

UNITED STATES OF AMERICA
Before the
SECURITIES AND EXCHANGE COMMISSION

SECURITIES ACT OF 1933
Release No. 10013 / January 31, 2016

SECURITIES EXCHANGE ACT OF 1934
Release No. 77002 / January 31, 2016

ADMINISTRATIVE PROCEEDING
File No. 3-17078

In the Matter of

CREDIT SUISSE
SECURITIES (USA) LLC,

Respondent.

ORDER INSTITUTING ADMINISTRATIVE AND CEASE-AND-DESIST PROCEEDINGS, PURSUANT TO SECTION 8A OF THE SECURITIES ACT OF 1933, AND SECTIONS 15(b) AND 21C OF THE SECURITIES EXCHANGE ACT OF 1934, MAKING FINDINGS, AND IMPOSING REMEDIAL SANCTIONS AND A CEASE-AND-DESIST ORDER

I.

The Securities and Exchange Commission (“Commission”) deems it appropriate and in the public interest that public administrative and cease-and-desist proceedings be, and hereby are, instituted pursuant to Section 8A of the Securities Act of 1933 (“Securities Act”) and Sections 15(b) and 21C of the Securities Exchange Act of 1934 (“Exchange Act”) against Credit Suisse Securities (USA) LLC (“CSSU” or “Respondent”).

II.

In anticipation of the institution of these proceedings, CSSU has submitted an Offer of Settlement (“Offer”) which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission’s jurisdiction over it and the subject matter of these proceedings, which are admitted, CSSU consents to the entry of this Order Instituting Administrative and Cease-and-Desist Proceedings Pursuant to Section 8A of the Securities Act of 1933 and Sections 15(b) and 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order (“Order”), as set forth below.

III.

On the basis of this Order and Respondent's Offer, the Commission finds that:

Summary

1. CSSU is the owner and operator of Crossfinder, an alternative trading system ("ATS")¹ commonly referred to as a "dark pool." Crossfinder is not a registered national securities exchange, but is a private execution venue that accepts, matches, and executes orders to buy and sell equity securities that it receives from CSSU clients who access Crossfinder either directly or by sending orders to CSSU algorithms that are then routed to Crossfinder (collectively, "subscribers"). Crossfinder has for several years been one of the largest, if not the largest, ATSs in the United States. As of March 31, 2015, Crossfinder was the second largest dark pool as measured by dollar volume of executions with over \$316 billion for the first quarter of 2015. Crossfinder is part of CSSU's Advanced Execution Services ("AES") business.

2. Beginning in at least April 2008, CSSU's operation of and disclosures regarding Crossfinder violated certain provisions of the federal securities laws and regulations.

3. Between at least April 2009 and April 2011, Crossfinder accepted and ranked orders priced in increments smaller than one-cent ("sub-penny orders") in violation of Rule 612 of Regulation NMS promulgated under the Exchange Act. Rule 612 was designed to prevent orders from executing ahead of others based upon economically insignificant sub-penny differences in their prices. The sub-penny orders accepted by CSSU were the product of three order "tags" created for Crossfinder which permitted subscribers to offset whole-penny orders, including in pricing increments of less than one penny. Crossfinder accepted and ranked these orders in sub-penny increments, and gave execution priority to such orders for subscribers who were willing to pay a fraction of a penny more (or receive a fraction of a penny less) for a share of stock over subscribers who had entered orders at whole-penny prices.

¹ Rule 300(a) of Regulation ATS promulgated under the Exchange Act provides that an ATS is "any organization, association, person, group of persons, or system: (1) [t]hat constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of [Exchange Act Rule 3b-16]; and (2) [t]hat does not: (i) [s]et rules governing the conduct of subscribers other than the conduct of subscribers' trading on such [ATS]; or (ii) [d]iscipline subscribers other than by exclusion from trading." Rule 301(a) of Regulation ATS provides that an ATS must comply with Rule 301(b) of Regulation ATS, unless the ATS is registered as a national securities exchange or qualifies for another enumerated exclusion. During the relevant period, Crossfinder was not registered as a national securities exchange and did not qualify for an enumerated exclusion. Therefore, it was required to comply with Regulation ATS, including Rule 301(b) thereunder, in order to benefit from the exemption from the definition of "exchange" provided by Rule 3a1-1(a)(2) under the Exchange Act.

4. Between October 2009 and April 2011, Crossfinder executed over 499 million orders for over 134.6 billion shares entered by subscribers using the three order tags that enabled subscribers to transmit orders to Crossfinder at impermissible sub-penny prices. During this period, Crossfinder executed over 117 million orders with impermissible sub-penny prices for over 34.2 billion shares, representing approximately 23 percent of all Crossfinder executions of orders using the three order tags.

5. Commission rules provide safeguards for ATS subscribers. In particular, Rule 301(b)(10) of Regulation ATS requires that an ATS establish safeguards and procedures to protect subscribers' confidential trading information and adopt and implement adequate oversight procedures to ensure that the safeguards and procedures for protecting subscribers' confidential trading information are followed. 17 C.F.R. §242.301(b)(10). In adopting Rule 301(b)(10), the Commission recognized "the sensitive nature of the trading information subscribers send to alternative trading systems" and stated its intention that Rule 301(b)(10) "prevent the disclosure or the use of information about a customer's trading orders."²

6. Although a broker-dealer that operates an ATS may conduct operations that are separate from its operation of the ATS, the existence of such operations outside the ATS presents a risk that ATS subscriber information could be accessed and misused. For this reason, the Commission highlighted the importance that ATSs "separate the alternative trading system functions from other broker-dealer functions" when the Commission adopted Regulation ATS. Reg. ATS Adopting Release, 63 Fed. Reg. at 70879.

