly-created Chief Risk Officer in September 2012 following Knight's August trading malfunction.

133. CW 4 compared her time at Knight to her time at her previous employer, a leading discount brokerage firm. CW 4 explained that her previous employer maintained "very structured" timelines for tech rollouts, which included established meetings and schedules. If these processes were not followed, she explained, "we would get flags written up." CW 4 described how Knight's lack of "structure" was especially obvious when compared to her previous employer's checks, balances and controls.

134. CW 1, Knight's former Vice President of Compliance who was employed at the Company between October 2010 and February 2012, stated that, with regard to the compliance department's role in the software development and integration, "the hallmark of compliance is dealing with laws, rules and regulations and whether something can be integrated and whether you are running afoul of the rules and regulations." CW 1 further confirmed that the "crash" of August 2012 was not an isolated event, stating that "there were tremors of things like this previously" and that Joyce knew about these events.

135. CW 1 stated that a couple months before she left Knight there were multiple "software glitches that brought about problems and losses in the millions of dollars." CW 1 recalled a particular incident involving the derivatives trading desk where a trader was "just watching his book deplete. He had to put a stop on it and it turned out it was a software glitch that was a testing of the system that resulted in the wrong price." CW 1 stated that Knight used dummy pricing to do the testing of this software and "with the dummy pricing what happened was it wasn't purged from the system come Monday morning and so it was going out to the street with the dummy pricing and people were hitting it." CW 1 stated that the malfunction cost the firm about $15 million.

136. Accordingly, as widely understood by the market and confirmed by former Company executives, Defendants' complete failure to meet regulations and adopt required risk control practices brought Knight to the precipice of ruin. Knight's rushed trading algorithm led the Company to take on an approximate $7 billion erroneous trading position, it was forced to agree to a "rescue package" through which it lost nearly half a billion dollars, the SEC launched a formal action against the Company that resulted in the groundbreaking findings of the SEC Order, and Knight's investors lost nearly all of their investment in the Company's securities.

VI. DEFENDANTS' FALSE AND MISLEADING STATEMENTS

137. Beginning on May 10, 2011, Defendants made false and misleading statements concerning (1) Knight's risk management procedures and protocols; (2) the Company's available cash and liquidity; (3) Knight's VaR; and (4) the Company's internal controls over financial reporting. These statements were made in Knight's SEC filings, press releases and analyst conference calls.[69]

A. Defendants' Misrepresentations and Omissions Regarding Knight's Risk Management Procedures and Protocols

138. Throughout the Class Period, Defendants regularly made false and misleading statements concerning Knight's risk management procedures and supervisory protocols. They created the false impression that the Company was abiding by strict internal risk management procedures, as required by industry regulations (including the Market Access Rule), which artificially inflated the Company's stock price.

139. The SEC had publicly proposed the Market Access Rule on January 26, 2010. After a lengthy comment period, the SEC formally adopted the Rule on November 3, 2010, and provided broker-dealers such as Knight until July 14, 2011 to comply with most of the Rule's

[69] Unless otherwise noted, all false statements are emphasized.

provisions. Thus, despite repeated advanced instructions and warnings from the SEC, Knight materially misrepresented the soundness of its risk management protocols and infrastructure—the backbone of the Company's entire business. In addition, Defendants failed to publicly disclose the deficiencies in the Company's operational systems, that Knight was in violation of required SEC regulations and that the Company's risk management procedures and protocols were not in compliance with the strict mandates of the Market Access Rule, thus exposing the Company to substantial undisclosed risk and liability. Indeed, as the SEC Order affirmatively concluded, "[b]eginning *no later than* July 14, 2011 . . . Knight's system of risk management controls and supervisory procedures was not reasonably designed to manage the risk of its market access." SEC Order ¶9.

140. A mere two months earlier (and nearly a year and a half after the Market Access Rule was proposed and six months after it was adopted by the SEC), on May 10, 2011 Knight filed form 10-Q for the first quarterly period ending March 31, 2011. In the report, and in each of Knight's quarterly and annual reports filed with the SEC during the Class Period, the Company painted a false portrait of its risk management policies and procedures. In the section entitled "Quantitative and Qualitative Disclosures About Market Risk," Defendants falsely stated in substantially identical language that:

> We are exposed to numerous risks in the ordinary course of our business and activities; therefore, effective risk management is critical to our financial soundness and profitability. ***We have a comprehensive risk management structure and processes to monitor and evaluate the principal risks we assume in conducting our business. Our risk management policies, procedures and methodologies are constantly changing and are subject to ongoing review and modification.*** The principal risks we face are as follows:

Market Risk

We employ proprietary position management and trading systems that provide real-time, on-line position management and inventory control. We monitor our risks by reviewing trading positions and their appropriate risk measures. ***We have established a system whereby transactions are monitored by senior management and an independent risk control function on a real-time basis as are individual and aggregate dollar and inventory position totals, capital allocations, and real-time profits and losses.*** Our management of trading positions is enhanced by our review of mark-to-market valuations and position summaries on a daily basis.[70]

141. These statements emphasized above were each false and misleading because Knight failed to disclose that the Company did not have in place even the most basic of risk management and internal control protocols that were standard in Knight's industry, that the Company was not in compliance with the Market Access Rule's requirements, and that it could not comply with the Rule's requirements. For example:

(a) Knight could not have "made a number of the necessary changes" to its systems because, as the SEC found, Knight "fail[ed] to have an adequate written description of its risk management controls" until at least the summer of 2012. SEC Order ¶39.

(b) Knight's written supervisory procedures "were incomplete as written and did not provide clear guidance as to what they required." SEC Order ¶44.

(c) Knight's initial assessment of its controls "did not sufficiently consider whether the controls were reasonably designed to management Knight's market access risks or whether Knight needed additional controls." SEC Order ¶44.

(d) The initial assessment and the post-compliance date reviews "failed to consider adequately the risks posed by possible malfunctions in SMARS . . . and failed to consider Knight's inability to prevent the entry of orders whose execution would exceed pre-set capital thresholds." SEC Order ¶44.

(e) The initial assessment and the post-compliance date reviews "also failed to assess adequately the consequences of Knight's reliance on PMON as a primary risk monitoring tool," including the "risks posed by the lack of

[70] This statement was repeated in substantially identical form in the 1Q2011 Form 10-Q, at p. 51 (filed May 10, 2011); 2Q2011 Form 10-Q, at p. 63 (filed August 9, 2011); 3Q2011 Form 10-Q, at p. 65 (filed November 9, 2011); the 2011 Form 10-K at p. 57 (filed February 29, 2012); and the 1Q2012 Form 10-Q, at pp. 57 (filed May 10, 2012).

automated alerts and PMON's inability to prevent the entry of orders that would exceed a capital threshold or position limit." SEC Order ¶44.

(f) The initial assessment and the post-compliance date reviews "did not adequately consider the root causes of previous incidents involving the entry of erroneous orders and the reasons why Knight's controls failed to limit the harm from those incidents." Instead, "Knight reacted to the events narrowly" by "limiting its responses to changes designed to prevent the exact problem at hand from recurring." SEC Order ¶44.

142. In the sections entitled "Operational Risk," Defendants falsely described Knight's operational risk controls and disaster contingency plans, stating in substantially identical language that:

Operational Risk

Operational risk can arise from many factors ranging from routine processing errors to potentially costly incidents arising, for example, from major systems failures. Our businesses are highly dependent on our ability to process, on a daily basis, a large number of transactions across numerous and diverse markets in several currencies. We incur operational risk across all of our business activities, including revenue generating activities as well as support functions. Legal and compliance risk is included in the scope of operational risk and is discussed below under "Legal Risk."

