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BY HAND

Jonathan G. Katz
Secretary
U.S. Securities and Exchange Commission
(Mail Stop 6-9)
450 Fifth Street, N.W.
Washington, D.C. 20549

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OFFICE OF THE SECRETARY
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Re: File No. 4-208; PCX Usage of ITS - Release No. 34-40204

"The Commission is authorized . . . by rule or order, to . . . require self-regulatory organizations to act jointly . . . in planning, developing, operating, or regulating a national market system" Section 11A(a)(3)(B) of the Securities Exchange Act of 1934

Dear Mr. Katz:

The Securities and Exchange Commission ("SEC" or "Commission") approved the Pacific Exchange Inc.'s ("PCX") proposal to operate a call market facility designed to provide retail and institutional investors with improved opportunities to execute their orders "in the best market" as required by the Securities Exchange Act of 1934 ("Exchange Act").^{1/} In approving the PCX Application of the OptiMark System ("PCX Application"), the Commission determined that the PCX Application is "likely to promote competition among market centers because it has the potential to attract new market participants and to increase order flow to the [PCX]. By attracting order flow, the Application may provide a new and enhanced source of liquidity for investors."^{2/}

As approved by the Commission, trading interest from the PCX members and their customers matched during a call will be executed on the PCX. The PCX plans to send certain other matches resulting from the call to other Intermarket Trading System ("ITS") participants in

^{1/} See Exchange Act Rel. No. 39086 (Sep. 17, 1997), 62 Fed. Reg. 50036 (Sep. 24, 1997) ("Approval Order").

^{2/} See Approval Order, 62 Fed. Reg. at 50045.

order to ensure that investors receive an "economically efficient execution of [their] securities transactions,"¹⁷ all "in the best market,"¹⁸ as reflected by public quotations in the National Market System ("NMS"). The Commission has proposed amendments to the ITS Plan to facilitate the integration of the PCX Application in the NMS.¹⁹ To date, the proposed linkage has received overwhelming support from the public -- academics, retail investors, institutional investors, broker-dealers, and other markets.²⁰ Indeed, all of the commentators supported the material terms of the PCX's proposal as presented in the Release -- except the New York Stock Exchange, Inc. ("NYSE").²¹

The PCX and OptiMark Technologies, Inc. ("OTI") have reviewed the NYSE Letter. We believe that the Commission should reject the NYSE's request that the Commission "instruct the ITS Participants to continue negotiations"²² to establish the terms of access to ITS. At the end of the day, there exist fundamental issues about the very nature of the NMS about which we simply disagree.²³

¹⁷ See Section 11A(a)(1)(C)(i) of the Exchange Act.

¹⁸ See Section 11A(a)(1)(C)(iv) of the Exchange Act.

¹⁹ See Securities Exchange Act Rel. No. 40204 (July 15, 1998), 63 Fed. Reg. 39306 (July 22, 1998) ("Release").

²⁰ Over 20 comment letters from various segments of the industry have been filed with the Commission in response to the Release.

²¹ See Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Jonathan G. Katz, Secretary, SEC, dated August 21, 1998 ("NYSE Letter"). All but the NYSE supported the initiative to mandate the linkage by a Commission order. Of those in support of the Commission's rulemaking initiative, all but the Chicago Stock Exchange ("CHX") urged that the Commission provide the customers of the PCX Application with full access to ITS without imposing any restrictions or delays.

²² See NYSE Letter at 1.

²³ The Commission and its staff are well aware that the parties already engaged in months of exhaustive and ultimately fruitless negotiations, as detailed in the petition filed by the PCX and OTI's wholly-owned subsidiary, OptiMark Services, Inc. ("OSI"). See Petition for Rulemaking to Amend the ITS Plan pursuant to Rule 11Aa3-2(b)(1) and Section 11A(a)(3)(B) under the Exchange Act, dated June 9, 1998 ("Petition"). The materials referenced in the Petition include various correspondence with the NYSE and the ITS Operating Committee ("ITSOC").

In light of the comments made in the NYSE Letter, we believe that the central questions presented are as follows: Whether a national securities exchange operating an SEC-approved call market facility may use an NMS facility, ITS, to send orders to the NYSE in an effort to ensure that investor orders are executed "in the best market"¹⁰ available at the time of the call and "without the participation of a dealer."¹¹ Or: Must an exchange -- as a condition precedent to using an NMS facility -- jeopardize the execution of an investor's order by providing an opportunity for dealer intervention, thereby reducing the "linking of all markets"¹² and the use of "[n]ew data processing and communications techniques"?¹³

Ultimately, the Commission itself must answer these questions in fulfilling its responsibility to facilitate an effective and efficient NMS. Although the NYSE seeks to frame the issue in terms of so-called ITS "precedents," even the NYSE, in effect, acknowledges that those prior determinations are inapplicable in view of the "inherent difficulties in linking markets with differing trading systems."¹⁴ Thus, while we respond below to the NYSE's arguments based on the ITS Plan and statute, the legal analysis itself will not necessarily resolve the issue. It will depend on what steps the Commission, under its Congressional mandate to facilitate development of an NMS, decides to take in order to further the public interest and protect investors.

The remainder of this letter is as follows: In Part I, we respond to the NYSE's arguments regarding the need for a so-called market "probe" under the ITS Plan. In Part II, we address the NYSE's request for "protection" in the form of a so-called "formula" that would limit the volume of ITS traffic from the PCX. For the reasons discussed below, we believe that the NYSE's position on both issues is based on a flawed reading of the ITS Plan as well as a flawed understanding of how the PCX Application is intended to operate as a call market. In Part III, we summarize and assess the alternatives presented by the NYSE. Concluding remarks are included at the end. To facilitate the Commission's review, a table of contents is prepared below.

¹⁰ See Section 11A(a)(1)(C)(iv) of the Exchange Act.

¹¹ See Section 11A(a)(1)(C)(v) of the Exchange Act.

¹² See Section 11A(a)(1)(D) of the Exchange Act.

¹³ See Section 11A(a)(1)(B) of the Exchange Act.

¹⁴ See NYSE Letter at 7.

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DISCUSSION

I. The NYSE Demand for a Second "Probe" Misconstrues and Misapplies the ITS Plan

The NYSE Letter presents the so-called "probing" of one's market as a critical issue raised by the PCX Application. It claims that the probing requirement under Section 8(a)(v) of the ITS Plan "(a) applies on an order-by-order basis once an order is received by the Participant Market, and (b) specifies that the probe for an execution must take place in the Participant's market."¹⁵ It then asserts that the "PCX/OptiMark position fails both requirements."¹⁶ We believe that the NYSE misreads the ITS Plan requirement.

Section 8(a)(v) of the Plan *only* requires "[r]easonable efforts to probe the market." The PCX's call market facility ensures such "reasonable efforts" by requiring the PCX specialists to include their quotations within the call and by providing a capability for other floor interest to be reflected to the extent that it exists at the time of the call. The NYSE, however, seeks to rewrite the Plan to require "the ability to probe the full extent of trading interest residing on the PCX floor"¹⁷ even after the call in an effort to discover "latent" undeclared interest by the specialist on an order-by-order basis. The NYSE further argues that the manner in which the PCX handles orders within its own continuous auction market and the handling of ITS commitments from the Cincinnati Stock Exchange ("CSE") support its analysis. As discussed more fully below, however, the PCX and CSE examples are mixing apples and oranges because neither gives effect to the call feature itself or the mandatory nature of participation within the call. The NYSE reaches back to inappropriate examples to suggest a wholly new standard for a call market.