7. Between at least April 2008 and August 2013, CSSU transmitted confidential subscriber trading information from Crossfinder to two internal AES applications that were outside of Crossfinder. The transmission of that order data outside the ATS was evidence of a violation of Rule 301(b)(10). In the first application, during this period, CSSU transmitted Crossfinder order information, aggregated by price level, to its smart order router (the "AES SOR"), an application whose function was to determine where to route orders transmitted by CSSU clients to CSSU for execution.

8. In the second application, from April 2008 until July 2011, Crossfinder transmitted confidential subscriber trading information from Crossfinder to a CSSU application that sent indications of interest ("IOIs") to the outbound routers of two registered national securities exchanges. IOIs are messages that contain information about unmatched orders resting in a trading venue and are used to attract potential contraside liquidity to the venue sending the IOIs. This application (the "IOI Server") received Crossfinder confidential subscriber trading information and, in certain circumstances, the IOI Server sent to the outbound routers of those exchanges IOIs

² See Regulation of Exchanges and Alternative Trading Systems, Exchange Act Release No. 40760 (Dec. 8, 1998), 63 Fed. Reg. 70844, 70879 (Dec. 22, 1998) ("Reg. ATS Adopting Release").

derived from Crossfinder order information concerning “sell side” subscribers. By default, IOIs were not sent for “buy side” subscribers.³

9. CSSU did not fully and completely disclose to all Crossfinder subscribers the fact that confidential order information was being transmitted to the AES SOR or to the IOI Server. Nor did CSSU fully and completely disclose to all Crossfinder subscribers that CSSU programmed the IOI Server to send IOIs outside of CSSU for sell side clients. With regard to the IOI functionality, CSSU categorized subscribers as either buy side or sell side and established different default IOI settings for each. Buy side subscribers were defaulted out of the IOI function; IOIs were not sent for their orders. Conversely, IOIs were sent based on the order flow of sell side subscribers. CSSU made this determination based on an assumption that buy side subscribers cared about order confidentiality and would want to determine for themselves whether to participate in the IOI function. CSSU assumed that sell side subscribers cared about liquidity and would therefore welcome the additional liquidity CSSU sought to attract with the IOIs. While some buy side subscribers were informed that they could change the default setting, sell side subscribers were generally not informed of CSSU’s default setting or of their ability to change it.

10. By not providing all Crossfinder subscribers with notice of these functionalities, CSSU violated Section 17(a)(2) of the Securities Act.

11. CSSU also made misrepresentations relating to the manner in which subscribers were categorized within Crossfinder. CSSU sought to differentiate Crossfinder from competing ATs by developing and marketing a proprietary methodology called “alpha scoring” that placed order flow from subscribers into various categories according to certain characteristics of that trading flow. Alpha scoring was in part intended to address certain subscriber concerns about interacting with high frequency trading (“HFT”) firms that pursued certain trading strategies and their desire for increased transparency. Alpha scoring in Crossfinder was marketed as giving subscribers the power to avoid trading with categories of pool participants that pursued certain trading strategies, such as those subscribers that CSSU categorized as “High Alpha” or “Opportunistic” based on the nature of their trading. CSSU described alpha scoring in Crossfinder as objective and transparent, and that categorizations of subscriber order flow were performed monthly.

12. From December 2010 through March 2014, alpha scoring was not performed as CSSU had represented. Alpha scoring in Crossfinder included significant subjective elements. Further, alpha scoring was neither transparent nor were all Crossfinder subscribers categorized on a monthly basis. By misrepresenting how alpha scoring was actually performed and how often CSSU actually performed subscriber categorizations, CSSU violated Section 17(a)(2) of the Securities Act.

³ Sell side firms generally tend to include investment banks and broker-dealers. Buy side firms generally tend to include hedge funds, mutual funds and pension funds.

13. CSSU further violated Section 17(a)(2) of the Securities Act by making misrepresentations regarding the manner in which it routed client orders. Specifically, CSSU told clients that the AES SOR did not preference Crossfinder or any other venue when routing orders when, in fact, the AES SOR systematically prioritized Crossfinder over other venues in certain stages of the dark-only routing process.

14. CSSU violated (a) Rule 301(b)(2)(i) of Regulation ATS by not disclosing in its Form ATS filing the fact that Crossfinder transmitted order information to the AES SOR, and (b) Rule 301(b)(2)(ii) of Regulation ATS by not filing, at least 20 days before it implemented the IOI functionality, an amendment on Form ATS⁴ that disclosed the transmission of order information to the IOI Server, how CSSU was using this information in the IOI Server to source additional liquidity for Crossfinder subscribers, and that all subscribers of the ATS did not have the same default settings for IOIs.