Primary responsibility for the management of operational risk lies with our operating segments and supporting functions. ***Our operating segments maintain controls designed to manage and mitigate operational risk for existing activities. As new products and business activities are developed, we endeavor to identify operational risks and design controls to seek to mitigate the identified risks.***

Disaster recovery plans are in place for critical facilities related to our primary operations and resources and redundancies are built into the systems as deemed reasonably appropriate. We have also established policies, procedures and technologies designed to protect our systems and other assets from unauthorized access.[71]

143. In the sections entitled "Legal Risk," Defendants falsely described in substantially identical language the Company's established practices and controls complied with legal and

[71] This statement was repeated in substantially identical form in the 1Q2011 Form 10-Q, at p. 52 (filed May 10, 2011); 2Q2011Form 10-Q, at p. 64 (filed August 9, 2011); 3Q2011 Form 10-Q, at p. 66 (filed November 9, 2011); the 2011 Form 10-K at p. 57 (filed February 29, 2012); and the 1Q2012 Form 10-Q, at p.58 (filed May 10, 2012).

regulatory requirements while they were currently in violation of many legal requirements, such as the Market Access Rule:

> **Legal Risk**
>
> Legal risk includes the risk of non-compliance with applicable legal and regulatory requirements and standards.…We are generally subject to extensive regulation in the different jurisdictions in which we conduct our business.…***We have established procedures based on legal and regulatory requirements that are designed to foster compliance with applicable statutory and regulatory requirements. We have also established procedures that are designed to require that our policies relating to conduct, ethics and business practices are followed.***[72]

144. In the sections "Legal Proceedings," Defendants continued to misrepresent current adherence to all legal and regulatory requirements and failed to disclose that the Company was unable to comply with the SEC's Market Access Rule when making changes to their systems in order to be competitive:

> We own subsidiaries including regulated entities that are subject to extensive oversight under federal, state and applicable international laws as well as self-regulatory organization ("SRO") rules. ***Changes in market structure and the need to remain competitive require constant changes to our systems and order handling procedures. We make these changes while continuously endeavoring to comply with many complex laws and rules.*** Compliance, surveillance and trading issues common in the securities industry are monitored by, reported to, and/or reviewed in the ordinary course of business by our primary regulators, the SEC, Commodity Futures Trading Commission ("CFTC"), FSA, SFC, FINRA, New York Stock Exchange ("NYSE"), Municipal Securities Rulemaking Board ("MSRB"), National Futures Association ("NFA"), Federal Housing Administration ("FHA") and HUD.[73]

[72] This statement was repeated in substantially identical form in the 1Q2011 Form 10-Q, at p. 52 (filed May 10, 2011); 2Q2011Form 10-Q, at p. 65 (filed August 9, 2011); 3Q2011 Form 10-Q, at p. 67 (filed November 9, 2011); the 2011 Form 10-K at p. 59 (filed February 29, 2012); the 1Q2012 Form 10-Q, at p. 59 (filed May 10, 2012).

[73] This statement was repeated in substantially identical form in the 1Q2011 Form 10-Q, at p. 54 (filed May 10, 2011); 2Q2011Form 10-Q, at p. 66 (filed August 9, 2011); 3Q2011 Form 10-Q, at p. 69 (filed November 9, 2011); 2011 Form 10-K, at p. 26 (filed February 29, 2012); 1Q2012 Form 10-Q, at p. 61 (filed May 10, 2012).

145. In a section of Knight's 2011 Form 10-K entitled "Market Making Segment – Business Segment Overview," Defendants falsely described how Knight used its risk management models to attract a client base, stating that:

> We apply advanced electronic trading tools which allow buy-side (also referred to as institutions) and sell-side (also referred to as broker-dealers) clients to interact with the market based on their specific needs and preferences. As a result, we are able to attract a significant base of clients with diverse investment styles and strategies, while at the same time, capture a greater share of client order flow. ***To do so, our model requires that we manage risk and deploy capital effectively as well as maintain efficient and reliable trading technology and infrastructure***.[74]

146. In its April 3, 2012 Proxy for the period ending May 9, 2012 (the "2012 Proxy"), Defendants falsely described their risk management process as follows:

> ***Management has a process embedded throughout the Company to identify, analyze, manage and report on all significant risks facing the Company***. ***In performance of risk oversight, the Board and its committees receive reports and regularly meet with the Company's Chief Executive Officer and other senior managers on significant risks facing the Company, including enterprise, financial, operational, legal, regulatory and strategic risks***. The independent Board members also discuss the Company's significant risks when they meet in executive session without management.

147. A few days after the compliance date incorporated under the Market Access Rule, on July 20, 2011, Knight announced their second quarter earnings and held a conference call in which Defendants Joyce and Bisgay participated. In response to an analyst's question regarding Knight's measures in response to contemporaneous market conditions, including the effects of the Company's cost-cutting measures on its operations, Joyce misleadingly characterized the Company's efforts as "appropriate" and "impactful"—statements that the SEC Order determined were demonstrably false:

> I don't – I didn't mean to imply that we're tweaking. I don't mean to imply we're doing a major overhaul. I mean – what I mean to imply is that we're looking at a lot of alternatives and would like to think ***whatever we do will be impactful*** and

[74] Source: 2011 Form 10-K, at p. 6 (filed February 29, 2012).

> you'll see it. But we certainly have – kind of doing a review of everything. I don't know if we're pulling out the forensic accounting had yet, ***but we're definitely digging deep into all the things we're doing, and want to make sure that when we decide on how to deal with the challenging environment that it's appropriate and it's of appropriate scale***. So you as analysts and our shareholders all know it will make an impact.[75]

148. Later that Fall, Joyce participated in Barclays Capital Global Financial Services Conference on September 14, 2011 ("Barclays Conference Call"). During the call, Joyce misled the public about Knight's adherence to the increased regulatory requirements and continued to mislead the public by omitting material facts when describing the Company's business operations and performance:

> ***New rules affecting sponsored access and large trade reporting will strengthen a number of industry processes and controls. We have already made a number of the necessary changes to our systems and others are in development.***
>
> * * *
>
> Likewise, future increases or decreases in Section 31 fees will impact trading costs. We are confident that the SEC will be careful and thoughtful in its work and we'll certainly be part of the conversation as to how to maintain liquid efficient and fair markets for all participants. ***We're confident in our ability to adapt quickly to the new rules and changes***, should any come to market structure.

149. On November 30, 2011, Knight participated in a question and answer session at the Keefe, Bruyette & Woods Securities Brokerage and Market Structure Conference (the "KBW Conference"). Joyce and Bisgay appeared on behalf of Knight.

150. During his prepared statements, Joyce discussed Knight's Market Making segment, falsely describing the Market Access Rule's impact on the Company as being "minimal" and representing that Knight had already enacted programs to meet compliance requirements with the rule:

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[75] Source: 7/20/11 Q2 Earnings Call.

Given the speed of Market Making and trading today, ***we carefully manage risk***. In our capacity as a market maker, Knight commits capital. In addition, we occasionally facilitate institutional client trades. And we own securities through non-client quantitative trading activities. Generally, our positions are liquid held for brief periods in mark-to-market constantly. The risks to Knight include absolute and relative pricing movements, changes in liquidity and of course pricing volatility.

* * *

Now, in regulatory matters, there are a number of issues we're tracking that have the potential to impact Knight. New SEC rules affecting sponsored access and large trade reporting will strengthen a number of industry processes and controls. ***We have already made a number of the necessary changes to our systems and others are under development***.

151. On January 29, 2012, Knight held a conference call with analysts to discuss its fourth quarter 2011 results, on which Joyce and Bisgay participated (the "4Q2011 Conference Call"). In his prepared remarks, Joyce falsely stated:

The performance of Market Making is driven largely by our client network, robust performance of our quantitative models and sophisticated trading technologies. During any given quarter, we roll out new models and strategies. The fourth quarter was no different. ***During the quarter, we implemented enhancements targeting large order execution, street routing and risk management*** that built on our Market Making foundation to drive increased profitability.

152. Also during the 4Q2011 Conference Call, Joyce gave the false representation that Knight deployed "robust algorithms," "highest quality execution" and a "disciplined risk management approach" when, in fact, the Company operated with little to no regard over its deficient operational risk management:

Niamh Alexander - Can you remind me of the barriers to entry and getting into this business?

Thomas M. Joyce - Chairman and CEO: Sure. I think there are three things that make for a good or a great offering. One is you need to have exchange like capability in that anything that comes into you, you have to be able to process it and send that. For example, if one of our counterparties send us 200,000 orders in a day, A you've [got] to be able to handle 200,000 orders or in our case handle 5 million orders. In B, we better get them all back in an accurate fashion. So, if your

> counterparty is sending 100,000 orders and you give back 95,000 orders you kind of get irritated. So, you need exchange like capability in terms of processing power. ***You need to have robust algorithms to actually extract to A to do two things. One, provide best execution, the highest quality execution to your clients, so they continue to do business with you; and B to extract a return for your shareholders. So, you need quantitative models of that incredibly robust if you will some of the sharpest software in the industry. With that, of course, you have to link a disciplined risk management approach that you would think everybody has it not everybody does***.