A. **The Call Itself Fulfills the Plan's Probe Requirement**

As an initial matter, what the ITS Plan provides, in relevant part, is as follows:

The Participants agree that ITS is not designed to be, and should not be used as, an order delivery system whereby all or a substantial portion of orders to buy and sell System securities which are sent to a particular market are not executed within that market, but are routinely rerouted to another market through the System for execution. In the normal course, most orders received within the

¹⁵ See *id.* at 6 (emphasis deleted).

¹⁶ See *id.*

¹⁷ See *id.* at n.9.

market of an Exchange Participant are expected to be executed within that market. Reasonable efforts to probe the market to achieve a satisfactory execution there are expected to be taken before the order is reformatted as a commitment to trade and rerouted to another market through the System.¹⁸⁷

The first sentence of Section 8(a)(v) prohibits the use of ITS as an order routing system while the second sentence states that in general, most orders sent to one's market must be executed in that market. Neither sentence requires a call market operating in conjunction with an existing continuous market to interact with any "latent" trading interest of a market maker in the continuous market. Similarly, the third sentence states that the "market" must be reasonably probed, without specifying how to probe that particular market.

Note that the word "market" as used in this Section is not defined anywhere in the Plan. The term "Exchange (Participant's) Market," on the other hand, is specifically defined to mean, in the case of the PCX, the floors of the PCX -- that is, the PCX's continuous floor trading.¹⁸⁸ One possible construction of Section 8(a)(v), therefore, is to say that the probing requirement is applicable only in the context of a continuous market -- such as in the case of the CSE's NSTS. Under this interpretation, no probing what-so-ever would be required of a call market, such as the PCX Application, with the result being automatic compliance with the ITS Plan.

The PCX believes, however, that a more appropriate view in keeping with the NMS principles -- one that it consistently has expounded in the past discussions with the NYSE and other ITS participants -- is that the reasonable probe requirement is also applicable to a call market. Indeed, the PCX's position on this issue is clear: It intends to comply fully with Section 8(a)(v) and each of its three operative sentences. The PCX will not use ITS as a device to re-route "orders," no matter whether such "orders" are received by its call market (the PCX Application) or its continuous market. Similarly, just as most of the "orders" sent to the PCX's continuous auction market are executed in that "particular market," most of the "orders" received by the PCX Application *are*, indeed, expected to be executed "within" that call market. The PCX is confident of such an outcome, and the Commission also expressly determined that the PCX Application is "likely to promote competition among market centers because it has the potential to attract new market participants and to *increase order flow to the [PCX]*. By

¹⁸⁷ See ITS Plan, Section 8(a)(v).

¹⁸⁸ See ITS Plan, Section 1(11).

attracting order flow, the Application may provide a *new and enhanced source of liquidity* for investors."²⁰

Finally, the PCX also intends to comply with the third operative sentence of Section 8(a)(v), irrespective of whether the market to be reasonably probed is a continuous market or a call market. Naturally, because a call market operates differently from a continuous market, we believe that it must be probed in a manner that reflects the workings of a call. By definition, a call market matches aggregate trading interest at a specified point in time. In the case of the PCX Application, *at the instant of the call*, the OptiMark System will probe all of *available* trading interest expressed by the PCX members and their customers, determining what matches are possible within the PCX's market as well as what matches are required and/or possible against the displayed trading interest of other markets. The latter matches will not be created without consideration of the former.

Indeed, the matching algorithm will assure the satisfaction of *all* outstanding PCX trading interest received by the OptiMark System, as expressed in the form of a satisfaction profile ("Profile"), at prices equal or superior to the interest displayed by the other markets, "before" any matches are "reformatted" into ITS commitments and sent out from the PCX Application. We believe that this very process constitutes a reasonable probe of the market as required by the third operative sentence of Section 8(a)(v). In sum, the PCX will *not* use ITS as an order routing device; *will* have most orders received by it executed in that market; and *will* conduct a reasonable probe before ITS commitments are sent out, all in compliance with the ITS Plan.

B. A Second Probe Is Not Required by the ITS Plan

The NYSE claims that the proposed call market probe is inadequate, because what the ITS Plan requires is fundamentally different. Although the NYSE admits that the term "probe" is not defined anywhere, it nevertheless asserts that a probe is "generally understood to mean a broker exploring the depth and liquidity in a market beyond the disseminated quote in a stock."²¹ The NYSE Letter thus equates the concept of a reasonable probe under the ITS Plan with broker-dealer intermediation in the order execution process -- in particular, intermediation by specialists in the course of "their market making responsibilities of providing continuity to the market."²²

²⁰ See Approval Order, 62 Fed. Reg. at 50045 (emphasis added).

²¹ See NYSE Letter at 5.

²² See *id.* at 4.

Needless to say, the ITS Plan itself requires *no* such market maker intermediation. It imposes no duty on anybody to "elicit possible contra-side trading interest that [market makers] have not communicated to the market"²³ by waiting for a specified period of time. This is true for both "manual entry" and "automated generation" of ITS commitments. Moreover, it simply makes no sense to talk about probing a call market on an "order-by-order basis," because it implies a temporal seriality that is inconsistent with the very notion of a call.

First, in the case of "manual entry," the ITS Plan provides, in relevant part, as follows:

For example, assume that a member firm of the NYSE receives from a customer an order to purchase 100 shares of a given NYSE listed stock that is also traded on the PCX and the PHLX and sends that order to the NYSE floor for execution. There an NYSE member, acting as agent for the customer, will receive the order and attempt to execute it. He will go to the post at which the stock is traded on the NYSE and inquire as to the market for that stock. *He may find that the best bid on the NYSE floor is 39-7/8 and that the best offer is 40-1/4.* The continuously updated quotation display at the same trading post will also show the broker the best bid and offer available throughout the System other than on the NYSE floor, identifying the Participant Market with the best bid and the Participant Market with the best offer. Thus, the broker may discover that the best bid for the stock from other Participant Markets is a bid of 39-7/8 on the PHLX and the best offer from other Participants Markets is one of 40-1/8 on the PCX. *Having learned this information, the broker may decide to attempt to buy the 100 shares for his customer from the 40-1/8 offer on the PCX.*²⁴

According to the NYSE, the above provisions of Section 6(a)(ii) of the ITS Plan should be deemed to "control how a market can generate ITS commitments."²⁵ For the reasons

²³ See *id.*

²⁴ See ITS Plan, Section 6(a)(ii) (emphasis added).

²⁵ See NYSE Letter, Attachment, at 1. In this regard, the NYSE states: "[T]he Commission, on its own motion . . . determined not to publish [the NYSE's proposal to require that] . . . proposed ITS access would require a Plan amendment." It further requests that "the Commission . . . include this portion of our proposal in the amendment." See NYSE Letter at n.8. Where the Commission, as the NYSE admits, specifically determines not to publish a proposal for comment, we believe it would violate the Administrative Procedure Act for the Commission to now adopt such a proposal without subjecting the proposal to full notice and

discussed in the PCX's prior correspondence as referenced in the Petition,²⁶ we disagree with the NYSE's view that the above language describes the "exclusive" methods for ITS access by the PCX. Rather, what is, in fact, described in Section 6(a)(ii) of the ITS Plan is a detailed and specific "example" of the "manual entry" of an ITS commitment by a floor member. Under either interpretation, however, it is clear that the *plain language* of the ITS Plan has no requirement for "exploring the depth and liquidity in a market beyond the disseminated quote"²⁷ by waiting for a specified period of time to elicit any "latent undeclared interest" from the floor.²⁸

Similarly, the *plain language* of Section 8(a)(v) of the ITS Plan includes *no* provisions setting forth how a particular market may be probed. Nevertheless, the NYSE seeks to interpret Section 8(a)(v) as requiring order-by-order exposure to facilitate market maker intermediation. We believe that the so-called "two specific precedents"²⁹ discussed in the NYSE Letter do not support any such interpretation.