15. From August 2010 through at least February 2014, and with respect to securities for which Crossfinder accounted for five percent or more of the average daily volume in four of the six preceding months, CSSU violated Rule 301(b)(5) of Regulation ATS by unreasonably limiting access to several Crossfinder functionalities in an unfair or discriminatory manner. Specifically, CSSU (a) did not inform certain subscribers of their ability to (and therefore did not permit those subscribers to) (i) choose to not have their order flow included in the IOI functionality and (ii) choose to not allow their order flow to be transmitted to the AES SOR, (b) permitted the outbound routers of the two registered national securities exchanges, and no other Crossfinder subscribers, to receive IOIs from the IOI Server, and (c) did not disclose information about its grants, denials, and limitations of access in Forms ATS-R that it filed with the Commission.

16. CSSU also did not disclose an arrangement it had with two HFT firms. From May 2009 to December 2012, CSSU operated a technology called Crosslink that executed trades between certain child orders that the AES SOR created from larger orders from CSSU clients and orders submitted by two other CSSU clients that were HFT firms. The AES SOR routed certain child orders to Crosslink after engaging in an exchange of messages with one or the other HFT firm. This message exchange – either in response to an IOI from one of the HFT firms or initiated by the AES SOR – informed the HFT firms that a particular order for a particular security at a specific volume and at a specific price was available for transmission to Crosslink. The AES SOR and the HFT firms could choose whether or not to send an order to Crosslink for execution. Sell side order flow, by default, was eligible for Crosslink for the entire period. Buy side order flow, by default, was eligible to be routed to Crosslink only in response to an IOI, and only from September 2010 to October 2011. The two HFT firms utilized Crosslink from January 2012 through November 2012 and October 2009 through December 2012 respectively. CSSU violated Section 17(a)(2) of the Securities Act by not disclosing that, through the Crosslink technology, the AES SOR routed child orders for execution with orders from the HFT firms.

⁴ Filed with the Commission pursuant to Rule 301(b)(2) of Regulation ATS, a Form ATS is a confidential document that an ATS uses to notify the Commission of its operations.

Respondent

17. CSSU is a Delaware limited liability company with headquarters in New York, New York. CSSU is registered with the Commission as a broker-dealer and as an investment adviser. CSSU operates Crossfinder, an ATS which has been operating pursuant to Regulation ATS under the Exchange Act since October 2005.

Facts

Sub-Penny Orders

18. Rule 612 of Regulation NMS provides that “[n]o ... alternative trading system ... or broker or dealer shall display, rank, or accept from any person a bid or offer, an order, or any indication of interest in any NMS stock⁵ priced in an increment smaller than \$0.01,” unless the price of the quotation is less than \$1.00, in which case the minimum increment is \$0.0001. In adopting Rule 612, the Commission noted that “Rule 612 will deter the practice of stepping ahead of exposed trading interest by an economically insignificant amount.” See Regulation NMS, Exchange Act Release No. 51808, at 219 (June 9, 2005), 70 Fed. Reg. 37496 (June 29, 2005) (adopting release).

19. From July 2009 through November 2011, Crossfinder’s Form ATS stated that “[p]articipants have the option on both limit and market orders to specify a peg relative to the NBBO.” In its “Regulation NMS Compliance Policy and Supervisory Procedures” manual, dated May 23, 2008, CSSU stated that it would not accept, rank or display orders that are “explicitly” priced in an increment less than \$0.01, but that it would accept orders “with instructions or information that implies a sub-penny price” (underlined in original) but that such “implicitly priced orders must be rounded (down in the case of an order to buy, and up in the case of an order to sell) to an allowable price increment (\$0.01).”

20. From at least April 2009 through April 2011, Crossfinder accepted and ranked tens of millions of orders priced in sub-penny increments. Those sub-penny orders were generated through the use of three tags applied to orders destined for the ATS. Two of the tags permitted the subscriber to enter an order with a price specified as an adjustment to the national best bid or national best offer,⁶ either in increments of 0.01 cent or in increments of ten percent of the spread between the national best bid and national best offer (“NBBO”). With these order tags, subscribers

⁵ Rules 600(b)(46) and 600(b)(47) of Regulation NMS provide that an NMS stock is a non-option security “for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan”

⁶ Rule 600(b)(42) of Regulation NMS provides that, with respect to quotations for an NMS security, the NBBO is typically the best (i.e., highest) bid price and the best (i.e., lowest) offer price for that stock “that are calculated and disseminated on a current and continuing basis by a plan processor pursuant to an effective national market system plan....”

could direct to Crossfinder an order, for an NMS stock with a one-cent spread, priced at the national best bid (or national best offer) plus (or minus) ten percent of the spread. Crossfinder accepted and ranked such orders at the resulting sub-penny price.

21. The third and most utilized order tag allowed the subscriber to adjust the limit price of its bid or offer in increments determined by the subscriber, up to four digits after the decimal (*i.e.*, up to one one-hundredth of a cent). The use of this third order tag frequently calculated to a sub-penny increment. The Crossfinder FIX Specification, a document that described for a subscriber how to connect to Crossfinder and how the various order tags operated, described this order tag by using an example in which the use of the tag yielded a sub-penny price: “If NBBO is 100.01 – 100.02, bid LMT: 100.02, [order tag] = 0.009. The adjusted limit price is 100.02-0.009 = 100.011.” Crossfinder accepted and ranked such orders at the sub-penny price, even though Rule 612 of Regulation NMS, and its own policies and procedures barred it from doing so. Between October 2009 and April 2011, approximately 23 percent of all Crossfinder executions of orders using the three order tags were at impermissible sub-penny prices.