153. On April 18, 2012, Knight held a conference call to discuss its 1Q12 results with analysts (the "1Q12 Analyst Call"). In response to an analyst's question regarding "the themes that you think are leading to the preference [for Knight's clients to use its platform]," Joyce responded:

> On the platform side, ***we've invested a whole bunch of time and money in to enhancing the platforms***.
>
> * * *
>
> So ***the technological component of the platforms is, I think superior to our competitors***.

154. Defendants' statements concerning Knight's risk management procedures and protocols were each materially false and misleading. As Defendants knew or recklessly disregarded, Knight did not have the proper procedures and protocols to manage risk, and did not comply with the strict mandates of the Market Access Rule. Moreover, Defendants' failed to disclose material adverse information:

(a) As the SEC found, Knight failed to link pre-set capital thresholds to its entry of orders so that Knight would stop sending orders when it breached such thresholds. Rather, Knight relied on PMON, which was incapable of preventing the entry of orders whose execution would exceed a pre-set capital thresholds. PMON, in turn, relied entirely on human monitoring and did not generate automated alerts regarding Knight's financial exposure, nor did it display the limits for various accounts or trading groups. In addition, PMON experienced delays during high volume events, resulting in reports that were outdated and inaccurate.

(b) As the SEC found, Knight did not have controls in place in SMARS to limit the Company's financial exposure arising from errors within SMARS, such as problems in the operation of the software that sent child orders to fill parent orders. The SEC found that Knight was also unable to halt SMARS in response to its own aberrant activity.

(c) As the SEC found, Knight's written supervisory procedures were incomplete as written and did not provide clear guidance as to what they required. In addition, the SEC found that Knight's initial assessment of its technological risk controls did not sufficiently consider wither those controls were reasonably designed to manage Knight's market access risks or whether the Company needed additional controls. Further, Knight's post-compliance date reviews failed to consider risks posed by possible SMARS malfunctions, as well as Knight's inability to prevent the entry of orders whose execution would exceed pre-set capital thresholds. For example, Knight had no written procedures that required the review of a single technician's installation of the new RLP Code, which would have revealed that the code had only been installed on seven of the eight servers.

(d) As the SEC found, Knight did not remove the Power Peg code from SMARS despite not using it since 2003. Further, Knight did not retest the Power Peg code after removing the cumulative quantity function to determine if the code would still function properly if flagged; in fact, Knight did not even have a written protocol concerning the ability to access any unused code on its production servers, or the testing of any such code.

(e) As the SEC found, Knight did not have adequate controls and supervisory procedures to guide employees' response to incidents as the August 1 debacle. This lack of protocols was evidenced by the fact that Knight personnel attempted to uninstall the RLP Code from seven SMARS servers in a live trading environment—which only exacerbated the runaway trading. Knight personnel ignored the 97 BNET reject error messages, which would have alerted them to the issue with Power Peg. This lack of protocols was also reported by several executives with direct knowledge of the matter, who reported that "there was a lot of 'it's not us, let me put you in touch this this guy'" as the disaster was unfolding.

(f) Defendants' repeated assurances concerning the quality and reliability of Knight's systems, as well as the Company's risk management protocols, were false and misleading since Defendants' knew of serious shortcomings in these areas of Knight's operations. Indeed, As CW 1 stated, the August 1 "technical glitch" was not an isolated incident. In mid-to-late 2011, a software glitch that used dummy unpurged pricing data resulted in a $15 million loss for the derivatives trading desk. Moreover, *the day before the August 1 trading breakdown*, an error in the

specialist unit of the Company's operations resulted in a nearly $1 million loss, which represented nearly half of Knight's 'value at risk' or VAR, a measurement of how much the firm expects to lose in any given trading day. (*see* ¶¶51, 135). As the SEC found, Knight failed to adequately investigate and consider the root causes of previous incidents involving the entry of erroneous orders and the reasons why Knight failed to limit the harm from those incidents. Instead, Knight reacted to events by narrowly limiting its responses to changes designed to prevent the exact problems from recurring.

(g) Defendant Joyce's repeated assurances during the Class Period that Knight was not "overly concerned" about the RLP's impact on the Company's business was materially false and misleading since Defendants were in fact scrambling during the four weeks between SEC approval of the program and the program's launch date in order to roll out an algorithm to operate on and compete with the RLP and avoid losing market share to the NYSE. (*see* ¶¶56, 62-66).

(h) Further demonstrating the falsity of Defendants' representations regarding the Company's risk management protocols, CW 3 revealed that Knight did not even have an enterprise risk function, elaborating that "I never met anyone at KCG who had enterprise or operational risk as part of their mandate. It didn't exist." (*see* ¶129). Indeed, in response to a question concerning the person responsible for operational risk posed by CW 3 to William Hartigan, Knight's former Global Markets Risk Management Leader, CW 3 recalled that "the answer was nobody." (*see* ¶131).

155. Accordingly, Knight's statements concerning its risk management policies and procedures were materially false and misleading and simply lacking in any rational basis when made. Defendants issued these statements with scienter in that they knew or recklessly disregarded that Knight's public statements regarding Knight's risk management infrastructure were materially false and misleading. Defendants were well aware of the need for broker-dealers such as Knight to maintain a robust system of risk management and internal controls, and indeed this necessity was known throughout the trading and regulatory industry well in advance of the start of the Class Period. Moreover, as described throughout this complaint, a myriad of facts demonstrate the Individual Defendants' knowing or extremely reckless conduct, providing a strong inference of Defendants' scienter.

B. Defendants' Misrepresentations and Omissions Regarding Knight's Available Cash and Liquidity

156. Throughout the Class Period, Defendants regularly made false and misleading statements regarding Knight's liquidity and materially understated the amount of potential losses related to the undisclosed risks in the Company's risk management, internal controls and algorithmic trading. As described herein, Knight Capital and its most senior executives repeatedly represented—both in SEC filings, public statements, and documents filed with government regulators—that it had reasonable systems in place to monitor trading activity in real-time, and had implemented internal risk management practices, including performing liquidity risk stress testing to reduce the Company's financial exposure. In addition, Defendants materially understated the amount of capital at risk and failed to disclose that this amount was far in excess of the Company's actual liquidity pool.

157. Defendants created the impression that Knight was highly liquid in comparison to the potential risks the Company faced, thus misleading investors to believe that the Company had sufficient cash and other highly liquid instruments to satisfy the Company's funding needs, including potential losses resulting the Company's risky trading algorithms. This false impression came crashing down when, in spite of these lies, Knight required an emergency $400 million injection from a consortium of investors in order to stave off collapse.

158. In its press releases, quarterly reports, and annual reports published throughout the Class Period, Knight reported materially false and misleading numbers regarding its available liquidity, including the following figures:

Reporting Period	Total Assets (mm)	% of Assets in Cash and Readily Convertible to Cash	Total Cash and Assets Readily Convertible to Cash (mm)	Net Current Assets (net assets readily convertible into cash less current liabilities) (mm)
1Q2011[76]	$5,780	79%	$4,566	$497.2
2Q2011[77]	$6,430	73.0%	$4,694	$105.1
3Q2011[78]	$7,062	66.4%	$4,689	$893.7
4Q2011[79]	$7,153	61.8%	$4,417	$1,060.0
1Q2012 [80]	$8,004	58.8%	$4,707	$1,070.0
2Q2012[81]	$9,206	56.4%	$5,191	$1,070.0

159. During the Question and Answer session of the September 14, 2011 Barclays Conference Call, Defendant Joyce falsely presented Knight's balance sheet as more "pristine" in comparison to the Company's competitors, and when asked why Knight did not feel the need build a higher liquidity buffer, Joyce represented that the Company's cash and cash equivalents could be liquidated within "a very short-term horizon" of three days:

> <Q - Roger Anthony Freeman>: And some of the other companies that presented this week have basically been alluding to, or more than alluding to, being ***perfectly happy to build even more a liquidity buffer or maintain extremely high. Given the kind of exposures you have in your daily VaRs, it sounds like you don't feel a need to do that, you have sufficient liquidity.*** And just maybe you can just touch on how you differ from more balance sheet intensive brokers.
>
> <A - Thomas M. Joyce>: Well, ***our balance sheet is all fairly pristine stuff***, there is no level two the stuff in there. The overnight positions, as you heard me say,

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[76] *See* 1Q2011 Form 10-Q, at p. 44-45 (filed May 10, 2011).