First, the probe implemented in the CSE "model"³⁰ is not an appropriate "precedent" for the PCX Application, let alone being a "model" for the ITS Plan. As an initial matter, the PCX Application operates as a call market that seeks to match aggregate trading interest at a given point in time without any intervention by a market maker. The CSE's NSTS, on the other hand, represents a continuous trading mechanism that matches orders based on quotes from multiple dealers on a "first-come-first-serve" basis. These fundamental differences between the two markets cannot be brushed aside simply by calling the latter a "model." When the ITS participants negotiated the particular terms of the linkage between ITS and NSTS in 1986, they did not negotiate a "model" probe that would apply to all future market developments. Rather, the negotiations were specifically tailored to the CSE. Similarly, when the Commission

comment.

²⁶ See Petition, Exhibits A.2 and A.6.

²⁷ See NYSE Letter at 5.

²⁸ Indeed, Section 6(a)(ii) of the ITS Plan is unclear as to what other trading interest the NYSE broker is expected to explore, once he finds out about the "best bid on the NYSE floor."

²⁹ See NYSE Letter at 5.

³⁰ See *id.*

approved the related internal trading rules of the CSE in 1986, it did not intend to create a new standard for ITS transactions that all other markets must follow in the future.

As for the second "precedent" cited in the NYSE Letter relating to the handling of marketable orders by the PCX specialists, it is not even a "precedent" in the correct sense of that word. The so-called 15 second "flash" requirement for orders received by the PCX specialists via P/COAST -- an automated order execution system for its continuous market -- is not an example of how a particular ITS Plan obligation has been interpreted and applied by a participant in the past. Rather, this is a requirement imposed by regional exchanges for their own markets outside the context of the ITS Plan.

To what extent, if at all, such "trading rules" designed for one's market -- including the rules of standing and order execution -- also should apply to the generation of ITS commitments is a question that the ITS Plan expressly reserves for each participant to answer: "*Each Exchange Participant shall determine the extent to which its trading rules shall apply to members within its market so far as such members' issuance of commitments to trade from such market and resulting executions are concerned.*"¹¹ The NYSE's attempt to turn the PCX's own trading rules into a "precedent" for a reasonable probe contradicts the above-cited right of the PCX to run its own market under Section 8(b) of the ITS Plan. The PCX finds any such attempt by one ITS participant to cross the threshold into another's autonomy deeply troubling.¹²

In short, the NYSE's position is not supported by the ITS Plan. A logical and natural reading of the ITS Plan would suggest that *each* ITS participant has a right to determine, in regard to any particular market that it is responsible for overseeing, what is meant by a reasonable probe; *provided*, of course, that the trading rules for such market have been reviewed and approved by the Commission under Section 19(b) of the Exchange Act. Such Commission review and approval of the applicable trading rules for the PCX Application already have taken place. Therefore, *what is and is not a reasonable probe of this call market is not for the NYSE to decide*. For the reasons discussed earlier in this letter, the PCX has determined that the market probe at the time of the call is reasonable, given the PCX Application's status as a call market facility.

¹¹ See ITS Plan, Section 8(b).

¹² Indeed, this line of reasoning advocated by the NYSE potentially has far-reaching implications. For example: May another ITS participant claim that the rules of the NYSE for handling orders sent *via* SuperDot serve as a "precedent" for interpreting how the NYSE members may issue and execute ITS commitments under the ITS Plan?

Other ITS participants have agreed with the PCX's position -- including, CHX, Chicago Board Options Exchange, Inc., and the National Association of Securities Dealers, Inc. ("NASD"). In particular, the CHX and NASD have commented that in light of the movement to sixteenths in terms of pricing securities (as a prelude to decimals) and the adoption of the Commission's own order handling rules,¹²⁷ the call addresses the probing issue adequately and that there is less need to interrogate the market once again following the call. Moreover, these markets have noted that because a call is expected to be of a short duration -- e.g., 3 seconds -- there is little reason to conduct a second probe. The Commission should reject the NYSE's unilateral attempt to reach back to inappropriate examples to infer a wholly new standard under the ITS Plan that the PCX and other ITS participants have not agreed to.

C. The OptiMark Matching Process Is a Valid Call

The NYSE Letter not only misreads the ITS Plan but also mischaracterizes how the PCX Application is designed to operate as a call market. In so doing, the NYSE attempts to discredit the integrity of the PCX Application as a call market facility of the PCX. We address below various misstatements, distortions and inaccuracies found in the NYSE description of the PCX Application's proposed operation and its status as an exchange facility.

1. Profiles, Bids and Offers, and Orders. The NYSE Letter claims that the PCX "persuasively used" the fact that the "orders" received by the PCX Application are "first created following an OptiMark cycle" to secure certain Commission findings about the regulatory status of a Profile -- which represents "trading interest residing in OptiMark prior to a cycle."¹²⁸ According to the NYSE, such interest is deemed by the Commission to be (i) an "indication of interest"; (ii) not a "bid" or "offer," and (iii) not an "order."¹²⁹ The NYSE's statement about what the Commission found materially misstates what is said in the Approval Order.

What the Commission actually stated about Profiles is as follows:

"A bid or offer is defined in the Firm Quote Rule as the bid price and the offer price communicated by an exchange member or OTC market maker to any broker

¹²⁷ See Exchange Act Rel. No. 37619A (Sep. 6, 1996), 61 Fed. Reg. 48290 (Sep. 12, 1996).

¹²⁸ See NYSE Letter at 6.

¹²⁹ See *id.*

or dealer, or to any customer. In order to constitute a bid or offer, therefore, the underlying trading interest must have been communicated to at least one other potential counterparty. . . . In contrast, the essence of the [PCX] Application is its anonymity."³⁶

"Moreover, Profiles, unlike bids and offers, are conditional until they are processed in a Cycle. In this way, Profiles are *analogous to indications of interest or CAP orders*, neither of which are displayed in exchanges or on Nasdaq."³⁷

"A Profile is only a generalized expression of interest with conditions attached and is not eligible for execution until the completion of the Cycle. Profiles entered into the PCX Application can be revised and canceled at any time prior to commencement of the next scheduled Cycle."³⁸

The above statements by the Commission indicate that a Profile is not a bid or an offer within the meaning of the Quote Rule, because it is a non-disclosed expression of trading interest specifically intended for an anonymous call market. Unlike in the continuous auction market, the execution of such trading interest is conditional on the occurrence of a call, which occurs on a periodic -- as opposed to continuous -- basis. This conditionality is an inherent attribute of any call market, including the PCX Application. The fact that trading interest found in a call market may differ from that of a continuous market is no basis for claiming that a Profile is "merely indicative"³⁹ and equating it with an "indication of interest" found in a continuous market.

Similarly, the fact that a Profile is not an "order" as used in the context of a continuous market does not mean that it lacks the "requisite elements of definition and firmness"⁴⁰ to meet the valid probe requirement under the ITS Plan. As discussed above, the ITS Plan does not limit the application of the probe requirement only to orders found in a continuous market. For the purposes of a call market probe, a Profile is sufficiently definite and firm. It includes very specific information about various prices, share amounts, and satisfaction levels, all of which are capable of being matched with contra-side trading interest during the call. The resulting matches

³⁶ See Approval Order, 62 Fed. Reg. at 50046.

³⁷ See *id.*

³⁸ See *id.*

³⁹ See NYSE Letter at 6.

⁴⁰ See *id.*

are then received by the PCX Application as a composite group of "orders" capable of immediate execution.