22. Crossfinder generally matched orders on a price/time priority basis. Thus, Crossfinder would execute an order to buy at \$100.011 per share before an order to buy the same security at \$100.01 per share. As a result, the order tags that enabled sub-penny orders facilitated the very result that Rule 612 was designed to prevent: allowing one subscriber to obtain priority over another who had placed an earlier order by offering to pay an economically insignificant amount, such as one-tenth of a cent more per share.

23. CSSU employees understood that the acceptance of orders priced in explicit sub-penny prices would be rejected by Crossfinder, but that the use of the proper order tag would result in an order priced at a sub-penny increment that would be accepted by the system. In an email, a CSSU employee with supervisory responsibilities over Crossfinder counseled a subscriber “we are rejecting your orders because you are putting sub dollar [sic] price into [p]rice field. You need to use [the order tag] to offset the price.”

24. CSSU employees also understood that Crossfinder’s subscribers could use the order tags to place orders that would have priority over orders placed earlier in time but that were pegged exactly to the bid or the offer. In one email to a subscriber, a CSSU employee wrote that using the available order tag allows “specifying a sub penny amount that they would like subtracted from their buy limit or added to their sell limit to give them priority in the queue. *i.e.* If your limit is \$10.51 and [the order tag] is \$.0099 then your actual limit order will be \$10.5001 allowing you to move ahead of traders with a \$10.50 limit.”

Access to Confidential Subscriber Trading Information

25. Rule 301(b)(10) of Regulation ATS provides that an ATS “shall establish adequate safeguards and procedures to protect subscribers’ confidential trading information,” including “[l]imiting access to the confidential trading information of subscribers to those employees of the alternative trading system who are operating the system or responsible for its compliance with these or any other applicable rules.”

26. During the period between April 2008 and August 2013, CSSU had two functionalities in place that resulted in the transmission of confidential order information of subscribers of Crossfinder to two CSSU systems that were within AES but not part of the ATS: the AES SOR and the IOI Server.

27. The provision of confidential Crossfinder order information to these internal systems was not fully disclosed to all subscribers of Crossfinder and not addressed in Crossfinder's Form ATS.

AES SOR Access to Crossfinder Order Book Information

28. CSSU operated Crossfinder and the AES SOR in its AES business unit.

29. During the relevant period, Crossfinder subscribers could access the ATS in one of two ways: either by sending orders directly to Crossfinder, or by sending orders to AES's SOR, which depending on the algorithm being utilized, could route orders to a number of different trading venues, including Crossfinder.

30. The AES SOR applies preprogrammed logic to carry out an execution strategy for orders provided to the AES SOR. AES's SOR gathered a broad spectrum of market data, including orders from a variety of sources, to form a consolidated picture of liquidity available in the market. This information came predominantly from publicly-available market data sources. Prior to August 2013, another source of market data that CSSU made available to CSSU's own AES SOR was order data from Crossfinder. The AES SOR's routing program continually makes adjustments, including re-routing orders based on updates to this market data, to carry out execution strategies and/or avoid unfavorable price movements until the client orders it routes are canceled or executed.

31. Between at least 2008 and August 2013, CSSU transmitted to the AES SOR order data from Crossfinder. The AES SOR received information for each order resting in Crossfinder, aggregated by price level, including orders that Crossfinder subscribers had submitted directly (i.e., orders that had not been submitted through the AES SOR). Although this order data did not include subscriber identifying information, it did include symbol, side, size and price information. From this information, the AES SOR knew whether there was liquidity available in Crossfinder. Crossfinder order information was not provided to any subscriber of the ATS.

32. Over time, CSSU began to limit the data transmitted to the AES SOR from Crossfinder. First, through the use of settings controlled by CSSU personnel, order data from subscribers who sent the most direct order flow to Crossfinder was no longer transmitted to the AES SOR. Later, CSSU permitted certain subscribers to inform CSSU if they wanted to disable the transmittal of their order data by Crossfinder to the AES SOR. In August 2013, CSSU discontinued the Crossfinder data feed to the AES SOR.

33. This feature was one of several settings in each subscriber's individual configuration for how their orders were sent to CSSU and/or Crossfinder. This setting could only

be changed by CSSU personnel. CSSU did not disclose to all of its subscribers the fact that Crossfinder order data was being sent to the AES SOR. A small percentage of subscribers were told, either because they specifically asked CSSU whether their order information was transmitted to the AES SOR, or because they were informed about the availability of the configuration setting that disabled order visibility to the AES SOR.

34. The AES SOR resided within the AES business unit. At no point was the AES SOR part of the Crossfinder ATS. The individual who was charged with supervising the AES SOR worked within AES but had no responsibilities over Crossfinder.

IOI Server Access to Crossfinder Order Book Information

35. Beginning in April 2008, CSSU began to transmit Crossfinder order data to the IOI Server, a computer program within CSSU's AES business unit. Although this order data did not include subscriber identifying information, it did include symbol, side, size, and price information. Until July 2011, the IOI Server transmitted IOIs to the outbound router of one registered national securities exchange, and also for a short time to the outbound router of a second registered national securities exchange. The IOIs – containing symbol and side information, as well as a “dummy” size value (required by the exchanges) – were sent to attract liquidity from the exchanges' outbound routers to Crossfinder and increase the opportunity for an execution for all subscribers in the ATS. No other Crossfinder subscriber received IOIs from the IOI Server.