[77] *See* 2Q2011 Form 10-Q, at p. 55-56 (filed August 9, 2011).

[78] *See* 3Q2011 Form 10-Q, at p. 57-58 (filed November 9, 2011).

[79] *See* 4Q2011 Press Release (published January 19, 2012); 2011 Form 10-K, at p. 64 (filed February 29, 2012).

[80] *See* 1Q2012 Form 10-Q, at p. 5 (filed May 10, 2012).

[81] *See* 2Q2012 Press Release (published July 18, 2012).

are ***largely cash and cash equivalents, and we have the ability to – we move the product in a very short-term horizon,*** our duration of the overnight positions is less than three days.

So we're not hanging on to anything. We have the ability to be fairly flexible. ***And we'll stress test, we've done a lot of stress tests in light of the balance sheet, and we feel very confident in its current make up. So we don't need a bigger buffer, the family has a lot of buffers, but we don't need any one that's any bigger than we currently have.***

160. On November 30, 2012, the day the pre-set thresholds of the Market Access Rule went into effect, Joyce addressed an audience at the KBW Conference. He falsely stated in his prepared remarks:

Now, turning briefly to our balance sheet, at the end of the third quarter we had $7.1 billion in assets, ***66% of which consisted of cash or assets readily convertible into cash***, securities owned or borrowed and receivables from brokers, dealers and clearing organizations.

161. Defendants consistently reinforced Knight's mirage of having a highly liquid balance sheet in their quarterly conference calls with analysts. During his prepared remarks on these calls, Bisgay stated:

(a) ***Our financial condition remains strong and liquid***. As of March 31st, we had $5.8 billion in assets, ***79% of which consisted of cash or assets readily convertible into cash***, principally securities owned or borrowed and receivables from brokers, dealers and clearing organizations.[82]

(b) ***Our financial condition remains strong and liquid.*** As of June 30, we had $6.4 billion in assets, ***73% of which consisted of cash or assets readily convertible into cash***, principal securities owned or borrowed, and receivables from brokers, dealers and clearing organizations.[83]

(c) ***Our financial condition remains strong and liquid.*** As of September 30 we had $7.1 billion in assets, ***66% of which consists of cash or assets readily convertible into cash,*** principal securities owned or borrowed and receivables from brokers, dealers and clearing organizations.[84]

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[82] *See* 1Q2011 Analyst Conference Call (held April 20, 2011).

[83] *See* 2Q2011 Analyst Conference Call (held July 20, 2011).

[84] *See* 3Q2011 Analyst Conference Call (held October 19, 2011).

(d) ***Our financial condition remained strong and liquid***. As of December 31, we had $7.2 billion in assets, ***62% of which consisted of cash or assets readily convertible into cash***, principally securities owned or borrowed and receivables from brokers, dealers, and clearing organizations.[85]

(e) ***Our financial condition remained strong and liquid***. As of March 31st, we have $8 billion in assets, ***59% of which consisted of cash or assets readily convertible into cash*** principally securities owned or borrowed and receivables from brokers, dealers and firm and organizations.[86]

(f) Our ***financial condition remains strong and liquid***. As of June 30, we had $9.2 billion in assets, ***57% of which consisted of cash or assets readily convertible into cash***, principally securities owned or borrowed and receivables from brokers, dealers and clearing organizations.[87]

162. Joyce did nothing to put an end to the charade. In response to an analyst's question raising concerns over the pace of Knight's share repurchases on the 1Q2012 Analyst Conference Call, Joyce falsely stated:

> We know that we have to return money to the shareholders when it's appropriate. ***We also have to make sure that we have a or we want*** to have a pristine balance sheet and ***to be able to handle the surges of activity that may or may not occur***.
>
> For example, I know this is a little abated, but when – went public, there were a lot of balance sheet demands from DTCC et cetera, because of the activity. ***So we want to be in a position to handle any activity like that, we want to be liquid when the need arises***.

163. In each of Knight's quarterly and annual reports filed with the SEC during the Class Period, the Company continued to paint a false portrait of its assets and available liquidity. In the sections entitled "Liquidity and Capital Resources," Defendants falsely described Knight's available liquidity:

(a) We have financed our business primarily through cash generated by operations, the proceeds from our stock issuances and our Notes offering of $375.0 million. We may seek to enter into new secured term loan

[85] *See* 4Q2011 Analyst Conference Call (held January 19, 2012).

[86] *See* 1Q2012 Analyst Conference Call (held April 18, 2012).

[87] *See* 2Q2012 Analyst Conference Call (held July 18, 2012).

facilities and/or revolving credit facilities for general corporate purposes. At March 31, 2011, ***we had net current assets, which consist of net assets readily convertible into cash less current liabilities, of $497.2 million***.[88]

(b) We have financed our business primarily through cash generated by operations, the proceeds from our stock issuances, our long-term debt and other borrowings. At June 30, 2011, ***we had net current assets, which consist of net assets readily convertible into cash less current liabilities, of $105.1 million.***[89]

(c) We have financed our business primarily through cash generated by operations, the proceeds from our stock issuances, our long-term debt and other borrowings. At September 30, 2011, ***we had net current assets, which consist of net assets readily convertible into cash less current liabilities, of $893.7 million***.[90]

(d) We have financed our business primarily through cash generated by operations, the proceeds from our stock issuances, long-term debt and other borrowings. At December 31, 2011, ***we had net current assets, which consist of net assets readily convertible into cash less current liabilities, of approximately $1.06 billion***.[91]

(e) We have financed our business primarily through cash generated by operations, our long-term debt and other borrowings. At March 31, 2012, we had net current assets, ***which consist of net assets readily convertible into cash less current liabilities, of $1.07 billion***.[92]

164. Defendants falsely described the risks to their liquidity in each of Knight's quarterly and annual reports filed with the SEC during the Class Period. In Knight's Annual Report for the year ended 2011, under the section, "Quantitative and Qualitative Disclosures About Market Risk," the Company provided the following on liquidity risk:

> Liquidity risk is the risk that we would be unable to meet our financial obligations as they arise in both normal and strained funding environments. To that end, ***we have established a comprehensive and conservative set of policies and procedures that govern the management of liquidity risk for the Company at the corporate level and at the business unit level***.

[88] *See* 1Q2011 Form 10-Q, at p. 45 (filed May 10, 2011).

[89] *See* 2Q2011 Form 10-Q, at p. 56 (filed August 9, 2011).

[90] *See* 3Q2011 Form 10-Q, at p. 58 (filed November 9, 2011).

[91] *See* 2011 Form 10-K, at p. 48 (filed February 29, 2012).

[92] *See* 1Q2012 Form 10-Q, at p. 51 (filed May 10, 2012).

165. In each of the sections entitled "Liquidity Risk," Defendants falsely stated in substantially identical language that:

> ***We maintain a liquidity pool consisting of primarily cash and other highly liquid instruments at the Corporate level to satisfy intraday and day-to-day funding needs, as well as potential cash needs in a strained funding environment***. In addition, we maintain committed and uncommitted credit facilities with a number of financial institutions.
>
> ***We regularly perform liquidity risk stress testing based on a scenario that considers both market-wide stresses and a company-specific stress***. The modeled cash inflows and outflows from the stress test serve as a quantitative input to assist us in establishing the Company's liquidity risk appetite and amount of liquid assets to be held at the Corporate level. ***The liquidity stress test considers cash flow risks arising from***, but not limited to, a dislocation of the secured funding market, additional unexpected margin requirements, and ***operational events***.
>
> ***We maintain a contingency funding plan ("CFP") which clearly delineates the roles, responsibilities and actions that will be utilized as the Company encounters various levels of liquidity stress with the goal of fulfilling all financial obligations as they arise while maintaining business activity***. We periodically update and test the operational functionality of various aspects of the CFP to ensure it remains current with changing business activity.[93]

166. The financial results Knight reported regarding its total assets, total cash and assets readily convertible to cash, cash and cash equivalents and total financial instruments owned at fair value, as represented in the above chart, were each materially false and misleading because:

(a) As the SEC found, the position limits that Knight did have "did not account for the firm's exposure from outstanding orders." Further, as detailed above, Knight "did not have pre-set capital thresholds in the aggregate for the firm that were linked to automated controls that would prevent the entry of orders if the thresholds were exceeded." Because of these facts, Knight could not adequately conduct liquidity stress tests as Defendants had falsely assured the public during the Class Period.