The NYSE Letter also confuses these pre-processed "orders" generated by the call as regular "orders" sent today to the PCX's continuous auction market for execution. It thus claims that the receipt of the former by the PCX Application must be followed by a "market probe." This assertion is based on a flawed understanding of the term "order" as used in the particular context of the PCX Application. As a call market, the PCX Application receives for execution only those pre-processed "orders" resulting from a call. Naturally, such "orders" are fundamentally different from those found in a continuous auction market. The former consists of matched trading interest from the opposite sides of the market whose terms and conditions can be immediately satisfied, while the latter is sent specifically to search contra-side trading interest. The ITS Plan does not require a second probe of these specialized call market orders received by the PCX Application.

2. PCX Application as an Exchange Facility. The NYSE Letter also claims that the call is not a valid probe by the PCX, because the interaction of trading interest does not occur in the PCX Application, but rather "in OptiMark, a privately-owned entity separate from, and not a 'facility' of, the PCX."⁴¹ This statement does not make sense. First of all, "OptiMark" as defined in the NYSE Letter refers to the computer technology firm, OTI.⁴² As so defined, "OptiMark" is an owner of technology, and itself is not a market where any interaction of trading interest takes place. For purposes of this letter, however, it is assumed that the NYSE Letter is referring to the OptiMark System.

Even so, the above claim by the NYSE still does not make sense, and it distorts the exchange facility status of the PCX Application as expressly determined by the Commission. As described in the Approval Order, the OptiMark System is one of the "[t]wo distinct operations" of computers and related network infrastructure that are "involved in running the PCX Application."⁴³ In fact, in order for the PCX to operate this computerized call market, it needs *both* (a) the "central information processing system and related administrative and communications terminal network of the OptiMark System" and (b) certain computer software and hardware "interfaces" between the OptiMark System and the PCX's computerized order

⁴¹ See *id.*

⁴² See *id.* at n. 1.

⁴³ See Approval Order, 62 Fed. Reg. at 50036.

system.⁴⁴ The fact that the PCX has no legal ownership over the OptiMark System itself has no bearing on the issue whether the PCX may use the computer and communications services provided by the OptiMark System to run its call market.

Neither the Exchange Act nor the ITS Plan requires a national securities exchange to legally own and directly operate every piece of the mainframe computers, software programs, switches, routers and servers over which its trading services are made available. Indeed, the fact that the PCX has contracted with an outside service provider to operate portions of necessary physical infrastructure is immaterial, so long as the PCX exercises appropriate oversight. In this context, the PCX clearly has the regulatory responsibility to ensure that the computerized matching process by the OptiMark System meets the applicable rules and standards established by the PCX. It fully intends to make necessary efforts to ensure the smooth operation of the PCX Application as an effective and efficient call market of the PCX. In short, the fact that the OptiMark System is privately owned does not alter the fact that a reasonable probe will take place before ITS commitments are generated.

D. There is No Policy Justification For a Second Probe

The NYSE Letter implies that because the probe of the PCX's call market does not entail a probe of its continuous auction market through order-by-order exposure to the PCX specialists, the PCX Application fails to provide "real benefits" to investors. The NYSE's view is based on its mistaken assumption that eliciting "latent trading interest"⁴⁵ through exposure to a specialist is a service that customers of the PCX Application are seeking to benefit from. We disagree. Such dealer intermediation through order exposure, with the attendant risks of potential "frontrunning" and "trading ahead," is not what customers of the PCX Application are looking for,⁴⁶ and such a standard is simply inappropriate for the PCX Application.

⁴⁴ See *id.*

⁴⁵ See NYSE Letter at 7.

⁴⁶ See Heike Wipperfurth, Big Board Mulls Revolutionary Change as Competition for Institutions Heats Up, *Investment Dealers' Digest*, Sept. 14, 1998, at 3. The article quotes the following comment by Harold Bradley of American Century Investment Management concerning an apparent proposal by the NYSE to eliminate its order exposure requirement for qualified institutional orders -- a "'fantastic improvement'" that is long overdue. 'If I buy an order on Dot, a specialist can improve it and somebody can trade it in front of me. . . . I don't know what's happening in the crowd.'

By its very nature, a call market does not allow for opportunities for a market maker to intermediate each potential trade between a willing buyer and a willing seller so that it may "step up" to trade for its own profits. This fact alone, however, does not mean that the PCX Application somehow fails to provide a valid price discovery process -- a source of liquidity *in addition to* that provided by a continuous auction market. Indeed, a number of institutional investors submitted comment letters in support of the PCX Application last year, stating their support for its robust call market principles.

For example:

"One of the features that we are excited about is OptiMark's unique ability to aggregate orders. For instance, when a large institutional order is entered into the system, OptiMark will aggregate any number of smaller individual customer orders and effect trades by matching these orders, thereby facilitating the transaction in a manner beneficial to all sides."⁴⁷

"Many investors, professional and retail, do not have easy access to interaction with all market participants. Completion of large professional orders through current mechanisms frequently involves information leakage. Information leakage tremendously increases costs and inhibits true expression of trading interests. The OptiMark System will solve these problems."⁴⁸

"Recent surveys of institutional trader preferences for market structure suggest a recurrent and irrefutable pattern. Academic research and anecdotal evidence increasingly suggest that institutional investors, if given a preference, would choose far different market structures in which to deal than those offered by 'traditional markets.' Bob Shwartz and Nick Economides published a study in May, 1994 which disputes the conventional wisdom that asset managers equate liquidity with dealer or specialist capital."⁴⁹

⁴⁷ See Letter from Matt Fong, State Treasurer, California, to Jonathan Katz, Secretary, SEC, dated July 10, 1997.

⁴⁸ See Todd Greenberg, Chief Investment Officer, ProActive Capital Management, to Jonathan Katz, Secretary, SEC, dated July 10, 1997.

⁴⁹ See Letter from Harold Bradley, Director of Equity Trading, American Century Investment Management, Inc., to Jonathan Katz, Secretary, SEC, dated July 15, 1997.

In short, the PCX Application is designed to meet the need of institutional investors whose trading interest ordinarily does not depend on the intermediation and continuity provided by market makers. To the extent that they wish to interact with "latent" trading interest of the PCX specialists, they perfectly well know where to go and how to obtain such services. Unlike the NYSE, these customers do not confuse a call market for a continuous market and do not seek to import one mode of price discovery process into the other.

E. The NYSE Statistics Are Irrelevant

To buttress its claim that the probe of a call market is inadequate, the NYSE cites various statistical data showing that the "PCX members regularly trade with incoming orders even though the PCX has not disseminated any trading interest at the price of the order or at the NBBO."²⁰ The core of the NYSE's argument is that because orders in the PCX continuous auction market often are executed at prices superior to the PCX's displayed quotations, a second probe should be required to determine whether the specialist or other trading interest on the floor will appear following the completion of a call. This argument should be rejected because it confuses the structural anomalies of a continuous auction market with the integrity of a call market.

The fact that the PCX specialists -- and likely *all* regional specialists -- compete for order flow by means other than displayed quotations stem from the historical and institutional factors underlying the current market structure, all of which have nothing to do with the PCX Application. Indeed, the NYSE's argument should be assessed within the context of NMS developments over the last 25 years. In a report submitted to Congress in 1993, the nations' four regional exchanges -- the Boston Stock Exchange, CHX, PCX, and the Philadelphia Stock Exchange -- discussed in detail the historical background.²¹ As noted in the Report, the "failure of intermarket price competition to thrive is directly related to the failure of the NMS to provide any real incentives to market makers to compete on the basis of their displayed quotations."²² The regional exchanges then discussed the type of structural changes needed to create such incentives, including (i) nation-wide time priority, which would give execution priority to the first person to enter a quote at a given price and (ii) nation-wide limit order protection, which

²⁰ See NYSE Letter at 10 (Table C).