36. CSSU did not disclose to any subscriber the fact that Crossfinder order data was being sent to the IOI Server. CSSU made only limited disclosure to Crossfinder subscribers about the sending of IOIs. CSSU broadly classified subscribers as buy side or sell side and determined that buy side subscribers' order flow would be defaulted to not send IOIs (unless enabled) but sell side subscribers' order flow would be defaulted to send IOIs to the exchanges' outbound routers (unless disabled). Although CSSU disclosed in annual disclosure letters that client orders may be handled by issuing an IOI to another market participant, this disclosure was not specific to Crossfinder. As with the provision of Crossfinder order data to the AES SOR, CSSU told a limited number of subscribers about the IOIs, either because they had specifically asked CSSU, or because they were informed about the availability of a configuration setting that either enabled or disabled IOIs. Sell side subscribers were generally not informed of CSSU's default setting or of their ability to change it.

37. Like the AES SOR, the IOI Server resided within the AES business unit. At no point was the IOI Server part of the Crossfinder ATS. The individual who was charged with supervising the IOI Server had no responsibilities over Crossfinder.

Alpha Scoring

38. Alpha scoring is a proprietary methodology that CSSU uses to categorize subscribers in Crossfinder based on the characteristics of their order flow. Part of the methodology involves assigning subscriber flow a numerical “alpha score” which, according to CSSU, is intended to “evaluate the appropriateness” of a party's interaction with institutional order flow by

capturing effects such as short-term negative selection that are “to the detriment of institutional investors.”

39. CSSU has calculated and used various scoring benchmarks to measure alpha. For example, CSSU has compared the execution price, the volume weighted average price, the number of shares traded and the number of executions before and after a given trade at numerous times (e.g., 1, 15, 30, or 60 seconds) and ticks (e.g., 10, 25, 100, 200, or 500) after the trade in order to determine alpha score. CSSU has also taken other measurable factors into account when categorizing subscribers, including frequency of order cancellation and too-late-to-cancel messages, fill rates, and add/take ratios.

40. Based on its alpha scoring methodology, CSSU categorized Crossfinder direct subscribers into one of three categories: “Plus” (at other times referred to as “Contributors” or “Low Alpha”); “Max” (previously referred to as “Medium Alpha” or “Neutral”); and “Opportunistic” (previously referred to as “High Alpha”). Other Crossfinder participants, such as those whose orders reached Crossfinder through AES’s SOR, were not scored, but were categorized as “Natural.” CSSU considered interaction with Plus counterparties to be “beneficial to the institutional investor” and interaction with Opportunistic counterparties to be “to the detriment of the institutional investor.”

41. These categorizations drove with whom subscribers interacted in Crossfinder. Specifically, Plus and Natural subscribers could choose whether to interact with Max and Opportunistic subscribers. Max subscribers could choose whether to interact with Opportunistic subscribers, but could only interact with Plus and Natural subscribers that chose to interact with them. Opportunistic subscribers could interact only with Max, Plus, and Natural subscribers that choose to interact with them.

42. Between at least December 2010 and March 2014, CSSU represented to subscribers in a variety of settings that alpha scoring in Crossfinder was objective and transparent, and that CSSU personnel performed such categorizations on a monthly basis, when, in fact, subjective aspects were embedded throughout the alpha scoring methodology, and subjective factors influenced how subscribers were scored and categorized. Further, all subscribers were not scored or categorized on a monthly basis.

43. In December 2010, CSSU told a client that “Crossfinder is the only market center (dark or light) that ropes off opportunistic clients based on a rigorous, objective methodology. To our knowledge, no other dark pool uses objective [and] transparent criteria to define client flow interaction in their dark pool.” At a March 2011 conference for institutional investor clients, CSSU represented that alpha scoring “measures short term alpha for all trades based on a fully-transparent, objective methodology.” Later in 2011, CSSU represented to multiple clients in responses to questionnaires that it did not use a subjective classification scheme based on general client type to drive which clients interact with each other, stating that it instead employed an “objective scoring methodology” to classify clients.

44. CSSU's alpha scoring methodology was not consistent with CSSU's representations. For example, before Crossfinder subscribers were scored, CSSU personnel used their judgment to subjectively classify them into various groups based on general subscriber type (e.g. brokers, buy side, and retail). This assigned group then influenced (i) the particular benchmarks used to calculate the subscriber's alpha score, and (ii) the additional factors other than alpha scores that were used to categorize the subscriber. CSSU personnel had discretion to determine which alpha scoring benchmarks and other factors to consider when scoring. In addition, feedback from subscribers and the observations of CSSU personnel were among the factors CSSU considered when scoring and categorizing Crossfinder subscribers. Further, established numerical thresholds between categories were not always followed. For example, CSSU personnel applying the methodology subjectively determined in some instances that a particular score was "biased" because it did not, in their view, accurately reflect the quality of the order flow and should therefore not be followed. At other times, CSSU personnel evaluated subscribers within a particular subjective group against each other, rather than against the established numerical thresholds. Subscribers with better scores in a particular group were moved to higher quality category, and those with worse scores were moved to a lower quality category, without regard to the established numerical thresholds.