(b) As the SEC found, Knight did not link the 33 Account, to which it assigned a $2 million position limit, to ***any*** automated controls concerning

[93] *See* 2Q2011 Form 10-Q, at p. 64 (filed August 9, 2011); 3Q2011 Form 10-Q, at p. 67 (filed November 9, 2011); 2011 Form 10-K, at p. 58 (filed February 29, 2012); 1Q2012 Form 10-Q, at pp. 58-59 (filed May 10, 2012).

Knight's overall financial exposure. On the morning of August 1, Knight quickly accumulated positions in the 33 Account, but could not determine the nature or source of those positions. Without the fundamental ability to determine the nature or source of positions, Knight could not determine if those positions were liquid or illiquid.

(c) PMON, Knight's primary post-execution position monitoring system, relied entirely on human monitoring and did not generate automated alerts regarding the firm's financial exposure. PMON also did not display the limits for the accounts or trading groups; rather the person viewing PMON had to know the applicable limits to recognize that a limit had been exceeded. As a result of these deficiencies, Knight could not accurately determine its positions or if those positions were liquid or illiquid.

(d) The SEC found that Knight did not have controls to monitor SMARS' ***output***, such as a control to compare orders leaving SMARS with those that entered it. Without this basic ability, Knight could not accurately determine how liquid its positions actually were.

(e) As detailed above, Knight created the false impression that it was deeply liquid, having access to $5 billion in assets readily convertible into cash, with Joyce representing that the Company could liquidate Knight's cash and cash equivalents in a "short-term horizon" of three days. Despite these misimpressions, Knight was forced to seek an emergency $400 million cash injection to continue operations. (*see* ¶¶9, 83, 122, 157, 159, 169).

(f) Defendants disclosed to investors in its 2011 Form 10-K that "substantially all" of its assets readily convertible into cash could be liquidated within five business days, yet made no provisions for necessary liquidity for the shorter 3-day period in which stocks must settle. (*see* ¶122).

(g) Knight was plainly unable to convert is "readily" convertible assets into cash, despite Joyce telling investors that Knight "want[s] to be liquid when the need arises." (*see* ¶¶82, 162)

(h) Knight could not have adequately performed its purported liquidity stress tests, as the Company was unable to come up with funding despite the fact that the majority of the market was unaffected by Knight's trading debacle. Indeed, as press accounts show, orders were almost immediately routed to other broker-dealers, and the NASDAQ itself was unaffected. (*see* ¶¶75-80, 165).

(i) Knight was unable to fulfill its contingency funding plan without the emergency $400 million capital injection. (*see* ¶¶9, 83, 142, 157, 165).

(j) Indeed, even several months after Knight had received the emergency capital injection, the Company was still reeling from its disastrous losses, ultimately having to sell itself to GETCO to avoid collapse. (*see* ¶¶9, 85-86).

(k) Defendants also could not have performed liquidity stress testing for operational events as described in Knight's Class Period statements. As Defendant Joyce admitted on August 2, Knight put in the new code for the RLP the night before August 1, not allowing Knight to properly test for flaws in the algorithm, let alone perform liquidity stress tests. (*see* ¶¶105, 110, 112, 114, 118).

167. Accordingly, Knight's statements concerning its cash and liquidity were materially false and misleading and simply lacking in any rational basis when made. Defendants issued these statements with scienter in that they knew or recklessly disregarded that Knight's public statements regarding Knight's cash and liquidity were materially false and misleading. Defendants were well aware of the deficiencies in Knight's system of risk management and internal controls—deficiencies which exposed the Company to a much higher degree of risk and liability than publicly disclosed and for which its liquidity pool could manage. Moreover, as described throughout this complaint, a myriad of facts demonstrate the Individual Defendants' knowing or extremely reckless conduct, providing a strong inference of Defendants' scienter.

C. <u>Defendants' False Statements Concerning Knight's Value at Risk</u>

168. Throughout the Class Period, Knight materially understated its "Value at Risk" by failing to incorporate in Knight's calculations, among other things, the Company's inability to limit position size. Value at Risk measures the potential loss in value of an investment or portfolio over a defined period for a given confidence interval. In this regard, Defendants represented that the most the Company could lose in any one day was approximately $2 million.

169. As discussed above, during the Question and Answer session of the September 14, 2011 Barclays Conference Call, Defendant Joyce falsely presented Knight's balance sheet as more "pristine" in comparison to other brokers when asked why Knight did not feel the need

build a higher liquidity buffer, and represented that the Company's cash and cash equivalents could be liquidated within "a very short-term horizon" of three days:

> <Q - Roger Anthony Freeman>: And some of the other companies that presented this week have basically been alluding to, or more than alluding to, being ***perfectly happy to build even more a liquidity buffer or maintain extremely high. Given the kind of exposures you have in your daily VaRs, it sounds like you don't feel a need to do that, you have sufficient liquidity.*** And just maybe you can just touch on how you differ from more balance sheet intensive brokers.
>
> <A - Thomas M. Joyce>: Well, ***our balance sheet is all fairly pristine stuff***, there is no level two the stuff in there. The overnight positions, as you heard me say, are ***largely cash and cash equivalents, and we have the ability to – we move the product in a very short-term horizon,*** our duration of the overnight positions is less than three days.
>
> So we're not hanging on to anything. We have the ability to be fairly flexible. ***And we'll stress test, we've done a lot of stress tests in light of the balance sheet, and we feel very confident in its current make up. So we don't need a bigger buffer, the family has a lot of buffers, but we don't need any one that's any bigger than we currently have.***

170. In his prepared remarks at the November 30, 2011 KBW Conference, Joyce falsely described Knight's VaR:

> To control our exposure, ***we seek to keep value at risk to a rational amount***. We measure VaR using a 95% confidence level and a one-day hold time horizon. ***Our target VaR is approximately equal to half of one day's revenues***. Even with the increase of our gross book size to $3.9 billion at the end of the quarter, ***our average VaR during the third quarter was just $1.8 million***. That amounts to less than a third of one day's revenue, which averaged over $5 million -- this has averaged over $5 million year-to-date

171. Throughout the Class Period, Defendants did not disclose Knight's VaR in its quarterly or annual reports filed with the SEC, or in its earnings press releases. The only other time that Defendants disclosed Knight's VaR was in the quarterly analyst calls:

> (a) Despite the increase in our total assets and more specifically in our gross trading book size to $3.6 billion at March 31st, ***our [VaR] remained at approximately $1.1 million to $1.5 million during the quarter***. As of

March 31st, we had $355 million in cash and over $200 million in excess capital.[94]

(b) Despite the increase in our total assets and, more specifically, in our gross trading book size to $3.8 billion at June 30, ***our VaR remained at approximately $1.5 million during the second quarter.*** As of June 30, we had $471 million in cash and over $200 million in excess regulatory capital.[95]

(c) Despite the increase in our total assets, and more specifically in our gross trading book size to $3.9 billion at September 30, ***our VaR increased slightly to approximately $1.8 million during the third quarter*** from $1.5 million over previous quarters. As of September 30 we had $450 million in cash and over $250 million in excess regulatory capital. Our debt to equity ratio increased to 0.29% from 0.23% at year end, reflecting the convertible debt that we issued last year, as well as the $100 million term loan that we entered into at the end of the second quarter.[96]

(d) Despite the overall increase in our total assets and more specifically in our gross trading book size to $3.5 billion at December 31, ***our VaR increased slightly, to approximately $2 million during the fourth quarter***, up from an average of approximately $1.6 million for the first three quarters of 2011. As of December 31, we had $468 million in cash and over $250 million in excess regulatory capital.[97]

(e) Despite the overall increase in our total assets and more specifically, in our gross trading book size to $4 billion at March 31st, ***our VaR remained consistent at approximately $1.9 million during the first quarter***, up from a quarterly average of approximately $1.7 million in 2011. As of March 31st, we had $336 million in cash and over $250 million in excess regulatory capital.[98]

(f) Despite the overall increase in our total assets and, more specifically, in our gross trading book size to $3.8 billion at June 30, ***our VaR increased slightly to approximately $2.2 million during the second quarter***, up from a quarterly average of approximately $1.8 million over the past four quarters. As of June 30, we had $365 million in cash and over $250 million in excess regulatory capital.[99]

[94] 1Q2011 Analyst Call.