²¹ See Hearings Before the Subcomm. on Telecommunications and Commerce, House of Representatives, 103rd Cong. Serial No. 103-67 (1993) ("Report").

²² See Report at 133.

would afford price protection against regional exchange executions for the benefit of limit orders held by the NYSE specialists.

As the Commission is aware, for a variety of reasons, efforts to adopt such measures to improve the efficiency and efficacy of the NMS have not been implemented. For example, the Commission chose not to pursue the nation-wide time priority rule. Similarly, the Commission chose not to introduce a universal order routing switch or a consolidated limit order book. The NYSE, after having obtained Commission approval,²² chose not to implement its proposed procedures to display a portion of the limit order book. For better or worse, the failure to pursue these various initiatives have left the current market structure consisting of one increasingly dominant market and various satellite markets in competition with that market. The finance literature is reasonably clear that because those satellite markets do not see the flow of orders on the NYSE -- in particular, its limit order books -- regional specialists must provide wider quotations or risk being picked-off in response to changing market conditions.²³

The result of these structural anomalies, of course, is that regional exchanges currently compete for order flow in the only way they can -- on the "basis of service and cost of execution."²⁴ Even though the resulting gains in execution efficiency and reductions in commission charges generally have benefited the industry, some may question whether this is how the NMS should be structured in the first instance. That, however, is a debate for another day. The point is that all the NYSE statistics "reveal" is the commonplace observation that regional specialists may "match" prices in away markets in an effort to retain order flow in an environment where the Commission permits such matching.

In contrast, the PCX Application as a call facility provides anonymity and a rigorous matching algorithm. In such a context, the PCX specialist, as well as any other floor interest, has every incentive to display the "full extent of trading interest" as requested by the NYSE. Indeed, the PCX rules require at a minimum that his quoted interest be incorporated in the call. Moreover, the PCX Application is designed to facilitate the entry of any other trading interest that the PCX specialist would like to include. The existence of the specialist's "latent" trading interest that may manifest later in the course of his market making activities is not a valid reason

²² See Exchange Act Rel. No. 28915 (Feb. 25, 1991), 56 Fed. Reg. 9036-01 (Mar. 4, 1991) (order approving proposed rule changes relating to the "Look-at-the-Book Information").

²³ See, e.g., Thomas H. McInish and Robert A. Wood, Hidden Limit Orders on the NYSE, 21 *J. Portfolio Mgmt.* 19 (1995).

²⁴ See Report at 136.

for finding the PCX Application inadequate and requiring a second, sequential "probe" -- in effect, a continuous market probe on top of the call.

More importantly, we believe that the Commission should not allow the NYSE to argue that the very techniques the regional exchanges have used to eke out a competitive existence within the existing NMS now preclude those same markets from attempting new competitive alternatives. The Commission should reject the NYSE's suggestion that because the PCX's continuous auction market in effect operates on a "derivative pricing," its call market (the PCX Application) is somehow inadequate. At best, these statistics only would suggest, as the PCX has agreed to do, it would be appropriate to carefully monitor the actual usage of ITS.²⁶ They do not suggest that a new call market facility should be so festooned with archaic manual appendages that it arrives stillborn.

F. A Second Probe Will Destroy the Integrity of the Call

The NYSE Letter materially misstates the ease with which the PCX Application can accommodate the second probe proposed by the NYSE. It fails to discuss the implications of its proposal for the operation of the call market as a whole. Claiming that probing the PCX's specialists for a specified time period -- e.g., 15 seconds -- "may well provide the OptiMark order with an execution," the NYSE suggests that its proposal will result in executions in a "much more timely manner" than sending ITS commitments.²⁷ The Commission should reject this suggestion, because it is inconsistent with how the PCX Application is designed to operate as a call market and match a variety of trading interest at different prices and sizes.

As an initial matter, transactions in the PCX Application are executed as a result of a call that seeks to match aggregate trading interest at a specified point in time. The advanced super computer residing in the OptiMark System is programmed to match available Profiles by computing optimal trade results for the customers of the PCX Application, based on their different willingness to trade across a wide range of price and size. To determine all available matches, the OptiMark System will consider what matches are required and/or possible against the displayed bid or offer of another market. Such considerations are necessary, because the matching algorithm is based on a rigorous price priority principle to (i) avoid initiating a trade-through as required under the ITS Plan and (ii) seek the most favorable prices available at the

²⁶ The NYSE itself has states that "there is no way of knowing beforehand how a system will be used or evolve." See NYSE Letter, Attachment, at 8.

²⁷ See *id.* at 10-11.

time of the call. All of this computing process is expected to take place during the call, which is generally expected to last 3 seconds or less.

The proposed second probe as envisioned by the NYSE paralyzes the above matching process by creating a logical and regulatory conundrum. By way of example, consider the following scenario:

Buyer 1 - a buy Profile at 20 1/8 for 3,000 shares, which reflects the trading interest of a retail customer of a PCX member firm;

Buyer 2 - a buy Profile at 20 1/8 for 8,000 shares, which reflects the trading interest of Pension Fund ABC, an institutional customer of a PCX member firm;

Buyer 3 - a buy Profile from the PCX specialist at 19 7/8 for 1,000 shares, which reflects the displayed bid from the PCX;

Seller 1 - a sell CQS Profile at 20 for 3,000 shares, which reflects the displayed offer from the NYSE;

Seller 2 - a sell Profile at 20 1/8 for 15,000 shares, which reflects the trading interest of Mutual Fund XYZ, an institutional customer of a PCX member firm;
and

Seller 3 - a sell Profile from the PCX specialist at 20 1/4 for 1,000 shares, which reflects the displayed offer from the PCX.

In the above scenario, the OptiMark System will find, in a rigorously prioritized manner, a match between Buyer 1 and the NYSE offer quote (Seller 1) for 3,000 shares at the price of 20 and then a match between Pension Fund ABC (Buyer 2) and Mutual Fund XYZ (Seller 2) for 8,000 shares at the price of 20 1/8. The first match with the NYSE offer results in the generation of an ITS commitment at the price of 20, while the second match at the price of 20 1/8 is being executed on the PCX. If the PCX is required to expose this commitment to a specialist for 15 seconds following the call and if the PCX specialist decides, at that later point in time, to take all or any portion of that commitment (e.g., the specialist sells either 3,000 shares or 1,000 shares to Buyer 1), then the call market trade between Pension Fund ABC and Mutual Fund XYZ will have traded through the NYSE -- a clear violation of the ITS Plan. This is true, because the 3,000 share offer displayed by the NYSE will have remained unsatisfied in whole or in part due to the second probe and the intervening trade by the PCX specialist.