45. The subjective elements of the alpha scoring methodology affected whether certain subscribers were categorized as Opportunistic. For example, on some occasions prior to March 2014, CSSU did not categorize the flow of certain subscribers that were HFT firms as Opportunistic because CSSU subjectively decided not to adhere to the quantitative results from alpha scoring showing that those subscribers were in the Opportunistic range based on the established numerical thresholds.

46. In addition, CSSU misrepresented to subscribers that it scored and categorized subscribers, which CSSU referred to as "clients," "participants" and "counterparties" into one of three categories.

47. These representations were inaccurate because CSSU did not apply alpha scoring to a subscriber's trading as a whole, but instead applied alpha scoring to the unique identifiers that CSSU assigned to the separate streams of order flow submitted by a subscriber. A Crossfinder subscriber could then have multiple identifiers for multiple order flows, and if one stream of order flow was scored as Opportunistic, that subscriber could continue to trade separate order flows using different identifiers that had not scored as Opportunistic against other subscribers who had chosen not to interact with Opportunistic counterparties.

48. In March 2014, CSSU implemented a new iteration of the alpha scoring methodology. At that time, CSSU made additional disclosures to subscribers and began to systematically score and categorize subscribers on a monthly basis.

AES's SOR Sent Orders to Crossfinder Before Sending to Other Venues

49. A function of the AES SOR was to break up orders into smaller "child" orders and make decisions about where to send those child orders for execution. When determining whether to route to a particular venue, the AES SOR was influenced by factors such as the likelihood of the

order getting filled and the ultimate execution price associated with the particular transaction. The AES SOR generally handled orders by sending immediate or cancel (“IOC”) orders to remove liquidity from venues and/or posting liquidity to venues with day orders.

50. From at least mid-2011, CSSU misrepresented to clients that (i) the routing logic of the AES SOR did not preference venues based on criteria other than execution quality; and (ii) CSSU performed regular, periodic analysis of the venues to which the AES SOR routed client orders. Certain of the AES SOR’s dark-only routing default settings automatically routed client orders to Crossfinder before any other venue and CSSU did not perform venue analysis on a regular basis.

51. In the circumstances under which these default settings applied, the AES SOR utilized a numbered list of available venues. A venue’s position on this list relative to other venues affected the sequence in which the AES SOR routed orders to that venue. Crossfinder held the first position on the list, which resulted in Crossfinder being prioritized over other venues during three stages of the AES SOR’s dark-only routing process.

52. During two of these stages, the AES SOR sent full-size orders (in the form of IOC orders, *i.e.* “pings”) to various dark venues in sequential order.⁷ By default, these pings were sent to venues in the order specified on the list. In the third stage, the AES SOR could also use the list when posting orders to dark venues.⁸ These routing methodologies resulted in a statistical bias in which more client orders were sent to Crossfinder (and other venues near the top of the list) than would have been sent if Crossfinder had not been prioritized at the top of the list. With respect to one of the ping stages, CSSU recognized this statistical bias in favor of Crossfinder as early as October 2013. In October 2014, CSSU stopped using the preset list of venues to determine the sequential ordering of venues for the two ping stages, but continues to use the preset list, with Crossfinder at the top, for certain aspects of the third stage.

53. Finally, CSSU represented to clients that it analyzed the various trading venues to which the AES SOR routed orders on a “monthly,” “regular,” “routine,” or “continuous” basis in order to assess the quality of the liquidity on those venues and avoid interaction with toxic flow when routing client orders. In practice, before January 2013, CSSU analyzed venues on an ad hoc,

⁷ CSSU made certain disclosures to some clients concerning its “pinging” of Crossfinder before other venues in November 2014.

⁸ During this “posting” stage of the dark-only routing process, the AES SOR primarily uses information about where the AES SOR recently found liquidity in the relevant security (“Heat Map” data). In situations where no Heat Map data is available or a client requests that Heat Map data not be used, the AES SOR starts at the top of a preset list of venues, led by Crossfinder, and allocates roughly an equal number of shares to as many venues as it can while avoiding odd lots. Additionally, the list is used as a tie-breaker between venues with the same Heat Map weight when, due to the number of shares in the order, it is not possible to post equal round lots to each venue. This methodology remains in place as of the date of this Order.

irregular basis. This lack of periodic analysis may have permitted client orders to be routed pursuant to stale data and risked allowing those orders to interact with toxic flow.

Fair Access

54. Rule 301(b)(5) of Regulation ATS requires an ATS with at least five percent of the average daily volume for any covered security (the “fair access threshold”) during four of the preceding six months to comply with “fair access” requirements. Under Rules 301(b)(5)(ii)(A), (B), and (D) of Regulation ATS, those requirements include: (a) establishing written standards for granting access to trading on its system, (b) not unreasonably prohibiting or limiting any person in respect to access to services offered by the ATS, and (c) reporting all grants, denials, and limitations of access (and the reasons for granting, denying, or limiting access) with respect to such security on its quarterly Form ATS-R. Reg. ATS Adopting Release, 63 Fed. Reg. at 70873. For equity securities, the fair access requirements apply on a security-by-security basis. *Id.* A denial of access is reasonable if it is based on objective standards that are applied in a fair and non-discriminatory manner. In the Matter of INET ATS, Inc., Exchange Act Rel. 53631 (April 12, 2006) (settled order).