[95] 2Q2011 Analyst Call.

[96] 3Q2011 Analyst Call.

[97] 4Q2011 Analyst Call.

[98] 1Q2012 Analyst Call.

[99] 2Q2012 Analyst Call.

(g) In conjunction with the overall decrease in our gross trading book size to $2.8 billion at September 30, ***our VaR decreased to approximately $1.4 million during the third quarter***, down from a quarterly average of approximately $2 million over the past four quarters.[100]

172. Defendants' statements regarding Knight's VaR were materially false and misleading for the following reasons:

(a) As the SEC found, the position limits that Knight did have "did not account for the firm's exposure from outstanding orders." Further, as detailed above, Knight "did not have pre-set capital thresholds in the aggregate for the firm that were linked to automated controls that would prevent the entry of orders if the thresholds were exceeded." Because of these deficiencies, Knight could not accurately calculate its VaR.

(b) Knight assigned a $2 million gross position to the 33 Account, which equaled or exceeded the Company's daily VaR for every quarter except 2Q2012. But as the SEC concluded, Knight "did not link this account to any automated controls concerning Knight's overall financial exposure." Because Knight failed to link the 33 Account to any controls, it could not accurately calculate its VaR.

(c) On the morning of August 1, the 33 Account quickly began accumulating positions, but Knight personnel were unable to determine the nature or source of those positions. Without the fundamental ability to even know what type of positions it was accumulating, Knight could not accurately calculate its VaR.

(d) PMON, Knight's primary post-execution position monitoring system, was not linked to the entry of orders such that the entry of orders in the market would automatically stop when Knight exceeded pre-set capital thresholds or its gross position limits. PMON relied entirely on human monitoring and did not generate automated alerts regarding the firm's financial exposure. PMON also did not display the limits for the accounts or trading groups; rather the person viewing PMON had to know the applicable limits to recognize that a limit had been exceeded. Due to these deficiencies in Knight's "primary" post-execution monitoring system, Knight could not accurately calculate its VaR.

(e) The SEC found that Knight did not have controls to monitor SMARS' ***output***, such as a control to compare orders leaving SMARS with those that entered it. Without this basic ability, Knight could not determine if it was taking on too much risk, and therefore could not accurately calculate its VaR.

[100] 3Q2012 Analyst Call.

(f) Moreover, under the premise that the Company could lose only $2 million in any one day, Knight appeared well capitalized and highly liquid. Defendants, however, failed to disclose that the amount of potential loss was far in excess of the Company's liquidity pool. As discussed above, at one point during its August 1 meltdown, Knight held $7 billion in shares and ultimately lost in excess of $461 million over the course of 45 minutes—220 times the Company's disclosed VaR. Indeed, far from constituting "half of one day's revenues," Knight's $461 million loss constituted approximately three months' worth of revenues. (*See* ¶¶2, 9, 76, 82, 136, 166, 168, 170-171).

(g) As discussed above, VaR is used as a monitoring tool for detecting unauthorized increases in positions, yet it was the NYSE, not Knight, which first detected Knight's erratic algorithmic behavior. Accordingly, Defendants' statements regarding the maintenance of a liquidity pool sufficient to satisfy intraday and day-to-day funding needs, as well as potential cash needs in a strained funding environment, were materially false and misleading because Defendants knew, or recklessly disregarded, that the Company's trading algorithms could accumulate trading positions and losses far in excess of the Company's liquidity pool—in essence, the Knight's VaR was exponentially larger than disclosed during the Class Period, thus changing the complete character of the Company's business and finances, as well as the nature of shareholders' investment in Knight. (*See* ¶¶51, 70-71, 123-124, 165, 168-171).

173. Accordingly, Knight's statements concerning its VaR were materially false and misleading and simply lacking in any rational basis when made. Defendants issued these statements with scienter in that they knew or recklessly disregarded that Knight's public statements regarding Knight's VaR were materially false and misleading. Defendants were well aware of the deficiencies in Knight's system of risk management and internal controls—deficiencies which exposed the Company to a much higher degree of risk and liability than publicly disclosed and for which its publicly-disclosed VaR was woefully inadequate. Moreover, as described throughout this complaint, a myriad of facts demonstrate the Individual Defendants' knowing or extremely reckless conduct, providing a strong inference of Defendants' scienter.

D. Defendants' Misrepresentations and Omissions Regarding Knight's Internal Controls Over Financial Reporting

174. Throughout the Class Period, Defendants materially misrepresented Knight's internal controls over financial reporting—which included the safeguarding of the Company's assets through the implementation of basic, industry-standard risk management and internal controls such as those required by the Market Access Rule.[101] Indeed, Knight's risk management infrastructure and its ability to provide a technologically sound and stable trading environment was the most important asset for the Company's business.

175. Specifically, in Knight's annual and quarterly SEC filings throughout the Class Period, the Company misrepresented that, after an evaluation of Knight's controls and procedures conducted by the Company's management, including Defendants Joyce and Bisgay, the Individual Defendants "***concluded that the design and operation of these disclosure controls and procedures were effective***." In addition, Defendants Joyce and Bisgay each falsely certified that the Company's financial statements were accurate and fairly presented the Company's financial condition, certifying in pertinent part:

> 1. I have reviewed this . . . [r]eport . . . of Knight Capital Group, Inc.;
>
> 2. Based on my knowledge, ***this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report***;
>
> 3. Based on my knowledge, ***the financial statements, and other financial information included in this report, fairly present in all material respects the***

[101] The SEC's final rules define "internal control over financial reporting" as including procedures "designed by, or under the supervision of, the registrant's principal executive and principal financial officers" that "provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the registrant's assets that could have a material effect on the financial statements." The SEC further emphasizes that its definition includes "explicit reference to assurances regarding use or disposition of the company's assets. ***This provision is specifically included to make clear that, for purposes of our definition, the safeguarding of assets is one of the elements of internal control over financial reporting*** and it addresses the supplementation of the COSO Framework after it was originally promulgated." *See* http://www.sec.gov/rules/final/33-8238.htm#iia.

financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) ***Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities***, particularly during the period in which this report is being prepared;

b) ***Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles***;

c) ***Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures***, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting. . . .[102]

176. Additionally, Joyce and Bisgay certified the following in Knight's SEC filings during the Class Period:

In connection with the . . .Report . . . [the undersigned] hereby certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

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[102] This statement was repeated in substantially identical form in: 1Q2011 Form 10-Q at Ex-31.1, Ex-31.2 (filed May 10, 2010); 2Q2011 Form 10-Q at Ex-31.1, Ex-31.2 (filed August 9, 2011); 3Q2011 Form 10-Q at Ex-31.1, Ex-31.2 (filed November 9, 2011); 2011 Form 10-K, at Ex-31.1, Ex-31.2 (filed February 29, 2012); 1Q2012 Form 10-Q, at Ex-31.1, Ex-31.2 (filed May 10, 2012).

(1) The Report fully complies with the requirements of Section 13(a) or, 15(d) of the Securities Exchange Act of 1934; and

(2) ***The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company***.[103]

177. The preceding emphasized statements were false and misleading at the time they were made because, throughout the Class Period, and as Defendants knew or recklessly disregarded, Knight's internal controls suffered from significant deficiencies. Indeed, the reports of former Knight executives and the SEC Order show that the Company suffered from substantially compromised internal controls:

(a) For instance, CW 3 stated that during her entire tenure at Knight it was common knowledge that there was limited to no oversight of operational risk, and that she never saw any accountability or reviews of operational risks created by the Company's technology. Indeed, CW 3 stated that "there was nobody who ever sat down and looked at a computer system being built and questioned whether that computer system could cause the firm risk." (*see* ¶¶128, 130).