The implications of the second probe, therefore, are clear and profound: The matching of two institutional investor orders by the PCX's call market is invalidated. Pension Fund ABC and Mutual Fund XYZ, a willing buyer and a willing seller, may not trade without violating the ITS Plan. The NYSE Letter attempts to downplay the seriousness of this consequence by stating that it is willing to require the second probe only in the case of the so-called "trade-at" commitments. The NYSE thus implies that no second probe would be required in the above example, because it would involve a "trade-through" commitment -- a term defined in the NYSE's own words as a "commitment resulting from an OptiMark cycle producing a non-block-sized trade-through print on the PCX."²⁸

Any such purported response to the problems raised by the second probe requirement, however, misses the basic point illustrated by the above example. How can a call market such as the PCX Application know in advance during the call what matches are "trade-at" commitments, as distinguished from "trade-through" commitments? Because the OptiMark System finds potential matches in a sequentially prioritized manner, it cannot tell whether a potential match with the NYSE's offer will be followed by an internal match between PCX trading interests at an inferior price. This logical conundrum created by the NYSE's position, therefore, leads to a regulatory dilemma: How can the PCX operate a call market that is consistent with the ITS Plan, if it cannot know (i) which commitments are subject to the second probe requirement and which are not and (ii) what is the outcome of the second probe of the PCX specialists, until well after the call has been completed? Furthermore, what should be the proper order handling obligations of the PCX specialists forced into this situation?²⁹

Fundamentally, the NYSE's proposed second probe will not facilitate "quick and efficient executions." By definition, a call market freezes trading interest for a moment in time to determine matches that clear buying and selling interest. Such a pricing mechanism is inconsistent with a subsequent price search and iteration. In effect, a second probe, if successful, would bring into question all of the matches determined by the original call. This daisy chain effect is why we have determined, after initial consideration, that a second probe was inconsistent with the call.

Indeed, it should be clear to the Commission that a second probe should not be required if it expects to see alternative trading structures -- such as a call market -- develop. While the

²⁸ See NYSE Letter at 11.

²⁹ Indeed, the existing PCX specialists are likely to find the prospect of a second probe unduly burdensome and entirely inappropriate. See Letter from Daniel Turner, President, Rubicon Securities, Inc., to Jonathan G. Katz, Secretary, SEC, dated August 14, 1998.

NYSE is free to believe that a continuous auction market based on physical floor trading, such as its own market, is all that there ever should be in the NMS, that certainly is not the outcome intended by Congress when it enacted Section 11A.^{60'} To the contrary, the NMS principles encourage competition among market alternatives, and a call market such the PCX Application should be given a fair opportunity to compete.

II. The NYSE May Not Impose an Artificial Ceiling on the Use of ITS

In addition to claiming that the PCX must conduct a second probe, the NYSE also claims that it and other Participants are "reasonably" entitled to protection, such as a "formula," in order to "prevent the automated generation of commitments from being an inappropriate device used to access other Participants' markets."^{61'} We believe that the so-called "formula" proposed by the NYSE to address its "access" concerns raises serious "access" concerns about ITS -- that is, concerns about investor access to the best displayed bids and offers in the NMS. Indeed, the NYSE's insistence upon a formula presents the following issue: May a national securities exchange restrict access to an NMS facility in order to restrict access to the public quotations disseminated from its market?

After all, notwithstanding the NYSE's efforts to frame the issue in terms of *access to its market*, what is really at stake in this proceeding -- indeed, what the Commission is required to consider under Section 11A of the Exchange Act is -- is *access to ITS*. The Commission must determine what standards to apply when authorizing the proper terms of access to an NMS facility. In this regard, the Commission should keep in mind that, *no matter* how strongly the NYSE may feel about a competitor obtaining access to its quotes, what is in the interest of the NYSE as a membership organization is not necessarily in the best interest of the public. Nor is it necessarily conducive to the establishment of a more effective and efficient NMS.

^{60'} As stated in the Senate Report No. 75 accompanying S. 249: "The objective [of the Securities Acts Amendments of 1975] would be to enhance competition and to allow economic forces, interacting within a fair regulatory field, to arrive at appropriate *variations in practices and services*. It would obviously be *contrary to this purpose to compel elimination of differences between types of markets* or types of firms that might be competition-enhancing." See 94th Cong., 1st Sess. (1975) at 8.

^{61'} See *id.* at 3.

A. There Is No Legal Basis for Requiring a Formula

The NYSE asserts that, in addition to having a second probe, it must have protection in the form of a formula. According to the NYSE, there are independent "access" concerns stemming from the fact that the PCX Application is designed to generate ITS commitments on an automated basis -- as distinguished from manual entry. The NYSE then specifically requests that the Commission impose a ceiling -- as low as 5% -- on the volume of ITS traffic originating from the PCX Application. It claims that such protection is warranted, in view of the probing requirement under Section 8(a)(v) and the formula imposed on the CSE under Section 8(e)(iv) ("CSE Formula"). We disagree. The ITS Plan confers no such entitlement on the NYSE. Nor does the Exchange Act. In fact, the NMS principles identified by Congress under Section 11A of the Exchange Act and the related policy objectives articulated by the Commission in the past oppose any such artificial barrier on the use of ITS.

As discussed earlier in this letter, Section 8(a)(v) of the ITS Plan requires the participants not to use ITS as an "order delivery system whereby all or a substantial portion of orders to buy and sell System securities . . . are routinely rerouted to another market through the System for execution." As previously noted, the PCX intends to comply fully with this provision. The PCX Application, a sophisticated call market facility with a robust price discovery process, will not use ITS to send "*all or a substantial portion*" of its orders resulting from the call to other markets. To ensure compliance, the PCX intends to carefully monitor the use of ITS in the future. It will maintain detailed audit trails, which will enable the PCX and other markets to determine whether the new call market facility has resulted in the improper use of ITS. The PCX and OTI hereby agree to undertake appropriate steps to address the issue, *if and when* such an outcome takes place or is reasonably anticipated to take place.

The NYSE Letter also claims that the CSE Formula in Section 8(e)(iv) sets an appropriate standard for imposing a formula on the use of ITS by customers of the PCX Application. As the Commission is well aware, however, the CSE Formula is specifically drafted on its face to apply only to the CSE. It was adopted as a result of very extensive and protracted negotiations, at the end of which the CSE reluctantly agreed to the terms set by other participants. The CSE has since observed that the CSE Formula is one of many structural inefficiencies of ITS inhibiting its ability to compete.⁶²

⁶² See Letter from Adam W. Gurwitz, Vice President Legal and Secretary, CSE, to Jonathan G. Katz, Secretary, SEC, dated October 2, 1997 (commenting on the SEC Concept Release).

The NYSE, however, in effect claims that because then Chairman of ITSOC, Mr. Charles Forman, noted in 1986 that there was the "precedent value of the concepts [embodied in the CSE Formula],"⁶⁷ the Commission, too, must treat the CSE Formula as an appropriate standard. We believe that the NYSE's reasoning is misguided. First, to the extent that the CSE Formula has any "precedent value" -- about which we disagree -- it would extend only to certain "concepts" to be considered when the ITS participants are negotiating a similar proposal. This is not itself a contractual obligation requiring the PCX to agree to the NYSE's proposed formula. After all, as declared by the NYSE in a different comment letter, the ITS Plan is just a "contract,"⁶⁸ and there is no obligation, until there is an actual meeting of the minds. As detailed in the Petition, the PCX previously considered these "concepts" underlying the CSE Formula. Faced with the NYSE's demand for a formula, the PCX reluctantly agreed to accommodate the NYSE in order to move the negotiations forward and avoid further delay. Notwithstanding such efforts, no agreement was reached.

More importantly, the CSE Formula has no bearing on the Commission's own authority to amend the ITS Plan. Clearly, the Commission itself is not bound by the history of the past negotiations among the ITS participants. Indeed, the Commission should reject any attempt by the NYSE to imply that just because the CSE Formula was previously approved by the SEC under Rule 11Aa3-2, it is a valid standard for the Commission to impose on all future market developments. Any such line of reasoning would lead to a clearly erroneous conclusion that the ITS Plan itself may *never* be reviewed and amended by the Commission on its own initiative, because all of the original 1978 agreement and subsequent amendments to the Plan previously have reviewed and approved by the Commission.

In short, neither Section 8(a)(v) nor the CSE Formula dictates that the Commission impose a formula. The real question that the Commission, in fact, should consider in this current proceeding is whether full access to ITS is proper and appropriate under Section 11A of the Exchange Act. We believe that the answer is clear under Section 11A of the Exchange Act: ITS is an NMS facility, full access to which must be encouraged to foster the development of a more efficient and effective NMS.