55. The concept of fair access under Rule 301(b)(5) is not limited solely to granting permission to subscribers to submit orders to or trade on the ATS. Fair access entails not unreasonably prohibiting or limiting any person in respect to access to any product or service offered by such alternative trading system by applying the written standards required by Rule 301(b)(5)(ii)(A) in an unfair or discriminatory manner. The Reg. ATS Adopting Release specifically explains, for example, that “an alternative trading system could allow institutional subscribers the option of refusing to trade with broker-dealer subscribers, as long as the alternative trading system grants this option to subscribers based on objective and fairly applied standards.” Reg. ATS Adopting Release, 63 Fed. Reg. at 70874.

56. In every month from August 2010 through at least February 2014, Crossfinder crossed the fair access threshold during four of the preceding six months with respect to at least one and as many as fifty different securities. Therefore, with respect to those securities during the relevant months, Crossfinder was subject to the fair access requirements of Regulation ATS and was required, among other things, to report all of its grants, denials, and limitations of access (and, for each person, its reasons for granting, denying, or limiting access) on its quarterly Form ATS-R.

57. During that time period, under Rule 301(b)(5)(ii)(B) of Regulation ATS and with respect to covered securities for which Crossfinder had crossed the fair access threshold for the requisite time period, the abilities to (i) opt-out of having IOIs sent by Crossfinder based on the flow directed to the ATS, and (ii) opt-out of allowing the AES SOR visibility into flow directed to Crossfinder, were ATS functionalities to which CSSU could not unreasonably prohibit or limit access in an unfair or discriminatory manner. CSSU’s failure to permit all Crossfinder subscribers access to these functions was not based upon a fair and non-discriminatory application of objective standards, because Crossfinder had not established any objective standards for informing subscribers about these ATS functionalities or how subscribers could opt out of them.

58. Further, CSSU permitted the outbound routers of two registered national securities exchanges to receive IOIs from the IOI Server during the period when Crossfinder crossed the fair access volume threshold for the requisite number of months. This ability to receive IOIs was an ATS functionality to which CSSU could not unreasonably prohibit or limit access in an unfair or discriminatory manner. CSSU's failure to permit all Crossfinder subscribers to receive IOIs from the IOI Server was not based upon a fair and non-discriminatory application of objective standards, because Crossfinder had not established any objective standards for informing subscribers about these ATS functionalities or how subscribers could opt out of them.

59. CSSU filed with the Commission Forms ATS-R quarterly on behalf of Crossfinder during the period in which it exceeded the fair access threshold for one or more covered securities in four of the six preceding months. With respect to those securities, in each of those Forms ATS-R, Crossfinder was required to disclose, but did not disclose, all required grants, denials and limitations of access and the nature of any denial or limitation of access.

Crosslink

60. In May 2009, CSSU began operating Crosslink, a technology that executed certain CSSU client order flow that the AES SOR was handling with orders submitted by other CSSU clients that were HFT firms. Crosslink resided within CSSU's AES business unit but was not part of Crossfinder. CSSU discussed the Crosslink technology with seven HFT firms, although only two such firms executed trades using Crosslink in material volumes.

61. Executions in Crosslink occurred after a two-step process. First, the AES SOR, while routing child orders, would determine whether to attempt to access liquidity from one of the two Crosslink-enabled HFT firms. In some cases, the AES SOR would respond to an IOI from one of the HFT firms by sending a "Notice of Match" (NOM) to one of the HFT firms and an order into Crosslink ("Targeted IOC Process"). In other cases, which represent the majority of executions in Crosslink, the AES SOR initiated this message exchange by sending unprompted messages, or "Blind NOMs" to one of the HFT firms and an order into Crosslink ("Blind NOM Process"). The Blind NOM process, by default, was used only for orders from sell side clients. The Targeted IOC Process was used for orders from both the buy side and sell side clients. In both processes, the messages reflected that a child order from the AES SOR was available to execute with at specific volume and specific price levels. Neither the AES SOR nor the HFT firms were obligated to send an order in response to an IOI or a Blind NOM.

62. In the second step, the AES SOR and the HFT firm could each send an order into Crosslink. The child order from the AES SOR would rest within Crosslink for a very brief period of time, waiting for a potential matching order from the HFT firm. The two orders would include a specific tag – a match ID – that enabled them to execute only with each other. While multiple orders may have rested in Crosslink at any moment in time, only the two orders with the same match ID were capable of executing with each other.

63. Throughout the period Crosslink operated, order flow from all sell side clients that used the AES SOR was eligible to be routed in the Targeted IOC Process and the Blind NOM Process. Order flow from buy side clients, by default, was enabled only for the Targeted IOC

Process, and only from late September 2010 through late October 2011. In late October 2011, CSSU changed the AES SOR settings so that buy side client order flow, by default, was no longer eligible to be routed to Crosslink.

64. CSSU did not disclose to its AES SOR clients that the AES SOR was initiating an exchange of messages with the HFT firms indicating the presence of child order liquidity in Crosslink for specific securities at specific volumes and specific price levels. CSSU did not disclose the default settings or the changes to the default settings to its AES SOR clients, buy side or sell side. Nor did CSSU disclose to its AES SOR clients that their child orders were being routed to Crosslink to execute with flow directed from the HFT firms. Execution reports provided to AES SOR clients disclosed that Crosslink executions occurred with external broker dealers, not the HFT firms, and did not identify the counterparty by name and did not indicate that the executions occurred within CSSU.