(b) Furthermore, CW 3 added that she "***never met anyone at KCG who had enterprise or operational risk as part of their mandate. It didn't exist. I never once was in a discussion in the firm that involved operational or enterprise risk, ever***." When she asked superiors about internal controls and who was responsibility for operating risk, she "was told that's not a function that we have," and that "there was no one in charge or responsible for operational risk at Knight." When CW 3 approached Defendant Bisgay on the issue, her concerns were simply brushed aside. (*see* ¶¶129, 131).

(c) As the SEC found, the lack of internal controls caused Knight to willfully violated Rule 200(g) and 203(b) of Regulation SHO by failing to properly mark sell orders, failing to obtain a "locate" in connection with orders, and failing to document compliance with this requirement before effectuating short sales.

(d) Moreover, the sheer magnitude of Knight's failure is further evidence of the falsity of Defendants' representations concerning the Company's

[103] This statement was repeated in substantially identical form in: 1Q2011 Form 10-Q at Ex-32.1, Ex-32.2 (filed May 10, 2010); 2Q2011 Form 10-Q at Ex-32.1, Ex-32.2 (filed August 9, 2011); 3Q2011 Form 10-Q at Ex-32.1, Ex-32.2 (filed November 9, 2011); 2011 Form 10-K, at Ex-32.1, Ex-32.2 (filed February 29, 2012); 1Q2012 Form 10-Q, at Ex-32.1, Ex-32.2 (filed May 10, 2012).

internal controls. Indeed, despite purportedly having access to approximately $365 million in cash and $5 billion in assets readily convertible into cash, Knight was forced to seek an emergency $400 million injection from a consortium of investors to stave off financial collapse, and wound up agreeing to a fire sale months later. (*see* ¶¶9, 14, 82-83, 85, 122, 157, 171).

(e) Lastly, the fact that the SEC issued a Formal Order of Investigation against the Company probing into Knight's available liquidity, and instituted administrative proceedings resulting in remedial sanctions and the SEC Cease-and-Desist Order is additional evidence that, contrary to the Company's assurances, Knight suffered from material deficiencies in internal controls throughout the Class Period. (*see* ¶¶10-11, 37, 44-45, 52, 115-121, 139, 141).

178. Accordingly, Defendants' statements during the Class Period that Knight had in place effective internal controls were patently false and materially misleading when made. On the contrary, as discussed above, the Company suffered from material deficiencies in its internal controls, which allowed Defendants' fraudulent behavior to occur in the first place and continue unabated through the duration of the Class Period.

VII. STATUTORY SAFE HARBOR

179. The federal statutory safe harbor provided for forward-looking statements under certain circumstances does not apply to any of the allegedly false statements pleaded herein. Furthermore, many of the statements pleaded herein were not identified as "forward-looking statements" when made, or indicated that actual results "could differ materially from those projected." Nor were there any meaningful cautionary statements identifying important factors that could cause actual results to differ materially from the statements made therein.

180. Defendants are liable for the statements pleaded because, at the time each of those statements was made, Defendants knew the statement was false and the statement was authorized and/or approved by an executive officer of Knight who knew that such statement was false when made.

VIII. LOSS CAUSATION

181. During the Class Period, as detailed herein, Defendants engaged in a scheme to deceive the market and a course of conduct that artificially inflated the prices of Knight's securities and operated as a fraud or deceit on Class Period purchasers of Knight's securities by failing to disclose to investors that the Company's operational and financial characterizations were materially misleading and misrepresented material information. When Defendants' misrepresentations and fraudulent conduct were disclosed and became apparent to the market, the prices of Knight's securities fell precipitously as the prior inflation came out of the Company's stock price. As a result of their purchases of Knight's securities during the Class Period, Plaintiff and the other Class members suffered economic loss.

182. Indeed, shortly after Knight's August 1, 2012 trading meltdown, the truth concerning Defendants' fraudulent conduct was revealed and the Company's wholly deficient risk management and internal controls became apparent, causing Knight's stock price to plummet 75%, wiping out over $750 million in market capitalization over a two-day trading period to close at $2.58 per share on August 2, 2012, on extremely high trading volume that was exponentially greater than the Company's normal trading volumes.

183. By failing to disclose the true state of the Company's operations, Defendants withheld from investors the true nature of their investments in Knight. Therefore, Defendants presented a misleading picture of Knight's business practices and procedures. Thus, instead of truthfully disclosing during the Class Period the true state of the Company's business, Defendants caused Knight to conceal the truth. Defendants' false and misleading statements had the intended effect and caused Knight's common stock to trade at artificially inflated levels

throughout the Class Period. The stock price drops discussed herein caused real economic loss to investors who purchased the Company's securities during the Class Period.

184. The decline in the price of Knight's common stock after the truth came to light was a direct result of the nature and extent of Defendants' fraud finally being revealed to investors and the market. The timing and magnitude of Knight's common stock price decline negates any inference that the loss suffered by Plaintiff and the other Class members was caused by changed market conditions, macroeconomic or industry factors or Company-specific facts unrelated to the Defendants' fraudulent conduct. The economic loss suffered by Plaintiff and the other Class members was a direct result of Defendants' fraudulent scheme to artificially inflate the prices of Knight's securities and the subsequent decline in the value of Knight's securities when Defendants' prior misrepresentations concerning the Company's risk management and internal controls and other fraudulent conduct were revealed.

IX. APPLICABILITY OF PRESUMPTION OF RELIANCE: FRAUD ON THE MARKET DOCTRINE

185. At all relevant times, the market for Knight stock was an efficient market for the following reasons, among others:

a. Knight securities met the requirements for listing, and were listed and actively traded on NYSE, a highly efficient market;

b. As a regulated issuer, Knight filed periodic public reports with the SEC and NYSE;

c. Knight securities were followed by securities analysts employed by major brokerage firms who wrote reports which were distributed to the sales force and certain customers of their respective brokerage firms. Each of these reports was publicly available and entered the public marketplace; and

d. Knight regularly issued press releases which were carried by national newswires. Each of these releases was publicly available and entered the public marketplace.

186. As a result, the market for Knight securities promptly digested current information with respect to the Company from all publicly-available sources and reflected such information in Knight's stock price. Under these circumstances, all purchasers of Knight common stock during the Class Period suffered similar injury through their purchase of stock at artificially inflated prices and a presumption of reliance applies.

X. CLASS ACTION ALLEGATIONS

187. Plaintiff brings this action as a class action pursuant to Federal Rule of Civil Procedure 23(a) and (b)(3) on behalf of all persons who purchased or otherwise acquired Knight securities during the Class Period and who were damaged thereby (the "Class"). Excluded from the Class are Defendants, members of the immediate family of each of the Individual Defendants, any subsidiary or affiliate of Knight and the directors, officers and employees of the Company or its subsidiaries or affiliates, or any entity in which any excluded person has a controlling interest, and the legal representatives, heirs, successors and assigns of any excluded person.

188. The members of the Class are so numerous that joinder of all members is impracticable. While the exact number of Class members is unknown to Plaintiff at this time and can only be ascertained through appropriate discovery, Plaintiff believes that there are thousands of members of the Class located throughout the United States. Throughout the Class Period, Knight securities were actively traded on NYSE (an open and efficient market) under the symbol "KCG." As of August 6, 2012, the Company had approximately 98 million shares outstanding. Record owners and other members of the Class may be identified from records

maintained by Knight and/or its transfer agents and may be notified of the pendency of this action by mail, using a form of notice similar to that customarily used in securities class actions.

189. Plaintiff's claims are typical of the claims of the other members of the Class as all members of the Class were similarly affected by Defendants' wrongful conduct in violation of federal law that is complained of herein.

190. Plaintiff will fairly and adequately protect the interests of the members of the Class and have retained counsel competent and experienced in class and securities litigation.

191. Common questions of law and fact exist as to all members of the Class and predominate over any questions solely affecting individual members of the Class. Among the questions of law and fact common to the Class are:

a. whether the federal securities laws were violated by Defendants' acts and omissions as alleged herein;

b. whether Defendants participated in and pursued the common course of conduct complained of herein;

c. whether documents, press releases, and other statements disseminated to the investing public and the Company's shareholders during the Class Period misrepresented material facts about the business, finances, financial condition and prospects of Knight;

d. whether statements made by Defendants to the investing public during the Class Period misrepresented and/or omitted to disclose material facts about the business, finances, value, performance and prospects of Knight;

e. whether the market price of Knight common stock during the Class Period was artificially inflated due to the material misrepresentations and failures to correct the material misrepresentations complained of herein; and

f. the extent to which the members of the Class have sustained damages and the proper measure of damages.

192. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Furthermore, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it impossible for members of the Class to individually redress the wrongs done to them. There will be no difficulty in the management of this suit as a class action.

XI. COUNTS AGAINST DEFENDANTS UNDER THE EXCHANGE ACT

COUNT ONE

For Violations of Section 10(b) of the Exchange Act and Rule 10b-5 Promulgated Thereunder Against Knight and Individual Defendants Joyce and Bisgay

193. Plaintiff repeats and realleges the allegations set forth above as though fully set forth herein. This claim is asserted against Defendants.

194. During the Class Period, Defendants Knight, Joyce and Bisgay disseminated or approved the false statements specified herein, which they knew or recklessly disregarded were misleading in that they failed to disclose material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, and they contained material misrepresentations.

195. These Defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 thereunder in that they: (a) employed devices, schemes, and artifices to defraud; (b) made untrue statements of material facts or omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and/or (c) engaged in acts, practices, and a course of business that operated as a fraud or deceit

upon Plaintiff and others similarly situated in connection with their purchases of Knight common stock during the Class Period. As detailed herein, the misrepresentations contained in, or the material facts omitted from, these Defendants' public statements, concerned, among other things, the Company's operational practices, financial results and internal controls.

196. These Defendants, individually and in concert, directly and indirectly, by the use of means or instrumentalities of interstate commerce and/or of the mails, engaged and participated in a continuous course of conduct that operated as a fraud and deceit upon Plaintiff and the Class; made various false and/or misleading statements of material facts and omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; made the above statements with a reckless disregard for the truth; and employed devices, and artifices to defraud in connection with the purchase and sale of securities, which were intended to, and did: (i) deceive the investing public, including Plaintiff and the Class, regarding, among other things, Knight's operational and financial status; as well as Knight's improper operational practices, and deficient internal controls; (ii) artificially inflate and maintain the market price of the Company's common stock; and (iii) cause members of the Class to purchase Knight stock at inflated prices.

197. Defendant Knight is liable for all materially false and misleading statements made during the Class Period, as alleged above. Knight is further liable for the false and misleading statements made by the Company's officers in press releases and during conference calls with investors and analysts, as alleged above, as the makers of such statements and under the principle of *respondeat superior*.

198. Defendants Joyce and Bisgay, as top executive officers of Knight, are liable as direct participants in the wrongs complained of herein. Through their positions of control and

authority as officers of the Company, each of these Defendants was able to and did control the content of the public statements disseminated by Knight. These Defendants had direct involvement in the daily business of the Company and participated in the preparation and dissemination of the false and misleading statements.

199. In addition, Defendants Joyce and Bisgay are liable for, among other material omissions and false and misleading statements, the false and misleading statements they made and/or signed during the Class Period. Defendant Joyce signed the Company's false and misleading Form 10-K filed with the SEC on February 29, 2012 and Form 10-Q filed with the SEC on May 10, 2012. Defendant Bisgay signed the Company's false and misleading Form 10-K filed with the SEC on February 29, 2012 and Form 10-Q filed with the SEC on May 10, 2012.

200. As described above, these Defendants acted with scienter throughout the Class Period, in that they either had actual knowledge of the misrepresentations and omissions of material facts set forth herein, or acted with reckless disregard for the truth in that they failed to ascertain and to disclose the true facts, even though such facts were available to them.

201. Plaintiff and the Class have suffered damages in that they paid artificially inflated prices for Knight common stock. Plaintiff and the Class would not have purchased the Company's common stock at the prices they paid, or at all, if they had been aware that the market price had been artificially and falsely inflated by these Defendants' misleading statements.

202. As a direct and proximate result of these Defendants' wrongful conduct, Plaintiff and the Class suffered damages in connection with their purchases of Knight stock during the Class Period.

COUNT TWO
For Violations of Section 20(a) of the Exchange Act
Against Individual Defendants Joyce and Bisgay

203. Plaintiff repeats and realleges the allegations set forth above as if set forth fully herein. This claim is asserted against the Individual Defendants.

204. This claim is asserted against the Individual Defendants for violations of Section 20(a) of the Exchange Act, 15 U.S.C. § 78t(a), on behalf of all members of the Class.

205. As alleged herein, Defendant Knight committed a primary violation of the federal securities laws through its knowing and/or reckless dissemination of materially false and misleading statements and omissions throughout the Class Period.

206. During their tenures as officers and/or directors of Knight, each of the Individual Defendants was a controlling person of the Company within the meaning of Section 20(a) of the Exchange Act. By reason of their positions of control and authority as officers and/or directors of Knight, these Defendants had the power and authority to cause the Company to engage in the wrongful conduct complained of herein. As set forth in detail above, the Defendants named in this Count were able to and did control, directly and indirectly, and exert control over Knight, including the content of the public statements made by the Company during the Class Period, thereby causing the dissemination of the false and misleading statements and omissions of material facts as alleged herein.

207. In their capacities as senior corporate officers of Knight, and as more fully described above, Defendants Joyce and Bisgay had direct involvement in the day-to-day operations of the Company and in Knight's financial reporting functions. Each of these Defendants was also directly involved in providing false information and certifying and/or approving the false financial statements disseminated by the Company during the Class Period.

Further, as discussed above, Defendants Joyce and Bisgay had direct involvement in the presentation and/or manipulation of false financial reports included within Knight's press releases and filings with the SEC.

208. Defendant Joyce served as Knight's Chief Executive Officer and Chairman of the Board during the Class Period. In his dual capacity as the senior manager and officer of the Company and as the head of the Board, Defendant Joyce had ultimate control over the actions of Knight.

209. Defendant Bisgay served as Knight's Chief Financial Officer during the Class Period. According to Knight's 2012 Proxy, Bisgay was charged with "enhancement of the company's overall risk management infrastructure" and was thus primarily responsible for the Company's risk evaluation and controls.

210. Defendants Joyce and Bisgay both had access to and received various written and oral reports from different executives and personnel within Knight on a routine basis, and thus were privy to the Company's financial and operational functions throughout the Class Period.

211. By reason of their positions as officers of Knight, and more specifically controlling officers—as can be seen by their corresponding ability to influence and control the Company—each of these Defendants is a "controlling person" within the meaning of Section 20(a) of the Exchange Act and had the power and influence to direct the management and activities of Knight and its employees, and to cause the Company to engage in the unlawful conduct complained of herein. Because of their positions, these Defendants had access to adverse nonpublic financial information about Knight and acted to conceal the same, or knowingly or recklessly authorized and approved the concealment of the same.

212. Moreover, each of the Individual Defendants was also involved in providing false information and certifying and/or approving the false financial statements disseminated by Knight during the Class Period. Each of these Defendants was provided with or had access to copies of the Company's reports, press releases, public filings and other statements alleged by Plaintiff to be misleading prior to and/or shortly after these statements were issued and the ability to prevent the issuance of the statements or cause the statements to be corrected.

213. As set forth above, Knight violated Section 10(b) of the Exchange Act by its acts and omissions alleged in this Complaint. By virtue of their positions as controlling persons of the Company and as a result of their own aforementioned conduct, the Defendants named in this Count are liable pursuant to Section 20(a) of the Exchange Act, jointly and severally with, and to the same extent as Knight is liable under Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, to Plaintiff and the other members of the Class who purchased or otherwise acquired the Company's securities.

214. As a direct and proximate result of these Defendants' conduct, Plaintiff and the Class suffered damages in connection with their purchase or acquisition of Knight common stock.

XII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff, individually and on behalf of the Class, prays for judgment as follows:

a) Declaring this action to be a class action pursuant to Rule 23(a) and (b)(3) of the Federal Rules of Civil Procedure on behalf of the Class defined herein;

b) Awarding Plaintiff and the other members of the Class damages in an amount which may be proven at trial, together with interest thereon;

c) Awarding Plaintiff and the members of the Class pre-judgment and post-judgment interest, as well as their reasonable attorneys' and experts' witness fees and other costs; and

d) Awarding such other relief as this Court deems appropriate.

Dated: December 20, 2013

By: */s/ James E. Cecchi*

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JURY DEMAND

Plaintiff hereby demands a trial by jury on all claims so triable.

Dated: December 20, 2013

By: */s/ James E. Cecchi*

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