⁶⁷ See NYSE Letter at 14-15, n. 14 (citation omitted).

⁶⁸ See Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Jonathan G. Katz, Secretary, SEC, dated August 31, 1998. This letter from the NYSE was filed with the SEC in response to Exchange Act Rel. No. 40260 (July 24, 1998), 63 Fed. Reg. 40748 (July 30, 1998).

In this regard, we believe that the statutory provisions of the Exchange Act are self-explanatory and thus compelling. The Commission's responsibilities are to (i) encourage "[n]ew data processing and communications techniques,"^{65/} (ii) assure the "practicability of brokers executing investors' orders in the best market,"^{66/} and (iii) promote the "linking of all markets for qualified securities through communication and data processing facilities."^{67/} In furtherance of these NMS objectives, the Commission itself previously recognized the need to enhance ITS -- in particular, the need to enhance the ITS commitment entry process through automation. For example, the Commission observed in 1979 that "[I]f the ITS is to provide a mechanism for the routing of orders easily and efficiently for execution . . . , certain of its operating characteristics must be substantially improved. Foremost among the necessary changes is a reduction in the length of time required to enter commitments to trade"^{68/}

Similarly, the Commission previously encouraged the NASD to develop certain automated commitment entry procedures. Specifically, the Commission recognized that "for CAES to be able to effectively prevent trade-throughs and for the system to operate at maximum efficiency, *CAES' ITS order entry process must be enhanced* so that CAES orders can be automatically entered into ITS without the manual intervention of a CAES market maker whenever an ITS exchange market is displaying a quotation superior to any interest in CAES."^{69/}

These statements make it clear that the NMS principles as stated in the Exchange Act and as interpreted by the Commission do not require a formula. There is no statutory requirement for imposing a ceiling on ITS traffic, simply because the PCX Application is designed to generate ITS commitments on an automated basis, as distinguished from manual entry. Indeed, to adopt a formula in this context would send a wrong message about the NMS -- i.e., "automated entry"

^{65/} See Section 11A(a)(1)(B) of the Exchange Act.

^{66/} See Section 11A(a)(1)(C)(iv) of the Exchange Act.

^{67/} See Section 11A(a)(1)(D) of the Exchange Act.

^{68/} See SEC, Status Report on the Development of A National Market System, 44 Fed. Reg. 20360 (1979).

^{69/} See Exchange Act Rel. No. 19456 (Jan. 27, 1983), 48 Fed. Reg. 4938, n.20 (1983) (emphasis added).

(bad) and "manual entry" (good).²⁰ Such an outcome would have serious and long-term detrimental effects on the Commission's efforts to foster the NMS.

B. The NYSE Access Concerns Are Unfounded and at Best Premature

The NYSE Letter contains a number of provocative statements about the PCX Application in an apparent attempt to convince the Commission that its "access" concerns are serious and legitimate. For example, the NYSE Letter starts with the assertion that the PCX and OTI are "seeking to use [ITS] as a proprietary order routing system for their competitive advantage."²¹ The NYSE then claims that the PCX is marketing the PCX Application as "one part of an order routing system to access competitive markets."²² The NYSE also implies that the PCX is inappropriately seeking to establish the PCX Application as the "national market system's institutional order routing system" to other competing markets.²³ According to the NYSE, OTI is "marketing the [PCX Application] link to ITS as providing a more efficient access vehicle to the PCX's competitor markets."²⁴

These are strongly worded accusations. They are apparently intended to justify the NYSE's request for "protection" from its competitors. The rhetoric in the NYSE Letter, however, does not make it any easier for us to respond to the policy implications of the NYSE's "access" concerns. After all, what the PCX is asking for is fair access to ITS, *not* free access to the NYSE. The former is fundamentally different from the latter. ITS can be used only to route "commitments." As described by the NYSE in its own words, ITS commitments are not

²⁰ This message presumably would be more agreeable to the NYSE, since it is the reverse of the NYSE's description of what the PCX and OTI are doing -- "posturing one model as 'automated' (good) and another as 'manual' (bad)." See NYSE Letter at 7.

²¹ See *id.* at 1.

²² See *id.* at 4.

²³ See *id.* at 8.

²⁴ See *id.* at 11.

"orders,"^{23f} and hence, they do not have standing in the NYSE's market.^{24f} Moreover, ITS is not an automatic execution system. The execution of a commitment in the receiving market is always uncertain. Using the PCX Application and its linkage to ITS, therefore, would be a grossly inefficient way for investors to obtain access to the NYSE's quotations.

Nevertheless, we believe that what the NYSE, in effect, is claiming is that the proposed use of ITS, unless shackled with a second probe and a formula, may undermine the NYSE's "liquidity." More specifically, the NYSE appears to be implying that customers of the PCX Application would enjoy the benefit of the "liquidity" provided by the NYSE members for "free" through ITS. As quoted by an unidentified NYSE official: "[PCX and OTI] are using the liquidity of New York and the other exchanges as the backbone for their system until such time as they succeed in getting enough matches."^{25f}

We are somewhat surprised to learn that the PCX's proposed use of ITS can be seen as such a serious threat to the NYSE. After all, historically, has ITS ever been a threat to the NYSE? Just how significant has been the volume of ITS traffic, relative to the NYSE's own trade volume? To put the NYSE's access concerns in their proper perspective, the following table shows the *total* share volume of ITS transactions originating from the PCX that were executed by the receiving markets (not just limited to the NYSE) during selected four weeks of 1997.^{26f} This data is then compared to the NYSE's own trade volume.^{27f}

^{23f} See Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Jonathan G. Katz, Secretary, SEC, dated August 31, 1998.

^{24f} See Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Jonathan G. Katz, Secretary, SEC, dated August 31, 1998.

^{25f} See Greg Ip, Big Board and Pacific Are in a Spat, *Wall Street Journal*, June 25, 1998, at C1.

^{26f} The information is based on a prior data analysis provided to the PCX by the NYSE. See Letter from James K.C. Doran, Managing Director - Intermarket Relations, NYSE, to John C. Katovich, then Senior Vice President and General Counsel, PCX, dated April 16, 1998 (Reports 2-5).

^{27f} The data is compiled from the NYSE's daily trade volume information for the relevant time periods, found in the "Statistics Archive" page of the NYSE's web site, <http://www.nyse.com/public/market>.

ITS v. NYSE Volume

| Week (1997) | PCX ITS Volume in shares (1) | NYSE Volume in shares (2) | Percentage (1)/(2) |
|-------------------|-------------------------------------|---------------------------------------|--------------------|
| Nov. 10-14 | 12,222,400 (12.2 million shares) | 2,792,991,630 (2.8 billion shares) | 0.44% |
| Sep. 8 - 12 | 13,176,400 (13.2 million shares) | 2,618,897,638 (2.6 billion shares) | 0.51% |
| May 19 - May 23 | 11,439,500 (11.4 million shares) | 2,191,659,891 (2.2 billion shares) | 0.53% |
| Feb. 10 - Feb. 14 | 14,480,600 (14.5 million shares) | 2,600,384,710 (2.6 billion shares) | 0.56% |

What this table shows is that, relative to the NYSE's overall trading activities, the volume of ITS traffic originating from the PCX essentially has been *de minimis*. Even if the proposed automated linkage were to result in a substantially increased volume of ITS transactions being executed by the NYSE specialists (for example, 2 or 3 times the current share volume), we seriously doubt whether it would ever rise to a level that potentially may impede the NYSE's internal market operations. After all, there are certain structural limitations on the volume of ITS transactions that can be actually *executed*, no matter how many commitments may be *generated* -- such as: (i) the relative "depth" of the NYSE's quotations,¹⁰ which controls the size of ITS commitments, and (ii) the potential time lag between the initial generation and final delivery of ITS commitments, which influences their "fill" rate.