65. Between May 2009 and December 2012, Crosslink executed approximately 19.1 million trades between its AES SOR clients and the HFT firms for approximately 8.2 billion shares. Executions in Crosslink ceased in December 2012.

Violations

66. As a result of the conduct described above, CSSU willfully⁹ violated:
- a. Section 17(a)(2) of the Securities Act, which prohibits, directly or indirectly, in the offer or sale of securities, obtaining money or property by means of any untrue statement of a material fact or any omission to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading;
 - b. Rule 301(b)(2) of Regulation ATS, which requires an ATS to file an amendment on Form ATS at least 20 days prior to implementing a material change to the operation of the ATS;
 - c. Rule 301(b)(5)(ii)(B) of Regulation ATS, which requires an ATS that crosses the fair access threshold during four of the preceding six months in a covered security to not unreasonably prohibit or limit any person in respect to access to services offered by the ATS with respect to such security by applying standards required by Rule 301(b)(5)(ii)(A) in an unfair or discriminatory manner;

⁹ A willful violation of the securities laws means merely “that the person charged with the duty knows what he is doing.” Wonsover v. SEC, 205 F.3d 408, 414 (D.C. Cir. 2000) (quoting Hughes v. SEC, 174 F.2d 969, 977 (D.C. Cir. 1949)). There is no requirement that the actor “also be aware that he is violating one of the Rules or Acts.” Id. (quoting Gearhart & Otis, Inc. v. SEC, 348 F.2d 798, 803 (D.C. Cir. 1965)).

- d. Rule 301(b)(5)(ii)(D) of Regulation ATS, which requires an ATS that crosses the fair access threshold during four of the preceding six months in a covered security to report all grants, denials, and limitations of access (and the reasons, for each applicant, for granting, denying, or limiting access) with respect to such security on its quarterly Form ATS-R;
- e. Rule 301(b)(10) of Regulation ATS, which requires an ATS to establish adequate safeguards and procedures to protect subscribers' confidential trading information and to adopt and implement adequate oversight procedures to ensure that the safeguards and procedures for protecting subscribers' confidential trading information are followed; and
- f. Rule 612 of Regulation NMS, which provides that "[n]o ... alternative trading system ... or broker or dealer shall display, rank, or accept from any person a bid or offer, an order, or any indication of interest in any NMS stock priced in an increment smaller than \$0.01," unless the price of the quotation is less than \$1.00, in which case the minimum increment is \$0.0001.

CSSU's Remedial Efforts

67. In determining to accept the Offer, the Commission considered remedial measures undertaken by Respondent. In April 2011, CSSU discontinued the use of the order tags that resulted in the acceptance and ranking of sub-penny orders. CSSU has enhanced its safeguards and procedures to protect Crossfinder subscriber confidential trading information. CSSU discontinued Crosslink in December 2012. CSSU has provided additional disclosures to subscribers regarding alpha scoring methodology and, since March 2014, Crossfinder subscribers have been scored and categorized monthly. CSSU also has made disclosures regarding how its routing logic prioritizes Crossfinder, has provided subscribers with information regarding order handling, and has enhanced policies and procedures related to disclosures to subscribers.

IV.

In view of the foregoing, the Commission deems it appropriate and in the public interest to impose the sanctions agreed to in Respondent CSSU's Offer.

Accordingly, pursuant to Section 8A of the Securities Act and Sections 15(b) and 21C of the Exchange Act, it is hereby ORDERED that:

A. Respondent CSSU cease and desist from committing or causing any violations and any future violations of Section 17(a)(2) of the Securities Act, Rules 301(b)(2), 301(b)(5) and 301(b)(10) of Regulation ATS promulgated under the Exchange Act and Rule 612 of Regulation NMS promulgated under the Exchange Act.

B. Respondent CSSU is censured.

C. Respondent CSSU shall, within 14 (fourteen) days of the entry of this Order, pay disgorgement of \$20,675,510.52 and prejudgment interest of \$3,639,643.39, for a total of \$24,315,153.91, and a civil money penalty in the amount of \$20,000,000 to the Securities and Exchange Commission for transfer to the general fund of the United States Treasury subject to Exchange Act Section 21F(g)(3). If timely payment is not made, additional interest shall accrue pursuant to SEC Rule of Practice 600 and 31 U.S.C. 3717. Payment must be made in one of the following ways:

- (1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;
- (2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at <http://www.sec.gov/about/offices/ofm.htm>; or
- (3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying CSSU as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Joseph Sansone, Deputy Chief, Market Abuse Unit, Division of Enforcement, Securities and Exchange Commission, Brookfield Place, 200 Vesey Street, Suite 400, New York, NY 10281.

D. Amounts ordered to be paid as civil money penalties pursuant to this Order shall be treated as penalties paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Respondent agrees that in any Related Investor Action, it shall not argue that it is entitled to, nor shall it benefit by, offset or reduction of any award of compensatory damages by the amount of any part of Respondent's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Respondent agrees that it shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the Securities and Exchange Commission. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this proceeding. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Respondent by or on behalf of one or more investors based on substantially the same facts as alleged in the Order instituted by the Commission in this proceeding.

By the Commission.

Brent J. Fields
Secretary