Surely, the NYSE must acknowledge the fact that while there is no sure way of knowing how the PCX Application would evolve in the future, ITS historically has not been a threat to its liquidity. Accordingly, at a minimum, before granting any "protection" to the NYSE, the

¹⁰ Consider the following interesting statistics: According to one academic report, the average "depth" of the NYSE quotations for sample 100 NYSE stocks for selected time periods in 1997 reached only 4,824 shares. See Michael A. Goldstein and Kenneth A. Kavajecz, *Eighths, Sixteenths and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE*, NYSE Working Paper #98-01 (June 1998) (Table I). Now, compare the NYSE's average quote size to the size of the NYSE's average daily volume for 1997, which is reported to be 526.9 million shares. See <http://www.nyse.com/public/market/2d/2dfm.htm>.

Commission should require that the NYSE rest its access concerns on actual trading experience and underlying market data, rather than couching them in the inflammatory rhetoric.^{81/}

C. A Formula Has Serious Policy Implications

Finally, we believe that the Commission should proceed carefully and deliberately before considering the need for any formula, because implementing a formula raises a fundamental question about who is entitled to access the public quotations for execution. By equating public access to the NYSE's *quotes* with free access to the NYSE's *liquidity*, the NYSE appears to be implying that the public quotations belong to the particular market disseminating the quotes, not to the NMS as a whole.

We are deeply troubled by the policy implications of the NYSE's position. We had assumed that the NMS principles, which led to the creation of ITS 20 years ago, required the participants to use the system to obtain efficient access to the public quotations in order to ensure that customer orders would be executed "in the best market." We had also assumed that such use would lead to greater inter-market competition. After all, what was the point of creating ITS in the first place, if its use had to be carefully guarded in order to provide "protection" to a particular market?

Moreover, while such protection clearly would benefit the NYSE's members, we seriously question whether it also would be in the best interest of the NYSE's public customers -- especially, those whose limit order interest is reflected in the NYSE's quotes. After all, the financial literature is reasonably clear that a substantially significant portion of the NYSE's "liquidity" comes from its limit order books.^{82/} How does restricting access to ITS benefit the public investor whose limit order is reflected in the NYSE's quote and whose trading interest would have been filled but for the restriction on ITS traffic? In such a situation, may the adversely affected limit order customer "opt out" of the NYSE restriction to trade with the incoming ITS commitment?

^{81/} As noted above, the PCX intends to maintain detailed audit trails. We hereby agree to provide relevant information for review by the Commission and other ITS participants during the initial stage of operation.

^{82/} See Michael A. Goldstein and Kenneth A. Kavajecz, *Eighths, Sixteenths and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE*, *NYSE Working Paper #98-01* (June 1998).

These are important policy issues, and we have carefully reflected upon them. Although we previously considered accommodating the NYSE's access concerns through some type of formula, we now firmly believe that absent a compelling policy justification, imposing a formula of any type on the use of ITS at this point is not warranted: It is a disservice to customers of the PCX Application and the investing public in general. We are, however, willing to consider the need for such a formula in the future, *if and when* the NYSE produces sufficient evidence justifying the need for it under the Exchange Act. At the moment, we are not aware of any.

III. The Commission Should Act Now to Facilitate the NMS

The NYSE presents the PCX with four alternative ways for proceeding, all of which are impracticable:

First, the NYSE suggests that the parties should "continue negotiations."⁸² We believe that this course of action will result in continued delay that has a disproportionate effect on the PCX and OTI, relative to the NYSE. As the Commission is well aware, the PCX's call market facility, unlike the NYSE, is a start-up venture. Thus, unlike the NYSE, the costs of further negotiations are very real for both the PCX and OTI. In addition, we were disturbed to read in the financial press that the NYSE may be developing an order routing system designed, in part, to compete with the PCX's call market facility -- one that would entail a change in the NYSE's own internal "probe" requirements.⁸³ We, of course, are not privy to the NYSE's business plans and believe that the NYSE should compete as they see best. Nevertheless, the possibility that the NYSE is pursuing such competitive alternatives to the PCX Application, while at the same time using the Commission's procedures to delay introduction of the PCX facility is troubling because of its real and immediate anti-competitive consequences for the PCX and OTI.

Second, the NYSE suggests that we agree to its probe and formula proposal. For the reasons discussed above, we believe that is unacceptable.

Third, the NYSE states that the PCX members are "always welcome to send [their] orders directly to the NYSE through the Exchange's member firms using established order routing systems."⁸⁴ This approach is fundamentally at odds with the NMS. The PCX Application is a

⁸² See NYSE Letter at 1.

⁸³ See Heike Wipperfurth, Big Board Mulls Revolutionary Change as Competition for Institutions Heats Up, *Investment Dealers' Digest*, Sept. 14, 1998, at 3.

⁸⁴ See NYSE Letter at 11.

call market facility of the PCX, an existing NMS participant. It is not a stand-alone trading system. The PCX members and their customers who use the call market facility of the PCX should be able to use the same NMS facilities as any other PCX member or customer. Moreover, we do not believe that such delivery mechanisms would be feasible as a practical matter. In particular, the use of SuperDot would not be appropriate, because it lacks the necessary capability for customers of the PCX Application to cancel their orders and make adjustments in time for the next call. For example, assume that an order resulting from a call is routed to the NYSE for execution *via* SuperDot, but that order is not immediately executed due to changed market conditions. In such a case, how can the customer take it "back" from the NYSE specialist in a timely manner to re-submit it for the next call? Because the NYSE's current trading rules do not provide for automatic cancellation based on a "time-out" concept, the implied SuperDot solution would be impracticable.

Fourth, the NYSE implicitly suggests that the PCX Application should simply "opt out" of the NMS. Apparently in an attempt to suggest that the PCX's proposal to obtain access to ITS is something untoward, the NYSE states that "[t]here was no need to include other markets' trading interest in [the facility] at all, particularly outside of trade-through and block trade situations. [The facility includes CQS Profiles] to enhance its competitive position as it is entitled to do."¹⁶ We hope the Commission finds this argument as troubling as we do. Essentially, the NYSE is claiming that somehow the PCX should have designed a call market facility that bypassed other markets' quotations. We had assumed that the overarching reason for the NMS, as well as the Commission's recent quote display and order interaction initiatives, was to better integrate quotations so that investor orders were effected in the best market. This argument by the NYSE, in effect, says that competitors may not compete for order flow in a manner that reflects and integrates the public limit order interest reflected in the NYSE's quotations. Were the Commission to acquiesce to this argument, it would have serious and long-term detrimental effects on the Commission's ability to foster and deal with alternative trading systems in general.

¹⁶

Id. at 7.

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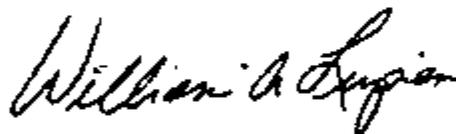
CONCLUSION

For the foregoing reasons, the Commission should adopt a Plan amendment in support of the PCX Application that would be consistent with its responsibility to facilitate the establishment of a more efficient and effective NMS. The Commission should reject any proposal that would limit or otherwise delay the operation of the proposed linkage to ITS.

We thank the Commission for the opportunity to comment on these important public policy considerations. If you have any questions on our comments, please contact the undersigned or call Brandon Becker of Wilmer, Cutler & Pickering at (202)663-6979.



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